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TCTA

A new word for water

INTEGRATED ANNUAL REPORT 2021-2022

A TRANSITION: WATER & ENERGY

A Transition: Water & Energy

We have always had a close and complex relationship with water; water truly is life, and it has shaped much of our world today. Giulio Boccaletti explored this relationship in his 2021 book *Water: A Biography*. His insights are quite profound: Since the earliest civilizations, water has been at the core of the development of political institutions; these flourished, largely because of our need to manage water collectively. As one can imagine, our ancient relationship with water was very ambivalent; while water made life possible, man was also at risk to perish either from its absence or from its destructive excess. So, water had to be managed, from the earliest times, for humanity to thrive. In the modern era, many now believe that we have conquered water with modern infrastructure, harnessing the flow of mighty rivers to provide households and industry with tame and secure water. As a result, the management of water has largely shifted to state bureaucracies, far away from the heart of public debate, argues Boccaletti. Today, this is plain to see; for all its existential importance, water is usually absent from the headline items on most national agendas.

But this illusion of water being a subjugated force will not endure; as the planet warms, climate change comes to humanity mostly through the water cycle, in ever more destructive ways. Once more, the insignificance of human planning and effort becomes evident as the powerful trio of water, climate and energy reasserts its dominance. And so, the need for man to collaborate is re-emerging, this time on a global scale, as we pursue water and energy security, adapt to the changing climate, and try to mitigate the environmental shocks that will be faced by generations to come. These challenges require many nations to collaborate on clean energy, lower greenhouse gas emissions, secure water resources and shift capital to where it can have the most impact.

Climate science indicates that our collective, global actions over the next thirty years will matter greatly; prudent policy and regulation, along with long-term international cooperation will enable new energy sources and energy flows, and change the way we heat homes, travel, power industries, clean and pump water, and care for the environment. These changes need to happen sooner, rather than later, if we are to avert the worst climate tipping points. Human ingenuity and our ability to adapt and innovate will probably ensure that we prevail as a civilisation, but it will take courage and significant effort.

Amid all this, stands TCTA as an agent of the South African state, tasked with the narrow mandate of implementing water infrastructure. While we remain firmly focused on that specialised task, we are also compelled to contemplate how such challenges may unfold for us, how we should respond, and what the long-run implications might be of not taking a proactive stance, be it as TCTA or as the Agency we are earmarked to become. Beyond our mandate, we have a sense of duty to step into the breach and rise to challenges, as they may come; it is what we do.

The theme of this Integrated Annual Report then is to demonstrate our high-level understanding of the dynamics within the nexus between water, energy and climate, and explore pockets therein where TCTA may have a future role.

TCTA GENERAL INFORMATION

Registered Name of the Public Entity:	Trans-Caledon Tunnel Authority
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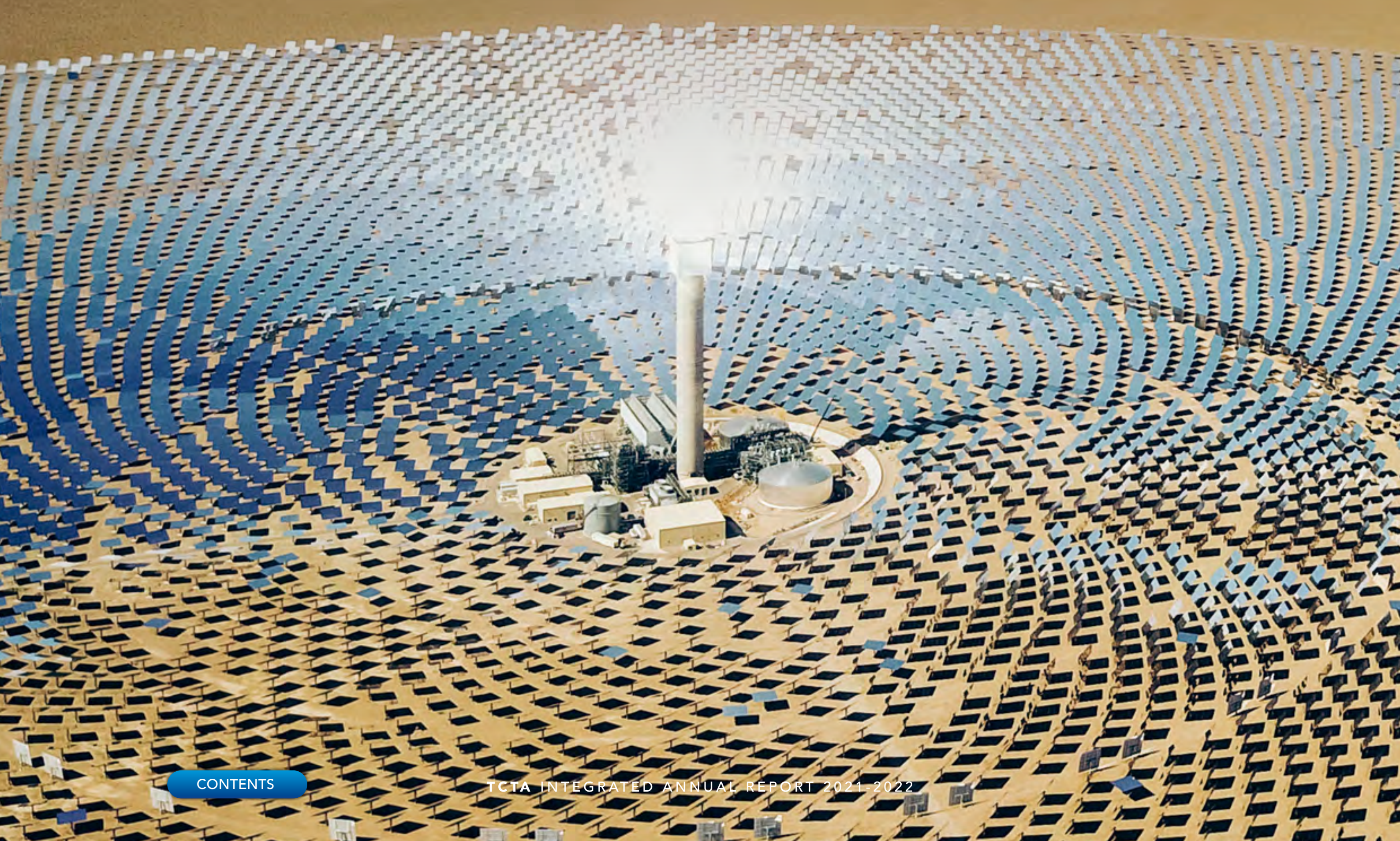
Banker's Information:	Standard Bank of South Africa Ltd 12 Church Square, PRETORIA, 0002
Company Secretary:	Wilma de Witt
ISBN Number:	978-0-621-50600-6
RP Number:	265/2022



VISION

World-class enabler of sustainable infrastructure for a water-scarce South Africa.

MISSION

To plan, finance and implement sustainable and accessible water resource infrastructure.

VALUES

Excellence – We consistently give our best, deliver excellent work with agility, and think innovatively and creatively to improve our performance.

Integrity – We conduct ourselves honestly and transparently, stimulating constructive action, truly 'walk the talk', and gain trust and credibility through fairness and mutually cooperative relationships.

Respect – We acknowledge and embrace diversity, and we are responsive to one another's needs and those of our communities, stakeholders and the environment.

Unity – We are committed through a common vision and goals, effective teamwork and partnerships, and we contribute positively to the team's performance, spirit and morale.

Growth – We willingly share knowledge and information with each other, we are innovative and proactive in thought and in action, and we support, encourage and provide opportunities for individual and collective growth.

Contents

STATEMENT BY THE MINISTER OF WATER AND SANITATION

SENZO MCHUNU
MINISTER OF WATER AND SANITATION

As the Minister of Water and Sanitation I am committed to ensuring that all residents in the Republic have access to a reliable, safe, and secure supply of water and sanitation that is not harmful to their health or the environment.

The water and sanitation value chain is completely integrated and any failure in any part of the chain has consequences for the consumer: be it households, businesses, power generation or agriculture. Therefore, as the Minister responsible for the water and sanitation sector, I have a responsibility to ensure that all parts function optimally. As I have seen from my travels around South Africa, there are frequent failures, which often result in service delivery protests - our people should not have to resort to protests to access a right enshrined in the Constitution!

The TCTA plays a vital role in the value chain by funding, implementing and operating infrastructure on behalf of the Department of Water and Sanitation. Over the years, the TCTA has displayed considerable innovation in addressing challenges, and these skills need to be retained going forward.

The floating pumpstation on Vaal Dam during the construction of the Vaal River Eastern Subsystem Augmentation Project was a good example of innovation in how delays by the contractor were obviated, thus ensuring a secure supply of water to the power stations in Mpumalanga.

It is not just the technical challenges that TCTA has overcome but social and environmental as well. During Phase 2 of the Mooi-Mgeni Water Transfer Scheme, there was the delicate issue of the relocation of households and graves from the dam basin to allow impoundment to occur. This was successfully done allowing the impoundment to occur, increasing the amount of water in storage before the drought hit KwaZulu-Natal in 2015-2016, thus reducing the restrictions that were placed on households and businesses, around eThekwini and Msunduzi during this period.

Currently in Phase 1 of the uMkhomazi Water Project, TCTA's skills have been brought to good use in resolving environmental issues that, if left unresolved, would have impacted on the ability to commence with the construction of the project.

On the three Acid Mine Drainage Treatment plants in Randfontein, Germiston, and Springs in 2012, TCTA stepped in, on behalf of the Department of Water and Sanitation to upgrade an existing works in Randfontein, build and then operate new plants in Germiston and Springs. Since 2012, there has been no surface contamination of water and no reported contamination of groundwater. This has been achieved in the face of significant difficulties over the past 2-years due to the COVID-19 lockdowns, preventing international suppliers coming to South Africa to fix failed pumps.

Such innovation needs to infuse the new National Water Resource Infrastructure Agency, the formation of which, will separate the regulatory function of scientifically determining the amount of water that can be safely abstracted from the water resource, setting the Annual Operating Rules for the different systems, and setting the water resource quality objectives from the provision and operation of the systems required to achieve the assurance of supply to the end consumers.

With South Africa ranked as the most unequal country in the world, among the 164 countries in the World Bank's global poverty database, with access to adequate water and sanitation services playing a vital enabling role to reduce inequality, change must occur in the water sector.

The Agency will be able to harness TCTA's skills in a far more efficient manner with affordability, social and environmental issues being dealt with in a holistic manner from the time of considering which options are available to augment a system, rather than trying to resolve issues on an already decided project. The Agency is also being formed at a time of great transition in the sector.

The approach of building dams further and further away from the centres of demand, such as Phase 2 of the Lesotho Highlands Water Project, is reaching its limit as Southern Africa reaches the limit on the amount of water it can safely abstract from the resource. The future will be on managing the resource better, which includes water services by using water more efficiently and ensuring that the resource is not polluted. On the coast, it will need to be decided if desalination and reuse of wastewater form part of the National Water Resource Infrastructure, as they augment entire systems, not only benefiting the consumers who directly receive it.

The other transition is in energy, from coal with the gradual phasing out of coal-fired power stations as they reach their end of useful life and the coal reserves are exhausted, to renewables. The Agency will have extensive assets, such as in the Vaal River Eastern Subsystem, which primarily serves the coal-fired power stations and the associated coal mines, and a decision would need to be made as to what the future use of these assets will be. Also, the transition to renewables will impact how water is pumped around the country and the releases to generate hydropower as renewables do not have 24-hour availability, as with nuclear and coal-fired power stations.

This transition will require the employees in both TCTA and DWS, who will become the Agency, to think differently in future, and I am encouraged by the theme adopted in this Integrated Annual Report to see it happening already.

Noting that the term of the Board is ending, I wish to thank them in guiding the TCTA through the past three years. Of particular note, was change in accounting treatment of the Lesotho Highlands Water Project, which resolved the issues that lead to the qualified audit opinion in 2019. This resolution also led to clarity of roles between TCTA, the Department of Water and Sanitation and the Lesotho Highlands Water Commission, which was needed to avoid future findings and I thank them in drawing this matter to a close and wish them well in their future endeavours.

Senzo Mchunu, MP
Minister of Water and Sanitation
Date: 17/08/22

CHAIRPERSON'S FOREWORD

GERALD DUMAS
CHAIRPERSON OF THE BOARD

As the term of this Board comes to a close, I would like to reflect on the past 3-years.

On 1 May 2019, the Minister entrusted this Board with the responsibility of leading TCTA. TCTA performs its functions in accordance with the Notice of Establishment and the income and implementation agreements with the Department of Water and Sanitation.

The entity adds value by providing the following key products and services:
- project management and implementation of infrastructure
- operations management
- structuring and raising finance
- debt management

The qualified opinion received on the annual financial statements in 2019, was an occasion for some introspection on how TCTA performs the above functions, whether it is in its own right or as an implementing agent of the Department of Water and Sanitation. What has become clear is that TCTA acts as an implementing agent for, or provides services to, the Department of Water of Sanitation (DWS) and this relationship is now clearly spelt out in the annual financial statements in how transactions are accounted for.

An essential part of good governance, and thus the avoidance of findings, is the understanding of the roles and responsibilities between the different parties and not to take on responsibilities of others.

Although TCTA has the responsibility meeting the financial obligations of the Government of South Africa, represented by DWS, to the Government of Lesotho, and does this through raising of funds against future revenue received by DWS on the Vaal River System, it cannot take on the resolution of intra-governmental issues. The objection by the Government of Namibia to the Phase 2 of the Lesotho Highlands Water Project, due to unresolved issues on the management of the Orange-Senqu river basin is one case. This issue is long-outstanding and if not resolved, and South Africa wishes for the main contracts to be awarded, it will have to make funds available from the fiscus. Also, the possibility there is an overpayment of the royalty is the responsibility of the Lesotho Highlands Water Commission to resolve, with the mandate of the South African delegation being given by DWS, not TCTA .

Within South Africa, it is the responsibility of DWS to resolve issues between itself and its users. An example is reaching an agreement on the percentage of funding that DWS will provide for the implementation of Phase 1 of the uMkhomazi Water Project, so that TCTA can raise the remainder of the funds and thus implement the project.

The Board, however, is ready to provide whatever support is necessary to the Minister and the Department to resolve these matters, but from the point of good governance, cannot take on the responsibility for resolving them.

Another issue that the Board has had to deal with throughout its term, is the possible formation of the National Water Resource Infrastructure Agency (the Agency). The Board has simultaneously had to ensure that TCTA remains a viable organisation, able to raise funding and implement projects on behalf of DWS, whilst at the same time aligning the organisation to merge with elements of DWS to form the Agency.

The Board fully supports the formation of the Agency as it has been able to observe how the split of responsibilities between DWS and TCTA, hinders implementation. For example, the responsibility to raise funding being separate from the resolution of institutional issues, leading to the delay in the implementation of projects.

The Board is of the view that in order for the Agency to be successful it needs a clear mandate such as given to the water boards (to provide water services to other water services institutions within their service area) or a municipality (to provide water services to consumers within its municipal area). The assets of the Agency are simply the means by which it will deliver on its mandate, and the responsibility of deciding what assets are required to deliver on its mandate is the responsibility of the Accounting Authority.

Without the Agency having a clear mandate, it risks perpetuating the situation that TCTA found itself in, over the past 3-years of having to resolve findings from the Auditor-General of South Africa, where it was not clear whether the responsibility lay with TCTA or DWS. A particular issue was which entity had the control of the Delivery Tunnel North of the Lesotho Highlands Water Project. It was eventually determined that control vested with DWS as TCTA has no control over the water flowing through the tunnel. TCTA is an agent for DWS for the operation and maintenance of the tunnel and DWS had full responsibility or collecting all revenue and paying the expenses that TCTA incurred. The Board would not wish to see the same situation perpetuated in the Agency.

Another area of concern for the Board, was the lack of progress in developing a framework on how the Agency would be formed. This is despite the Board committing TCTA in the Corporate Plan for 2021 -22 to the process, and management making the resources available. The Board remains accountable for the performance of the organisation and ensuring that it aligns the organisation to the future Agency, but without being allowed full participation in the process, it is difficult to achieve.

Another focus of the Board during its term has been improving the percentage achievement of the predetermined objectives, having risen from 43% to 77% during its tenure. The change is largely due to improvement in governance in not committing the organisation to deliverables that are outside the control of the organisation. A notable example of this was the change of the targets on the acid mine drainage treatment plants from the level of the water in the mine void below surface, to the volume of water treated. TCTA's responsibility is to operate and maintain the plants at a given capacity and it does not have the mandate to take all measures required to maintain the water level at or below the required level.

On behalf of the Board, I wish to acknowledge and thank the Minister and his team for the support and confidence shown to the Board. To my fellow members of the Board, and the Executive Management Team, I am thankful of your support and commitment to effective and clean governance and am confident that we are handing the organisation over to the new Board in a stronger position, than when we commenced.

Gerald Dumas
Chairperson of the Board

STATEMENT OF RESPONSIBILITY AND CONFIRMATION OF ACCURACY OF THE INTEGRATED ANNUAL REPORT

To the best of our knowledge and belief, we confirm the following:

- all information and amounts disclosed in the Integrated Annual Report are consistent with the annual financial statements audited by the Auditor-General of South Africa;
- the Integrated Annual Report is complete, accurate and free from any omissions;
- the Integrated Annual Report has been prepared in accordance with the guidelines on annual reports as issued by the National Treasury and incorporates elements of the "G4 Sustainability Report Guidelines" issued by the Global Reporting initiative;
- the Annual Financial Statements (Part G) have been prepared in accordance with the International Financial Reporting Standards;
- the Accounting Authority is responsible for the preparation of the annual financial statements and the judgments made;
- the Accounting Authority is responsible for establishing and implementing a system of internal control, which has been designed to provide reasonable assurance as to the integrity and reliability of the performance information, the human resources information and the annual financial statements, and
- external auditors are engaged to express an independent opinion on the annual financial statements.

In our opinion, the Integrated Annual Report fairly reflects the operations, performance information, human resources information and financial affairs of the entity for the financial year ended 31 March 2022.

The Board of Directors approved the Annual Performance Report on 28 April 2022 and the annual financial statements on 10 August 2022.

Gerald Dumas
Chairperson of the Board
31 August 2022

Percy Sechemane
Chief Executive Officer
31 August 2022

ABOUT THE INTEGRATED ANNUAL REPORT

The Trans-Caledon Tunnel Authority presents this Integrated Annual Report for the period 1 April 2021 - 31 March 2022 as its principal medium of communication to stakeholders.

The primary purpose of the Integrated Annual Report is to give assurance to:

- the Shareholder, represented by the Minister of Water and Sanitation and the Parliamentary Portfolio Committee on Water and Sanitation, which plays an oversight role, that TCTA is performing its functions in keeping with the Notice of Establishment and directives;
- the lenders and investors, that TCTA uses the proceeds of funding for the purpose which they are provided, and that the Authority can meet its financial obligations; and
- other stakeholders to the extent that they rely on the information provided in this report.

In the short- to medium-term, TCTA adds value by raising funds for projects, ensuring that the infrastructure it builds delivers water when required by users, and is built within budget and to specification. Within this framework TCTA also ensures it satisfactorily addresses all the aspects relating to implementing projects, particularly the environmental and social dimensions. Over the long term, the organisation ensures that it manages debt in a manner that is affordable, sustainable and within regulatory requirements.

The deliverables in the current project directives and those flowing from the Notice of Establishment are reviewed yearly. This exercise results in a Shareholder's Compact between the Minister and the Board of TCTA, which maps out the predetermined objectives for the financial year. TCTA is required to report against these objectives in the Annual Performance Report (refer to Part B). The Shareholder's Compact and the subsequent Corporate Plan are drawn up in compliance with Treasury Regulations for departments, constitutional institutions and public entities.

TCTA implements projects on behalf of the Department of Water and Sanitation (DWS). Information on project progress and the outstanding liability is consolidated in the Department's Annual Report.

The Energy Transition and Freshwater

A
GENERAL INFORMATION

This is an exciting time to be alive; humanity finds itself amid the 4th Industrial Revolution and furthermore, over the next thirty years, our economies will transition away from a reliance on fossil fuels towards clean, renewable energy. Beyond the vital climate imperative, which is the primary driver of the transition, the benefits of cheap and clean energy promise to be vast, conceivably improving the quality of life of every human being. Some of the gains are easy to anticipate, such as a significant improvement in urban air quality, but other gains may be less apparent, yet as important, such as freshwater availability.

To understand how renewable energy will improve freshwater availability, one needs to consider the interdependence of water and energy; energy is required to pump fresh water to where it is to be consumed, and when a water source is not fit for purpose (e.g., the sea), then energy is required to make it so. As freshwater scarcity increases, mostly due to human activity, so the energy intensity of water increases; more water needs to be pumped and cleaned. Global Water Intelligence estimates that the management of water consumes about 3.7% of global energy consumption. On the other hand, freshwater is consumed in thermal power generation, and for some time early in this century, several global agencies were concerned that the water-energy interdependency would result in a doom-loop situation, where countries could be running out of both energy and fresh water.

Relief came in the mid-2010s when it transpired that both solar and wind energy, which require only minimal water in its generation, were rapidly becoming cheaper; in fact, much quicker than even the most optimistic expert had forecast, reaching projected price levels some seventeen years earlier than expected. By 2014 renewable energy had become cost-competitive with conventional thermal generation, and today solar photo-voltaic and wind generation are the least-cost new supply options in most markets. A price-point of $0.05/kWh is now quite common in countries with a favourable solar or wind endowment, and very similar to the prices achieved locally through the fifth bid window of the Renewable Independent Power Producer Programme during 2021. The water-energy doom loop has effectively been broken, and this is very good news for water.

Mature technologies and cost-effective energy sources now exist to desalinate seawater or recycle municipal wastewater on a large scale and convey the fresh water to where it is needed, with a minimal environmental impact. This is especially achievable and relevant in water-scarce countries with ample renewable energy resources, such as South Africa. What has often been described as a water crisis is perhaps more of a significant management challenge.

Already, there are examples of the impact that cheap renewable energy will have on the water sector. In Namibia, a project is under consideration that would have been inconceivable just a few years ago: The concept is to desalinate seawater near Swakopmund and convey this to the capital Windhoek, some 400 kilometres inland and at an elevation of 1800 metres above sea level. This would only be possible due to the availability of ample solar energy for the desalination plant and several pumping stations needed to lift the water onto the central plateau, where the main economic hub of Namibia is located. Namibia has long been a world-renowned leader in direct water reuse; now it is breaking new ground once more.

Another example of how the business of water is adjusting to the energy transition can be seen in the Middle East, where several Gulf countries have since 2019 embarked upon a mass replacement of fossil-fuel-reliant thermal desalination with reverse osmosis technology, powered by renewable energy. The scale of this conversion is massive: Some 7,400 mega-litres per day in new and replacement capacity will be built by 2026, through more than 15 mega-projects. For context, Johannesburg consumes about 1,600 mega-litres of water per day. The chief planner for the Emirates Water and Electricity Company states that between 2020 and 2024, Abu Dhabi will reduce the carbon intensity of power and water production by 50%. It is worth noting that the benchmark pricing so far in this multi-national venture is around $0.40/kl, setting a record low price for desalination; this is largely ascribed to low-cost renewable energy, efficient contracting and the favourable risk profile of the world's most mature desalination market.

A

GENERAL INFORMATION

As we stand at the dawn of a new energy transition, it is perhaps appropriate to reflect upon the energy transitions of the past. During the first industrial revolution, from the 1760s to the 1820s, the world's fledgling economy adopted coal, oil, and later gas to replace wood and biomass. The eventual impact of this transition on humanity could hardly have been foreseen at the time; the industrial revolution itself gave rise to a capitalist economy and brought the first consistent improvement in the standard of living of the general population in history, initially only in the western hemisphere, but later on a far greater scale. Access to affordable energy brought opportunity, education, improved healthcare and much more. And yet, the transition itself was painful to millions of people whose livelihoods were upended when their economic activities became obsolete.

Similarly, it is now hard to imagine just how this second energy transition will change the world we live in. Early indications are that it would take generations to come with a cleaner, more water-secure planet, and much more. But the transition itself will leave its scars as mature industries become obsolete, and new ones take their place.

For TCTA it is vital to be well-positioned for the opportunities and threats that flow from the energy transition. It is already in a prominent position on seawater desalination, having anchored a knowledge hub in this area for eight years now. It has also managed the development, maintenance and operation of the Acid Mine Drainage plants on the Witwatersrand for several years now. Both these solutions are poised to grow in prominence due to the transition, as the energy implications soften. This also resonates with the National Water and Sanitation Master Plan, which foresees significant growth[1] in the desalination of both seawater and mine-impacted water by 2030. We need to be agile to embrace the opportunities that will present themselves.

1 *The NWSMP projects that by 2030, the desalination of seawater and mine-impacted water would contribute 1,610 million litres of water per day on a national level, which calls for an eight-fold increase of existing capacity.*

CHIEF EXECUTIVE OFFICER'S REPORT

PERCY SECHEMANE
CHIEF EXECUTIVE OFFICER

The external operating environment it is still challenging with the July 2021 riots and then the floods in April 2022 causing further damage to infrastructure and the economy. This depresses tax revenue as less money is available from the fiscus, and water affordability is raised as an issue on projects. However, any delay in a project impacts water security, in that it reduces the level of assurance of supply from a system. However, if water security is not dealt with, either through new water resource projects or using the existing supply more efficiently, the restriction in the supply of water will depress economic growth. On all its current projects, which TCTA is implementing on behalf of the Department of Water and Sanitation (DWS), TCTA works proactively with DWS to resolve challenges as they occur.

The successes and challenges of the 2021-2022 financial year are as follows:

1) Phase 1 of the uMkhomazi Water Project has been delayed due to affordability and environmental considerations. With regard the environmental considerations, TCTA assisted DWS to reconfigure the project to avoid the breeding and foraging grounds of the critically endangered Blue Swallow and is currently assisting DWS on amending conditions in the Environmental Authorisation that seriously impacted the ability to deliver the project in a cost-effective manner and within the required timeframe.

2) On the operation and maintenance of the Acid Mine Drainage plants on the Eastern, Central and Western Basins, prudent management of resources by TCTA in the face of the challenges presented by the repeated failure of the abstraction pump motors and the inability of the German supplier to provide the required diagnosis and support, enabled TCTA to meet two of the three targets, but without compromising the quality of the surface water or groundwater.

   During the year, the targets were changed from keeping the water below a certain level in the mine voids, to the volume of water treated, as TCTA's responsibility is to operate and maintain the plants at a given capacity and it does not have the mandate to take all measures required to maintain the water level at or below the required level.

3) The successful repayment of R9.9 billion (coupon plus interest) on the WSP05 bond on the Vaal River System and the closure of the bond programme, demonstrated to the market, the ability to finance national water resource infrastructure and repay the money owed, through the tariffs received from the users.

4) The planning for the six-month outage in 2024, of the Delivery Tunnel North of the Lesotho Highlands Water Project continued with the preparation of the tender document for the

Professional Service Provider. Its issuance to the market was held in abeyance due to the advice received from National Treasury, but this has not impacted the programme.

5) On Phase 2 of the Mokolo-Crocodile Water Augmentation Project the procurement strategy for the construction tenders was changed to mitigate possible irregularities in the process. The tender design was completed, but the issuance of the tender to market will be dependent on first raising the funding or getting an exemption from National Treasury's Supply Chain Management Note no. 3, which requires funding to be in place before a tender is issued.

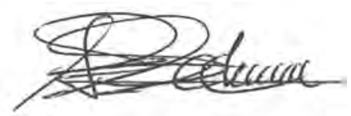
Over the past year, a theme that emerges from the challenges faced by TCTA and DWS in bringing the projects to implementation ready, is that the fragmentation of responsibilities between different organisations hinders the achievement of the overall objectives set out in the National Development Plan of reducing inequality and increasing real GDP per person. In the institutional realignment envisaged by the creation of the Agency, care must be taken to ensure this issue is resolved and not continued.

Regarding the organisation's internal operating environment, TCTA completed the second year of remote working with no significant impact on operations. This will be the future for TCTA with a hybrid working environment, as based on the success of our experience of remote working, we have deliberately opted for a smaller building thereby saving costs and entrenching the hybrid working model. Change is often dictated by external forces, such as the extended restrictions imposed by COVID-19. However, TCTA transitioned well and kept our skills levels within acceptable attrition levels.

TCTA, along with many other organisations in the world is still exploring how to maximise the potential that this new environment offers, and to ensure that new employees joining the organisation do not feel marginalised. The Digital Transformation journey that TCTA embarked on during the financial year, will hopefully address these issues, and ensure that TCTA emerges as a stronger, fitter organisation capable of playing its part in the new world of work.

The change to the hybrid working environment and digitisation highlights TCTA commitment to sustainable use of resources and creating a better work-life balance for its employees. The hybrid working environment has resulted in a major reduction in energy use resulting from the commute to the office as well as being of a significant financial benefit to employees. A new Flexible Working Policy was adopted to allow employees more flexibility in their working hours to accommodate family commitments or to use their time in more productive ways, which rigid office hours and commuting precluded.

I wish to thank the TCTA Board for its guidance and support and the management and staff for their commitment to work during this challenging period.

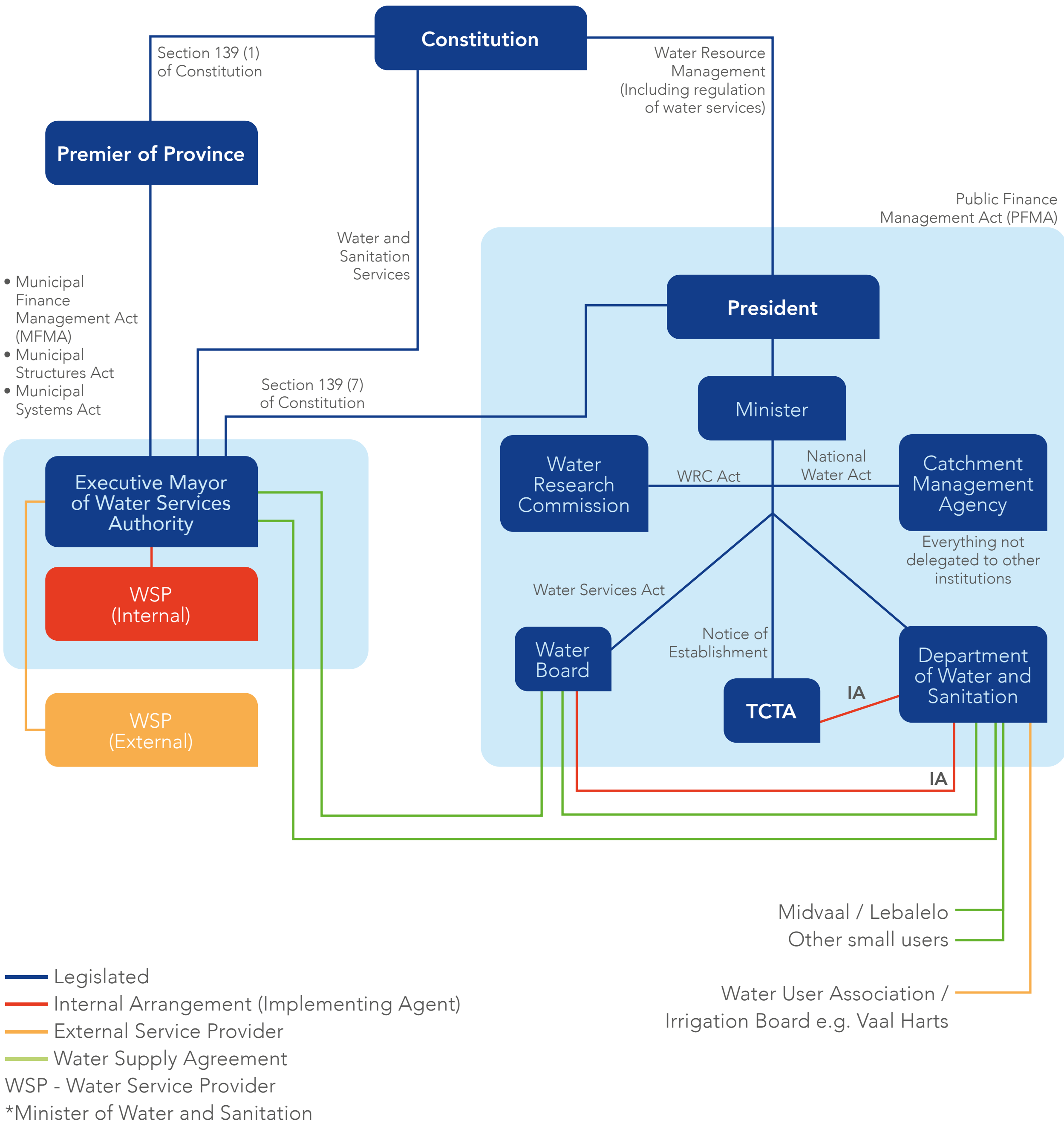


Percy Sechemane
Chief Executive Officer

LEGISLATIVE AND OTHER MANDATES

The legislative framework within which TCTA operates within the water sector is set out in Figure 1.

Figure 1: Legislative Framework



The Trans-Caledon Tunnel Authority (TCTA) was established in 1986, by Notice 2631 in Government Gazette No. 10545, dated 12 December 1986, to finance and build the Delivery Tunnel North of the Lesotho Highlands Water Project (LHWP). In 1994, a directive was received to fulfil the financial obligations of the Government of South Africa, in terms of the Treaty on the Lesotho Highlands Water Project, on the water transfer component in Lesotho.

On 24 March 2000, the Notice of Establishment was amended by Notice 277 in Government Gazette No. 21017, to include the 1994 directive and to allow for the Minister, in terms of Section 24(d) of the notice, to issue directives to TCTA in terms of Section 103(2) of the National Water Act (Act No. 36 of 1998).

In accordance with Section 3 of the Notice of Establishment, TCTA is set up to:

- implement, operate and maintain that part of Phase 1 of the LHWP, situated in the Republic of South Africa, in accordance with the provisions of the Treaty; and
- perform the functions set out in Clauses 24(a) and (b) and any other additional functions that the Authority may be required to perform in terms of a directive by the Minister under Section 103(2) of the National Water Act.

In doing so, the Minister must be satisfied that such directives will not prejudice the capacity of TCTA to perform the functions for which it was established. The National Water Act allows the Minister to direct a body, established under Section 102 of the Act, to perform additional functions which may include, but are not limited to, providing water management institutions, both within the borders and external to the Republic, with:

- management services (project implementation);
- financial services (structuring and raising project finance, debt management and advising on tariff setting);
- training; and
- other support services.

The above provision makes it clear that TCTA cannot undertake any function outside of its Notice of Establishment without the permission of the Minister unlike the Water Boards, which are given such an opportunity in terms of Section 30 of the Water Services Act (Act No. 108 of 1997).

The National Water Act requires that TCTA manages and accounts for different functions separately. This is further emphasised in the Notice of Establishment for TCTA, which states in Section 20(1) that the Authority must manage its Treaty functions separately from its non-Treaty functions and account for them separately, as required by Section 105(1) of the National Water Act. The Treaty functions in terms of Section 8A of Protocol 6 of the Treaty are limited to the operations and maintenance of the Delivery Tunnel North within South Africa.

Section 20(2) furthermore states that the Authority's Treaty responsibilities are not applicable to its non-Treaty functions.

The bulk of TCTA's work now comprises non-Treaty functions. TCTA accounts for and manages these functions separately from the Treaty functions and from each other, in terms of Section 103(2) of the National Water Act. The impact of these provisions on TCTA is that, regarding the LHWP mandate and each directive, there is a separate:

- borrowing limit from the Minister of Water and Sanitation, government guarantees and funding arrangements;
- general ledger; and
- where money is borrowed to finance a project, separate income/implementation agreements with DWS, which are back-to-back with the water supply agreements between DWS and the beneficiary water users, where applicable.

The income/implementation agreements with DWS determine inter alia, the cost recovery mechanism for each project. To date, the following three principles have been applied:

- a structure per project is applied to ensure break-even sufficiency of revenue to recover project costs over the debt repayment period. Key principles applied in determining an appropriate tariff structure for a project include end-user affordability, predictability and sustainability;
- the revenue is only used to recover costs related to each project, namely capital costs, funding costs and administration costs; and
- management of liquidity and funding risks.

Since its original mandate (the Notice of Establishment), TCTA has received a further 21 directives. The mandate and directives, as of 31 March 2021, are shown in Table 1.

Table 1: Mandate and Directives

Mandate / Directive	Date	Type of work					
		Planning	Funding	Implementation	Operation and maintenance	Advisory	Payment agency
Operation & maintenance of Delivery Tunnel North of the Lesotho Highlands Water Project (Treaty obligation)	12 December 1986		√	√	√		
To fulfil all the Republic's financial obligations in terms of or resulting from the Treaty on the Lesotho Highlands Water Project and any other obligations on the Vaal River System (e.g. Acid Mine Drainage Project). (non-Treaty obligations).	3 August 1994 (and incorporated into amended Notice of Establishment, 24 March 2000)		√				√
Advisory Services to Umgeni Water (UW).	4 July 2001					√	
Advisory Services to Water Management Institutions, Water Boards and DWS.	17 May 2004					√	
Berg Water Project (BWP).	6 May 2002		√	√		√*	
Vaal River Eastern Subsystem Project (VRESAP)	6 October 2004		√	√		√*	
Mooi–Mgeni Transfer Scheme – Phase 2 (MMTS-2).	29 November 2007		√	√		√*	
Olifants River Water Resources Development Project – Phase 2C (ORWRDP-2C).	17 June 2008 (directive revised 12 March 2012)			√		√*	
Komati Water Scheme Augmentation Project (KWSAP).	29 September 2008		√	√		√*	

Mandate / Directive	Date	Type of work					
		Planning	Funding	Implementation	Operation and maintenance	Advisory	Payment agency
Mokolo–Crocodile Water Augmentation Project – Phase 1 and Phase 2A (MCWAP-1; MCWAP-2A).	19 May 2010		√	√		√*	
Metsi Bophelo Borehole Project.	2 March 2011			√			
Acid Mine Drainage – Short-term Intervention (AMD-STI).	6 April 2011			√	√	√	
Phase 1 of the Mooi–Mgeni Transfer Scheme – Phase 1.	29 November 2011			√			
Strategic Integrated Project 3 (SIP-3).	10 November 2012					√	
Advisory Services for the uMzimvubu Water Project (MRWP).	10 February 2014 (latest revision revised 19 January 2019)	√	√	√			
Strategic Integrated Project 18 (SIP-18)	26 February 2014					√	
Amendment to MMTS-2 directive to include the construction of a potable water pipeline for Umgeni Water.	20 March 2014			√			
Olifants River Water Resources Development Project – Phase 2B (ORWRDP-2B).	25 February 2015 (directive revised 22 October 2015)	√	√	√			
Advisory Services for the Water Off-take for Kriel Town (KRIEL).	20 June 2015			√		√	
Acid Mine Drainage – Long-term Solution (AMD-LTS).	19 May 2016		√	√		√	
Berg River–Voëlvlei Augmentation Scheme (BRVAS).	18 May 2017		√	√		√	
uMkhomazi Water project (uMWP).	22 February 2019		√	√		√	
Programme Management Services to DWS in relation to Water Infrastructure Projects	1 April 2019					√	

** Institutional arrangements*

MAJOR PRODUCTS AND SERVICES

To fulfil the responsibilities set out in the Notice of Establishment and the directives that are given to it from time to time by the Minister, TCTA provides the following services and associated products:

1) project management and implementation of water infrastructure:
   - project design
   - project construction
   - environmental compliance
   - land acquisition
2) operation and maintenance;
3) debt management;
4) structuring and raising project finance;
5) knowledge management;
6) risk management;
7) socio-economic transformation; and
8) tariff setting.

These products and services are in alignment with the functions set out in Section 102 of the National Water Act.

OUR CONTRIBUTIONS TO DEVELOPMENT OUTCOMES

In delivering on its mandate and the Minister of Water and Sanitation's directives, the organisation continuously ensures that it strongly contributes to the developmental priorities of the government, as reflected in Table 2.

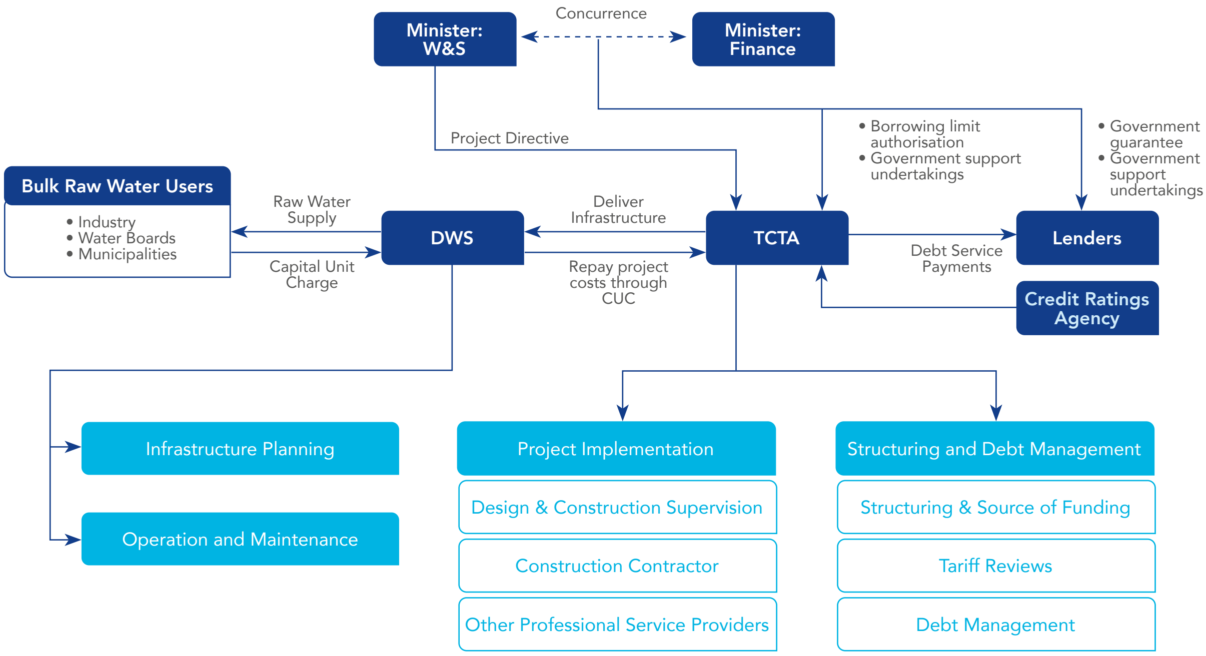
Table 2: Government outcomes and TCTA's contribution

Outcome		TCTA Contribution
4	Decent employment through inclusive economic growth.	Providing cost-effective water infrastructure as an enabler of economic growth and jobs.
5	Skilled and capable workforce.	• Developing a strong skills-set in scarce fields, thereby enabling SA to compete in world markets. • Promoting entrepreneurship in small businesses.
6	Efficient, competitive and responsive economic infrastructure network.	Ensuring a comprehensive financial and implementation package that delivers the most cost-effective solution.
7	Vibrant, equitable and sustainable rural communities with food security for all.	Supporting other water sector institutions to enable them to deliver on their mandate.
8	Sustainable human settlements and improved quality of household life.	Providing affordable infrastructure and improved access to basic services.
9	A responsive, accountable, effective and efficient local government system.	Supporting other water sector institutions to enable them to deliver on their mandate
10	Environmental assets and natural resources that are well protected and continually enhanced.	Developing infrastructure in an environmentally responsible and socially inclusive manner, in accordance with global best practice.
12	An efficient, effective and development-orientated public service.	Contributing to the development of critical knowledge in the sector and beyond (e.g. project financing and implementation, desalination, water reuse).

OUR BUSINESS MODEL

The business model through which TCTA renders services, receives revenue and allocates business risk, is schematically displayed in Figure 2. It has remained largely unchanged since the organisation's inception more than 35 years ago. TCTA implements mainly off-budget national water infrastructure, on behalf of DWS, by progressing projects to a state of bankability and securing finance, followed by the procurement of design and construction services. Lenders can draw comfort from the undertaking by the government to assume TCTA's obligations to funders, if it is unable to do so, in terms of project income/implementation agreements. Loans are typically repaid over 20 years.

Figure 2: Business Model



STAKEHOLDER RELATIONSHIPS

Effective stakeholder engagement enables TCTA to develop more informed policies, project plans, programmes and services. This engagement yields benefits for the various parties. For stakeholders, these include opportunities to contribute to policy and programme development and participation in decision-making, where applicable. Interaction further enhances the possibility of achieving favourable outcomes on matters that need negotiation and consensus between the parties. For TCTA, well-thought-out stakeholder engagement strategies, offer an effective platform to unlock obstructions to business success and produce efficient information flow. Furthermore, the engagement also delivers a window for the organisation to tap into local knowledge and to "road test" policy initiatives with stakeholders.

TCTA seeks to contribute to the nation's water security through the financing and development of water infrastructure. Management of stakeholder relationships are, therefore, critical to the execution of the organisational mandate.

TCTA creates and maintains relationships with a variety of stakeholder groups. It enables the organisation to achieve more than it would, working in isolation. In the period under review, TCTA primarily focussed its efforts on maintaining and improving relations with the parent national department, DWS, other government departments and institutions with a significant impact on its business. The organisation further paid special attention to funding institutions with a financial interest in the projects it manages.

Table 3 below outlines the organisation's broad list of stakeholders and the nature of engagement with them.

Table 3: Stakeholder Relationships

Stakeholder	Nature of interest/ stake	Engagement strategy
Parliament	Regulation and compliance with legislation.	Empower with project information. Present Integrated Annual Report and Corporate Plan. Account on performance and governance of the organisation. Manage the relationship.
Shareholder (Ministry)	Directive and mandate to operate. Financial guarantees and compliance.	Account on performance and governance of the organisation. Consult stakeholder on all major decisions. Provide project monthly reports. Hold regular meetings. Collaborate and empower with relevant information. Manage the relationship.
Shareholder Department (DWS)	Compliance with Ministerial directives and mandate.	Advise on funding requirements. Provide advice and support on consultations with bulk water users. Communicate results and performance. Obtain feedback on requirements or any changes. Provide frequent status reports and updates. Have stream focused collaborative meetings/ engagements at senior management level. Collaborate and empower with relevant information. Manage the relationship.

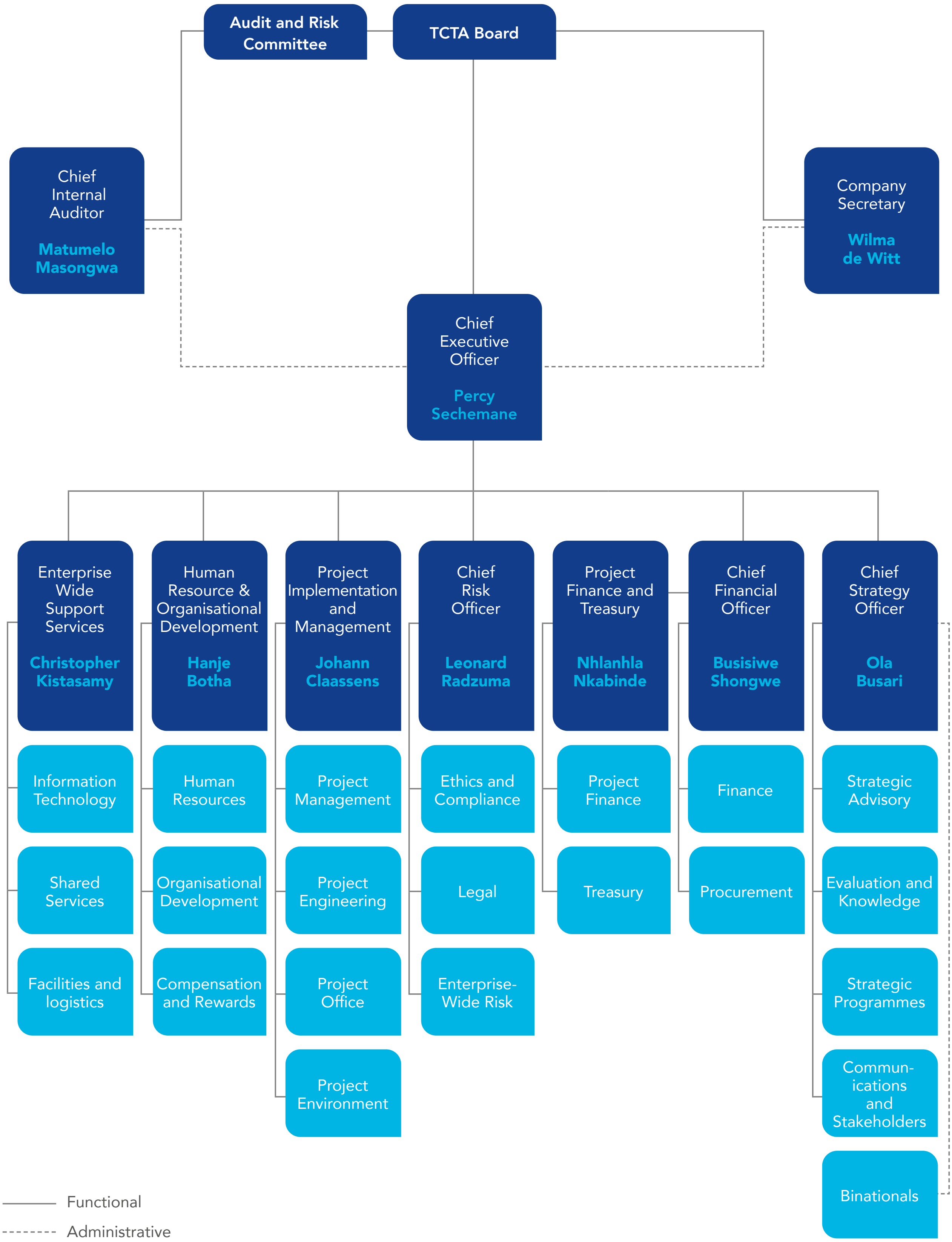
Stakeholder	Nature of interest/ stake	Engagement strategy
National Treasury	Operation within borrowing limits. Compliance with applicable legislation.	Account for performance and governance of the organisation. Consult on all major financial decisions and PFMA related matters. Provide regular status reports and updates. Collaborate and empower with relevant information. Manage the relationship.
Major Water Boards	Current and future raw water off-takers and tariff payments.	Involve and keep stakeholders informed on all developments within the implementation of projects. Provide support on consultations with bulk potable water users. Ensure regular reporting on project progress. Provide transparent information. Explore future opportunities. Manage the relationship.
Water Boards and water entities	Key water sector role-players.	Empower and consult on sector-wide issues. Provide support on consultations with bulk potable water users. Lobby for support, as required.
Off-takers	Water resources infrastructure is funded and implemented cost-effectively and sustainably, fair and transparent determination of capital charges	Water users participate in the development of institutional arrangements and project Committees, and are consulted during tariff reviews.
Financiers	Ability to service loans and project development.	Keep satisfied. Keep informed on the financial standing of the organisation. Meet regularly. Comply with contractual agreements. Report on good governance.
Communities	Favourable decisions.	Empower and consult on relevant issues. Establish representative community forums in active project areas.
Government Regulators	Compliance and good governance.	Keep satisfied. Keep informed. Engage regularly. Provide compliance reports.
Bi-national partnerships	Servicing the terms of the Treaty.	Manage closely. Collaborate and consult. Regular meetings with bi-national partners. Honour agreements.
Rating agencies	Provide credit ratings on projects, used by funders and other interested parties	Provide requested information
Contractors	Successful implementation of projects.	Manage closely. Schedule monthly performance evaluation meetings. Monitor performance. Satisfy contractual obligations.

Stakeholder	Nature of interest/ stake	Engagement strategy
Suppliers & consultants	Provision of quality services & products and timeous payment of services rendered. Successful management of contractors.	Manage closely. Schedule monthly performance evaluation meetings. Monitor performance. Inform timeously on changes. Satisfy contractual obligations.
Media	Accessibility of information and brand visibility.	Keep informed. Engage and empower. Provide factual information. Ensure deadlines are met on all enquiries. Manage the relationship.
Civil society	Social and environmental responsibility.	Keep satisfied. Consider needs and concerns. Respond decisively and responsibly. Manage the relationship.
Affiliations and associations	Contribution to excellence in the sector.	Share information. Attend to all membership requirements within guidelines and expectations.
Internal stakeholders	Organisational performance and a conducive working environment.	Manage the relationship closely. Collaborate and empower with information. Account on performance and governance of the organisation. Consult stakeholders on all major decisions. Have regular meetings. Promote organisational values. Promote accessibility. Motivate. Provide effective communication.

ORGANISATIONAL STRUCTURE

The organisational structure as of 31 March 2022 is as per Figure 3.

Figure 3: Organisational Structure



Striving for a survivable climate

B

PERFORMANCE INFORMATION

Humanity's response to climate change has become perhaps the single most important challenge of our time; it requires a unified global response and difficult, even painful economic and technological restructuring, at a time when power blocks are deeply divided. If we fail in this quest, parts of the planet may well become uninhabitable, and in most instances, it will be poor nations and vulnerable people bearing the brunt. Climate change will test not only our resolve and ingenuity, but also our humanity.

Throughout the ages of man, climate and water security have always influenced where human settlements could develop and survive. In recent years, however, the long-run equilibrium appears to have been destabilised; extreme floods, droughts and heat waves seem to occur more frequently, and glaciers and ice shelves that have existed for millennia are disappearing at an unprecedented and alarming rate. Climate change is revealing its might to all the inhabitants of this planet.

A global response to climate change has been underway, at least since the late 1980s; under the auspices of the United Nations Framework Convention on Climate Change, the Paris Accord of the Conference of the Parties was adopted by many nations, including South Africa, during 2016. Its aim is, broadly, to keep global temperature rise well below 2° C in this century, through the elimination of carbon emissions.

The science explaining climate change, how it is caused and what its effects will be, has developed substantially in recent years, and many of its concepts and terms are now part of mainstream conversations. Yet despite near-universal adoption of the science, some dissenting, minority views remain.

What does seem clear, with widespread consensus amongst the scientists, is that human-induced warming[1] of the planet had already reached 1°C above the pre-industrial[2] temperature in 2017 and is currently increasing at 0.2°C each decade. This is caused by the emission of greenhouse gasses[3] from much of what we do: Travel, transport, consumption of energy, manufacture of steel or cement, etc. The aim is now to constrain global warming to no more than 1.5°C[4] above pre-industrial levels; to do this, we need to reduce the current rate of emissions by 45% by 2030, and we need to achieve global Net Zero Emissions[5] by 2050.

Another perspective is to consider that the planet had a "budget" in 2018 of about 400 Giga-tonnes of GHG to emit before the 1.5°C limit would be breached. Current global emissions stand at around 40 Gt per annum, which means that with no reduction in emissions, the planet would reach the 1.5 °C limit by 2028, with all the grave implications that entails. Hence, there is a clear imperative to make real progress with the decarbonisation of our economies, as soon as possible.

The International Energy Agency has developed a pathway to net zero emissions by 2050, depicted in summary form in the diagram on the following page, wherein milestones appear for the cessation of specific carbon-intensive economic activity, and the up-scaling of renewable energy sources and low-carbon activity. Scrutiny of this pathway will indicate those industries and technologies likely to be terminated through policy and regulation over the next 30 years. Also noteworthy on this pathway is the emergence of a "hydrogen economy," wherein green or low-carbon hydrogen is used as an energy carrier instead of hydrocarbons (e.g., diesel, petrol, kerosene); this is foreseen to enable a global trade in renewable energy, and allows zero-emission combustion of the fuel, with significant gains in air quality.

One may well ask why is it even necessary to maintain the global average temperature below the 1.5°C limit; what would be the implications if temperatures went to 2°C or more? The short answer, taken from the 6th Assessment Report of the Intergovernmental Panel on Climate Change

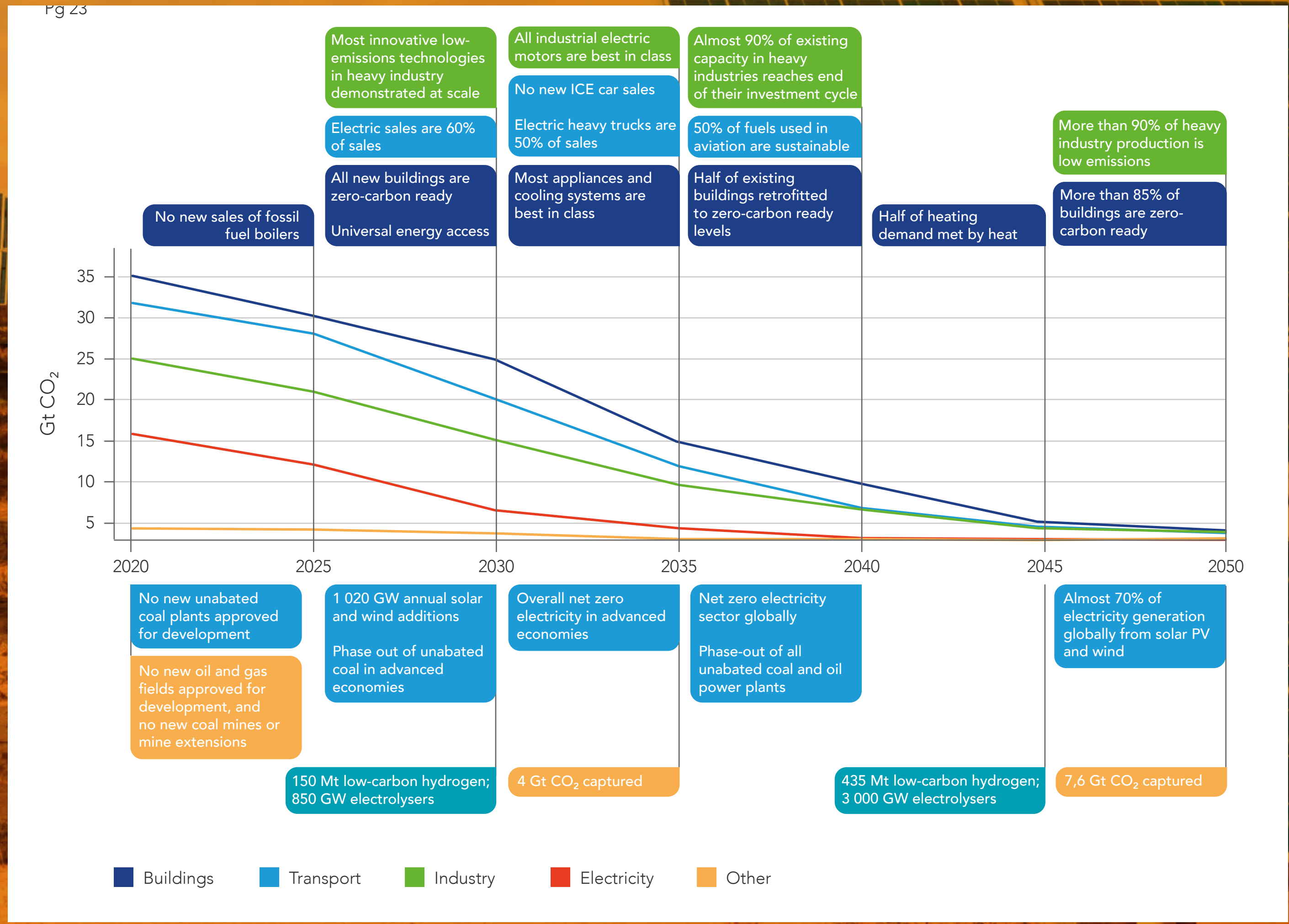
1 *Global warming is defined by the Inter-governmental Panel on Climate Change (IPCC) as an increase in combined surface air and sea surface temperatures averaged over the globe and over a 30-year period.*
2 *The period 1850 to 1900 is used as an approximation of pre-industrial temperatures.*
3 *Greenhouse gasses (GHGs) absorb and emit radiant energy within the thermal infrared range. Too much GHG in the atmosphere causes a heat build-up, and hence global warming. The primary GHGs in the atmosphere are water vapour (H2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Without any GHGs, the average temperature on Earth would have been about -18°C.*
4 *The 6th Assessment Report of the IPCC (March 2022) expresses "very high confidence" that global warming reaching 1.5°C would cause unavoidable increases in multiple climate hazards and present multiple risks to ecosystems and humans.*
5 *"Net Zero" refers to reducing global greenhouse gas emissions to as close to zero as possible, to the point where any remaining emissions could be re-absorbed from the atmosphere by oceans and forests.*

B

PERFORMANCE INFORMATION

is that if the global average temperature could be curbed at 1.5°C instead of 2°C, adaptation to climate change would be less difficult, and there would be fewer negative impacts on resources, ecosystems, biodiversity, food security, cities and tourism as a result of the intensity and frequency of extreme events. There is medium confidence that around 420 million fewer people would be frequently exposed to extreme heatwaves, and about 65 million fewer people exposed to exceptional heatwaves, assuming no change in vulnerability. There is similar confidence that the probability of extreme drought and water stress would be substantially increased in some regions, particularly the Mediterranean and Southern Africa.

In essence, responding to the climate challenge should dominate much of the leadership agenda over the next three decades and beyond. There will be tough choices to make in the strategy of enterprises, public policy and governance; leaders will need to have courage and follow the science. No country, region, city or organisation will be exempted from an obligation to reduce its carbon footprint. But there will also be opportunities, as it often is with crises. Perhaps the strategy then for an organisation like TCTA would be to engender an innovative and intrapreneurial approach in our efforts to mitigate and adapt, and to seek out the opportunities presented by the disruption.



ORGANISATIONAL PERFORMANCE

TCTA continues to fulfill a critical role in the water sector through the raising of funding, the implementation of sound infrastructure and diligent debt management.

The performance of TCTA is measured in two ways:
1) Through the predetermined objectives that are concluded annually with the Minister in the Shareholder's Compact; and
2) The Balanced Scorecard, in which the predetermined objectives account for 35% of the performance concluded between management and Board.

The organisation achieved 10 out of 13 targets (77%) in the Shareholder Compact and 28 out of 31 targets (74%) in the Balanced Scorecard.

Predetermined Objectives in the Shareholder's Compact

In the achievement of the predetermined objectives, the most notable achievements were in the managing of the debt and the operation and maintenance of the acid mine drainage plants in Gauteng.

In the managing of debt, the most noteworthy achievement was on 28 May 2021, when the repayment of the WSP05 bond and its associated coupon occurred, an amount of R9 857 million. The underlying cash flows on the Vaal River System remain strong, as demonstrated by the fact that as of 31 March 2022 an amount of R5 555 million, in cash, was available in the account for use on LHWP-2.

All other projects had sufficient funds to continue with preparatory activities, whilst working towards the milestone of issuing tender documents.

TCTA operates the Acid Mine Drainage (AMD) plants on behalf of the Department of Water and Sanitation. The year proved particularly challenging with the continual failure of the pumps used to abstract the water from the mine void, for reasons that are still under investigation. Travel restrictions imposed by COVID-19, supply chain problems in Germany and the lack of responsiveness by the manufacturer to the urgency of the situation lead to the result of having insufficient working pumps to keep all three basins operating. A decision was made to concentrate the operable pumps in the Central and Western Basins for the following reasons.

The Central Basin was declared operational in December 2014 and experience has shown that the pumping rate required to hold the water level constant has increased. With the capacity of the plant, it has proved difficult to draw the water level back down after any outage. A decision was made to continue to pump, even at a reduced capacity due to the pump and the scaling on the outfall line, so that when the capacity is restored, the task of drawing the water level down again will be more manageable.

In the Western Basin, after 12-years of intervention, the water level on 31 March 2022 was 4.47 m from overflow occurring. This is due to the plant in the Western Basin still being the emergency intervention and not a designed fit-for-purpose plant (as is the case with the Central and Eastern Basin Plants). With the lack of a buffer in the mine void able to accommodate any plant outage, a decision was made to keep the plant running at full capacity and prevent overflow, This contrasts with the Eastern Basin, where the Council for Geoscience's efforts to reduce ingress have borne fruit, resulting in significant extra capacity in the plant and thus the ability to easily draw down the water levels once the pumping capacity is restored.

As a result of a proactive approach to the challenges faced, the water quality discharged into the different watercourses remains 100% compliant and there has been no reported contamination of surface water or groundwater.

On procurement, there were a number of challenges resulting in the targets not being met. The tender for the Professional Service Provider for the Outage on Delivery Tunnel North of the Lesotho Highlands Water Project was delayed on the advice of the National Treasury on 25 February 2022, stopping all new bids being advertised after 16 February 2022, whilst National Treasury sought clarity from the Constitutional Court. However, this has now been clarified, the document issued, and it will not impact the delivery programme.

On MCWAP-2A, the procurement strategy was changed due to an abundance of precaution over a possible irregularity and a new strategy was approved.

Table 4: Performance against Predetermined Objectives in the Shareholder Compact for 2020 - 2021

Objective	Measure	Target	Progress as of 31 March 2021	Reasons for variance if target was not met
1. Implement capital projects in accordance with the timelines agreed with DWS	Reaching of project critical milestones as reflected in the Project Plan	**MCWAP-2A:** Approval of the 1st construction contract by the BAC within 8 months of the BAC approval of the pre-qualified tenderers.	The Bid Specification Committee approved the pre-qualification specification on 2 July 2021, but subsequently changes to the procurement strategy made PDO not applicable Based on the revised procurement strategy of 16 November 2021. The tender documents were revised and completed by 31 March 2022	Exco suspended the procurement process in July 2021 due to a concern over a possible tender process irregularity that needed to be investigated. Following the conclusion of the investigation Exco directed that a revised procurement strategy must be prepared for the main construction activities and approved same on 16 November 2021. Given the resultant delay, the milestone became inapplicable in the financial year ending 31 March 2022.
2. Operate and maintain designated projects to meet DWS requirements/ specifications	The Level of water below shaft collar level in mine void, in all basins is being drawn down to meet DWS requirements set out in letter of 23 September 2020	**Western Basin:** Between 80% and 90% of the treatment capacity of 30 Ml/d.	**Western Basin:** Average volume treated of 31.3 Ml/d equating to 104% of the treatment capacity of 30 Ml/d	
		Central Basin: Between 80% and 90% of the treatment capacity of 60 Ml/d.	**Central Basin:** Average volume treated of 50.1 Ml/d equating to 84% of the treatment capacity of 60 Ml/d	
		Eastern Basin: Eastern Basin: Between 80% and 90% of the treatment capacity of 100 Ml/d.	**Eastern Basin:** Average volume treated of 37.4 Ml/d equating to 37% of the treatment capacity of 100 Ml/d	Challenges experienced are: Three motor failures were experienced during the year, two in the 1st quarter and one in the second quarter of 21/22. The sole remaining pump also experienced a motor failure on 2 February 2022, resulting in a total shutdown of pumping operations. Due to delays in obtaining the required spares to repair the motors the Eastern Basin will not have a motor available till June 2022. Pending the repair of the motors, the water level in the basin will rise. It is anticipated that no negative environmental impact will occur before the plant is back in operation.
	To ensure the water discharged from the Western Basin, Central and Eastern Basins plants, meets parameters as set out in DWS letter of 23 September 2020	90% or greater, of the water samples taken in the Western Basin are compliant	100% of the water samples taken in the Western Basin are compliant	
		90% or greater, of the water samples taken in the Central Basin are compliant	100% of the water samples taken in the Central Basin are compliant	
		90% or greater, of the water samples taken in the Eastern Basin	100% of the water samples taken in the Eastern Basin are compliant	
	LHWP Delivery Tunnel North-Prepare for tunnel outage in 2024	Issuance of PSP Tender Documents for the required 2024 tunnel outage by March 2022	On 8 March 2022, the Request for Bid was approved by the Bid Specification Committee.	The tender was not issued due to the instruction from the National Treasury of 25 February 2022, stopping all new bids being advertised after 16 February 2022, whilst the National Treasury sought clarity on the Constitutional Court
3. Raise funding for implementation of infrastructure and manage debt within the approved borrowing limit	Sufficient funding is available to facilitate reaching of critical project milestones	**MCWAP:** Funding is available to enable construction to commence according to the Project Plan for MCWAP-2A	As of 31 Mar 2022, an amount of R608 million, in cash, was available in the MCWAP account for use on MCWAP-2A	
		VRS: Funding is available to enable construction to commence according to the Project Plan for LHWP-2	As of 31 Mar 2022, an amount of R5 555 million, in cash, was available in the VRS account for use on LHWP-2. Total committed facilities available for drawn amounted to R10 410 million is available for further drawdowns. Of this amount, R7.5 billion can only be used for the purpose of CAPEX only.	
		VRS: Funding is available to enable redemption of maturing debt on 28 May 2021	Funding was available to enable the redemption of maturing debt on 28 May 2021.	

Table 4: Performance against Predetermined Objectives in the Shareholder Compact for 2020 - 2021 (continued)

Objective	Measure	Target	Progress as of 31 March 2021	Reasons for variance if target was not met
3. Raise funding for implementation of infrastructure and manage debt within the approved borrowing limit	Sufficient funding is available to facilitate reaching of critical project milestones	**uMkhomazi Water Project:** Funding is available to enable project implementation activities for 2021-2022 according to the Project Plan	As of 31 Mar 2022, an amount of R11.5 million, in cash, was available in the uMWP account	
	Debt is managed within approved borrowing limits	Debt managed within the borrowing limits and all payment obligations are met. • VRS • BWP • VRESAP • KWSAP • MMTS-2 • MCWAP	Debt managed within the borrowing limits and all payment obligations were met. As of **31 Mar 2022**, the remaining borrowing authority per project were as follows: • VRS: R9 538 million under limit of R19 076 million. • BWP: R128 million under limit of R411 million. • VRESAP: R498 million under limit of R3 307 million. • MMTS-2: R690.7 million under limit of R1 273 million. • KWSAP: R95.3 million under limit of R1 185; and • MCWAP: R 3 792 million under limit of R4 690 million. Debt servicing payments (1 Apr 2021-31 Mar 2022): • Capital repaid amounted to R3 531 million; • WSP5 nominal: R9 433 million • Interest paid was R1 084 million; • WSP5 coupon: R424 million; and • Fees paid were R175 million.	

Legend
- Achieved
- Not achieved

SUMMARY OF PROJECT IMPLEMENTATION

TCTA funds and implements a portfolio of projects on behalf of the Department of Water and Sanitation. These are at various phases, namely preparation, implementation and closure phases.

In addition, TCTA oversees the operation and maintenance of the Delivery Tunnel North of the Lesotho Highlands Water Project as well as Acid Mine Drainage (AMD) treatment plants in the Western, Central and Eastern Basins of the Witwatersrand Goldfields.

The key activities undertaken during the year under review are summarised as follows:

Projects in Preparatory Phase

uMkhomazi Water Project – Phase 1

The uMgeni System is the main water source supplying about 6 million people and industries in KwaZulu-Natal. The water requirements projection indicates that the uMgeni System is experiencing a deficit, and therefore, there is a need to augment the water supply of the system. In February 2019, the Minister issued TCTA with a directive to fund and implement the bulk raw water component of the project, which entails the following infrastructure:

- an 81m high Smithfield Dam and Associated Infrastructure in the uMkhomazi River near Bulwer.
- a water conveyance infrastructure:
  - approximately 32km of 3.5m diameter tunnel from Smithfield Dam reservoir to the uMlaza River Valley
  - approximately 5km of 2.6m diameter raw water pipeline from the outlet portal of the transfer tunnel (above) to the proposed Umgeni Water's water treatment works in the uMlazi River Valley.

The project will increase the yield of the uMgeni System by 220 million m^3 per annum.

The two Environmental Authorisations (EAs) for the project were received in November 2020, however, the proposed Environmental Management Programme for the whole project was rejected. The EAs had onerous restrictive conditions necessitating two amendment applications on various conditions. The final amendment applications were approved by the Department of Forestry, Fisheries and Environment (DFFE) in September 2021 and there were no appeals from the interested and affected parties. Furthermore, the Environmental Management Programmes (for pre-construction only) were revised and submitted to DFFE in January 2022. DFFE approved both programmes in March 2022. TCTA will start preparing bid documents for the design and construction of the infrastructure.

The project was prepared for funding and implementation during the year, utilising R69 million allocated by DWS pending the finalisation of institutional arrangements and the raising of funding.

Water supply agreements with the users were prepared and consultations commenced. During these consultations, the Municipalities requested that the National Fiscus contribute 50% of the project cost, versus the 25% defined in the DWS feasibility study. This request has been referred to the Project Steering Committee and further progress is subject to this matter being resolved.

Projects in Implementation Phase

Berg River - Voëlvlei Augmentation Scheme

The Water Reconciliation Strategy for the Western Cape Water Supply System indicates that the system is in deficit and should have been augmented by 2019-2020 to avert a severe shortfall. This need was evident when the water supply system could not cope with the drought situation that was experienced in 2018-2019. BRVAS was identified as the next surface water development that can contribute to satisfying this requirement. BRVAS will abstract and pump winter flows from the Berg River to the existing Voëlvlei Dam, improving its yield by 23 million m^3 per annum. The project consists of a diversion weir in the Berg River, a pump station, a 6.3 km long pipeline and ancillary works.

There has been good progress made in the implementation activities of BRVAS during the year under review. In February 2022 the PSP, who was appointed in February 2021, completed the conceptual designs, after amending the information through additional investigations. The enhanced design outputs were used to augment the initial TCTA drafted Plant, Design & Build tender document. The tender will be issued in the next financial year subject to project funding being confirmed.

The project timelines and cost estimate were revised following the improvements to the conceptual designs. The Project Charter was accordingly updated with the revised information. The revised cost estimate is higher than the initial one used, which was based on the DWS feasibility study information, to estimate the indicative water tariff and informed the borrowing limit application. Further consultation with the water users will be required to confirm the affordability to the users, which will enable the finalisation and signing of all water supply agreements, followed by the raising of funding.

Mokolo - Crocodile River (West) Water Augmentation Project – Phase 2A (MCWAP-2A)

The project comprises an abstraction weir, pump stations and a 160-km pipeline to transfer water from the Crocodile River near Thabazimbi to the Lephalale area. The project is a prerequisite to enable further development of the Waterberg Coalfields, as envisaged in the first Strategic Infrastructure Project of the Presidential Infrastructure Coordinating Commission. It will enable Eskom to have a second source of water supply for their Medupi and Matimba power stations, which is 20% of the country's reliable power supply capacity. Also, it will enable them to operate an additional three flue gas desulphurisation (FGD) units at the Medupi Power Station, and later six Matimba FGD units, which could not be supplied with the available water from the Mokolo Dam, through the Phase 1 of the project. The FGD units minimise the environmental emissions from the power station, which is a condition of Eskom's World Bank loan and the Department of Environment, Forestry and Fisheries emission requirements. The FGD units are expected to be operational by 2027.

The full implementation of the project has commenced, and the project is in the Tender Design and Procurement phase. As at March 2022, the designs on the infrastructure are 100% complete and the procurement documents, in accordance with the revised contracting strategy for the construction contractor, were in preparation. Issuing of the tender is dependent on the securing of the total project funding.

The Environmental Authorisation on the project was received in March 2019, and all the environmental appeals were dismissed by the Minister of Forestry, Fisheries and Environment in October 2020. The identified project environmental studies, which were conditions of the approval, were completed and a Construction Environmental Management Programme, which includes the deviations necessitated by the discovery of a bat cave along the pipeline route, was submitted to DFFE for authorisation that is expected in the next reporting period.

The Department of Minerals Resources gave approval for 23 of the 30 borrow pits, with 7 being appealed, being in a critical biodiversity area. These appeals are being addressed and should be resolved in the next reporting period.

The Socio-Economic studies for the project area have been completed and the report informed the criteria for procurement. Valuations for properties along the entire pipeline route were done, and Promotion of Administrative Justice Act notices are expected to be issued in the next reporting period.

The Scoping Report of the River Management System (RMS) is complete and the procurement of the RMS PSP to do designs and construction supervision is concluded. The contract placement for the PSP is expected in the next reporting period.

The Water Supply Agreements, borrowing limit and government guarantees are in place for the project. A tender to obtain funding will be issued to the market in the next reporting period.

The identified Water Users have applied for their Water Use Licences, with Eskom having obtained theirs in the financial year and Exxaro having made an application. DWS has received appeals on the Water Use License applications, which it is in the process of resolving.

Overall, the project is 20 months behind schedule due to a combination of COVID-19 impact, PSP delays and the suspension and subsequent revision of the procurement process for the contractor.

Project in Close-out Phase

Olifants River Water Resources Development Project – Phase 2C

The project comprises a 40-km distribution pipeline from De Hoop Dam, which feeds the De Hoop Water Treatment Works at Steel Bridge, and a pump station near Steelpoort, where it can interconnect with the Lebalelo Water Users Association infrastructure. It provides water to the eastern limb of the Bushveld Complex (mining) as well as for municipal consumers in the Sekhukhune District Municipality.

The project is complete and was handed over to DWS for operations and maintenance. The remaining activity during the year was limited to obtaining financial closure on the construction contract through the contractual dispute resolution process to close-out of the project.

Advisory Services to DWS

Mzimvubu Water Project (MWP)

The Mzimvubu Water Project aims to develop the water resources in the Mzimvubu River catchment to provide a stimulus for the regional economy in terms of domestic water, irrigation, hydropower generation and job creation.

On 16 January 2019, TCTA received a revised directive to provide project management advisory services to DWS for the implementation of Stage 1 of the project, which entails the construction of the access road to Ntabelanga Dam.

Construction started in March 2021. However, limited progress was achieved due to initially, the lack of construction drawings as a result of their dispute with the professional service provider and subsequently to procurement delays and adverse climatic conditions. TCTA also supported DWS with resources for social facilitation that ensured all stakeholders are engaged and key issues are resolved without community disruptions to the works.

SUMMARY OF OPERATION AND MAINTENANCE ACTIVITIES

TCTA operates and maintains the following two infrastructure projects:
1) delivery Tunnel North of the Lesotho Highlands Water Project; and
2) the Short-term Intervention of the Acid Mine Drainage Project.

A summary of these activities is as follows.

Delivery Tunnel North of the Lesotho Highlands Water Project

In terms of the Treaty, as amended by Protocol IV between the Republic of South Africa and the Kingdom of Lesotho, TCTA is responsible for the operation and maintenance of that part of the project situated in the Republic of South Africa, Delivery Tunnel North, and is accountable to the Lesotho Highlands Water Commission in this regard. TCTA also manages the Ash River Management Plan, a river erosion monitoring and mitigating plan that was implemented following the start of water deliveries from LHWP.

During the financial year under review, TCTA complied with all its operations and maintenance obligations to ensure that the infrastructure could deliver the scheduled 894 million m^3 of water at the designated outlet point in the Ash River.

Acid Mine Drainage Treatment Plants

A summary of the performance of the AMD treatment plants is as follows:

Western Basin

Over the reporting period, the volume target of treated water of between 80% and 90% of the max treatment capacity of 30 Ml/d including planned outages, calculated over the full year, and adjusted for any force majeure events or other events outside TCTA's control, has been exceeded. The average volume treated for the year was 31.37 Ml/d (= 104%) of the treatment capacity of 30 Ml/d. The average daily ingress is in the order of 28 Ml/d, meaning that the plant is operating with very little spare capacity for downtime and cannot easily drawdown the water level. No negative environmental impact occurred, and the strategic objective of protecting the natural water system was maintained.

TCTA, DWS and Sibanye Stillwater, who are the owner and operator of the plant, are constantly evaluating the plant and are looking for ways to further improve the plant efficiency to address the changing parameters and, in turn, reduce operating costs.

Central Basin

Over the reporting period, the Central Basin Plant did achieve the revised target of an average daily volume of treated water of between 80% and 90% of the max treatment capacity of 60 Ml/d including planned outages, calculated over the full year, and adjusted for any force majeure events or other events outside of TCTA's control. An average of 50.1Ml/d (=84%) was achieved during the financial year ending 31 March 2022. No negative environmental impacts occurred during the full reporting period. The operational challenges set out below were encountered during the period, giving rise to the lower-than-expected treated water volumes for the full year:

a) The plant was operated at less than full capacity during the period due to a lower capacity pump being installed pending the procurement of a larger capacity replacement pump (+/-17% lower).
b) Restrictions on the treated water outlet pipeline due to scaling (- 7%)

To restore the full treatment capacity of the Central Basin plant the following mitigation measures are in progress:

a) TCTA is in consultation with Andritz in Germany to build a new pump with the spare parts on-site. They are currently finalising the spares and equipment needed prior to coming to site.
b) The purchase of a new pump/motor is currently being finalised which will give the site a spare motor and pump.
c) A second discharge pipeline will be constructed utilising the contract with the plant operator.

Eastern Basin

The target for the operation of the eastern Basin has not been met due to motor failures which result in an average volume treated of 37.4 Ml/d equating to 37% of the treatment capacity of 100 Ml/d. This failure was due to the initial failure of two of the pump motors in June 2021, followed by the remaining pump motor failing in February 2022, resulting in the complete shutdown of the plant due to no pumps being available.

The failed motors will be repaired as soon as the required spares from Germany have been delivered. Unfortunately, supply chain challenges in Europe have delayed the delivery of the required spares for the motors. The first repaired motor was scheduled to be recommissioned during June 2022.

The interventions taken by management included the reporting of the non-responsiveness of the German supplier to the local embassy, which resulted in a visit from Andritz senior management in February 2022 where the supplier recommitted to providing support to TCTA through their local subsidiary. A service level agreement will be concluded to formalise the required support from the supplier, and they undertook to do further tests on the root cause of the motor failures which at this stage seems to be related to the cooling system. Andritz raised extended travel restrictions and international supply chain challenges due to COVID-19 as the root cause for their lack of support to TCTA.

The water effluent discharged into Blesbokspruit met the DWS specification.

Table 6: Treated Water Quantity and Quality data from the three basins

Basins			Western	Central	Eastern
Average Volume Treated			31.3 Ml/d	50.1 Ml/d	37.4 Ml/d
Environmental Critical level			Not determined	126 m below ground level	106.6 m below ground level
Level as at 31 March 2022			4.47 m	82.40 m	70.05 m
Water Quality	**Units**	**Specification (as per DWS directive)**	**Treated Water (Annual average 1 Apr '21 – 31 Mar '22)**		
PH		6.5 – 9.5	100%	100%	100%
Iron	mg/l	< 1	100%	100%	100%
Manganese	mg/l	< 10	100%	100%	100%
Aluminium	mg/l	< 1	100%	100%	100%
Sulphates	mg/l	≤3 000	100%	100%	100%
Electrical Conductivity	mS/m	≤450	100%	100%	100%
Turbidity	NTU	≤30	100%	100%	100%

Table 7: Operating Costs

Basins	Central	Eastern	Western
Operations	72 161 429	34 786 208	56 858 298
Electricity	41 006 139	34 274 551	-
Rates & Taxes	7 931 567	3 154 729	-
Recoveries from ERGO	-16 760 938	-	-
Total	**104 338 197**	**72 215 488**	**56 858 298**

All costs excluding VAT

FINANCIAL SUMMARY

For the year ended 31 March 2022, TCTA was once again tasked with ensuring effective financial management which ensures the successful achievement of its strategic goals, both financial and non-financial.

The financial performance of TCTA as reported, provides a snapshot of the underlying activities and provides assurance of the financial health of the organization as well as to provide assurance of TCTA's ability to continue to operate as a going concern. Compliance with Public Finance Management Act remains an area of focus and shortfalls identified within the compliance environment are receiving the priority attention of management more especially with regards to the prevention of the occurrence of irregular, fruitless and wasteful expenditure and in ensuring that the expenditure incurred in previous financial years is condoned by the relevant authority.

Management is pleased with the annual financial statements as reported as a reflection of TCTA's continual drive to improve our financial reporting, which ensures that all stakeholders are presented with reliable and accurate financial information which appropriately and accurately depicts TCTA activities. TCTA is continuing on the commitment made of ensuring that the solid track record of unqualified audit opinions is maintained and that investor confidence remains untainted.

The analysis of TCTA's financial performance can best be interpreted via a deeper insight into the following five elements in its financial statements

a) the Tariff Receivable
b) cash inflows
c) utilisation of Cash Received
d) sources of funding
e) distribution of debt across projects

a) The Tariff Receivable

The Tariff Receivable represents TCTA's entitlement to recover the project costs incurred for the funding, construction and implementation of national water infrastructure as well as the subsequent management of the debt incurred for the implementation of these projects. The Tariff Receivable relates to the present value of all cash flows that are payable by DWS to TCTA to settle construction costs, costs incurred on services rendered, cost-related payments as well as other operating expenses incurred for each project.

The amounts received from DWS decreases the outstanding Tariff Receivable balance (refer to note 10.4 for details on the valuation of the Tariff Receivable).

The Tariff Receivable has been on the decreasing trend as the majority of the projects are in the debt repayment phase with less costs being incurred in comparison to the amounts received from DWS.

i. The receivable was increased by R321m as costs were incurred in relation to projects implemented by TCTA as well as R3.2bn in relation to cost-related payments and royalties. R9.2bn was received from DWS which reduced the balance. Refer to note 10.4.2 for further detail.

ii. TCTA invoices DWS on a monthly basis as a recovery mechanism for the tariff receivable in line with the Income Agreements between TCTA and DWS. Of the amounts invoiced to DWS, R803m was outstanding, a decrease of R160m compared to 2021. The amount outstanding as at the end of 31 March 2022 was neither past due nor impaired. Refer to note 10.4.3 for further detail.

b) Cash inflows

Cash and cash equivalents are held for the purposes of meeting TCTA's short-term cash commitments. Some short-term investments are included as cash and cash equivalents when it is readily convertible to a known amount of cash and the risk of a change in the value is insignificant.

The maturity period of these short-term investments, classified as cash and cash equivalents, are normally less than three months from the date of acquisition.

TCTA prioritises liquidity across all its projects, as such; most investments are allocated to Call and Money Market Funds.

The composition of cash inflows from operating activities (Figure 4) for the year ended 31 March 2022 remained largely unchanged from the year ended 31 March 2021. The higher receipts were partly due to the funding received to finance the social projects. In addition, the tariff billing for the current financial year was higher than the previous financial year due to increased volumes. Total receipts from DWS were R11 316m (2021: R11 105m). Recoveries on social projects were higher as funding was made available for MCWAP-2A, ORWRDP, BRVAS and uMWP.

Figure 4: Cash Inflows from Operations

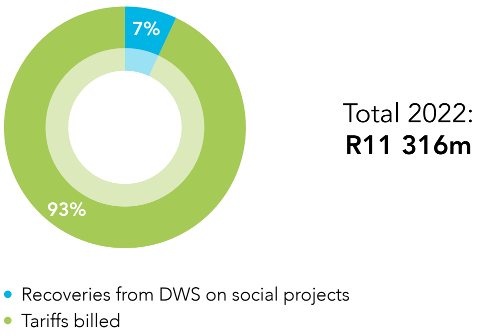
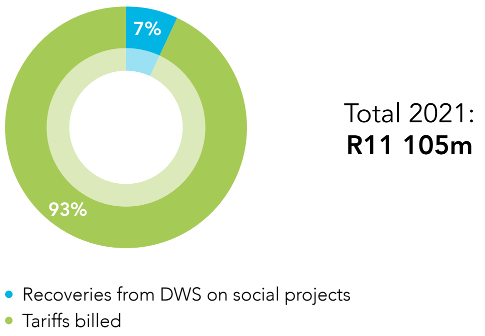


Figure 5: Cash Inflows from Operations



Cash inflows from financing and investing activities for the year ended 31 March 2022 (Figure 6) are mainly due to the additional drawdowns on loans for the repayment of WSP05. In the current financial year, R17m of investments matured as compared to R600m in 2021 as funds were focused on the WSP05 repayment programme.

Figure 6: Cash Inflows from Financing and Investing activities

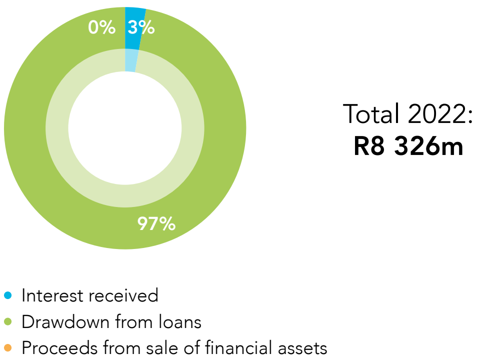
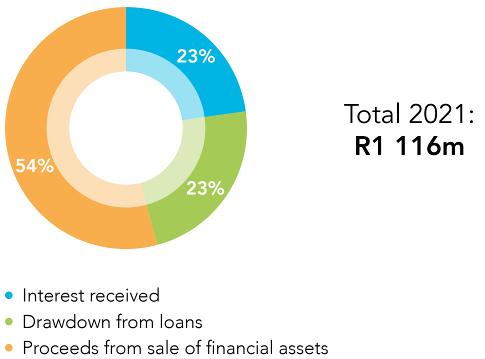


Figure 7: Cash Inflows from Financing and Investing activities



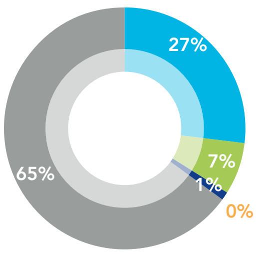
c) Utilisation of Cash Received

Total cash outflows increased for the year ended 31 March 2022, figure 8, as compared to outflows for the year ended 31 March 2021 due to increased capital repayments. TCTA settled the WSP05 bonds as well as other capital repayments which were made in line with the contractual agreements. In addition, the utilisation of the commercial paper programme was lower due to a lesser demand as the timely payments by DWS ensured that there were sufficient funds to service debt. Cash paid to suppliers, cost-related payments and employees increased due to the uptake of spend in the projects currently underway.

Interest paid decreased due to the capital repayments made during the year.

Remuneration related costs have remained at 5% of total outflows consistent with the previous financial year.

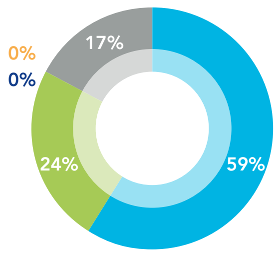
Figure 8: Cash outflows



Total 2022:
R20 046m

- Cash paid to suppliers, cost-related payments and employees
- Interest paid
- Other finance costs
- Purchase of property, plant and equipment
- Repayment on borrowings

Figure 9: Cash outflows



Total 2021:
R7 290m

- Cash paid to suppliers, cost-related payments and employees
- Interest paid
- Other finance costs
- Purchase of property, plant and equipment
- Repayment on borrowings

d) Sources of Funding

The total value of Bonds, as reflected in figure 10, decreased from R9 433 million in 2021 to zero in 2022 due to the redemption of WSP05.

The composition of the sources of funding has changed significantly as compared with the previous financial year. The repayment of the last of TCTA's issued bonds as well as the delay in setting up the Johannesburg Stock Exchange programme has resulted in TCTA having no bonds in issue.

Figure 10: Funding instruments

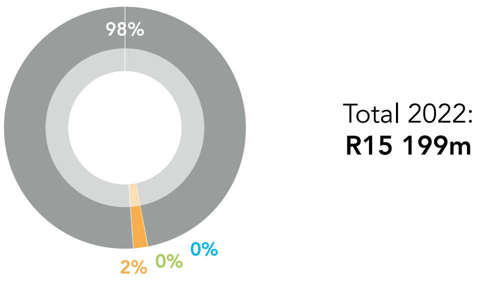
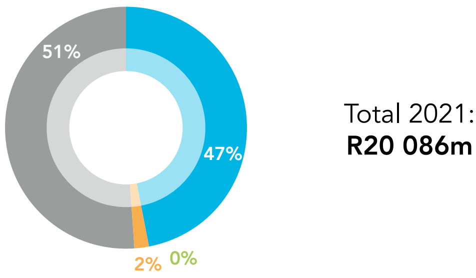


Figure 11: Funding instruments



The short-term borrowings have decreased from 52% to 21% in the current financial year due to the redemption of WSP05 (R9.4bn) in May 2021.

Figure 12: Total Borrowings

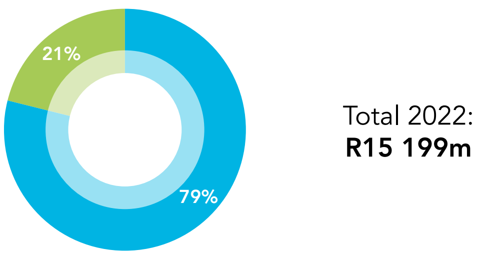
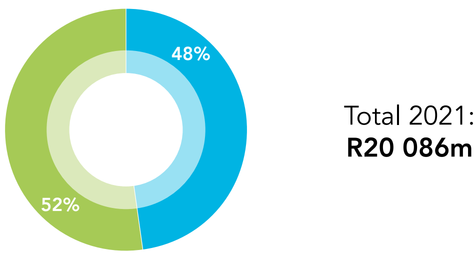


Figure 13: Total Borrowings



e) Distribution of Debt Across Projects

As at 31 March 2022, the overall debt outstanding decreased by R4.9 million and is reflected at an overall balance of R15.0 billion compared to the balance at 31 March 2021 of R20.0 billion. The decrease is as a net result of the redemption of WSP05 of R9.4 billion; draw down of R8.0 billion on long-term loans for VRS with capital repayments in all other projects.

Figure 14: Total debt by project

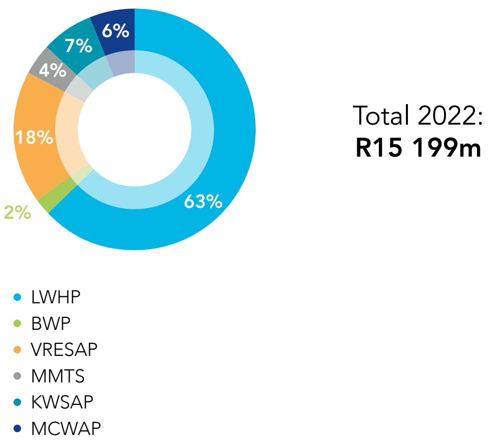
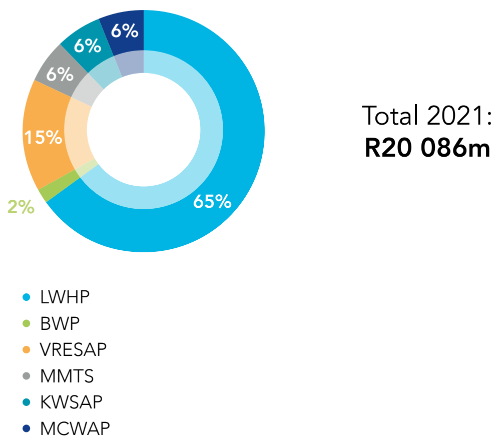


Figure 15: Total debt by project



Is Green Hydrogen our new Gold?

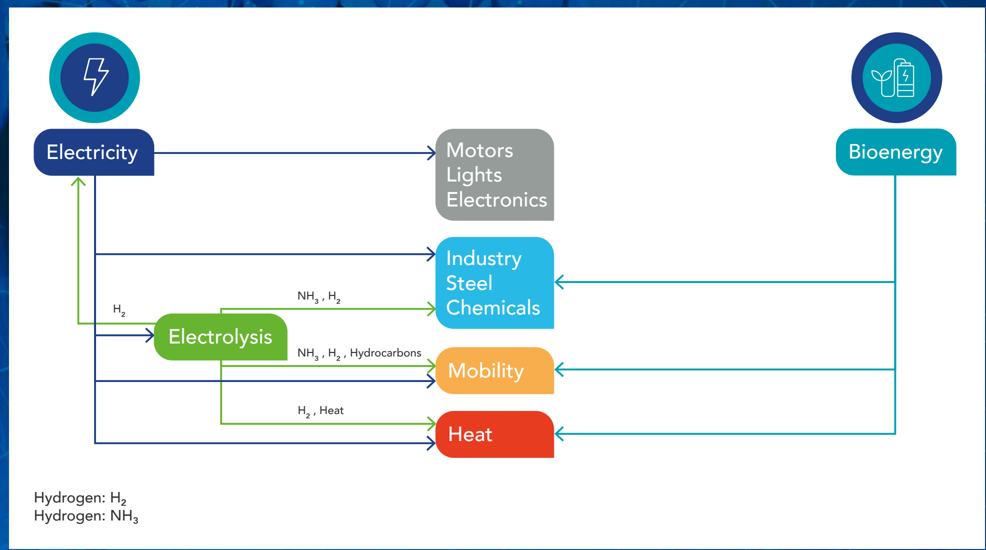
C

SUSTAINABILITY

Hydrogen will have a vital role as an energy carrier in the global economy, during and after the energy transition; this much is clear from the hydrogen strategies already adopted by many industrialized economies. The migration to a hydrogen economy[1], as proposed by these strategies, is underpinned by the climate context.

The burning of fossil fuels contributes about 65% of global anthropogenic greenhouse gas emissions, and this is being targeted for replacement by green hydrogen[2] and the powerfuels[3] derived from it. Besides the climate benefit, hydrogen combustion[4] also brings a significant improvement in air quality, and hence public health, especially in urban areas.

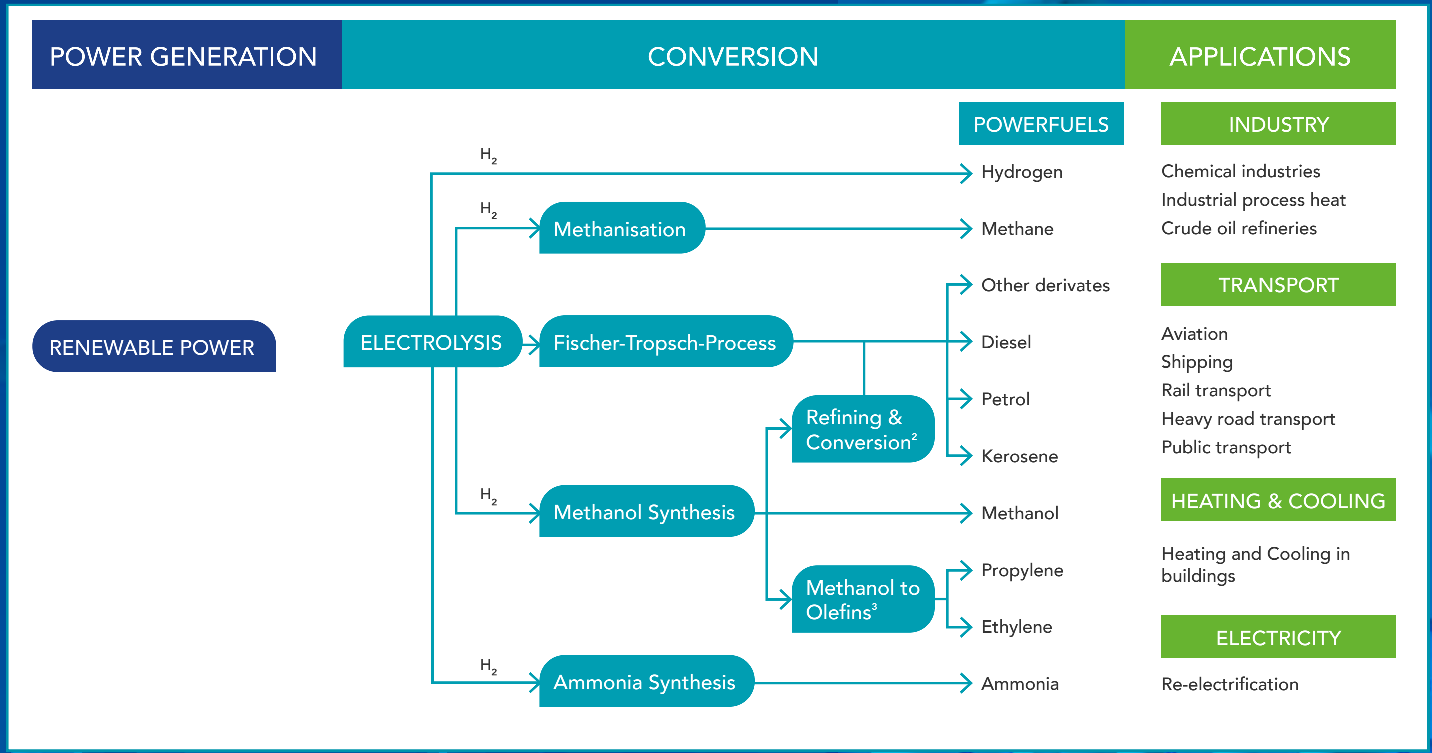
A predicament faced by several industrialised nations is that their renewable energy resources are simply insufficient to meet the demand of their economies, and therefore cannot be reconciled with the emission commitments they made under the Paris Accord. As a result, these nations are compelled to import fuels produced with renewable energy from countries with a generous natural endowment of such renewable energy, and with the industrial capacity to produce green hydrogen and its derivative powerfuels. In this way, green hydrogen will allow renewable energy to be distributed from regions of abundance to regions of scarcity.



Hydrogen as an energy carrier

In much the same way that electricity, diesel, petrol, kerosene and other fuels are the energy carriers for coal and crude oil, bringing that energy conveniently to the point of consumption, so electricity, hydrogen and powerfuels will be the carriers of renewable energy. This is illustrated in the adjacent diagrams. Electricity generated from renewable energy (solar, wind, hydro or biomass) will be used in electrolysis to generate Green Hydrogen from pure water. This could be used as-is in industrial, domestic or transport applications, or converted into a range of powerfuels for hard-to-abate sectors, such as aviation or shipping.

1 A "hydrogen economy" relies on hydrogen as the commercial fuel to deliver all or a large part of a nation's energy and services.
2 Green hydrogen is simply hydrogen produced from electrolysis, where pure water is split into oxygen and hydrogen, by means of electrical power supplied from a renewable energy source. "Green" simply indicates its origin.
3 Powerfuels is a collective name for a range of conventional fuels, such as petrol, diesel or jet fuel, but manufactured from green hydrogen, as illustrated in Figure 3.
4 In contrast to hydrocarbon combustion, which emits CO_2, NOx and an array of aerosol particles, hydrogen combustion emits only water vapour.



Already, it is clear that the European Union (EU), Japan, South Korea and quite a few others will need to import green hydrogen in some form. Market research by Valuates concludes that "The global green hydrogen market size was valued at USD 0.3 Billion in 2020 and is projected to reach USD 9.8 Billion by 2028, growing at a CAGR of 54.7% from 2021 to 2028." The EU specifically, hopes to integrate about one million tons of green hydrogen per annum into the economy by 2024, and to increase this tenfold by 2030, before moving to large-scale deployment thereafter.

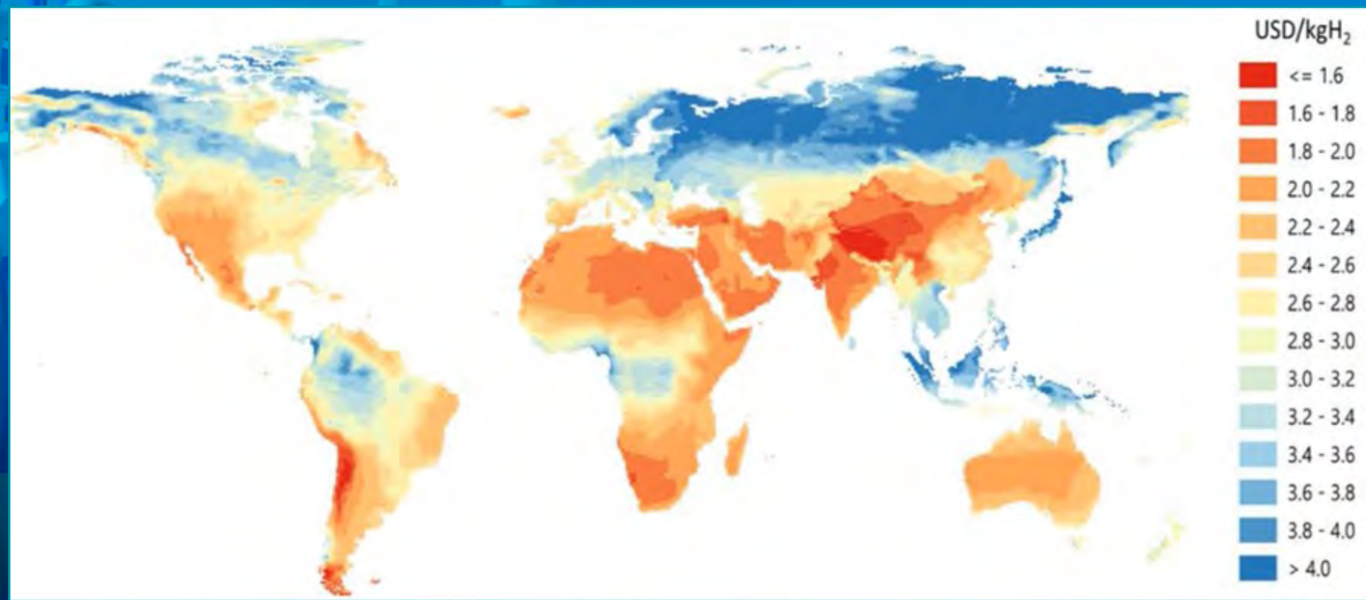
Recent developments will probably accelerate the demand for green hydrogen. The war in Ukraine has brought new layers of uncertainty to energy markets; this is affecting the EU directly, which since February 2022 has reduced its reliance on Russian gas from 40% to 20%, and more recently declared its intention to eliminate Russia completely from its energy mix within five years. It seems very likely that the EU will now accelerate its existing plans to migrate to a hydrogen economy.

So, what does all this have to do with South Africa, our water sector and TCTA? Southern Africa is amongst a handful of regions in the world with an exceptional potential to generate renewable energy, along with the Atacama region in Chile, and parts of central Asia, the Middle East and North Africa. For several reasons, which include regional political stability, a coastal position, chemical industrial capacity and having established deep-water ports on a major trade route, South Africa is in a very competitive position to supply green hydrogen to the world markets. This opportunity to become a key supplier of renewable energy is being keenly explored and developed by the Department of Science and Innovation, Hydrogen South Africa (HYSA), the CSIR and the private sector, with significant interest coming from the EU and the German Federal Government in particular. There is also strong support coming from the Presidency.

Already, several local projects are underway to facilitate the production and adoption of green hydrogen. A hydrogen corridor initiative is being planned, running from Mokopane to Johannesburg to Durban; it encompasses nine initial hydrogen-related projects and will promote the adoption of fuel-cell technology in heavy transport, replacing diesel power. Sasol has taken the lead in the Boegoebaai Green Hydrogen Development Project in the Northern Cape, a Strategic Integrated Project (SIP), where a deep-water port, 30 GW of wind and solar power generation, 10 GW of electrolysing capacity and battery storage will be developed by 2030. The aim is to produce green ammonia for maritime fuel export. Sasol is also leading in the field of green aviation fuel, produced from green hydrogen and sequestrated carbon.

The link of green hydrogen to water stems from the electrolysis process, where pure water is split into hydrogen and oxygen. The EU has adopted the position, in principle, that local freshwater resources will not be used to produce green hydrogen, and hence large- scale desalination of seawater will need to be established. The economics of producing green hydrogen is such that the cost of seawater desalination is simply dwarfed[5], and the idea is being floated that the desalination component could easily be over-sized to provide freshwater for utility purposes when required in times of drought. This is unlikely to have a significant impact on the widespread adoption of large-scale desalination in South Africa, mainly because the location of the green hydrogen hubs will likely be restricted to a few deep-water ports: Saldanha, Coega and eventually Boegoebaai. Nonetheless, TCTA has a substantial node of interest in large-scale desalination and will be well-placed to have a role in such development.

The story of green hydrogen reveals, once again, how the domains of water, energy and climate are inextricably and systemically linked. But perhaps even more exciting is the prospect that green hydrogen may well herald a new era of prosperity for South Africa, not unlike the discovery of Gold in 1886.



Long-term cost estimate to produce green hydrogen, excluding transport cost. Source: Siegemund, IEA (2009)

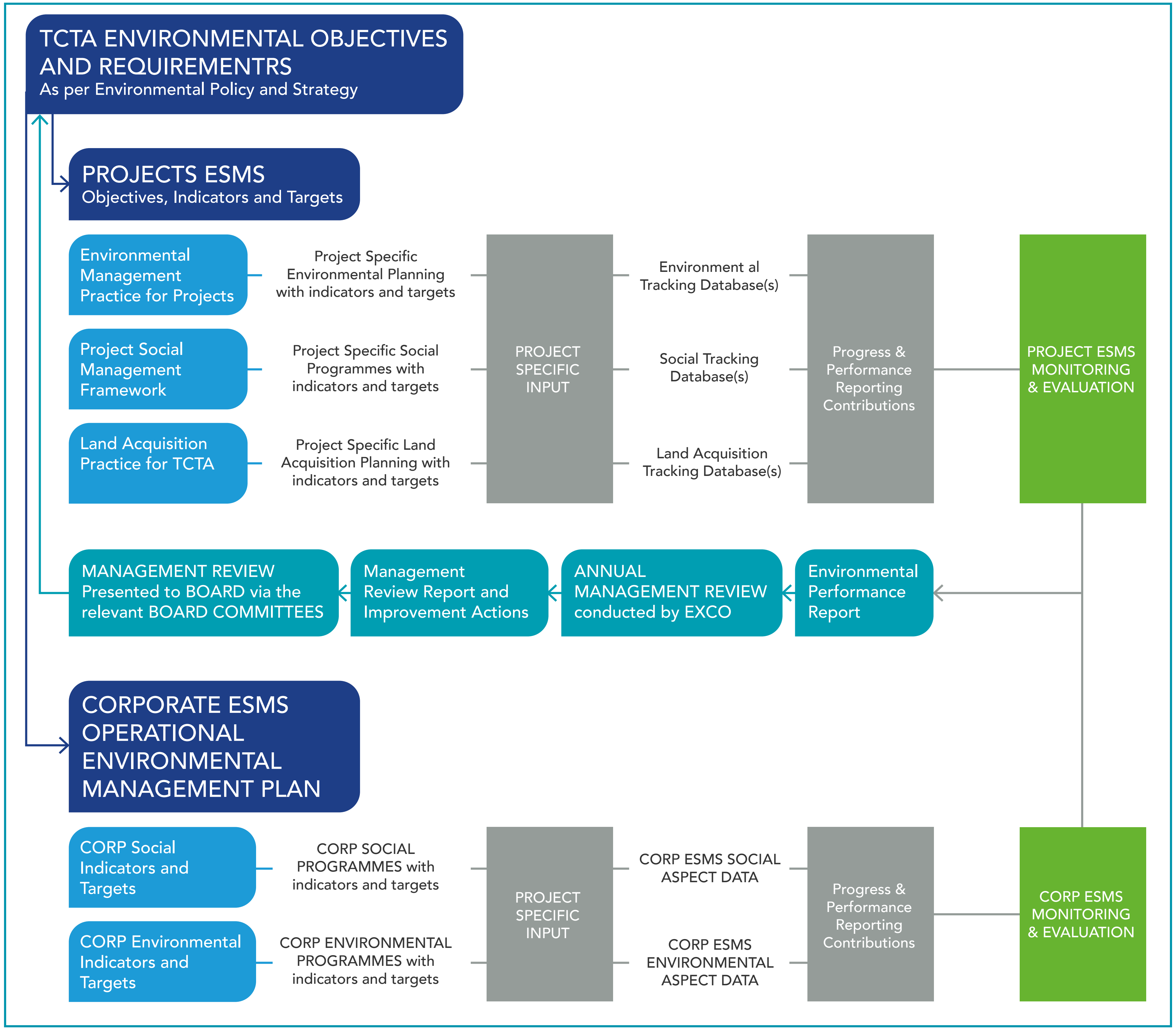
5 *Where seawater desalination is part of the green hydrogen value chain, the water cost is a negligible element: One thousand litres of freshwater can be produced for about $0.50, enough to produce 112kg of green hydrogen with a value of around $336.*

INTRODUCTION

"Environmental and social sustainability aspects, risks and opportunities are appropriately addressed and accounted for through the lifecycle of all TCTA operations."

In line with the above TCTA Environmental Goal Statement, implementation of the 2020–2023 Environmental Strategy continues to drive the organisation's transition from a project-centric Environmental Management System to the implementation of an organisation-wide Environmental and Social Management System (ESMS). Figure 16. The ESMS development grows TCTA's ability to demonstrate responsible corporate citizenship and improved integration of social and environmental sustainability considerations into the organisation's operations. Relevant contributions/efforts from across the business are being assessed, defined and shaped into structured programmes that align with TCTA's environmental and social objectives as defined in the recently revised Environmental Management Policy.

Figure 16: Environmental objectives and requirements



AWARENESS AND COMPLIANCE

Growing Environmental Consciousness (Knowledge & Learning)

The global COVID-19 pandemic and a range of national and international extreme weather events have raised societal consciousness of the potential of environmental conditions to fundamentally change the way in which we live and work. Higher levels of awareness and the sharing of learned knowledge build institutional memory and are a precursor to continual improvement. As such, TCTA has actively created opportunities to grow staff awareness of social and environmental topics through the circulation of awareness slides, knowledge-sharing sessions and special events. Knowledge-sharing sessions provided staff with a deeper understanding of TCTA's environmental obligations and how these are incorporated into the ESMS and showcased good practice and lessons learned from infrastructure developments to date. To raise staff awareness of existing water course pollution and waste management challenges, TCTA supported the efforts of the Hennops Revival Project that operates in Centurion. Staff were invited to participate in structured clean-up events which resulted in the removal of large quantities of waste that were obstructing the flow of the Hennops River.

TCTA maintains representation on national and international fora inter alia the Board of the International Association of Public Participation Practitioners, the South African Right of Way Association, the Land Rehabilitation Society of Southern Africa, the South African National Committee on Large Dams, and on technical Committees of the Blue Deal Partnership and the International Commission on Large Dams.

Project Authorisations

Project activities are duly authorised in terms of, inter alia, the National Environmental Management Act 107 of 1998, the National Water Act 36 of 1998, and the Mineral and Petroleum Resources Development Act 28 of 2002.

Environmental Authorisations (EAs) for the uMkhomazi project were issued by the Department of Forestry Fisheries and the Environment (DFFE) on 18 and 19 November 2020. Authorisation conditions posed significant cost and time risk to the project, including the prohibition of all works until such time as a biodiversity offset has been implemented. A successful amendment application, inclusive of intensive consultation with various authorities, has enabled the reduction of risk whilst maintaining high standards of environmental and social responsibility. A pre-construction Environmental Management Programme (EMPr) has been approved to allow the commencement of preparatory work, whilst the biodiversity offset planning is undertaken.

The MCWAP-2A EA was upheld by the Minister of DFFE following appeals against the project. Extensive social and environmental baseline studies have provided valuable insights into the avoidance, management and mitigation of potential impacts associated with project construction. Once such a study identified the need for deviation of the servitude alignment to avoid a bat cave. A Basic Assessment for the realignment of this short section of the servitude is in progress. Public participation and extensive consultations with relevant authorities have been concluded and the BA report was submitted to DFFE, and a decision is awaited. The first suite of 23 MCWAP-2A borrow pits has been authorised by DMRE and applications for an additional 7 are in progress. Water Use Licence applications are in progress.

The BRVAS project authorisation amendment application was approved by DFFE to extend the initially approved project construction commencement date by an additional five years to no later than June 2027. This EA amendment will allow enough time for project commencement constraints to be resolved. The scope of mining permits and water use licencing requirements will only be defined once the engineering design process has advanced significantly.

The planned shut down for 2024 of the Delivery Tunnel North of the Lesotho Highlands Water Project will include erosion protection works that may require a Water Use Licence (WUL) in terms of sections 21(c) and (i) of the National Water Act 36 of 1988. Existing survey data has been reviewed to better understand the scope of licensing required.

Environmental Compliance & Incidents

Compliance monitoring and management provisions are included in the planning phase of all new projects. Independent Environmental Control Officers are appointed to monitor project implementation in line with each project's specific EA conditions. At present, only the AMD Operation and Maintenance works require auditing. The Eastern Basin and Central Basin facilities are independently audited on a bi-annual basis. The most recent audit took place in October 2021, achieving a result of 99% for the Central Basin and 100% for the Eastern Basin. The next audit is due in April 2022.

No reportable environmental incidents or non-compliances have occurred during the 2021-2022 financial year, but regular site monitoring programmes are implemented to maintain high standards of practice.

ENVIRONMENTAL SUSTAINABILITY ASPECTS

The ability of TCTA to limit the negative impacts of its operations on the environment and people depends entirely on the way in which the organisation and its representatives conduct their activities. Aspect-driven programmes are implemented in both the project and corporate spheres of the ESMS.

Resource use

The revision of TCTA's operating model and the formalisation of remote working arrangements have fast tracked the digitalisation of operations, reducing reliance on paper-based systems whilst demonstrating that productivity and collaboration can be maintained. In light of low occupancy levels, a section of the existing office has been mothballed. TCTA's current lease is due to end, presenting an opportunity to create a future facility that is designed to support the new hybrid working model and be more efficient to operate and maintain.

Water and electricity, paper and fuel are the most significant resources consumed through the operation of the TCTA corporate office facilities. Consumption figures for the reporting period show significant reductions in use as a direct result of remote working arrangements. Figure 17 below, highlights a significant reduction in water use and a less significant electricity reduction. This is ascribed to the continued operation of lighting, air-conditioning and IT servers.

Figure 17: TCTA Facilities Electricity Use Per Year

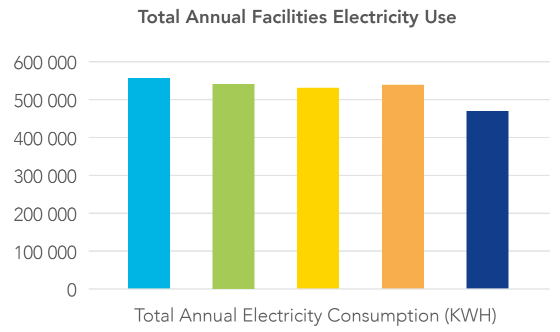
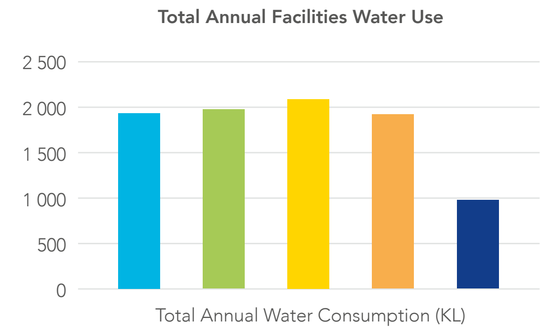


Figure 18: TCTA Facilities Water Use Per Year



2016-2017 2017-2018 2018-2019 2019-2020 2020-2021

Figures 17 and 18: Total annual electricity and water use as at end of March 2021.

Pollution Management

TCTA prioritises pollution prevention and control, towards reducing the risk of material adverse impacts on the environment. Pollution prevention and mitigation requirements are incorporated into the contractual obligations of all new and existing construction contracts.

Carbon Footprint Programme

TCTA's monitoring of key resources used for the operation of the corporate office serves as a direct input into the Carbon Footprint programme. A pilot carbon footprint was calculated for 2019-2020. Subsequent COVID-19-induced remote working arrangements caused decentralisation in resource consumption patterns that resulted in the programme needing to be re-designed. During the 2021-2022 ESMS Management Review it was agreed that a revised Carbon Footprinting programme be developed with the assistance of a subject matter expert. The revised programme scope is to consider a broader range of TCTA operations, inclusive of the operation and maintenance of the project and where possible new infrastructure development projects.

AMD Neutralisation

The AMD Treatment plants contribute significantly to the prevention and reduction of pollution impacts on both land and waterbodies through the abstraction and neutralisation of AMD and subsequent release of the treated water into water courses. Neutralised water, complying with the DWS specification is released into the Blesbokspruit and Klipspruit. The existing pollution load within these streams is diluted by the releases of neutralised AMD, resulting in an overall improvement of the stream condition.

Operational challenges at the plants over the reporting period have reduced the amount of AMD that was abstracted and treated. This has impacted the ability to draw down subsurface AMD levels and has reduced the neutralized water available for release into streams. In line with the project directive and EA quarterly ground water quality and monthly surface water quality monitoring is conducted and results are reported to DWS and shared with the Blesbokspruit Catchment and the Klipriver Catchment fora.

Waste Management

Corporate ESMS Waste Management Programme

The management of waste is a significant aspect of TCTA's corporate operations. As such, a formal facilities waste management programme has been launched. Data collection and monitoring commenced at the beginning of the financial year, but very low levels of waste generation have been recorded due to prevailing remote working conditions and the highly restricted use of kitchen facilities. Waste management is one of the formal programmes that has been included in the Operational Environmental Management Plan for the management of the new corporate office facility.

Project ESMS Waste Management Programme

Waste management requirements are represented in project contractual obligations and are informed by project-specific pre-construction baseline information. The operations and maintenance of the AMD treatment facilities result in the generation and disposal of general waste, hazardous waste and hydrated lime sludge. The latter required specific disposal interventions. Sludge disposal constraints experienced in the Eastern Basin during the previous financial year have been resolved by commissioning an alternative shaft for the pilot subsurface sludge disposal programme.

Resource Transformation

The means of reducing the long- and short-term impacts on the quality and availability of key resources is a significant consideration in the design, implementation and operation of water infrastructure development projects.

River Management System

MCWAP-2A includes the development of a River Management System (RMS) for the Crocodile River from the Hartbeespoort Dam to the Vliepoort Wier near Thabazimbi. In collaboration with DWS, the RMS development has been defined and packaged into four distinctive stages. The initial scoping has been concluded as the first stage. The second stage for the procurement of a PSP to design the RMS is in progress. Once completed, the third stage will see the implementation of works required to establish the RMS. Once completed the third and final stage of operation and maintenance will commence.

Biodiversity Offsetting

The MMTS-2 Biodiversity Offset is a requirement of the programme designed to secure the long-term protection and conservation of grassland, wetlands and rivers in the project areas. A stewardship approach, generally used in KwaZulu-Natal, was used to secure the offset on private land that is to be declared as a nature reserve. The KwaZulu-Natal Provincial Member of the Executive Council (MEC) for Economic Development, Tourism and Environmental Affairs published the Intention of Declaration in the Government Gazette in 2019. The requisite public participation processes were concluded and the final agreements between the MEC and property owners were prepared in 2020. The landowners signing of the agreements has been delayed due to a land claim process that is currently underway on the property earmarked for the biodiversity offset. The implementation budget has been approved and institutional arrangements for the operation and maintenance of the offset are under negotiation.

The uMkhomazi Project EA issued in 2020 included inter alia specific conditions for biodiversity offsetting, the development of compensation plans and the development of detailed Catchment and Ecological Infrastructure Management Plans for the Upper uMkhomazi catchment. TCTA assisted DWS in the preparation of amendment applications to bring the EA conditions in line with the scope of the project. The offsetting provisions have been addressed during the EA amendment process. Only once the offset planning has been completed, will the construction EMPr be approved to enable the project to commence construction. TCTA is in the process of sourcing services for the development of the offset in conjunction with the additional ground truthing that will be required in preparation for the construction phase of the project.

SOCIAL SUSTAINABILITY ASPECTS

Social Responsibility (Community Development & Support)

TCTA has sustained its participation in the Career Modelling Day programme in partnership with a NPO named 'Skills Development', SAICA and the Department of Basic Education. In this way, previously disadvantaged learners from rural areas are exposed to information on potential careers and bursary opportunities. TCTA participated in the National Water Week function hosted by National Parks in partnership with DWS. TCTA participated in an associated wetland clean-up and provided attendees with information on the importance of water and water-saving tips. Other social consciousness efforts included support for existing programmes such as Casual Day and the annual international awareness campaign, promoting activism for No Violence against Women and Children.

Stakeholder Relations

Ongoing stakeholder engagements in TCTA project areas seek to establish and maintain a transparent and cooperative relationship between TCTA, its representatives and the project-affected persons and communities. Stakeholder engagements and management planning interventions are informed by project-specific impact assessments, stakeholder analysis and detailed baseline studies. The monitoring and evaluation of social indicators during all phases of the projects is an integral element of ensuring that project social impacts are avoided, reduced, mitigated and, where necessary, fairly compensated for. TCTA supports the Community Development Strategies implemented by the AMD operator, monitoring implementation progress to verify that programmes are delivered in line with the operator's undertakings.

Health and Safety

Section 24 of our Constitution established that everyone has the right to an environment that is not detrimental to his or her health or well-being. Matters pertaining to the health and safety of all TCTA personnel, third parties acting on our behalf and that of the public are presented below.

Occupational Health and Safety at the Corporate Office

TCTA's operational health and safety objective is to ensure and maintain a safe and healthy environment for employees and members of the public that visit the office. To this end, the Occupational Health and Safety programme has been adapted to support the roll-out of TCTA's new Flexible Working Policy. Staff are provided with weekly electronic communications to raise awareness of Occupational Health and Safety (OHS) requirements and COVID-19-related developments. The OHS Committee effectively monitors OHS compliance to the relevant legislation and internal requirements and all audit, risk, compliance and COVID-19 registers are maintained. An audit by the Department of Labour gave TCTA a clean bill of health, with no findings or recommendations.

In response to the COVID-19 pandemic TCTA; the operational objective is to minimise the spread of the virus and implement control measures to comply with Government Department regulations and guidelines and to protect against severe illness. A specialised

COVID-19 Task Team monitors compliance and the implementation of related COVID-19 protocols and guidelines for the office and operation and maintenance sites.

The weekly COVID-19 screening information is submitted to the National Institute of Occupational Health. A draft TCTA Vaccination policy is under development and has been the subject of rigorous internal consultation. The organisation's policy on this matter will be guided by relevant research, risk assessments, government guidelines, regulations and good practice.

Project's Health and Safety

In its project implementation, TCTA complies with the Occupational Health and Safety Act and the Construction Regulations of 2014. Project-specific health and safety specifications are developed to serve as operational controls and support effective auditing. The Construction Health and Safety (CHS) Agent performs the health and safety oversight and monthly audits from which the project's compliance scores are derived. The CHS Agents for BRVAS and MCWAP-2A projects are appointed and are ready to be mobilised when construction commences. Specialised security protocols are being incorporated into the MCWAP-2A project in line with the project's EA.

Operations and Maintenance Health & Safety

TCTA operates and maintains the Delivery Tunnel North (DTN) of the Lesotho Highlands Water Project (LHWP). There were no incidents recorded during the financial period.

An armed robbery at the Eastern Basin AMD treatment plant resulted in the fatal shooting of a security officer who was deployed to the facility. The incident is classified as a safety and security incident.

Table 8: Summary of AMD Plants Health and Safety statistics

Project	Year	Lost Time Injuries	Fatalities	First Aid	Near miss	Recordable cases	Recordable case rate	H & S compliance score
EASTERN BASIN	2022	0	0	0	15	0	0	97%
	2021	1	0	0	28	0	0	94%
CENTRAL BASIN	2022	0	0	1	16	0	0.31	97%
	2021	1	0	0	30	0	0.42	92%
WESTERN BASIN	2022	0	0	0	0	0	0	N/A
	2021	0	0	0	0	0	0	N/A

HUMAN RIGHTS

Resettlement and Livelihoods Restoration

The MCWAP-2A baseline studies identified one household that will need to be relocated but alternatives have been explored to limit the risk of needing to undertake involuntary resettlement. No other Livelihood restoration or resettlement challenges have been identified on projects that are nearing implementation. There will be a need for these on the uMkhomazi project, but the detailed planning will take place during the new financial year.

Acquisition of Land and Land Rights

Following the conclusion of valuations on MCWAP-2A, preparation of the Promotion of Administrative Justice Act (PAJA) notices and expropriation notices are underway. The timing of the acquisition will be managed to ensure that properties are accessible for the commencement of construction.

EMPLOYMENT AND EMPLOYMENT EQUITY ON PROJECTS

The creation of employment on TCTA projects is an integral part of the organisation's contribution to the government's transformation agenda and presents an opportunity to temporarily employ members of the communities affected by the infrastructure developments. Socio-economic targets are incorporated into the contractual obligations of TCTA Professional Service Providers, Construction Contractors and Operators. As project implementation gains momentum performance, reporting against these targets will be reported in detail. The PSPs appointed for MCWAP-2A and BRVAS are actively reporting against their contractual targets and progress is being monitored.

LHWP Operations

At present, the TCTA LHWP operations and maintenance team in Clarens consists of in-house personnel. As of 31 March 2022, there are three semi-skilled local male employees who attend to the operations on-site and one skilled staff member.

AMD Operations

The AMD operator of the Central and Eastern Basin facilities has identified some maintenance tasks that will be ring-fenced for local businesses. Local job opportunities are provided as and when required. The Eastern Basin facility employs a total of 35 personnel, all of whom are locally sourced. The team of 20 males and 15 females comprises various skill levels. In the Central Basin, there are a total of 37 personnel, all of whom are locally sourced. The team of 28 males and 9 females is comprised of 7 unskilled staff, 20 semi-skilled, and 10 skilled staff. The Western Basin facility, operated by Sibanye Gold employs 33 staff, including a total of 6 females and 27 males. Locally sourced staff total 26, whilst 7 staff are employed from elsewhere. The team consists of 13 unskilled, 16 semi-skilled and 4 skilled staff.

Active Infrastructure Development Projects

The BRVAS and MCWAP-2A projects are in their early stages of development and are still in the pre-construction phase and as such performance against contractual targets is limited. Only PSP contracts have been awarded. As construction contracts commence SED and Transformation Reporting will be presented in greater detail.

On the MCWAP-2A Project, the PSP reports against five elements of SED and Transformation. Progress, namely: ownership, development, supplier development, employment and skills development.

Operations and Maintenance Employees

SED and Transformation Performance Monitoring against Targets in the MCWAP-2A PSP Contract

Table 9:

SED and Transformation Performance Monitoring against Targets in the MCWAP PSP Contract	
Ownership	
Contractor	Black Ownership %
GIBB	67
Bigen	51%
Nyeleti	51%
Phathwe	100%
Isinyathi Cathodic	51%
PSW	51%
Pipetech	100%
Sentinal	52%
Africando	100%
Bapuleng	100%
Sole For Real	100%

Employment			
Category	Minimum required %	Contracted %	Progress %
Manco	30	100	76.2
Internal Review Panel	30	65.3	11.5
Specialist	40	87.4	0
Environment (Natural)	45	100	94.7
Environment (Social)	45	100	100
Engineering	50	91.8	6
Project Management	50	66.8	70.8

Skills Development			
Category	Minimum	Contracted	Progress
Bursary	Four students per annum	36 over the duration of the project	(26 bursars) 72% - Some bursars have passed their courses.
Internship	Four recipients per annum	36 over the duration of the Project	(8 internships) 22% - A new intake of interns is under way.
Learnership	Four recipients per annum	28 over the duration of the project	(30 learnerships) 125 %

SED and transformation targets in the BRVAS PSP contract are being implemented. The table below shows a summary of performance to date. The areas of Engineering and Environment are currently performing under the target, but it is expected that this will improve as the project progresses.

SED and Transformation Targets in the BRVAS PSP contract.			
Category	Minimum required %	Contracted %	Progress %
Manco	30	100	100
Specialist	40	48	100
Engineering	50	52	21
Environmental	45	100	26
Project Management	50	57	38.5

Preferential Procurement

TCTA has a B-BBEE status of non-compliant. The B-BBEE certificate is included at the end of the Integrated Annual Report.

However, for the active contracts in 2021-2022, 87% are to Black-empowered companies and for contracts awarded in 2021-2022, 83.9% were awarded to Black empowered companies.

KNOWLEDGE AND LEARNING

Entrenching the Knowledge Agenda

The organisation has now settled into regularly anchoring and implementing extensive and robust knowledge initiatives, in its drive to ensure the osmosis for collective learning within TCTA and across its boundaries into value-creating alliances. During the reporting year, TCTA continued to integrate organisational knowledge flows to foster inclusive learning, to leverage its partnerships and networks in support of the knowledge agenda, and to optimise the value accruing from knowledge-based activities. Further, TCTA entrenched its objective to capture best practices across the spectrum of its projects and initiatives, in advancement of equitable water access and project-based environmental and social sustainability.

In sustaining a corporate environment that values learning, knowledge generation and diffusion, TCTA broadened its nurturing of strategic partnerships through inter-organisational cooperation in developmental value networks, within and beyond the water and sanitation sector. One such critical partnership involves the deployment of significant knowledge resources to the initiative on the National Water Resources Infrastructure Agency, in a manner that not only protects the TCTA legacy and market standing, but enriches its value proposition and values, as well as deeper sector reach and relevance, ultimately to the benefit of the entire sector and country.

As in the previous year, these strategic attributes were maximised with an encouraging increase in the uptake of internally focused knowledge services and products across the organisation, despite the unrelenting effects of the COVID-19 pandemic.

Thought Leadership in the Water Sector

In the year under review, the organisation continued its pursuit of thought leadership in the water sector, by convening regular sector-wide forums that addressed key challenges to the sustainable management of water, and through broadening and strengthening specialized advisory inputs to the effective coordination and integration of strategic infrastructure projects. In advancing its thought leadership role in the water and infrastructure sectors during the year, TCTA anchored platforms that explored critical issues relating to the diversification of the country's water mix for more effective water resources management, and extended associated strategic advisory to partner institutions.

The organisation deploys considerable intellectual assets to the ongoing process for the establishment of the National Water Resources Infrastructure Agency, particularly since 2020 when it played a pivotal role in conceptualizing the new entity, and during 2021-2022 when the initiative progressed into implementation. As an equal partner in the DWS-led project, TCTA has allocated high-calibre resources to the implementation workstreams, and made substantial commitments in time and effort, coming from Board members, executives and senior managers. TCTA regards the initiative to be both strategic and of existential importance, not just to the organisation, but the entire water sector: the establishment of a progressive, future-proof agency will be crucial in the turn-around of the sector.

TCTA also leveraged its thought leadership realm through the provision of strategic direction in the effective coordination, implementation, and fast-tracking of prioritised national infrastructure programmes. The organisation carried out this work in the context of its mandate to coordinate SIP-18, focussing on National Water and Sanitation Infrastructure, and SIP-3, seeking to advance the development of the South-Eastern Node and Corridor anchored in the Eastern Cape province. As an important interface for moving its SIP mandate forward into the year 2022-2023 and beyond, TCTA entered a new phase of infrastructure development support, advisory services and inputs for the effective coordination, integration, and delivery of strategic infrastructure projects, tailored specifically to the newly gazetted SIP-19 program designed to reposition and reinforce aspects of national water resources infrastructure.

Research and Publications

In the 2021-2022 financial year, TCTA contributed to the infrastructure and water management knowledge areas through sector-related research, analysis, and paper publications. In this domain, TCTA work occurred predominantly in three strategic knowledge spheres, leading to the documentation of thought-provoking papers on seawater desalination, infrastructure coordination, and the role of social media in the public sector.

The organisation researched and delivered a presentation on contemporary trends in the development of economic infrastructure at an international conference, and submitted five papers addressing other key water and infrastructure issues to local and international journals. Amid continued COVID-19 restrictions, the presentation was delivered through technology-enabled platforms that facilitated a broader audience reach. These diverse and impactful thought-leading articles enhanced the profile of TCTA as a respected knowledge institution, both locally and internationally.

Generating Lessons for a Learning Organisation

The significance of evaluative work in developing a learning organisation is pivotal for a progressive and modern institution. In the light of this, evaluative work remained central to organisational learning at TCTA, especially through the mainstreaming of operational and management lessons emanating from sector projects, programmes and initiatives. In the 2021-2022 financial year, TCTA continued to prioritise the systematic generation and use of evaluative knowledge for organisational learning and effective management, as well as for fostering accountability. Such a move is increasingly important for an organisation taking on a pivotal role in the provision of infrastructure for broad-based social advancement and for growing the South African economy.

Major lessons were drawn for the organisation and its key stakeholders in two critical areas of the business, involving project preparation, planning and off-taker negotiation, to provide insights that would positively influence and guide later phases of projects. In both evaluative cases – specifically the BRVAS front-end planning and MCWAP-2A preparation – the lessons spanned process strengths that should enrich similar project phase-gates, and gaps in areas that could be improved to sensitise future project phases to potential obstacles.

As part of its chosen trajectory of sustaining knowledgeability and value-creation, TCTA will increasingly draw on its knowledge assets as a critical driver of its business strategy, to affirm excellence in the provision of water infrastructure, as well as in its leadership and change agent role in pursuing a better life for all South Africans.

Decarbonising the Water Sector

D

HUMAN CAPITAL, SOCIAL AND ETHICS

Our response to climate change requires adaptation to a changing environment and mitigation of the factors contributing to climate change, which includes reducing the emission of greenhouse gasses, mainly, but also reversing environmental degradation.

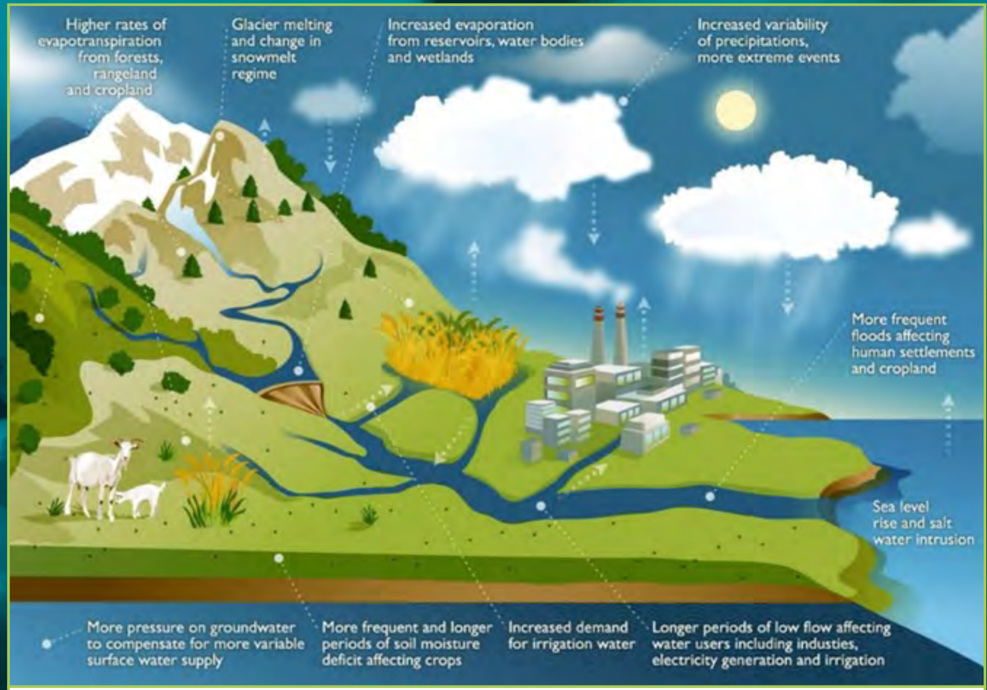
The adjacent diagram illustrates many impacts of climate change on the water cycle; these are all areas in which adaptation will need to take place. Much of it could be addressed through the adoption of circular water use practices: Wastewater captured and cleaned for reuse or aquifer recharge, dams with a dual function of storage and flood protection, and desalination being widely used. The availability of cost-effective, renewable energy will greatly assist in making this possible.

But the water sector has an obligation to not just adapt to climate change, but also to help mitigate its effect. Global Water Intelligence estimates that the pumping, transporting and treatment of water consumes about 3.7% of global energy; it is comforting to know that as energy generation transitions to clean, renewable sources, so the carbon footprint of water will also shrink.

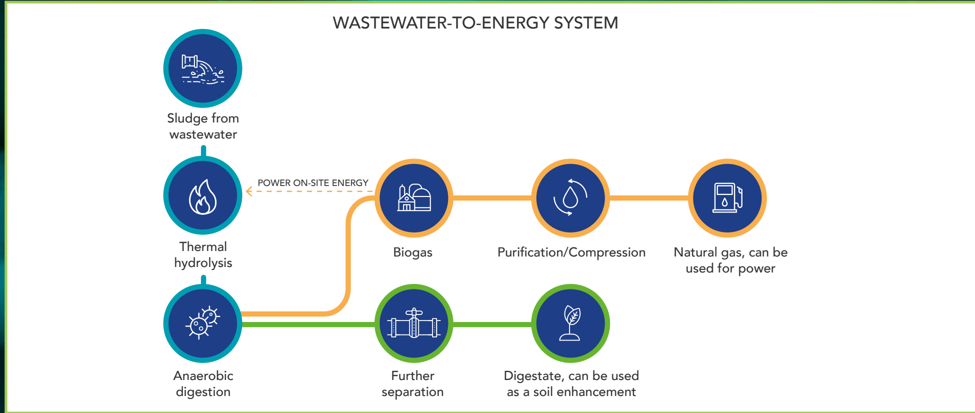
What remains to be addressed is better management of wastewater and faecal sludge. Sub-optimal management of waterborne waste now contributes between two and six percent of global methane emissions, and between one and three percent of nitrous oxide emissions, both being very potent greenhouse gasses[1].

This presents opportunities for public-private partnerships, where business models could be developed to derive revenue from aquaculture, biogas and compost production, and recycled water for industrial or even potable use. The technologies involved in such a sanitation value chain, as shown in the adjacent diagramme, are well-developed and available, although it may be necessary for some elements to be cross subsidised by more profitable elements.

Why is this not happening yet, on a large scale? One reason would be the historic and structural attachment to the status quo, but there is also the paradigm of seeing sanitation merely as a social issue and a cost burden, rather than as a sanitation value chain and a business opportunity, while also contributing to the net zero quest. Global Water Intelligence observes that the SDG-6 for sanitation may become more attainable and attractive to investment if it was to be viewed through the lens of climate impact (SDG-13).



Climate Change impacts on the water cycle (Credit: IPCC 6th Assessment Report)



A typical wastewater to energy system

1 Methane (CH_4) is 34 times as potent a GHG as CO_2, and N20 is 298 times as potent.

HUMAN CAPITAL, SOCIAL AND ETHICS COMMITTEE REPORT

GREG WHITE
CHAIRPERSON

I am pleased to present the Human Capital, Social and Ethics Committee report for the year ended 31 March 2022.

The Human Capital, Social and Ethics Committee is constituted to assist the Board in ensuring that the organisation remunerates fairly, responsibly and in a transparent manner to promote the achievement of strategic objectives and outcomes in the short-, medium- and long-term. The Committee also oversees organisational ethics and monitors social responsibility activities in the workplace, the broader economy, and the social and natural environment.

The past two years have proven that TCTA can be agile in responding to challenges brought about by the pandemic. Our dedicated staff continued to deliver on the organisational mandate while continuing to adapt to the requirements of a remote working environment. The participation in the 2021 Employee Engagement and Organisational Climate Survey had improved significantly from 63% in 2018 to 86%. The overall employee satisfaction showed the need for improvement at 63% and the organisational improvement score was 67%. The outcome of the survey culminated in the Culture Transformation Framework and Plan that will be implemented over three years and seeks to address issues raised by employees.

Terms of Reference and Composition

The Committee has a formal terms of reference and regulated its affairs in compliance thereof. The Committee's revised terms of reference were approved by the Board in April 2022. The Committee is satisfied that it has discharged its responsibilities under its terms of reference and 2021-2022 work plan.

The Committee comprises four independent non-executive directors and the Chief Executive Officer who is recused from remuneration discussions. The members have sound knowledge and experience of general human resources, which include strategic human resource management, performance management, talent management, workforce planning, rewards and recognition, including organisational development. Members of executive management have a standing invitation to attend meetings.

Refer to pages 78 to 79 for the qualifications and experience of Committee members.

Meetings

Seven scheduled meetings were held during the period under review. Attendance during the reporting period is shown below:

Table 10: Attendance at Human Capital, Social and Ethics Committee

Name and Designation	Attendance
Greg White: Chairman and Independent Non-Executive Director	100%
Satish Roopa: Independent Non-Executive Director	100%
Mollale Maponya: Independent Non-Executive Director	100%
Lindelwa Dlamini: Independent Non-Executive Director	100%
Percy Sechemane: Executive Director (CEO)	100%

Responsibilities

The Committee is, amongst others, responsible for overseeing:

- human resource and organisational development;
- performance and knowledge management;
- remuneration, benefits and incentives;
- reputation and stakeholder management;
- social responsibility; and
- organisational ethics.

Key Issues that Received Attention During the Period Under Review

The Committee, amongst others:

- monitored human resources and change management risks associated with the formation of the National Water Resources Infrastructure Agency, social responsibilities relating to the workplace, the social and natural environment as well as fraud and corruption from an ethical perspective.
- overseen the implementation of human resource priorities, the talent management strategy and the facilities management and logistics strategy as well as performance management practices,
- reviewed certain human resources policies and strategies for approval by the Board
- agreed and recommend the annual salary increases for employees and the strategic resourcing plan for approval by the Board.

The following areas of focus have been identified for 2022-2023:

- building a performance culture and improving performance practices
- strategically position TCTA for a sustainable future
- the institutionalisation of ethics management
- combined assurance as it relates to human capital and ethics-related matters

Refer to pages 231 to 232 for the Remuneration Report.

Greg White
Human Capital, Social and Ethics Committee Chairperson

HUMAN CAPITAL PRACTICES

TCTA's primary human capital objectives are to attract, retain, develop, and motivate capacity for a changing world of work and to further evolve the organisational culture into that of high performance. We, therefore, continued for the year under review, to further entrench the initiatives which were started in the preceding year, these being to continue:

- embracing flexible working arrangements and implementing policies, procedures and practices that support a motivated and healthy workforce despite the impact of COVID-19;
- grow a skilled and capable leadership and people management cadre;
- implementing organisational effectiveness initiatives; and
- implementing a focused change management programme towards strengthening a culture of engagement and connection.

Embracing Flexible Working Arrangements to Support Employee Well-being Despite the Severe Impact of COVID-19 and Enable Attractive Employment Conditions

The impact of the COVID-19 pandemic continued to be felt among employees. We saw an uptake of 22.4% utilisation in the employee wellness offering. Many employees took up the Employee Assistance Programme for counselling support, with the main themes being mental health and well-being, and family-related matters. Within this climate, TCTA endeavoured to create a positive organisational culture for its employees. Its objective is to provide the support needed in all aspects of employees' lives, helping them to function optimally at their fullest capacity. We recognise that a happy and healthy employee is a productive employee, hence a holistic wellness programme, emphasising well-being from physical, mental, spiritual, financial, and social perspectives was implemented. TCTA developed a policy to respond to the hybrid / flexible working conditions. Flexible work is an alternative work arrangement or schedule relating primarily to the combination of remote and in-office work arrangements as well as different start and end times for the TCTA workday instead of the standard 08h00 to 16h30. To this end, a change management plan aimed at managing the transition into flexible work was rolled out and implemented in March 2022.

Developing a Skilled and Capable Leadership and People Management Cadre

A purposeful journey was undertaken to develop skilled, capable leadership and people managers at different levels within the organisation. This journey focused on two interventions:

Firstly, the Leadership and People Management Coaching Programme was developed in 2019 and the first of the five-year programme kicked off in 2020, with 37 leaders and people managers participating in the programme. The evaluation at the end of Year 1 showed a noteworthy shift in the appreciation levels for the value of the programme. The second cycle of the Leadership Coaching Programme concluded in September 2021 and the greatest shifts seen were increased self-awareness, personal mastery, team leadership, and cross-team collaboration. Year 3 initiated in Q4, saw 21 employees being enrolled on the programme, again comprising employees at different levels -- from Executive, Senior Managers, Managers and Specialist. The focus was on building coaching capacity to create a performance culture.

Secondly, building a culture of performance management has been a focus area for the business in the previous three years, and this focus was carried through into the 2021-2022 financial year. An external review of the performance management system and its application was undertaken. Some recommendations for improvement were approved for implementation. The enhancement of procedures and capacitating leaders and people managers to be effective in managing performance as a key element of talent management remained a noteworthy focus. The first year of the People Management Capacity Programme was successfully implemented using the newly established People Management Forum platform.

Organisational Effectiveness

Stemming from the Organisational Effectiveness study which provided a baseline data set to validate efficiencies (or lack thereof) within TCTA in October 2020, three business areas were identified and prioritised for review in 2021, to address capacity and design challenges to improve service delivery. It is envisaged that this work will be carried out in the next financial year. It was further established from the baseline study that the organisation's job profiles required reviews to be aligned to the new world of work. By December 2021 the vast majority of role profiles were reviewed and by the end of March 2022 these revised profiles were validated, and the revised job worth reports were being compiled. This set the scene for competency verifications in 2022-2023, which promotes a modern skilled workforce. Lastly, TCTA implemented a team effectiveness programme, in three phases, with two of the three phases being completed in the year under review. The indicators are positive about the impact of the programme.

Change Management Towards Strengthening Employee Engagement and Connection

TCTA has been on a cultural journey that requires it to become a modern progressive employer of choice. This need was exacerbated by the onslaught of COVID-19, the resultant economic downturn as well as the subsequent war between Russia and Ukraine. TCTA had embarked on a cultural journey where our efforts were informed by the demands of the contextual landscape. In 2021, we used a collaborative approach to adjust the culture transformation plan to synchronise our strategies with the new world of work, to align also to the type of skills and competencies required. This continues to be work in progress as highlighted by the organisational-wide culture plan relaunch in March 2022. Employee engagement and connection were re-established through an intensive programme which sought to strengthen our leadership branding, refresh our values and cement personal, job, team and organisational engagement. TCTA has truly made a positive shift towards responding to the new world of work.

MEANINGFUL STATISTICAL INFORMATION

Staff Complement, Rewards, Skills Development, Employment Equity and Employee Relations Cases

Staff Complement

On an annual basis, a cautious approach is adopted toward resourcing the structure. TCTA's planning approach, towards the filling of vacancies, is therefore flexible and is informed by the conclusion of implementation agreements with DWS and the securing of funding, reflecting the project environment and financial markets it operates in. A combination of employment techniques is used, such as permanent placement; fixed-term contracts; temporary placements; interim and internal redeployments. Every attempt is made to optimise the structure and to appropriately allocate resources: a balance is maintained between prudent staff cost management and having the right people in the right job at the right time.

As of 1 April 2021, TCTA operated from an approved headcount of 194 plus 13 interim resources, plus 19 interns and 6 temps. In addition, there were 3 approved contingent positions. As of 31 March 2022, TCTA employed 173 people in the organisation, inclusive of 11 interns, 1 temp and 5 interim resources.

There were 38 vacancies, which translated into a 19.58% (38/194), vacancy rate. Overall, there were 33 appointments made between 1 April 2021 and 31 March 2022.

Table 11: Employment and Vacancies

Level	Employment at beginning of period	Appointments	Terminations	Employment at end of the period
Top management	1	-	-	1
Senior management	9	-	-	9
Professionally qualified	83	18	9	92
Skilled	47	8*	4	50
Semi-skilled	17	7	3	21
Unskilled	-	-	-	-
Total	157	33	16	173

** The 8 skilled appointees include 1 of the same position which was recruited twice within the financial year.*

The breakdown of employment by category in Table 12:

Table 12: Employment by Category

Level	2020-2021 Number of employees	2021-2022 Approved posts	2021-2022 Number of employees	2021-2022 Vacancies	Vacancies as percentages
Top management	1	1	1	-	-
Senior management	9	9	9	-	-
Professionally qualified	83*	112	87	34	17,53%
Skilled	47	63	50	4	2,06%
Semi-skilled	9	9	9	-	-
Unskilled	-	-	-	-	-
Headcount Total	**149**	**194**	**156**	**38**	**19,59%**
Interns	8	19	11	8	19,51%
Interim resources	-	13	5	8	19,51%
HR Temps	-	6	1	5	12,20%
Contingent resources	-	3	-	3	7,32%
Subtotals	**8**	**41**	**17**	**24**	**58,54%**
Grand Total	**157**	**235**	**173**	**62**	**26,38%**

** This includes 1 professional employee who was deceased*

Table 13 below indicates the reasons employees left TCTA.

Table 13: Reasons for Staff Leaving

Reason	Number	(%)
Death	0	-
Resignation	10	55,56%
Dismissal	0	-
Retirement	2*	11,11%
Ill health	0	-
Expiry of contract**	6	33,33%
Total	18	100.00%

** The 2 referred to above were both early retirement resignations*

*** Expiry of contract refers to fixed-term contracts ending*

Staff Rewards

TCTA changed its current remuneration philosophy to a total rewards philosophy that includes all programmes, policies and practices to adopt a holistic appreciation of value received in return for the contributions to the mission and goals of TCTA, by employees, for example, the re-focused employee well-being offering.

This section of the report reflects on staff cost as a key element of human resource management and elaborates on TCTA's Remuneration approach, policy and implementation practices, especially as it is aligned to King IV™, Principle 14. Principle 14 says that "*the governing body should ensure that the organisation remunerates fairly, responsibly and transparently, to promote the achievement of strategic objectives and positive outcomes in the short-,* *medium- and long-term."* TCTA complies with all the practices that apply to a State-owned Entity (SOE), under this remuneration governance principle.

Staff cost is described in Table 14 below.

Table 14: Personnel Cost by Employment Category for the period under review*

Level	Personnel expenditure (guaranteed package) R'000	Percentage of personnel expenditure to total personnel cost	Number employed during the period	Average personnel cost per employee R'000
Top management	5 763	2.58%	1	5 763
Senior management	28 410	12.71%	9	3 157
Professionally qualified	146 098	65.37%	101	1 447
Skilled	37 262	16.67%	55	677
Semi-skilled	5 964	2.67%	24	249
Unskilled	-	-	-	-
Total	223 497*	100%	190*	1 176

** These figures include employees who have exited TCTA's employment during the financial year.*

The cost per employee decreased from R1 292 000 (2020-2021) to R1 176 000 (2021-2022), an 8.98% decrease, due to an increased recruitment drive that brought new employees in at a competitive total guaranteed package.

TCTA's remuneration-related policies hinges on a pay-for-performance philosophy, and the attraction of the best skill in the market. This philosophy is closely linked to TCTA's status as a Special Purpose Vehicle where remuneration benchmarks are drawn on an annual basis from the national market to enable attraction, retention and motivation of employees. TCTA is also committed to fair and transparent remuneration practices, where internal equity is managed through the application of formal pay lines underpinned by the Paterson job grading methodology. These policies are due for revision in light of the revised and approved total rewards strategy and the near-completed independent remuneration benchmark study, which flows over into the first quarter of the financial year 2022-2023.

TCTA's remuneration policy broadly distinguishes between two elements of pay: the guaranteed portion and the pay-at-risk element.

Guaranteed Pay

The guaranteed remuneration, or total guaranteed package, is determined by three formal pay lines based on three employment categories namely critical, important, and support roles. These formal pay lines are drawn from national market data on an annual basis, and TCTA aims to pay at the mid-point of these formal pay lines.

The guaranteed pay includes the employer's contributions to employee benefits, which is a remuneration element TCTA was progressively growing, since its inception. Employees can define their pensionable and risk earnings at a reasonable percentage of their total cost to the company. The Pension Fund has now reached 7.5% employer contribution with the salary increases effected 1 April 2021.

Annual increases are given in line with TCTA's Board guidance. The Board considers relevant outer and inner contextual information such as, but not limited to, economic growth indicators, the Consumer Price Index (CPI), remuneration trends, TCTA remuneration portfolio information and affordability.

For the year in focus (April 2021-March 2022), the following salary increment implemented in October 2021 was:

- a 3.7% increase in Total Cost To Company
- an increase in the Pension Fund employer contribution from 6% to 7.5%
- the medical aid prescribed annual increase to the Medical Aid insurance on the employer 50% contribution, effected in January each year
- the continuation of the 50% Employer contribution on TCTA Group Life, as per previous years.

Variable Pay

With regard to the variable portion of remuneration, TCTA offers short-term reward incentives, which are at the discretion of the Board, and are based on organisational, divisional, and individual performance. Performance for the 2021-2022 financial year has not been concluded, specifically the annual audit process, thus incentives have not yet been considered.

However, the Short-Term Rewards Incentive Policy was implemented as applicable to the period 1 April 2020 to 31 March 2021.

TCTA cautiously use methods such as attraction payments when a critical skill is being secured. During the 2021-2022 financial year, only one such payment was made.

Skills Development

An approved training plan guides the organisational-wide training interventions. There were 17 compulsory approved workshops identified for the financial year 2021-2022. At the end of March 2022, 16 interventions had been delivered, translating into 94% achievement, with excellent attendance and participation through a virtual platform. The impact of training interventions was measured with post-evaluation forms and the average target of 3 was exceeded with an average score of 3.65. Table 15 below shares information as it relates to training costs.

Table 15: Training Costs

Personnel expenditure	Training expenditure	Training expenditure as a percentage of personnel	Number of employees trained	Average training cost per employee
R223,497,114.36	R1,923,388.62	0.86%	84	R22 897,48

With regard to skills development for the youth and countering unemployment, TCTA had 11 interns in place and most of them had completed training in different areas for their development. Three interns' contracts were extended by one more year, due to the impact of COVID-19. The expenditure on Interns & Bursary holders for the year under review is as per Table 16 below:

Table 16: Expenditure on Interns and Bursary Holders

	Salaries & Stipend	Training & Fees	Total
Interns	R2,560,469.38	R60,775.74	R2,621,245.12
Bursary holders	R108,000.00	R182,460.80	R290,460.80
TOTAL	R2,668,469.38	R243,236.54	R2,911,705.92

Employment Equity

The table below reflects our employment equity targets in the three categories. The purpose of which is to achieve reasonable progress towards employment equity in the workplace. These targets are influenced by TCTA's commitment to Transformation and aligning with the South African labour force in terms of the designated groups. TCTA is still reporting below our actual target for People with Disabilities. Going forward, TCTA will endeavour to increase female representation at the senior management level, with People with Disabilities remaining a focal area of improvement.

Table 17: Overall Employment Equity (%)

Actual / Target	Black	Female	Disabled
Actual	89.02	49.7	1.18
Target (31 March 2022)	85.2	49.7	2.5

Table 18: Breakdown of Employment Equity by Employment Category as of 31 March 2022

Classification	African				Coloured				Indian				White				Foreign nationals			
Level	Current		Target		Current		Target		Current		Target		Current		Target		Current		Target	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Top management	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Senior management	3	2	4	1	0	0	0	0	1	0	0	0	1	2	1	2	0	0	0	0
Professionally qualified	39	26	36	30	3	1	4	3	5	4	6	2	5	5	5	4	3	1	3	1
Skilled	15	25	20	23	1	6	1	6	0	2	1	3	0	2	1	4	0	0	0	0
Semi-skilled	11	9	8	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unskilled	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	69	62	69	60	4	7	5	9	6	6	7	5	6	9	7	10	3	1	3	1

Table 19: People Living with Disabilities

Level	Current: 2021-2022	Target: 2021-2022
Top management	-	-
Senior management	-	-
Professionally qualified	1	2
Skilled	1	2
Semi-skilled	-	-
Unskilled	-	-
Total	2	4

Employee Relations Management

Simply defined, Employee Relations (ER) is the relationship between employees and employers. TCTA understands the need for an effective employee relations strategy, and the same had been adopted a few years ago. The strategy focuses on the following:

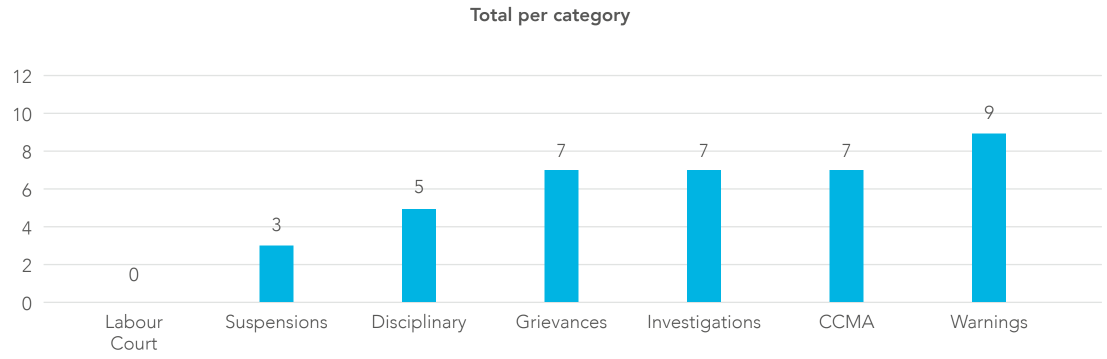
- restoring employee relations, resulting in a positive workplace;
- well-functioning and effective engagement platforms;
- competent and energised workforce; and
- effective employee relations practices (including legislative compliance)

2021 signified the third year of implementation of the ER strategy. The restoration of relations had taken place in the preceding year through a successful re-negotiation of the Recognition Agreement with our social partners. TCTA sought to maintain the Bargaining Forum as a primary engagement forum for mutual interest matters with Organised Labour. This was however expanded through innovative interventions to broaden the scope of engagement by ensuring regular staff consultation through topical workshops which touched on a variety of subjects from policy review to organisational culture and transformation plans. Formal relations continue to be managed through the principles of:

- co-operating in achieving positive and healthy Employee Relations
- adopting a collaborative approach toward achieving Employee Relations objectives
- engaging in effective communication with employees
- achieving greater participation and involvement of all members of staff, and
- working towards a culture of high-performance

Mutual interest matters were engaged in and managed according to the Recognition Agreement and the Labour Relations Act. Labour Relations cases undertaken during this period are set out in Figure 19.

Figure 19: Labour Relations Cases



Private Money, Private Skills, Private Risk

E

GOVERNANCE

Freshwater scarcity is on the rise in many parts of the world, resulting in a growing demand for non-conventional water resources, such as reuse and, more prominently, seawater desalination. DesalData projects that the global desalination industry will grow by an average of 7.9% per annum during the period 2020 to 2025, with capital expenditure in the order of $4 billion per annum; this far exceeds both economic and population growth. Increasingly, the world is turning to the sea for freshwater.

Perhaps as a result of freshwater resources becoming more technology-intensive, it appears that many water utilities are losing their enthusiasm for owning the complex water resource infrastructure they rely on; this is especially visible in the desalination market where, since 2019, Independent Water Producer (IWP) contracts have dominated in the sector's primary market of the Middle East. In simple terms, an IWP contract means that a private developer is granted, following a competitive bidding process, a long-term concession to finance, build and operate a seawater desalination plant (in this instance) on a pre-qualified site, in return for a firm commitment by the state (or client) to purchase the produced water, at an agreed price. These contracts typically run over thirty years or longer, by which time the capital outlay would be fully amortized. The implication is that, at least as far as seawater desalination is concerned, the role of the private sector seems to be expanding into ownership of the infrastructure, instead of merely providing a service to the public sector.

Why are we seeing this trend and how is it relevant to South Africa? The IWP model is attractive for several reasons. Perhaps foremost is how risk allocation follows manageable interests; project, technology and delivery risks are all placed with the developer, who would normally be capable and best placed to manage such risks; if the plant does not perform as expected, it is the developer who needs to resolve the matter. This simplifies the role of the state or client to simply purchase the water at the agreed price, time and quantity, and to focus on water services and revenue collection instead.

A second benefit is simplicity, at least from the client's perspective. Since the client will not own the facility, there is no need to be involved in the technical specification and design, or in the complex evaluation and selection that is usually part of the procurement process. Hence, there is a much lesser requirement for the client to have the in-house technical capacity, than what would have been necessary with a conventional design-build-operate procurement approach.

The IWP model allows more latitude for the developer to innovate in plant design and operational improvements, but within reason; imprudent "value engineering" solutions will detract from the long-run reliability of the plant. Still, this allows the developer to drive down costs, which is ultimately the only basis on which the bidders compete.

From the state's perspective, an IWP contract offers true off-balance-sheet finance; it does not add any further debt exposure to the fiscus, as the funding of the plant stems entirely from the private developer.

The potential of IWP contracting to unlock an implementation program for seawater desalination in South Africa is vast. This is already being mobilized by a task team comprising the appropriate state entities, including TCTA, with strong political support. It is foreseen that soon, coastal municipalities would be supported in their quest to procure climate independent freshwater, drawn from the sea.

OVERSIGHT

Executive Authority

In accordance with the Notice of Establishment 2000, the Board is appointed by the Executive Authority (the Minister of Water and Sanitation) through a formal, competitive, and transparent process. The Executive Authority ensures that the appropriate mix of directors are appointed with the necessary skills, knowledge, experience and qualifications to lead the organisation.

Portfolio Committee on Water and Sanitation

The Portfolio Committee on Water and Sanitation oversees the service delivery performance of TCTA, within the broader context of its contribution to the sector and the State. During the reporting period, TCTA attended two Portfolio Committee meetings, on 14 May 2021 to present its Corporate Plan 2021-2022 and on 9 November 2021 to present TCTA's roles and responsibilities on the Lesotho Highlands Water Project. A representative of the Board also accompanied the Portfolio Committee on an oversight visit to the Lesotho Highlands Water Project in May 2021.

Shareholder's Compact

In terms of the Treasury Regulations issued under the PFMA, TCTA must, in consultation with the Executive Authority, agree on its predetermined objectives, measures and indicators annually. These are included in the shareholder's performance agreement (Shareholders' Compact) between the Board and the Executive Authority. The Shareholders' Compact promotes good governance practices by clarifying the roles, accountabilities and responsibilities of the Board and the Executive Authority.

ACCOUNTING AUTHORITY

Directors continued to adapt to the new realities of the COVID-19 pandemic by ensuring that leadership was uninterrupted, and that management was given support during another tempestuous year. The Board demonstrated ethical and effective leadership by continuing to guide TCTA through the uncertainties, risks and opportunities presented. The health of all employees remained paramount, and all the necessary adjustments required to safeguard them were addressed. Apart from formal Board and Committee meetings, the Chairperson and non-executive directors regularly interacted with top management, sharing their expertise and advice as and when required.

Ethical and Effective Leadership

The Board is responsible for the strategic direction and control of the organisation and brings independent, informed, and effective judgement and leadership to bear on material decisions reserved for the Board. The main focus of the Board is to ensure that strategy, risk, performance and sustainable development considerations are effectively integrated and appropriately balanced. The Board ensures that TCTA is governed in accordance with leading corporate governance practices, appropriate and relevant industry rules, codes and standards, and internal control systems.

As a values-based organisation, TCTA is committed to the highest standards of business integrity and ethics in all our activities. Directors acknowledge that their fundamental responsibility is to lead and direct the organisation in an ethical and effective manner. Led by an independent non-executive Chairperson, the Board reports in a transparent and balanced manner, to all stakeholders regarding the performance of TCTA and how it has fulfilled its responsibilities.

As set out in the King IV™ Report, the Board appreciates that TCTA's core purpose, its risks and opportunities, strategy, business model and sustainable development are all inseparable elements of its value-creation process. Decisions are made in an integrated manner, taking into account the effects of strategy on all stakeholders and its impact on the social, economic and natural environment. Our King IV™ application register is set out on page 80.

Board Charter

To guide its effective functioning, the Board annually reviews its charter. The purpose of the Board Charter is to regulate the parameters within which the Board operates and to ensure TCTA applies good corporate governance practices in all its dealings. The Charter also sets out the roles and responsibilities of the Board and its individual directors, including its composition and relevant procedures.

Induction and Professional Development

On appointment, directors undergo an induction programme to facilitate their understanding of the business environment and markets in which the organisation operates. This programme is facilitated by the company secretary and, amongst others includes, inter alia, information on the organisational structure and leadership configuration, the business model and funding approach, financial performance, our mandate, ministerial directives and projects. The business is also introduced through site visits and engagement with executive management. All directors undergo continuing professional development and attend regular briefings on changes in legislation, governance and the business environment. The majority of directors have been awarded the Certified Director designation by the Institute of Directors of South Africa.

Board Attendance

Seven scheduled meetings and three special meetings, as well as a two-day strategy session, were held during the period under review. The Board also met on three occasions to discuss matters relating to the establishment of the National Water Resources Infrastructure Agency and held two workshops on the strategic risk register and the governance arrangements for the Lesotho Highlands Water Project, respectively. Attendance for the reporting period is shown below:

Table 20: Attendance at Board Meetings

Director	Designation	Attendance
Gerald Dumas	Independent Non-Executive Director (Board Chairman)	100%
Maemili Ramataboe	Independent Non-Executive Director (Deputy Chairperson)	94%
Simphiwe Kondlo	Independent Non-Executive Director	100%
Satish Roopa	Independent Non-Executive Director	94%
Greg White	Independent Non-Executive Director	100%
Mollale Maponya	Independent Non-Executive Director	100%
Norman Baloyi	Independent Non-Executive Director	100%
Lindelwa Dlamini	Independent Non-Executive Director	100%
Percy Sechemane	Executive Director (CEO)	94%

Board Leadership

The Board is led by an independent non-executive Chairperson. The role of the Chairperson is separate and distinct from that of the Chief Executive Officer (CEO) and the separation of powers and responsibilities, as set out in the Board charter, ensures no single person has unfettered decision-making powers and that the appropriate balance of power exists at Board level. During the period under review, the Board amongst others, approved the following strategic policies, frameworks and plans:

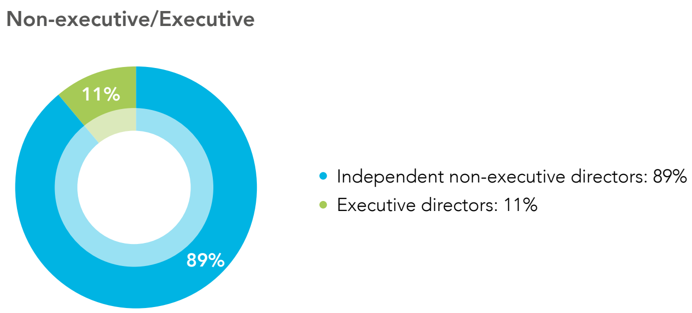
- risk appetite and tolerance framework
- talent management strategy and policy
- sexual harassment policy
- strategic risks and opportunities
- code of business conduct and ethics
- conflict of interest policy
- organisational targets and performance
- framework for tariff review and fiscal funding requirements
- business continuity management framework and policy
- disaster recovery plan
- protection of personal information policy
- strategic resourcing and high-level organisational structure

- corporate plan including the budget
- performance management policy
- flexible working policy
- reputational management strategy
- stakeholder management strategy
- whistle-blower policy
- fraud and corruption policy
- digital transformation strategy
- total rewards framework

Board Composition and Director Independence

The Board is appointed by the Minister of Water and Sanitation and comprises the appropriate balance of knowledge, skills, experience, diversity and independence to discharge its governance role and responsibilities objectively and effectively. Individual members bring considerable and diverse demographics, skills and experience to the Boardroom. In line with King IV™, non-executive members may be categorised as independent if the Board concludes that there is no interest, position, association or relationship that when judged from the perspective of a reasonable and informed third party, is likely to influence unduly or cause bias in decision-making in the best interest of the organisation.

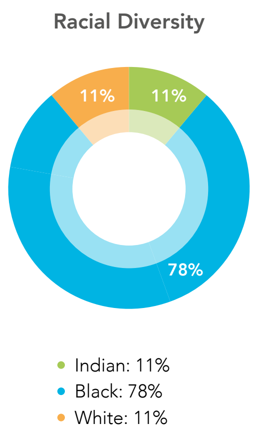
Figure 20: Non-executive/Executive

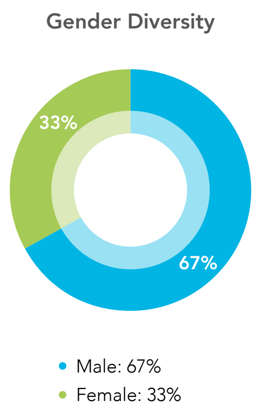


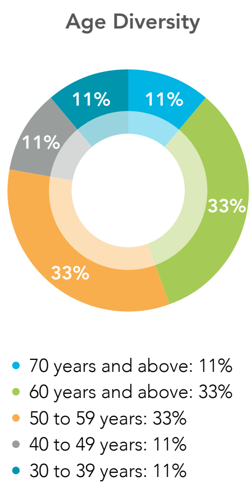
Diversity of Skills and Experience

The Board skills matrix is on pages 78 and 79.

Board Gender, Racial and Age Diversity







Board Performance Evaluation

A Board performance evaluation is conducted under the auspices of the Nominations and Governance Committee in consultation with the Chairperson. The objective is to determine ways to improve the effectiveness of the Board and its Committees. These assessments are transparent and documented. The Board has adopted a formal performance evaluation policy in 2021.

For 2021-2022, an internal performance review should have been performed. However, the Board approved a deviation from its policy as the term of directors would have expired at the end of April 2022. The shortcomings that were identified following the independent review for the period 2020-2021 are currently being implemented.

Company Secretary

All directors have access to the services and advice of the company secretary, Ms Wilma De Witt (BLC, LLB, LLM). She is not a director and maintains an arms-length relationship with the Board. The company secretary supports the Board, as a whole, and directors individually, by guiding how to fulfil their related responsibilities in the best interests of TCTA. To achieve these objectives, independent advisory services are retained by the company secretary at the request of the Board or its Committees.

The Board considered the outcome of the 2021-2022 performance assessment of the company secretary and remains satisfied with her competence and experience.

Board Committees

The Board has established Committees to assist with fulfilling its responsibilities in line with the provisions of its charter, promote independent judgement and ensure a balance of power. The Board acknowledges that delegating authority to these Committees does not detract from its responsibility to discharge its fiduciary duties to the organisation. Each Committee is chaired by an independent non-executive director and has its terms of reference. The Committees' terms of reference are reviewed annually by the Board. These set out their roles and responsibilities, functions, scope of authority and composition.

To ensure effective leadership, the Board monitors how its Committees discharge their responsibilities by annually setting work plans for each Committee and monitors the implementation thereof with the assistance of the company secretary.

Audit and Risk Committee

The Committee comprises five independent non-executive directors. The Committee complies with all applicable and relevant legal and regulatory requirements as necessary under the legislation and applies the corporate governance practices for audit committees as recommended by King IV™.

The Board recognises the important role of the Committee as part of the risk management and governance processes. The Committee's mandate is, amongst others, to review the effectiveness of internal controls, ensure satisfactory standards of governance and compliance, maintain oversight for financial results and integrated reporting, oversee risk management including risk control systems. In this regard, the Committee also has oversight of financial reporting risks, internal financial risks, as well as fraud and IT risks as they relate to financial reporting.

During the period under review, two combined Audit and Risk Committee and Finance Committee meetings were held to consider the draft annual financial statements and the audited annual financial statements respectively. Attendance at these meetings is shown below:

Table 21: Attendance at Audit and Risk Committee Meetings

Member	Attendance
*Maemili Ramataboe: Chairperson and Non-Executive Director	50%
***Norman Baloyi: Non-Executive Director	100%
***Simphiwe Kondlo: Non-Executive Director	50%
*Mollale Maponya	100%
***Greg White: Non-Executive Director	100%
***Satish Roopa: Non-Executive Director	50%
**Nala Mhlongo: Co-opted Specialist	50%
**Percy Sechemane: Executive Director (CEO)	100%

** Audit and Risk Committee member*

*** Finance Committee member*

**** Audit and Risk Committee and Finance Committee member*

Refer to page 109 for the Chairperson's report which reflects the composition, role and responsibilities of the Committee as well as the members' attendance record during the period under review.

Finance Committee

The Committee comprises four independent non-executive directors, a co-opted specialist, and the Chief Executive Officer. The Committee is chaired by a non-executive director, appointed by the Board. Executive managers attend meetings by invitation. The Committee's mandate as set out in its terms of reference is, amongst others, to consider finance policies and strategies, the organisational budget, bridging facilities, water tariff setting review, strategic guidance and effective oversight on financial reporting, procurement activities and processes including the supply chain management system to ensure that same is consistent with the Preferential Procurement Policy Framework Act, the Broad-Based Black Economic Empowerment Act and relevant National Treasury Regulations.

Five scheduled meetings were held during the period under review. Attendance for the reporting period is shown below:

Table 22: Attendance at Finance Committee Meetings

Member	Attendance
Norman Baloyi: Chairman and Non-Executive Director	100%
Simphiwe Kondlo: Non-Executive Director	100%
Greg White: Non-Executive Director	100%
Satish Roopa: Non-Executive Director	100%
Nala Mhlongo: Co-opted Specialist	100%
Percy Sechemane: Executive Director (CEO)	100%

Human Capital, Social and Ethics Committee

The Committee comprises four independent non-executive directors and the Chief Executive Officer who is recused from remuneration decisions. The Committee is chaired by a non-executive director, appointed by the Board.

The Committee is constituted to assist the Board in ensuring that the organisation remunerates fairly, responsibly and in a transparent manner to promote the achievement of strategic objectives and outcomes in the short-, medium- and long-term. The Committee also oversees organisational ethics and monitors social responsibility activities in the workplace, the economy, and the social and natural environment.

Refer to page 58 for the Chairperson's report which reflects the composition, role and responsibilities of the Committee as well as the members' attendance record during the period under review.

Technical Committee

The Committee comprises four independent non-executive members and the Chief Executive Officer. The Committee is chaired by a non-executive director, appointed by the Board. Executive managers have a standing invitation to attend all meetings. The Committee assists the Board in providing strategic leadership to management on project technical management-related functions and has oversight on organisational project technical management functions.

Four meetings were held during the period under review. Attendance for the reporting period is shown below:

Table 23: Attendance at Technical Committee Meetings

Member	Attendance
Simphiwe Kondlo: Chairman and Non-Executive Director	100%
Gerald Dumas: Non-Executive Director	100%
Maemili Ramataboe: Non-Executive Director	100%
Lindelwa Dlamini: Non-Executive Director	100%
Percy Sechemane: Executive Director (CEO)	100%

Nominations and Governance Committee

The Committee comprised five independent non-executive directors. Although the Committee does not have the power to nominate or elect Board members, the Committee actively seeks to collaborate with the Executive Authority on the required knowledge, skills and capabilities of new directors.

The Committee reviews the structure and composition of its Committees, from time to time, to enhance its effectiveness and oversees the development of an induction programme for new directors. The Committee further ensures that a continuous development and training programme for directors are in place and oversees the performance review of the Board and its Committees. Concerning governance matters, the Committee has oversight over the development and implementation of the organisational strategy and the business model including the corporate plan and predetermined objectives. The Committee also annually considers the outcome of organisational performance review and reviews the application of King IV™ practices.

Six scheduled meetings were held during the period under review. Attendance for the reporting period is shown below:

Table 24: Attendance at Nominations and Governance Committee Meetings

Member	Attendance
Gerald Dumas: Chairman and Non-Executive Director	100%
Maemili Ramataboe: Non-Executive Director	100%
Simphiwe Kondlo: Non-Executive Director	100%
Greg White: Non-Executive Director	100%
Norman Baloyi: Non-Executive Director	100%

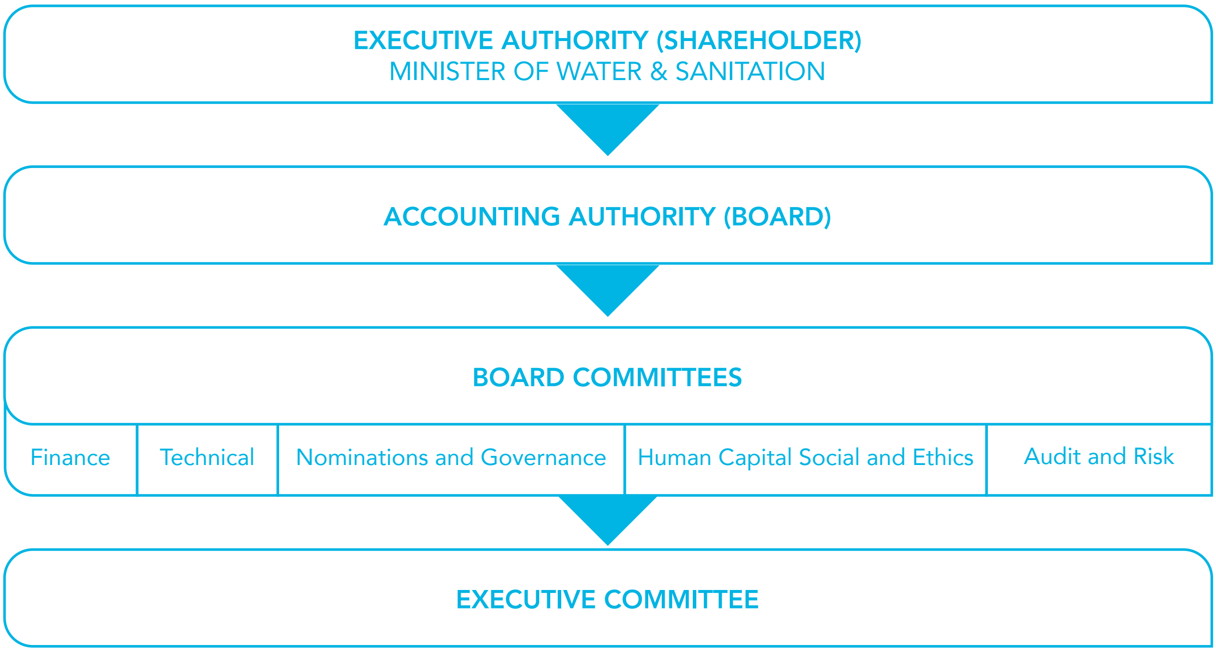
Table 25: Director Information

Surname & Initials	Gender	Race	Age	Skills, Knowledge and Experience		Term of Office		Other Active Memberships
				Qualifications	Field of Expertise	Date of first appointment	Expiry of Term	
 Dumas, G	Male	African	70	• MBA • BSc • Municipal Executives Fin Prog	• Business Management • Finance • Operations Strategy	2019/05/01	2022/04/30	• Market Theater Foundation • Nethezeka Business Solution
 Ramataboe, M	Female	African	66	• CA • MBA • Accredited Associate of the Institute for Independent Business	• Finance & Auditing • Project Management • Risk Management & Compliance • Strategy & Ethics • Corporate Governance • Corporate Treasury	2019/05/01	2022/04/30	• CSOS • UBank • MAE Risk Management
 White, G	Male	White	61	• BA Admin (Hons) Development Studies • BA (Economics)	• HR • Finance • Economics • Governance	2019/05/01	2022/04/30	None
 Roopa, S	Male	Indian	64	• B Iuris • LLB • MPhil • Certificate: Transformation of Institutes of Higher Education • Certificate: Executive programme for Leaders in Government • Certificate: Negotiating International Contracts & Development Finance • Certificate: Global Housing Trends	• Legal • HR • Philosophy • Risk	2015/12/01	2022/04/30	• Roopa Ruysenaar and Associates • S Roopa Consultants • Afriforte • Mphete Ventures • Independent Commission for the Remuneration of Public Office Bearers • Da Vinci Institute: School of Business Leadership • Investigation and Recommendations Committees of North-West Legal Practice Council • Legal Services Committee of Legal Aid South Africa • Roopa Potgieter Incorporated Attorneys
 Dlamini, L	Female	African	35	• B.Sc Hons - Env and Water Science • BSc - Env Sc	• Environmental Management	2019/05/01	2022/04/30	None
 Khondlo, SN	Male	African	54	• Dip: Civil Engineering • BSc Agric. Engineering • MSC Eng. Management • Dip: Project Management • Certificate: Property Practitioner Practice	• Engineering • Project Management • Audit	2006/07/01	2022/04/30	None

Surname & Initials	Gender	Race	Age	Skills, Knowledge and Experience		Term of Office		Other Active Memberships
				Qualifications	Field of Expertise	Date of first appointment	Expiry of Term	
 **Baloyi, N**	Male	African	47	• Advanced Diploma in Accounting Sciences • BSc Mathematics and Applied Mathematics • BSc Computer Science and Information Systems • Bcom Financial Management • Bcom Human Resource Management • BSc (Hons) Computational and Applied Mathematics • BCom (Hons) • PGDip Business Management • HDip Computer Auditing • MSc Applied Science in Electrical Engineering • MSc Electronics • MBA • MPhil Development Finance	• Financial Management • Risk Management • Strategic Leadership • Project Management • Infrastructure Development • HR	2019/05/01	2022/04/30	• SASRIA • SAHPRA
 **Maponya, M**	Female	African	58	• LLB, Univ. of North • B Iuris, Univ. of North • Admitted Attorney 2016	• HR • Audit • Planning and Strategy • Corporate Governance • Legal	2019/05/01	2022/04/30	None
 **Sechemane, P**	Male	African						

GOVERNANCE FRAMEWORK

Figure 21: Corporate Governance Framework



APPLICATION OF KING IV™ PRINCIPLES

TCTA prides itself on its commitment to applying leading corporate governance practices as it delivers on its mandate of providing bulk raw water infrastructure using state and investor funding to ensure the ongoing sustainability of the business.

TCTA applies the relevant practices under the first 16 principles of King IV™ to achieve the governance outcomes of an ethical culture, good performance, effective control and legitimacy. Refer to the King IV™ application register below:

<table>
<tr><th>KING IV™ PRINCIPLE</th><th>APPLICATION</th></tr>
<tr><td>PRINCIPLE 1: LEADERSHIP
The Board should lead ethically and effectively.</td><td>The Board of Directors (the Board) of the Trans-Caledon Tunnel Authority (TCTA) is committed to the good corporate governance principles as set out in King IV™, these being the overarching principles for an ethical foundation. The Board leads ethically and effectively by acting with due care and diligence and maintaining a sufficient working knowledge of TCTA and its sector and remaining informed about matters for decision-making. Directors hold one another accountable for decision-making based on integrity, competence, responsibility, fairness and transparency.

The Board is competent to steer and set the strategic direction of TCTA and oversee the implementation of approved strategies by management, ensuring accountability for organisational performance. The Board is mindful of the impact of business activities on society and the environment as a whole, considering key risks and opportunities, and seeks to ensure sustained value creation for key stakeholders.

The Board Charter, amongst others, outlines the policies and practices of the Board on matters such as declarations declaration of interest including the receipt of gifts.

The Nominations and Governance Committee (the NGC) annually reviews the composition of Board Committees to ensure that the Board is effective in discharging its duties and responsibilities.</td></tr>
<tr><td>PRINCIPLE 2: ORGANISATIONAL ETHICS
The Board should govern the ethics of the organisation in a way that supports the establishment of an ethical culture.</td><td>The Board, assisted by the Human Capital, Social and Ethics Committee (the HCSEC), ensures that TCTA's ethics are managed effectively and provides effective leadership based on an ethical foundation.

An ethical culture is promoted and sustained through:
• endorsing the organisational values as documented in the Code of Business Conduct and Ethics which is published on the website;
• endorsing internal policies, specifically around Fraud, Anti-Money Laundering, Conflicts of Interest, Gifts and Entertainment and Whistleblowing to tackle practices inimical to ethical conduct more efficiently;
• monitoring and reporting on the measures taken to achieve adherence thereof through the HCSEC, and the Audit and Risk Committee (the ARC)); and
• all business conducted aligns with the values of TCTA.

The implementation and execution of the Code of Ethics and Conduct and related policies are delegated to management.</td></tr>
</table>

KING IV™ PRINCIPLE	APPLICATION
PRINCIPLE 3: RESPONSIBLE CORPORATE CITIZENSHIP **The Board should ensure that the organisation is and is seen to be a responsible corporate citizen.**	The Board ensures that TCTA is, and is seen to be, a responsible corporate citizen. The Board endorses the values, strategy and conduct which are congruent with being a responsible corporate citizen. The Board assesses the consequences of the organisational business activities by monitoring performance against measures and targets in the following areas: • workplace [including, but not limited to, employment equity, fairness of remuneration principles, development of and the health and safety of employees]; • economy (including, but not limited to, broad-based black economic empowerment, economic transformation, fraud and corruption practices and policies, approving responsible and transparent tax practices); • society (including, but not limited to, public health and safety, protection of human rights); and • environment (including, but not limited to, responsibilities in respect of pollution and waste disposal). The monitoring of the above activities is delegated to the HCSEC.
PRINCIPLE 4: STRATEGY AND PERFORMANCE **The Board should appreciate that the organisation's core purpose, its risks and opportunities, strategy, business model, performance and sustainable development are all inseparable elements of the value creation process.**	TCTA recognises that its activities and outputs can have both positive and negative impacts on the economy, society and environment in which it operates and the capital it employs to create value for stakeholders by achieving good performance. It sets its strategy objectives by assessing the risks and opportunities presented in relation to the risk appetite and risk tolerance, establishes its key performance indicators (KPI) and the key risk indicators for each KPI and measures its performance against these. The Board has delegated to management the detailed formulation and implementation of the approved strategy. The Board approves the strategy, key performance measures and targets for management and oversees the implementation of the strategy and plans carried out by management against the agreed performance measures and targets. The ARC assists with the governance of risks and monitors the effects of the identified risks and the mitigating controls. The responsibility for risk management is detailed in the ARC Terms of Reference. The Board annually enters into a Shareholder's Compact (SC) with the Executive Authority (EA) being the Minister of Water and Sanitation (the Minister). The SC includes key performance indicators and objectives that are set by the shareholder. The Board quarterly reports to the EA on the performance of the organisation against these objectives and indicators.
PRINCIPLE 5: REPORTING **The Board should ensure that reports issued by the organisation enable stakeholders to make informed assessments of the organisation's performance, and its short-, medium-, and long-term prospects.**	The Board assumes responsibility for the integrity of the Integrated Annual Report and critically assesses and satisfies itself as to the assurances obtained in terms of the combined assurance model. The model enables an effective internal control environment that supports the integrity of information used for internal decision-making by management, the Board and its Committees. The Board, assisted by its Committees, oversees that the various reports are compliant with legal reporting requirements. The Board approves management's basis for determining materiality and takes accountability for the Integrated Report and, through the ARC, ensures that the necessary controls are in place to verify and safeguard the integrity of the annual financial statements and reports, and any other disclosures. These disclosures are in line with the King IV™ recommended practices.

KING IV™ PRINCIPLE	APPLICATION
PRINCIPLE 6: PRIMARY ROLE AND RESPONSIBILITIES OF THE BOARD **The Board should serve as the focal point and custodian of corporate governance in the organisation.**	The Board's role and responsibilities and the way it executes its duties and decision-making are set out in the Board Charter. The Board is supported by its Committees, which have delegated responsibility to assist the Board to fulfil specific functions. Each Board Committee is governed by Terms of Reference. The Board Committees quarterly report to the Board on its oversight responsibilities. The governance structures have been aligned to King IV™, and the organisation has materially applied all the principles. The organisation's governance framework and corporate governance practices are disclosed in the Integrated Annual Report.
PRINCIPLE 7: COMPOSITION OF THE BOARD **The Board should comprise the appropriate balance of knowledge, skills, experience, diversity and independence for it to discharge its governance role and responsibilities objectively and effectively.**	The non-executive directors (NEDs) of the Board are appointed by the Minister, whilst the Chief Executive Officer (the CEO) is appointed by the Board. These appointments are affected in accordance with the Notice of Establishment 2000. Although the Board does not have the power to nominate and elect members, it actively seeks to collaborate with the shareholder in this regard. The Board is satisfied that its current composition is appropriate, and an optimal mix of knowledge, skills, experience and independence is present. Except for the CEO, all Board members are independent NEDs. Details of the directorate are provided in the Annual Integrated Report.
PRINCIPLE 8: COMMITTEES OF THE BOARD **The Board should ensure that its arrangements for delegation within its own structures promote independent judgement and assist with balance of power and the effective discharge of its duties.**	The Board determines delegation to individual members, groups of members, and standing or ad-hoc Committees. The composition of the Board and its Committees are in line with King IV™ practices. There is a clear balance of power to ensure that no individual has undue decision-making powers. Each Committee has a formal Terms of Reference recording the responsibilities delegated to it. Each Committee has a minimum of three members and is sufficient capability and capacity to function effectively. Any member of the Board is entitled to attend Committee meetings as an observer. Management is allowed to attend by standing or ad-hoc invitation. The Board Committees have fully complied with its terms of reference during the reporting period. Membership of the Committees is reviewed on an annual basis through the NGC to ensure that these are optimally constituted for their respective mandates. Without abdicating its own responsibility, the Board has formally, and in writing, delegated powers to the following Committees: • Audit and Risk Committee. • Human Capital, Social and Ethics Committee. • Nominations and Governance Committee. • Technical Committee; and • Finance Committee. All Board Committees have work plans in place to execute their oversight responsibilities during the year. Refer to the Integrated Annual Report for Board Committee membership and Terms of Reference details.

KING IV™ PRINCIPLE	APPLICATION
PRINCIPLE 9: EVALUATIONS OF THE PERFORMANCE OF THE BOARD **The Board should ensure that the evaluation of its own performance and that of its Committees, its chair and its individual members, support continued improvement in its performance and effectiveness.**	Under the Board Performance Evaluation Policy, the Board conducts a formal, externally facilitated evaluation process of the Board, the Chairperson, its Committees and individual directors at least every two years. An internal evaluation process of the Board and its Committees, through the assistance of the NGC and the Company Secretary is conducted in the intervening years. The outcome of these evaluations is discussed at Board and Board Committee meetings. Areas of improvement or concern are discussed, and action plans are put in place to address the identified shortcomings. An independent assessment was conducted in 2021. The results confirmed that the Board and its Committees were effective in discharging their duties during the period under review. The necessary action plans were put in place to address the areas of concern. The outcome of the 2021 review was also shared with the Minister.
PRINCIPLE 10: APPOINTMENT AND DELEGATION TO MANAGEMENT **The Board should ensure that the appointment of, and delegation to, management contribute to role clarity and the effective exercise of authority and responsibilities.**	The Board has appointed a CEO, who is responsible for leading the strategy implementation and who regularly reports to the Board on the progress thereof. The Board has also approved and implemented a Delegation of Authority, which details the powers and matters reserved for itself and those to be delegated to Management via the CEO. The Board reviews its delegation of authority annually. The Board ensures that key management functions are led by a competent and appropriately authorised individual and are adequately resourced. The Board is satisfied that TCTA is appropriately resourced and that its delegation to management contributes to an effective arrangement by which the authority and responsibilities are exercised.
PRINCIPLE 11: RISK GOVERNANCE **The Board should govern risk in a way that supports the organisation in setting and achieving its strategic objectives.**	The Board has direct responsibility for the governance of organisational risks. The Board acknowledges the importance of risk management as it is linked to the strategy, performance and sustainability of TCTA. The Board governs risk through the Audit and Risk Committee (ARC). The Board approves the Policy, risk management framework as well as risk appetite framework which govern risk management. TCTA has adopted an enterprise-wide approach to risk management, enabling a formal and systematic process for identifying and assessing the organisation's material risks. The ARC has delegated the delegated to Management the implementation of processes to ensure that the risks to the sustainability of the business are identified and managed within acceptable parameters. Management continuously identifies and assesses risks likely to prevent the organisation from achieving its strategic objectives. They ensure mitigation measures and action plans are implemented in order to reduce risks to acceptable levels. Implementation of controls is monitored on a regular basis and reports are submitted to the ARC and the Board. TCTA applies a combined assurance model in its management of corporate risk, with both internal and external service providers providing assurance over the process. The Board oversees this and monitors the effectiveness of the organisation's risk and management processes through the ARC. The Board is satisfied that the risk management process is effective in continuously assessing risks and opportunities and ensuring that these risks are managed in line with business strategy.

KING IV™ PRINCIPLE	APPLICATION
PRINCIPLE 12: TECHNOLOGY AND INFORMATION GOVERNANCE **The Board should govern technology and information in a way that supports the organisation setting and achieving its strategic objectives.**	The Board, together with the ARC, oversees the governance of IT. The Board is fully aware and supportive of the importance of information technology in relation to the achievement of the organisational strategy. The ARC has increased its focus on technology, information, compliance and maximising of opportunities which also manage risk factors. The Board has approved the updated IT Governance Framework. The responsibility for the implementation of the framework was delegated to Management and progress is monitored through the ARC and the Board on a quarterly basis. The Internal Audit function provides assurance on IT internal controls to the ARC. The ICT Steering Committee is integral to the IT Governance Framework and has the overall responsibility of ensuring that technology and information is managed, appropriately resourced and contributes to the achievement of strategic objectives set. There is appropriate management of cyber security and initiatives to improve the posture of the organisation.
PRINCIPLE 13: COMPLIANCE GOVERNANCE **The Board should govern compliance with applicable laws and adopted, non-binding rules, codes and standards in a way that supports the organisation being ethical and a good corporate citizen.**	The Chief Risk Officer is responsible for ensuring that an effective compliance programme is established across the entity, which enables adherence to laws and regulations, as well as policies and established standards. Management monitors the compliance activities and regularly provides assurance to the Audit Committee. Board, with the assistance of the ARC, ensures that the organisation complies with applicable laws, and adopted non-binding rules, codes and standards. The TCTA's Compliance Universe has all the identified laws, adopted non-binding rules, codes and standards that are applicable and impact TCTA's operations to ensure efficient compliance risk management. TCTA's compliance is approached and addressed through the following: • the Compliance Universe and the Compliance Programme is reviewed and approved by the ARC • TCTA has a compliance function led by a senior employee as required by the Compliance Institute of Southern Africa's Generally Accepted Compliance Practice Framework to oversee all compliance activities and provide training on new requirements and regular updates on existing legislation and adopted, non- binding rules; • the Board approved a Compliance and Regulatory Management Framework and Policy delegating the responsibility for monitoring thereof to the ARC Committee; • compliance with rules, laws and codes and standards is • incorporated in TCTA's Code of Business Conduct and Ethics; and • the responsibility to implement, execute and monitor compliance with relevant policies is delegated to management. The Board discloses in the Integrated Annual Report details on how it discharged its responsibility towards governing and managing compliance, areas of focus, and inspections by authorities as well as material or repeated instances of non-compliance.

KING IV™ PRINCIPLE	APPLICATION
PRINCIPLE 14: REMUNERATION GOVERNANCE **The Board should ensure that the organisation remunerates fairly, responsibly, and transparently so as to promote the achievement of strategic objectives and positive outcomes in the short-, medium- and long-term.**	The Board, assisted by the HCSEC, assumes responsibility for the governance of remuneration by setting the direction for how remuneration should be approached and addressed on an organisation-wide basis. The HCSEC ensures that executives and general staff are remunerated fairly and responsibly in line with industry standards with a view to promoting the creation of value in a sustainable manner. TCTA's remuneration policy is reviewed by the HCSEC and approved by the Board. The policy is designed to attract and retain human capital and promote the achievement of strategic objectives, positive outcomes, ethical culture and responsible corporate citizenship. The HCSEC oversees the implementation of the policy to ensure the achievement of the policy objectives. The Board is satisfied that the remuneration policy and its implementation reflect appropriate alignment between strategic objectives and stakeholder interests. The remuneration of NEDs and executive management is disclosed in the Integrated Annual Report.

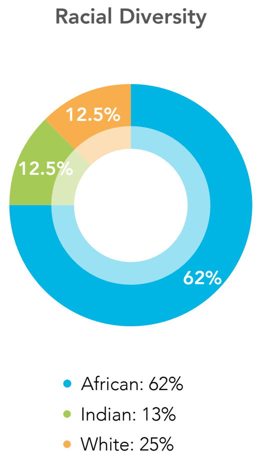
KING IV™ PRINCIPLE	APPLICATION
PRINCIPLE 15: ASSURANCE **The Board should ensure that assurance services and functions enable an effective control environment and that these support the integrity of information for internal decision-making and of the organisation's external reports.**	The Board delegated the ARC to fulfil the King IV™ requirements on combined assurance. The ARC adopted the four Lines of Assurance, and a Combined Assurance Strategy and Combined Assurance Policy were documented based on the four levels of assurance and approved by ARC in April 2020. The combined assurance implementation included the introduction of Control-Self-Assessments, as guided by ARC. Training on Control Self-Assessment (CSA) was conducted for Divisions and opportunities to embed the CSA approach were pursued in a few Divisions. There is still room for improvement in this regard. Formal Terms of Reference for a Combined Assurance Forum were approved by the Executive Committee in February 2022. The Forum should provide a means for the internal assurance providers to engage on one platform and coordinate their efforts more seamlessly. The implementation of combined assurance improved in 2021-2022, Board Committee reports presented by Executive Management now incorporates a combined assurance approach. Collaboration between the internal assurance providers improved. The Auditor-General of South Africa did use Internal Audit's work for some of their audits. An improvement in this area is for more enhanced collaboration to ensure that AGSA is able to use more of the internal audit's work. Management provided first-line assurance through, among others, reports with relevant management information that supported the integrity of information for internal decision-making, and for reporting to external stakeholders. The Risk, Compliance and Legal Units, among others, as part of the second line assurance providers presented to Management, and the Board and its Committees, relevant reports and progress on the mitigation strategies. The irregular expenditure management and process continued to be a major focus area that the Office of the CRO – with Compliance and the Procurement Department leading the quest to resolve legacy items. Management and the HR&OD Division are involved in the consequence management process to ensure that employee relations are aligned to HR policies, practices and the relevant legislation. The Internal Audit Division, through the risk-based internal audit plan, provided reasonable assurance on the adequacy and effectiveness of controls, as the third line. The AGSA provided independent assurance to the Board and other stakeholders through the Regulatory audit. The outcome of this level of assurance contributed to TCTA reviewing financial internal controls and enhancing other areas that needed improvement.

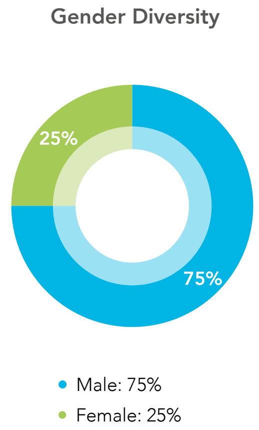
KING IV™ PRINCIPLE	APPLICATION
PRINCIPLE 16: STAKEHOLDERS **In the execution of its governance role and responsibilities, the Board should adopt a stakeholder-inclusive approach that balances the needs, interests and expectations of material stakeholders in the best interests of the organisation over time.**	The Board, with the assistance of the HCSEC, is responsible for monitoring the organisation's relationship with stakeholders. Through regular reporting by the HCSEC, the Board is equipped with the necessary information to enable it to take the legitimate interests and expectations of stakeholders into account in its decision-making to drive a sustainable and long-term value strategy. TCTA has fostered and strengthened its relationships with various stakeholders it interacts with. Environmental, social and governance factors in investment decision-making and practice affect the value of an investment and these are considered essential by the Board for responsible investments to promote good governance and the creation of value by the companies in which it invests.
PRINCIPLE 17: INSTITUTIONAL INVESTORS **The governing body of an institutional investor organisation should ensure that responsible investment is practised by good governance and the creation of value by the companies in which it invests.**	Not Applicable to TCTA

EXECUTIVE COMMITTEE

Our Executive Committee comprises the Chief Executive Officer (CEO), the Chief Financial Officer and six executive managers. The Chief Internal Auditor has a standing invitation to attend all Executive Committee meetings. The Board delegates authority to executive management, through the CEO, to manage, direct, control and coordinate the day-to-day business activities and affairs of the organisation, subject to statutory limits and other limitations set out in the delegation of authority. The Risk Forum, the ICT Steering Committee, the Policy Review Committee, the Combined Assurance Forum and the Business Planning and Integration Committee are Exco standing committees.

Figure 22: Exco gender and race diversity as of 31 March 2021





BUSINESS ETHICS

TCTA recognises that ethics plays an important role in conducting its business operations i.e., raising funding and implementing projects. The Board and Human Capital Social and Ethics Committee are responsible for the governance of ethics (strategic and oversight role) within TCTA. Management is responsible for the implementation of the ethics policy and framework within the organisation.

The ethics programme was approved and monitored by the Human Capital Social and Ethics Committee of the Board. The Board noted that there were delays in the implementation of the ethics plan for the 2021-2022 financial year. As a result, management has been tasked with the responsibility of implementing a dedicated ethics office responsible for the implementation of ethics. This process will be finalised in the 2022-2023 financial year.

At the beginning of the 2021-2022 financial year, the Board considered the outcome of an independent survey on the ethics culture within TCTA. The recommendations of this survey are being implemented and form part of the Ethics Plan for the 2022-2023 financial year.

In addition, the outcome of an independent assurance (Internal Audit) in the implementation of ethics within TCTA was considered by the Human Capital, Social & Ethics Committee. The recommendations of Internal Audit are being implemented to enhance the ethics process.

The Board recognises that the ethics implementation process in TCTA is in its infancy, however, the basic activities as required by the Ethics Institute are in place. The 2022-2023 ethics has been designed to elevate the implementation and culture of ethics at TCTA.

RISK MANAGEMENT

TCTA's enterprise-wide risk management approach is integrated and structured to ensure that the strategy is implemented effectively to ensure the achievement of all corporate objectives. This is fundamental to the delivery of the organisation's mandate. TCTA's Board is responsible for the governance of risk and sets the direction of how risks should be managed. All business areas are responsible for identifying risks, developing risk mitigating plans and reporting risks in their areas of responsibility. Risks and treatment plans are continually monitored and reviewed.

The risk management process is governed through an approved Risk Management Policy, Risk Management Framework, and risk implementation plan. The Risk Management framework is aligned to principles outlined in COSO internal control framework, ISO 31 000: Risk Management Guidelines, the King Code Governance Framework (King IV™), the Public Sector Management Framework, COBIT for Information Technology and PMBOK for project management. The Board approves the organisation's risk appetite and tolerance levels, which set out the amount and type of risk that TCTA is prepared to accept in order to achieve its objectives. This is reviewed annually.

Business continuity is managed through an approved business continuity policy and business continuity framework. The framework is based on ISO 22301 and the Business Continuity Institute, Good Practice Guidelines 2018.

The Audit and Risk Committee (ARC) of the Board reviews the implementation of risk management activities on a quarterly basis, in line with the annually approved Risk

Management plan. In managing risks, TCTA adopts a top-down and bottom-up approach to risk management. TCTA has also adopted a combined assurance approach, which allows Risk Management, Internal Audit, Compliance and Legal to work together to manage organisational risks. The combined assurance strategy and plan were implemented during the year.

The responsibility to implement and execute risk management has been delegated to Exco in order to support the organisation in achieving its strategic objectives. The organisation has in place a Risk, Ethics and Combined Assurance Forum established by Exco. The Forum identifies, monitors and controls risk and ethics-related matters on an enterprise-wide basis in support of the Board's strategic objectives. The Forum makes recommendations to Exco on the combined assurance proposed scope and coverage and deliberates the assurance provided to cover overlaps and gaps.

The Risk Management department continually conducts periodic environment scans, by monitoring TCTA's internal and external environment to detect potential threats to the organisation. The information gathered is used to assess material risks and opportunities that may affect the achievement of objectives. This allows the organisation to execute its business strategy effectively. The risk assessment is based on objectives set out in the corporate and divisional plans. The department conducts risk assessments across the organisation. Divisional risks are identified quarterly through workshops with Executives. During the risk register review sessions new and emerging risks are identified and progress towards the implementation of measures to reduce previously identified risks is monitored.

The status of key risks is reported quarterly to the Audit and Risk Committee.

Risk Management Governance Statement

A sound risk governance structure provides a solid foundation for embedding an effective risk management culture within the organisation. TCTA recognises that risk management requires a team-based approach for effective application across the organisation. In this regard, the organisation has adopted a combined assurance approach to manage organisational risks. This allows for the allocation of responsibilities to assurance providers and ensures that key risks are not missed and misjudged. The responsibility to implement and execute risk management is delegated to management, in line with King IV™, so as to ensure the achievement of business objectives. Management ensures that all risks affecting their areas of responsibility are identified and mitigated to acceptable tolerance levels.

Approach to Risk Management

The management of risk at TCTA entails proactive identification of potential risks and opportunities in a continuous and systematic manner in accordance with the enterprise risk management framework. This approach enables TCTA to manage risks to an acceptable tolerance level. The risks are identified, evaluated, and managed at the appropriate levels, and their collective impact is aggregated. Risks are identified according to the various risk categories defined by the organisation. The defined categories include strategic risks, sustainability risks, operational risks, financial risks (funding, liquidity, interest rate, etc.), reputational risks, governance risks, human capital, political risks, information and technology and project risks (construction, environmental, engineering, social risks as well as health and safety). The identified risks are then assessed in terms of likelihood of occurrence and impact.

During the year, gaps were identified, and the organisation sought to improve the risk management process by addressing those gaps. Risk management key performance indicators and the Board-approved Risk Appetite and Tolerance Framework were implemented and monitored on a quarterly basis.

Management of Risks During the Financial Year

The risk management implementation plan approved by the Board at the beginning of the financial year 2021-2022 year was implemented. The strategic, operational and project risks were reviewed in order to ensure that all identified and emerging organisational risks were mitigated, in line with the organisational risk appetite and tolerance level.

During the year the organisation placed corporate insurance covers on the market. However, the negative perception of State Owned Enterprises and delays in the finalisation of financial statements affected the placement of some liability policies. The organisation was not able to place Directors and Officers Liability, Commercial Liability and Employment Practices Liability in time, but management were subsequently able to secure these covers.

Strategic risks

During the financial year, the organisation identified 15 key strategic risks. Out of the 15 risks, four were rated extreme, seven were rated high, and another four rated medium at the end of the financial year.

These are risks that are likely to impact TCTA's strategic direction and are largely outside of the organisation's control. The identification and assessment of strategic risks are conducted at an annual risk workshop conducted with the Board and Exco. The assessment is based on the organisational balanced scorecard and business plan for the financial year. Divisions are responsible for the identification and management of business risks as well as strategic risks in their areas of responsibility. The mitigations were put in place to reduce such risks to acceptable levels.

Key Risk Identified During the Financial Year 2021-2022

The table below shows the key strategic risks and their mitigation measures, as well as the inherent and residual ratings in line with the TCTA risk rating matrix. At the end of the financial year, the organisation was still in the process of implementing some of the mitigation measures to manage the identified risks.

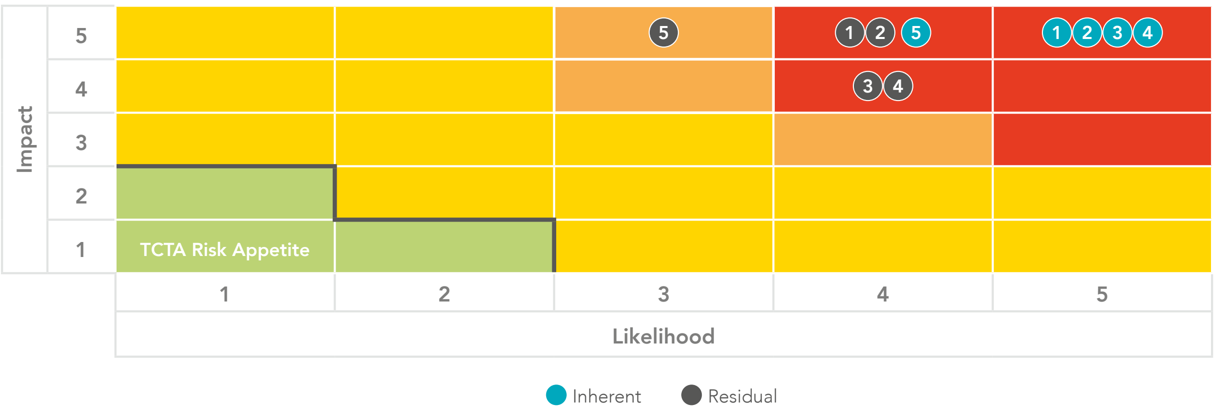
Table 26: Key Strategic Risks

No.	Risk	Inherent risk	Mitigation Measure	Residual Risk
1.	**TCTA unable to raise sufficient funding, on behalf of RSA for the implementation of LHWP-2.** – This was due to the outstanding no objections letter from the Namibian government which is one of the DFI loan conditions as required in terms SADC Revised Protocol on Shared Watercourses	25	Matter elevated to DWS to resolve with the Namibian government.	20
2.	**Delays in the implementation of the projects within time, budget, technical specifications and environmental requirements.** – MCWAP-2A: A change in the procurement strategy has resulted in a delay in going to tender	25	• Procurement plan progress report is a standing item at Exco strategic meetings	20
3.	**Failure to treat desired volumes of water and failure to meet water quality specifications in the Acid Mine Drainage Project.** – Only in the Eastern Basin was the target of treating the required volumes not met	25	• The plant has flexibility to treat varying water quality and in the event of the parameters being exceeded for any length of time, production can be halted until the situation is remedied • The risk that materialised due to the numerous failures of the abstraction pumps was mitigated by maintaining pumping capacity in the Western and Central Basins, where the ability to drawdown after a shutdown is difficult and taking the Eastern Basin offline as once pumping capacity is restored there is a far greater ability to pump in excess of the required volumes of water.	16
4.	**Irregular, fruitless, and wasteful expenditure.** – This was due to historical expenditure that was not condoned and Lack of consequence management for non-compliance with applicable policies and processes.	25	• Irregular, fruitless, and wasteful expenditure procedure manual. • Developed Guidelines on consequence management.	16

No.	Risk	Inherent risk	Mitigation Measure	Residual Risk
5.	**Failure to conclude funding agreements with lenders** – Only loans required for VRESAP were in negotiation stage with lenders	20	• Submission of borrowing limits requests nine months in advance to National Treasury and active engagement with National Treasury and DWS by PF&T, Exco. • Skilled employees with knowledge of & relationships in water sector, DWS & NT. Financial modelling, structuring, negotiations, legal skills.	15

Key	Extreme	High	Medium	Low

The following heatmap illustrates the inherent and residual risks in line with the TCTA risk rating matrix.



Project Risks

Project risks were monitored and reported on a monthly basis. All the new projects were in the preparation stages during the financial year. The main risk associated with the projects was the raising of funding. The details of the risk per project during the financial year are shown below:

- **Berg River Voëlvlei Augmentation Scheme (BRVAS)** – The main risk was delays in raising funding due to failure to conclude the public participation process and obtain Council decisions on time resulting in Water Supply Agreements not being signed between them and DWS.
- **Mokolo Crocodile River Water Augmentation Project – Phase 2A (MCWAP-2A)**. The main risk was appeals received against the environmental approval. Upon the Minister of FFE rescinding the appeals, the following main risk was delays in procurement of the major construction contract. With the institutional arrangements concluded, sourcing of funding could commence. However, funding is sourced simultaneously with the tender process for the major construction contract and must reach financial close, for TCTA to award the contract. With the delays in procurement of the construction contract, the

timelines for sourcing of funding changed accordingly as it would be costly to have funding in place ahead of requiring it, as loans attract fees and lenders generally want facilities to be drawn within a limited period after reaching financial close, which will accumulate unnecessary interest.

- **uMkhomazi Water Project Phase 1(uMWP)**.The first risk affecting the project was the inability to proceed with the raising of funding with users wanting a higher contribution from the fiscus. Until there is an agreement between DWS and the users, this project will not proceed. The second risk was the conditions contained in the environmental authorisation, which required the biodiversity offset to be in place before the construction of the dam could commence. This risk was mitigated by the condition being set aside.

Financial Risks

The organisation was exposed to financial risks associated with project funding and liability management. The key treasury risks such as liquidity risk, interest rate risk and credit risk were well managed during the financial year. The following were some of the risks identified during the year:

- **Liquidity risk** - The ORWRDP-2C liquidity risk was rated extreme because the project is dependent on the transfer of funds from DWS to meet obligations such as payment on invoices. Should DWS delay the transfer of funds, there is a potential for delays in paying invoices.
- **Borrowing limits** - The organisation is required to comply with borrowing limits obtained from National Treasury. At the end of the financial year, all projects remained within the borrowing limits approved by National Treasury. However, the borrowing limits for BWP and KWSAP were closer to the limit. Any further utilisation against the limits had to be closely monitored to prevent any breaches.
- **Interest rate risk** - In terms of the approved Treasury Risk Policy, projects that are post-construction must have at least 70% of project funding at a fixed rate and a maximum of 30% floating rate to make interest rate payments predictable. All projects were within the approved threshold, except VRS, MMTS-2 and VRESAP which had 99%, 35% and 54% of their funds at a floating rate. The VRS project was not expected to meet the ratio as LHWP-2 is still under construction. MMTS-2 is also not expected to meet the ratio as it is to be prepaid in 2024. VRESAP was not considered a breach as the Finance Committee condoned the deviation from the ratio for the remainder of the repayment period.
- **Counterparty risk** - During the financial year, all investments were within the approved counterparty limits and were adequately diversified.

Business Continuity Management (BCM)

The scope of TCTA's BCM Programme covers six life cycle stages, namely policy and programme management, embedding, analysis, design, implementation and validation in line with the Good Practice Guidelines and International Organisation for Standardisation (ISO) 22301. TCTA continued to implement the BCM programme to ensure readiness for potential business disruptions. During the financial year the following activities were performed to enhance the BCM programme:

- awareness sessions and Training of Business Continuity Champions.
- conducted business impact assessments and developed business continuity strategies for all divisions.

- the Emergency Response Plan, Crisis Management Plan, Business Recovery Plan and ICT Coordination Continuity Plan were developed and approved by the relevant Committees.
- scenario tests were conducted on the above-approved plans.
- an off-site Disaster Recovery Testing was conducted.

Planned Areas of Future Focus for the 2022-2023 Financial Year

As part of risk management continuous improvement in TCTA, the following are the five key activities that will be implemented in the 2022-2023 financial year.

- conduct risk awareness sessions to improve the embedment of risk management and Business Continuity management into organisational processes and activities.
- provide formal risk management training to identified employees.
- contribute to the implementation of the combined assurance process in collaboration with Compliance, Internal Audit, Compliance and Legal department.
- assess TCTA's risk maturity level.

REGULATORY COMPLIANCE

The responsibility for the effective implementation of compliance throughout TCTA has been delegated to the compliance function under the management of the Chief Risk Officer. The compliance function empowers the business to comply with applicable regulatory requirements as recorded in the Compliance Universe by ensuring that actions, processes and procedures are risk-appropriate and that the business can achieve its business goals within the compliance framework.

Areas of non-compliance are identified through compliance assessments in collaboration with the divisional Compliance Champions and are reported to the responsible business process owners; to ensure that corrective plans are developed and implemented to mitigate and or prevent future recurrence of incidents of regulatory non-compliance. The compliance function is also charged with the responsibility of assisting, guiding, and advising the various divisions within TCTA on how to discharge their duties in managing their compliance responsibilities and obligations. The Audit and Risk Committee is responsible for oversight for all compliance matters within TCTA.

During the year under review, management undertaken a variety of initiatives to eradicate historical irregular, fruitless and wasteful expenditure. The framework and procedure manuals for the treatment of Irregular, Fruitless and Wasteful Expenditure and Consequence Management Manuals were developed and implemented. This has resulted in a significant decline of the new incidents of Irregular, Fruitless and Wasteful Expenditure.

As of 31 March 2022, a total of R84 381358.01 was submitted to National Treasury for condonation.

INTERNAL AUDIT

The Internal Audit division upholds the Institute of Internal Auditors (IIA) International Standards for the Professional Practice of Internal Auditing (Standards) in executing its deliverables. The approved Internal Audit Charter outlines the mandate that informs the execution of assurance and advisory reviews, for the in-house internal audit function. The Internal Audit Methodology informs the execution of reviews and is aligned to the Standards. Internal Audit provides reasonable assurance to Management, the Audit and Risk Committee, and the Board, on the adequacy and effectiveness of internal controls, risk management and governance processes. Internal Audit strives to add value to TCTA and provide management with foresight, advice and guidance on improving operations, through advisory reviews conducted.

A hybrid working environment embracing the remote and on-premises working arrangements was embraced in the period. The 2021-2022 Internal Audit Plan was largely executed remotely, with some testing being executed in the TCTA Offices.

TCTA has adopted the Co-sourcing model which remained in place during the period. The Co-source Partner provides technical and specialist skills, as and when required. Additional capacity is also sourced when required.

Internal Controls

The 2022-2023 risk-based annual and three-year rolling Internal Audit Plan was approved on 28 March 2022, in line with PFMA requirements. The 2021-2022 risk-based annual and three-year rolling Internal Audit Plan was completed by 31 March 2022. The annual assessment of internal controls is informed by the outcome from the completed assurance and advisory reviews, to inform the process of forming an overall audit opinion on the adequacy and effectiveness of controls. The monitoring and reporting on the audit tracking on both internal and external audit findings continued and gained momentum, encouraging timeous resolution of committed action plans. The resolution rate on 31 March 2022 was 93,15%, which is a slight improvement from the 92.4% reported at the end of the 2020-2021 period. This is the highest rate achieved since the inception of the tracking process. The delayed conclusion of the 2020-2021 Auditor-General of South Africa Regulatory Audit resulted in the planned internal audits in the Finance and Procurement Departments only being commenced in quarters 3 and 4, which did not afford Management adequate time to implement action plans, prior to the 2021-2022 AG Audit.

The backlog in the resolution of the Irregular, Fruitless and Wasteful Expenditure (IFWE) from prior financial periods still remained a major concern for Internal Audit. The rate of the implementation of corrective actions is not commensurate with the urgency that this historic challenge requires to be resolved.

The extended delay in the sourcing of the Enterprise Resource Planning (ERP) exacerbates the challenge of highly manual processes in key areas like procurement. The manual process is inherently more susceptible to human error and inefficiencies. The further delay in the implementation of the ERP Project has negatively impacted the ability of TCTA to embrace continuous auditing and continuous monitoring to realise efficiency and effectiveness.

All the above points are considered in informing the Annual Written Assessment for 2021-2022.

A Root Cause Analysis was conducted by Internal Audit and the outcome indicated four Themes that emerged, namely Compliance, People, Process and Technology.

Given the themes that have emerged from the analysis, Management was encouraged to make a concerted effort to address the predominantly "Process" related Root Causes, to help further strengthen the internal control environment. The other key areas, that also needed remedial action are, among others:

Tone and the Top:
Given that most Root Causes were process related, Leadership and Management were encouraged to embrace the Digitalisation Project and the Business process improvement initiatives planned for implementation in 2022-2023.

Policy Governance:
Internal Audit recommended that Policy Governance be further improved by:

- ensuring that policies and procedures for key processes are developed, kept brief, updated and implemented consistently. Where possible, existing policies should be consolidated.
- a complete and accurate Policy Masterfile is developed or updated and maintained by a dedicated official going forward.

Record Keeping / Document Management:
It was recommended that Management further improve and/or expedite the action plans necessary to address the inefficiencies that were still experienced in retrieving records or documents, more specifically, requested by both internal and external audits for audit purposes. Divisions were encouraged to take responsibility for complying with the TCTA Records Management Policy.

Risk Management

A follow-up review was conducted on the Enterprise Risk Management (ERM) process. Of the 15 findings reported in 2020-2021, 40% (6) have been resolved and 60% (9) were partially resolved, with the due date being overdue for all 9 items. The improvement relating to 40% of the implemented actions is acknowledged. The adequacy and effectiveness of controls in the overall risk management process and the embedding of risk management into all daily operations need further improvement to embrace ERM optimally. Over and above the follow-up audit outcome, the following were considered to inform this written assessment: the progress on the implementation of action plans in the strategic risk register; reports presented to management structures and Board oversight structures; the Irregular, Fruitless and Wasteful Expenditure backlog, consequence management process and the root causes identified during the execution of internal audit reviews. The strategic importance of ERM and its direct impact on organisational performance should be embraced by Executive Management, to improve the overall risk management process. This should also be a priority for the Board, the ARC and Management, to ensure that TCTA's strategic objectives are achieved, given that not all targets were achieved for a number of consecutive financial periods.

The implementation of the Business Continuity Strategy, Policy and Plan should further improve organisational resilience through an effective business continuity management process. The business continuity management programme requires management to document key business processes to mitigate the risk of continuity of operations, in the event of an emergency or a disaster, especially during the remote or hybrid working environment

The digitisation project, which commenced during the year, is expected to address this need.

No cases were reported to the Anti-Fraud and Ethics Hotline in the period, for the first time since at least 2018. A Whistle-blower Policy was approved during the period. The policy embraces the Protected Disclosures Act and should further educate employees and other relevant stakeholders about the rights and obligations that a Whistle-blower has. The fraud risk was managed as part of the risk management process. A fully outsourced Anti-Fraud and Ethics Hotline was available to employees and external parties to report allegations of fraud and/or corruption anonymously. Internal Audit administers the Hotline, and the Risk Department facilitates the management of fraud and ethics risks, as part of the broader risk management process. Requests for investigation were received from Executive Management and through the AGSA recommendations in the Management Report. These allegations were investigated, and the outcome was presented to relevant Executive Management, ARC and the Board – where relevant. Recommendations were made for management's implementation, to address internal control failures and weaknesses identified during the investigations.

Governance

A follow-up Governance Review for the Board and its Committees was conducted. Of the 7 findings reported, 57% (4) have been resolved, 29% (2) were partially resolved and 14% (1) was not resolved, with the due date being overdue for the 2 findings that were partially resolved. The finding that has not been resolved has a dependency on the Minister.

For Exco and its Committees, a follow-up review was also conducted. Of the eight findings reported, 88% (7) have been resolved and 12% (1) are partially resolved, with the due date being overdue for this finding.

The implementation of the action plans committed to was evident in the improvement of the Board and Exco Committees' terms of reference, alignment of the respective mandates to the risk management responsibilities and other administrative improvements.

An Ethics Management Review was conducted during the period. Based on the assessment of the adequacy and effectiveness of controls as well as considering the self-identified improvement areas, Internal Audit concluded that the governance process, risk management process and the internal control environment for Ethics Management within TCTA were noted to be Partially Adequate and Partially Ineffective.

TCTA subscribes to the King IV™ Report and Code. A self-assessment was conducted by the Board Members, with support from the Company Secretary. The consistent non-achievement of the majority of targets and the strategic objectives remains a concern and the Board and Management strives to improve the level of organisational performance. The long outstanding consequence management process, relating to the irregular expenditure incurred in prior periods also requires improvement, as the preceding financial years expenditure was still not condoned. This matter was reported in 2020-2021 as well. Overall good governance practices were pursued, to comply with the JSE requirements, Company's Act (Act 71 of 2008) – as far as relevant to TCTA and the King IV™ Principles. The Board and Management should continue to pursue effective leadership, ethical culture and legitimacy to achieve improved performance against set strategic objectives.

A journey is being undertaken to further improve the organisational culture. Once the culture is optimal, this should also improve the internal control environment.

Accountability

The Internal Audit division reports functionally to the Audit and Risk Committee and administratively to the Chief Executive Officer.

Combined Assurance

The Combined Assurance Strategy and Policy were approved in April 2020. Four lines of assurance have been adopted by the Audit and Risk Committee and the approved Combined Assurance Strategy and Policy were aligned to this approach. This was in response to King IV™'s recommendation that organisations determine the appropriate Combined Assurance Model that will suit their needs. The Internal Audit division led the implementation of the Combined Assurance Plan, supported by the Risk and Compliance Units and other assurance providers. The Control Self-Assessment (CSA) process is still in its infancy and continued to be a focus area in 2021-2022. The uptake from Management was not yet optimal, thus this will remain a priority for 2022-2023 as well, to further enhance ownership of controls by the first line of assurance: Management. The main key success factor for the Combined Assurance approach to yield the desired results is for the Leadership to set the tone at the Top and for the risk management process to further improve, with Management owning and driving the management of risks effectively.

Terms of Reference for the Combined Assurance Forum (CAF) were approved in the period. The CAF should provide a platform for all internal assurance providers to coordinate their efforts more effectively for improved collaboration. The Auditor-General of South Africa used the work from Internal Audit on the Audit of Predetermined Objectives, which reduced duplication of effort and audit fatigue. Internal Audit will continue to collaborate with AGSA to increase the number of audits that the AGSA is able to use work executed by Internal Audit.

Annual Written Assessment

Conclusion

The overall internal audit opinion, on the TCTA internal control environment is that the system of internal controls, risk management and governance processes are partially adequate and partially effective. Through the Combined Assurance approach and commitment from the leadership, further improvement in embedding risk management processes and the strengthening of controls should enable TCTA to achieve its strategy through effective leadership and performance.

Trading Carbon emissions to aid capital flows

F

INFORMATION AND COMMUNICATION TECHNOLOGY

We know that opportunity often flows from a crisis or disruption. In this way, the climate imperative and our efforts to reduce GHG emissions may well provide a mechanism to incentivise the flow of capital from wealthy, industrialised economies to relatively poor, developing economies.

Carbon trading schemes have had a rocky start, at least politically; it is always tough to levy a tax for something that used to be free. But it is inevitable that climate change will extract a cost on all of us, directly or indirectly, no matter how much the resistance. Already, in much of the world, there are cost implications to GHG emissions, either through a Carbon Tax as in South Africa and Argentina, or an Emissions Trading Scheme (ETS), as in the EU, China, and a few other places. The principle is that businesses either pay a tax on their emissions, which the state then applies to climate adaptation, or businesses have an emissions budget which, once exceeded, requires them to purchase tradeable credits from lesser emitters of GHG, through an ETS. In this way, businesses are incentivised to invest in low-carbon technologies, and furthermore, there is a mechanism for capital to be applied where it can have the most impact.

GHG emissions are a global phenomenon; the climate impact of one ton of CO_2 emitted in Africa is the same as a ton emitted in Europe. There is also the matter of diminishing returns; in almost any system, your returns tend to decline as your investment increases. The implication is that when an excessive emitter in a developed economy needs to mitigate a ton of CO_2, it may well find it much more cost-effective to mitigate that same quantum in a developing economy, where the returns have not yet diminished. Consider the position of a water utility in the EU: It could purchase an advanced water treatment solution yielding a given emission reduction at $100 per ton in Europe, or it could spend $20 per ton of CO_2 saved in a developing country, simply by replacing water trucks with piped reticulation.

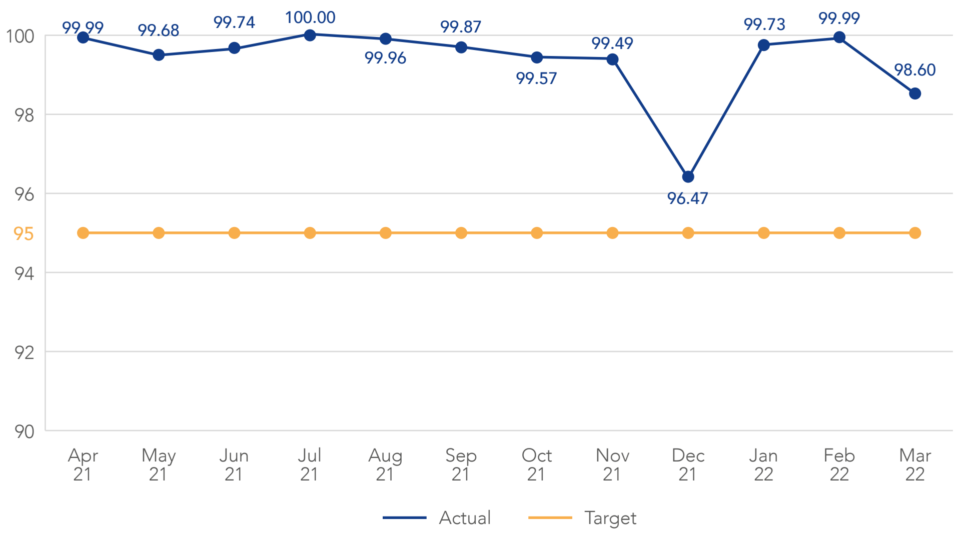
In this vein, Global Water Intelligence has suggested that a water sector-wide emissions trading scheme may be catalytic to facilitate capital flows from developed economies into developing economies, where it may be possible to achieve more climate mitigation for less expenditure.

BUSINESS CONTINUITY

The Information Technology environment is a key business process enabler and vehicle for the delivery of services, towards the achievement of our overall corporate objectives. Providing an innovative, secure, and resilient environment is critical, not only for business continuity, but also for enabling a future-fit business that can use IT for competitive advantage and improved service delivery to our stakeholders.

During the year ended March 2022, the average uptime recorded for critical servers was 99.42% which is above the organisational target of 95%. This annual average was achieved despite the ageing ICT infrastructure over the first half of the period under review.

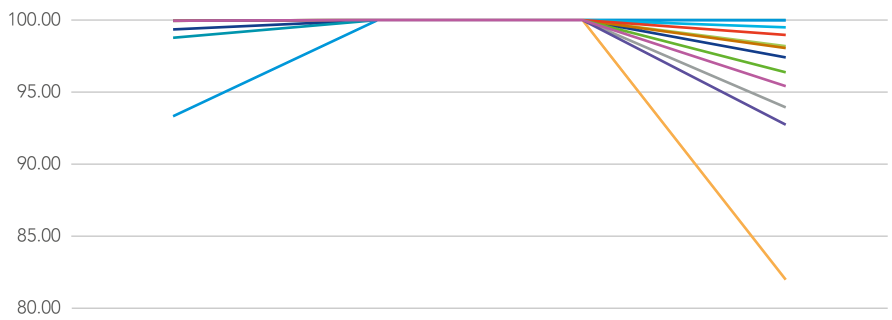
Figure 23: Critical Server Uptime



December 2021 saw a drop below target in the uptime statistics, this is due to the extensive scheduled maintenance and IT Disaster Recovery Testing, which was required to ensure the effectiveness of the control measures put in place. Frequent monitoring and maintenance of critical servers are undertaken monthly to ensure business continuity and system availability. There is a noticeable improvement in operations since the provision of the new infrastructure environment.

The success rate achieved for data backup was 99.37% on the first attempt and 100% on the second one. Data is backed up daily with both off-site and on-site storage facilities fully functional.

Figure 24: Data Backup Success Rate



	Backup Scheduled (First Attempt)	Backup Re-runs	Backup restore	Anti-virus updates
Apr 21	99.43	100	100	97.00
May 21	99.14	100	100	-
Jun 21	93.87	100	100	100
Jul 21	100	100	100	94.00
Aug 21	100	100	100	99.39
Sep 21	100	100	100	98.40
Oct 21	100	100	100	82.46
Nov 21	100	100	100	97.98
Dec 21	100	100	100	99.92
Jan 22	100	100	100	99.63
Feb 22	100	100	100	93.95
Mar 22	100	100	100	95.40

The risk of data loss has been mitigated through the implementation of a new environment which is also hosted by our service provider. Furthermore, new endpoint protection has been rolled out with frequent internet updates and user communication and awareness sessions are held regularly to ensure that the endpoints are being protected accordingly. The interventions over the period have enhanced the reliability, stability and security of our environment allowing the organisation to turn its focus to more innovative capabilities for our business.

CYBER AND INFORMATION SECURITY

The IT Department continues to provide effective support and management of our infrastructure platforms, especially in the current environment of remote connectivity and collaboration. The remote working has increased the risks to the confidentiality, integrity and availability of TCTA information systems, however, the department has implemented various tools to mitigate these risks. The IT leadership takes full cognisance of the need for ongoing cyber and information security controls irrespective of where employees are connecting from and to this end, effective technical and administrative controls are implemented and continuously monitored and enhanced as required, to effectively manage IT risks.

While there is continuous monitoring of the IT landscape, TCTA cannot ignore the fact that it is often people who are the weakest link within the cyber security threat landscape. Thus, it is important to ensure that TCTA employees are made aware of cyber threats, increased social engineering and email phishing attempts. Cyber security awareness and training have been embedded into the culture of TCTA to further reduce the risk of cyberattacks within the organisation. For the period ending March 2022, there has been one cyber security incident reported. This incident occurred at the service provider hosting our infrastructure, and the incident was managed as per the protocols agreed upon in the SLA.

REPORTABLE INCIDENTS

The following incidents were reported during the period under review.

- in April 2021, our infrastructure service provider had a cyber incident (Ransomware attack) impacting some of TCTA's services.
- on 10 and 22 May 2021, the link between TCTA and the primary data centre failed, affecting all systems and services.
- on 28 July 2021, our primary authentication server stopped responding. No systems or services were affected during the time of the incident.
- on 18 November 2021, the internet line failed, affecting some of the systems and services.

As can be seen from the above, majority of our incidents were connectivity related and were easily and quickly resolved, without TCTA being compromised. Additionally, and following the cyber incident, the service provider has put in place the necessary measures to ensure that their environment is secure and protected from possible attacks. These measures included the achievement of the ISO 27001 certification.

STRATEGIC OBJECTIVES AND PROJECTS

TCTA recognises IT as a strategic enabler by which to deliver business value and enable the corporate strategy. The IT strategy seeks to turn our Information and Technology capabilities into strategic assets where we can also look at exploiting new technological advances that could provide new opportunities for TCTA.

The IT strategy has been split into ten main themes (Innovation, Digitisation, Customer Focus, Cloud Focus, Information Management, Capable Workforce, Sustainability, Simplification, Speed and Quality) to allow for the prioritisation of projects in the next three years. These themes will not only address organisational challenges but will also be guided and, where relevant, aligned to industry demands and trends.

This three-year strategy focuses on stabilisation in Year 1, optimisation in Year 2 and lastly digitisation in Year 3. For the period ending March 2022, we have stabilised the environment through the implementation of the integrated ICT infrastructure project as well as ensuring that key applications such as Oracle Payroll and the Treasury Management System have adequate disaster recovery measures in place.

With the implementation of the ERP system being a priority for the organisation, in year two, we will focus on optimising business processes to ensure the successful implementation of the ERP system. This will be supported by mobile-friendly applications to guarantee that our applications

For the period ending March 2022, we have commenced with the digitisation journey through the development and approval of the Digital Transformation Strategy. This strategy seeks to:

- create a positive employee experience through enabling access, collaboration and automated processes.
- establish synergistic work practices by removing silos and implementing integrated systems.
- improve speed of execution of processes and agility in new technology adoption, whilst simplifying the way of work.
- greater auditability, visibility and efficiency, thereby ensuring that external stakeholders' needs are met.

INFORMATION AND TECHNOLOGY GOVERNANCE

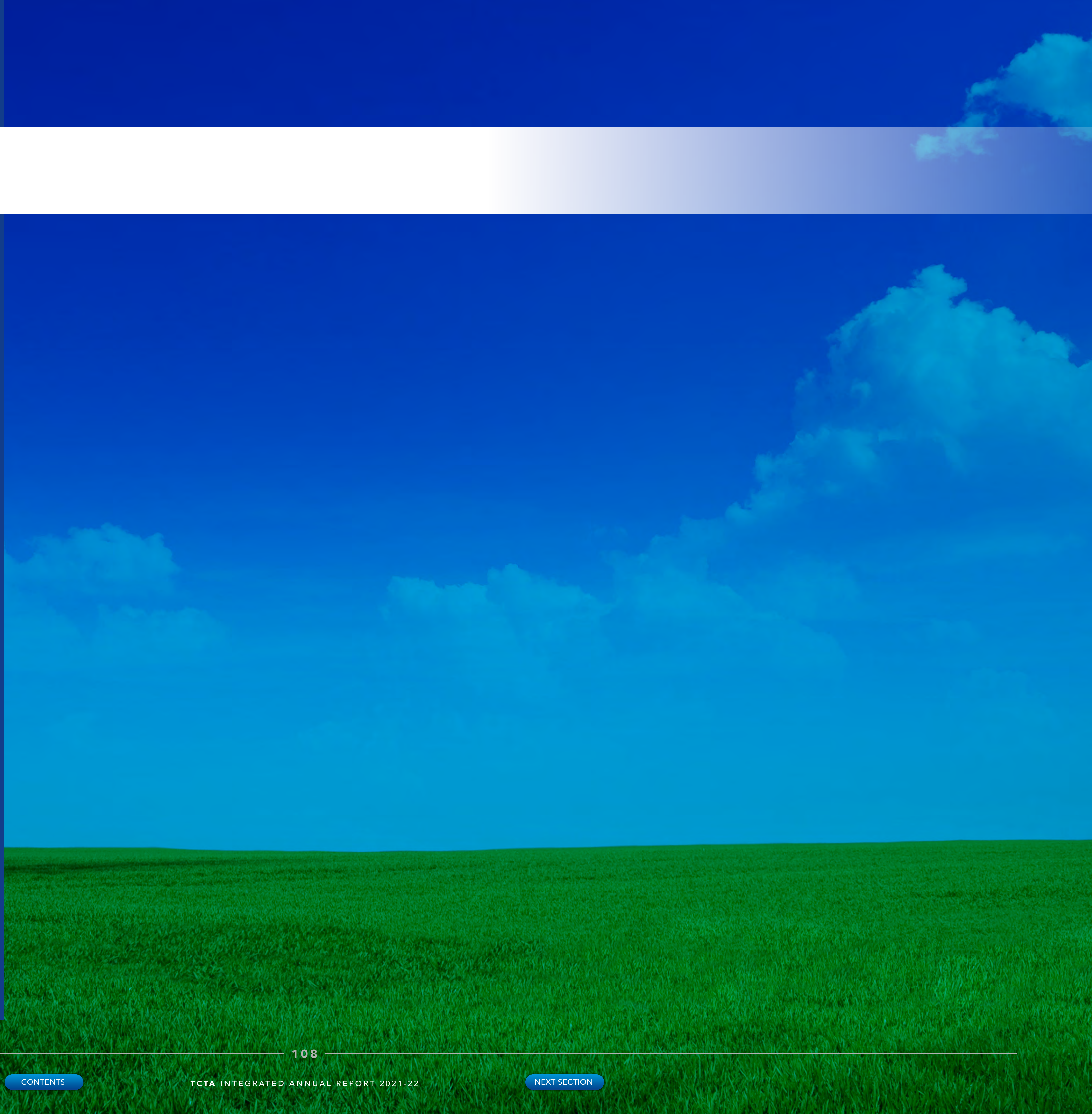
Reliance on Information Technology (IT), as a key business enabler and vehicle for delivering the business strategy, has increased significantly and continues to do so. Such reliance brings to the fore the requirement for the sound governance of IT as part of the corporate governance agenda. In exercising their duty of care, the Trans-Caledon Tunnel Authority ("TCTA") Board of Directors continues to ensure that prudent and reasonable steps are taken by Management with respect to IT Governance, Risk and Compliance. Such steps included putting in place governance structures and controls for the protection of information assets from loss, unauthorised disclosure and other threats; prioritising and investing in the right projects and ensuring return on investment; putting in place business resilience measures to continue operations in the case of a disaster; and implementation of controls to mitigate identified risks.

TCTA has put in place an IT GRC framework which provides a formal and documented process by which decisions on IT investments are made; how risks associated with those investments are managed; and what legislation, best practices and standards TCTA must comply with. Some of these include compliance with the Protection of Personal Information Act in respect of information about data subjects that the organisation holds. TCTA promotes the protection of personal information of data subjects and guides its employees on mitigating the risk of information breaches as well as processes and procedures for dealing with those breaches if they occur.

The implementation of our framework is constantly monitored by the Board and areas of improvement are identified in line with legislation, business priorities, as well as relevant Technology trends.

G

FINANCIAL INFORMATION



AUDIT AND RISK COMMITTEE REPORT

MAEMILI RAMATABOE
CHAIRPERSON

I am pleased to present the Audit and Risk Committee report for the year ended 31 March 2022.

The primary mandate of the Audit and Risk Committee is to provide oversight of TCTA's internal controls, implementation of the risk management and governance processes. The mandate includes the Public Finance Management Act and King IV™ requirements on the financial reporting process, through the Regulatory Audit process, to provide assurance to the Board on compliance with the statutory duties and responsibilities required of it. The Committee also provides oversight on the implementation of Combined Assurance and ICT Governance.

The Committee reviewed its charter in the reporting period, and the revised charter was approved by the Board. The Committee is satisfied that it has discharged its responsibilities in accordance with the approved charter, throughout the reporting period.

Composition

The Board Chairperson is not eligible to be a member of the Committee. The Committee consisted of four independent non-executive directors, from 1 April 2021 to 27 October 2021, and a fifth independent non-executive director was appointed as a member from 28 October 2021. Collectively, the members have the requisite risk management, financial, business and leadership skills and are financially literate. The Chief Executive Officer, Chief Financial Officer, Chief Risk Officer, Chief Internal Auditor and the independent external auditor, are permanent invitees to the Committee meetings. The Committee meets with the external auditors at least once a year, and periodically with internal audit, without management.

Committee members' details on qualifications and experience are available on pages 78 to79.

Attendance at Meetings

Five scheduled and three special meetings were held during the period under review. Attendance for the reporting period is shown below:

Name	Designation	Attendance
Maemili Ramataboe	Chairperson and Non-Executive Director	100%
Mollale Maponya	Non-Executive Director	88%
Satish Roopa	Non-Executive Director	100%
Norman Baloyi	Non-Executive Director	100%
*Greg White	Non-Executive Director	100%

** Appointed with effect from 28 October 2021*

Key Focus Areas

The following key focus areas were actioned in line with the Committee's charter, among others:

- approved the internal audit plan and overseeing the work of internal audit.
- reviewed the engagement letter and strategy of the external auditors.
- considered the quarterly organisational performance reports presented by management, and recommended their approval by the Board, for onward submission to the Executive Authority and the National Treasury.
- provided oversight on the management of irregular, fruitless and wasteful expenditure.
- exercised oversight on the business continuity management process.
- provided oversight on the adequacy and effectiveness of internal controls, including internal financial controls, risk management and governance processes.
- monitored the tracking of action plans committed to by management to address internal and external audit findings and recommending the audit tracking report on external audit findings to the Board for onward submission to the Portfolio Committee.
- provided oversight on the implementation of the strategic risk register action plans, the Risk Management Plan and the Fraud Prevention Plan.
- monitored and exercised oversight on the compliance programme, regulatory universe and regulatory compliance.
- assessed the effectiveness of internal financial controls based on assurance gained from management and written assessment from internal audit.
- exercised oversight on the integrated reporting process.
- monitored the implementation of the combined assurance plan.
- monitored the implementation of the ICT strategy, considered the ICT risk register and recommended the risk appetite and tolerance framework for approval by the Board.
- considered final forensic investigation reports and supported the recommendations for implementation by management.
- considered legal reports and monitored litigation cases for resolution.

Effectiveness of the Finance Function

In accordance with King IV™ requirements, the Committee has concluded that the finance function has adequately performed its role during the period under review. However, the adequacy of the planning process, leadership in managing financial risks and the custodianship of supply chain management processes within the organisation were identified as areas of improvement; these would be closely monitored going froward. Overall, the Committee was satisfied with the expertise and competency of the Chief Financial Officer.

Effectiveness of Performance

A follow-up Governance Review was conducted by Internal Audit during the period under review. No formal assessment by an external service provider was conducted on the performance of the Committee, due to the term of the Board coming to an end.

Responsibilities

The Committee confirms that it has exercised its duties and responsibilities in line with the adopted terms of reference and report as follows:

Review of Financial Statements:

The Committee has reviewed the annual financial statements and significant accounting and reporting issues were considered by the Committee, including complex project issues and other financing transactions that involve complex judgment areas. Professional and regulatory requirements were considered to understand the impact on the financial statements.

The Committee discussed the annual financial statements and considered whether they were consistent with information reported by management and other assurance providers during the period under review, and other relevant information known to the Committee. The appropriateness of the applicable accounting principles as well as emerging accounting Standards were also considered.

During the reporting period the Committee reviewed and discussed quarterly reports to both the Department of Water and Sanitation and the National Treasury with management, and considered compliance with regulatory requirements, accounting principles, and TCTA information known to the Committee.

The Committee reviewed, with Management and the Auditor-General of South Africa (AGSA), and extensively discussed the results of the audit and challenges encountered with financial reporting for the Lesotho Highlands Water Project (LHWP), particularly with respect to the complex Treaty bilateral arrangements and the related Accounting Treatment.

The Committee have reviewed the relevant sections of the Integrated Annual Report and considered the accuracy and completeness of information, taking into account relevant regulatory requirements and it is comfortable that it complies with applicable regulations governing disclosure and reporting in all material respects.

Internal Control:

The Committee considered the adequacy and effectiveness of TCTA's internal control system, including Information Technology security and controls. The further delay in the procurement of the Enterprise Resource Planning (ERP) system by 31 March 2022, is regrettable. The Committee notes the negative impact that the further delay has on the improvement on IT controls, and the various IT projects for systems improvement. The absence of the ERP has a negative impact on the control environment, as the manual procurement process, among others, is prone to human error and inherent inefficiency. The digitisation project commenced in the period and has progressed satisfactorily. The Business Continuity Management (BCM) strategy, policy and plans in place are adequate to ensure continuity of and delivery of business operations, in the event of a disaster or an emergency. Further work is needed to align the disaster recovery plan with management's requirements, which are still to be identified.

Internal and external audit reports were considered. Action plans to address internal and external audit findings were monitored regularly to understand the impact on the financial reporting process, the recommended and planned remedial actions and their appropriateness were considered accordingly. The Committee is satisfied that current control weaknesses, can be adequately addressed with the commitment expressed by management and the Board.

The Committee is dissatisfied with management's non-compliance to the National Treasury Framework on Irregular, Fruitless and Wasteful Expenditure and the delay in implementing consequence management, in the period under review and prior periods The controls around contract management and expenditure management need improvement.

Internal Audit:

The TCTA Internal Audit function satisfactorily meets the International Standards for Professional Practice of Internal Auditors, governed by the Institute of Internal Auditors, having undergone the required external assessment in the 2019-2020 period.

The Internal Audit Charter was approved in October 2021, and it aligns to all applicable requirements.

The 2021-2022 risk-based Annual Internal Audit Plan approved by the Committee was fully delivered. The Committee closely monitored this deliverable together with the Chief Internal Auditor (CIA), and approved minor revision of the plan, to maintain the focus on critical risk areas. The 2022-2023 risk-based annual Internal audit plan was approved by the Committee, in the period, for implementation in the 2022-2023 period.

The Committee in consultation with the CIA, reviewed the efficacy of the internal audit function, the budget, the resource plan, including the Co-Source partner arrangement, the activities in relation to the organisational structure, and the decision to adequately capacitate the division.

External Audit:

The Committee reviewed the remedial action plans developed by management in order to address the Auditor-General of South Africa's (AGSA) findings from 2020-2021. Although the AGSA's management report was issued in March 2022, due to the dispute on the proposed change in accounting policy for costs incurred in Lesotho, the Committee monitored progress regularly on the unresolved actions from prior periods. Quarterly reports on the resolution of action plans on external audit findings were submitted to the Portfolio Committee, through the Minister's office. Some of the key issues relating to the complex structural arrangements between TCTA and Lesotho have commenced; however, they were not satisfactorily achieved, and they are ongoing and expected to take some time.

The Committee reviewed the AGSA proposed audit scope for 2020-2021 in the period. The audit scope for 2021-2022 was presented in the 2022-2023 period, due to the delay in finalising the 2020-2021 audit.

The Committee is satisfied that the AGSA, in its fourth year of full engagement at TCTA, is fully acquainted with the business environment, and is adequately providing the assurance required in line with the statutory requirements.

The Committee, Management and the AGSA have discussed the Audit Opinion on the 2020-2021 annual financial statements and accepted the audit outcome received. The Committee believes that the embedding of the resolution of the accounting treatment for the LHWP project is crucial, as this will further enhance the achievement of the desired audit outcome in future reporting periods.

Combined Assurance:

The Committee adopted the four lines of assurance model for TCTA. The combined assurance strategy and policy were translated into a combined assurance implementation plan for 2021-2022. The implementation plan was not fully realised, as the success of the combined assurance approach is dependent on all four assurance providers collaborating effectively, for the maturity to improve. The Internal Audit Division continues to collaborate closely with Risk Management, Compliance and Legal departments. Terms of reference for a combined assurance forum were approved in the period. The forum should provide a platform for all assurance providers to further embed combined assurance and improve the control self-assessment (CSA) process. The Committee is looking forward to the improvement in the internal control environment, risk management and governance processes, stemming from the enhanced CSA approach and an improved risk management process.

Risk Management:

The TCTA Risk Management Department has the overarching responsibility for coordinating the risk management activity across the entity. It also includes a Compliance Department, which is responsible for coordinating compliance with laws and regulations. Compliance with the Public Finance Management Act i.e the National Treasury Framework for managing Irregular, Fruitless and Wasteful Expenditure remains a challenge. The Committee is dissatisfied with the delay in the implementation of the consequence management process on historical cases, which remains a big challenge for management. Whilst Management have submitted an application to the National Treasury for part of the historical expenditure, this was processed after the 2021-2022 financial year. The non-compliance with the prescribed period within which the irregular expenditure must be addressed requires significant improvement from Management. On the other hand, there has been a significant decrease of irregular, fruitless and wasteful expenditure during the period under review, compared to prior periods, as a result of strengthening of controls and oversight on the implementation of the National Treasury Framework for Irregular Expenditure, by the Accounting Authority. The Loss Control Committee that was set up during the previous financial period continues to consider irregular expenditure and recommend appropriate actions to address this challenge. The Audit and Risk Committee believes that with the commitment expressed by management, and the determination by the Board to improve and manage the reputation of the TCTA, this challenge will be properly managed, and consequently eradicated from the AFS of the TCTA going forward.

TCTA has developed and maintains the risk management policy, framework and risk appetite and tolerance framework to ensure appropriate management of business and projects risks emanating from TCTA's operations.

The Committee wishes to highlight that TCTA was served with a Writ of Execution and Notice of Attachment in execution on incorporeal property or rights in incorporeal property on 17 May 2021, emanating from a dispute between Frazer, a company incorporated in Germany and the Kingdom of Lesotho (KOL). TCTA was not a party to the original proceedings between Frazer and KOL. The Writ of Execution and Notice of Attachment make provision for the attachment of incorporeal property or incorporeal rights. The right to receive payment of royalties from the RSA, through TCTA for water delivered to the RSA, would be considered to be an incorporeal right, capable of attachment.

The matter was set down for hearing from 16 May 2022 to 17 June 2022 and has now been postponed sine die (to a date to be arranged). This has occurred on the request of the parties with the concurrence of Frazer Solar, because KOL instituted an application in Lesotho to review and set aside the original supply contract concluded between it and Frazer in that jurisdiction on the basis that the contract was unlawfully concluded. The Committee and Board continue to monitor any developments on this matter.

Conclusion:

The Committee concludes by confirming that it has considered and recommended the approval of the annual financial statements and the Integrated Annual Report for the financial year 2021-2022, to the Board of the TCTA.

Maemili Ramataboe
Committee Chairperson

REPORT OF THE AUDITOR-GENERAL TO PARLIAMENT ON THE TRANS-CALEDON TUNNEL AUTHORITY

Report on the Audit of the Financial Statements

Opinion

1. I have audited the financial statements of the Trans-Caledon Tunnel Authority (TCTA) set out on pages 121 to 251, which comprise the statement of financial position as at 31 March 2022, the statement of comprehensive income, statement of changes in equity, statement of cash flows for the year then ended, as well as notes to the financial statements, including a summary of significant accounting policies.

2. In my opinion, the financial statements present fairly, in all material respects, the financial position of the Trans-Caledon Tunnel Authority as at 31 March 2022 and its financial performance and cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS) and the requirements of the Public Finance Management Act of South Africa 1 of 1999 (PFMA).

Basis for opinion

3. I conducted my audit in accordance with the International Standards on Auditing (ISAs). My responsibilities under those standards are further described in the auditor-general's responsibilities for the audit of the financial statements section of my report.

4. I am independent of the entity in accordance with the *International Ethics Standards Board for Accountants' International code of ethics for professional accountants (including International Independence Standards)* (IESBA code) as well as other ethical requirements that are relevant to my audit in South Africa. I have fulfilled my other ethical responsibilities in accordance with these requirements and the IESBA code.

5. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Responsibilities of the Accounting Authority for the Financial Statements

6. The accounting authority is responsible for the preparation and fair presentation of the financial statements in accordance with the IFRS and the requirements of the PFMA, and

for such internal control as the accounting authority determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

7. In preparing the financial statements, the accounting authority is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting unless the appropriate governance structure either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

Auditor-General's Responsibilities for the Audit of the Financial Statements

8. My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with the ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

9. A further description of my responsibilities for the audit of the financial statements is included in the annexure to this auditor's report.

Report on the Audit of the Annual Performance Report

Introduction and scope

10. In accordance with the Public Audit Act 25 of 2004 (PAA) and the general notice issued in terms thereof, I have a responsibility to report on the usefulness and reliability of the reported performance information against predetermined objectives for selected objectives presented in the annual performance report. I performed procedures to identify material findings but not to gather evidence to express assurance.

11. My procedures address the usefulness and reliability of the reported performance information, which must be based on the entity's approved performance planning documents. I have not evaluated the completeness and appropriateness of the performance indicators included in the planning documents. My procedures do not examine whether the actions taken by the entity enabled service delivery. My procedures do not extend to any disclosures or assertions relating to the extent of achievements in the current year or planned performance strategies and information in respect of future periods that may be included as part of the reported performance information. Accordingly, my findings do not extend to these matters.

12. I evaluated the usefulness and reliability of the reported performance information in accordance with the criteria developed from the performance management and reporting framework, as defined in the general notice, for the following selected objectives presented in the entity's annual performance report for the year ended 31 March 2022:

Objective	Pages in the annual performance report
Objective 2 - Operate and maintain designated projects to meet DWS requirements/ specifications	Page 27

13. I performed procedures to determine whether the reported performance information was consistent with the approved performance planning documents. I performed further procedures to determine whether the indicators and related targets were measurable and relevant, and assessed the reliability of the reported performance information to determine whether it was valid, accurate and complete.

14. I did not identify any material findings on the usefulness and reliability of the reported performance information for this objective:

    - Operate and maintain designated projects to meet DWS requirements/ specifications

Other Matters

15. I draw attention to the matter below.

Achievement of planned targets

16. Refer to the annual performance report on pages 27 to 28 for information on the achievement of planned targets for the year.

Report on the Audit of Compliance with Legislation

Introduction and scope

17. In accordance with the PAA and the general notice issued in terms thereof, I have a responsibility to report material findings on the entity's compliance with specific matters in key legislation. I performed procedures to identify findings but not to gather evidence to express assurance.

18. The material findings on compliance with specific matters in key legislation are as follows:

Annual financial statements

19. The financial statements submitted for auditing were not fully prepared in accordance with the prescribed financial reporting framework, as required by section 55(1)(b) of the PFMA.

20. Material misstatements of revenue identified by the auditors in the submitted financial statement, were corrected, resulting in the financial statements receiving an unqualified audit opinion.

Consequence management

21. Disciplinary steps were not taken against the officials who had incurred and/or permitted irregular expenditure, as required by section 51(1)(e)(iii) of the PFMA. The loss control Committee recommendations were not implemented.

22. Disciplinary steps were not taken against the officials who had incurred and/or permitted fruitless and wasteful expenditure, as required by section 51(1)(e)(iii) of the PFMA. The loss control Committee recommendations were not implemented.

Expenditure management

23. Effective and appropriate steps were not taken to prevent irregular expenditure amounting to R32 951 828 as disclosed in note 29 to the annual financial statements, as required by section 51(1)(b)(ii) of the PFMA. The majority of irregular expenditure was caused by non-compliance with national treasury instruction note 03 of 2016/17 where expansions to contracts were not approved by National Treasury.

Other Information

24. The accounting authority is responsible for the other information. The other information comprises the information included in the annual report, which includes segmental statement of .cash flows for the period ended 31 March 2022, the directors' report and the audit Committee's report. The other information does not include the financial statements, the auditor's report and those selected objectives presented in the annual performance report that have been specifically reported in this auditor's report.

25. My opinion on the financial statements and findings on the reported performance information and compliance with legislation do not cover the other information and I do not express an audit opinion or any form of assurance conclusion thereon.

26. In connection with my audit, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements and the selected objectives presented in the annual performance report, or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

27. I did not receive the other information prior to the date of this auditor's report. After I receive and read this information, and if I conclude that there is a material misstatement, I am required to communicate the matter to those charged with governance and request that the other information be corrected. If the other information is not corrected, I may have to retract this auditor's report and re-issue an amended report as appropriate. However, if it is corrected this will not be necessary.

Internal Control Deficiencies

28. I considered internal control relevant to my audit of the financial statements, reported performance information and compliance with applicable legislation; however, my objective was not to express any form of assurance on it. The matters reported below are limited to the significant internal control deficiencies that resulted in the findings on compliance with legislation included in this report.

29. Management did not adequately review the annual financial statements to ensure that they are prepared in accordance with some aspects of the financial reporting framework.

30. The accounting authority did not adequately implement consequence management processes in relation to contravention with applicable policies, laws and regulations.

31. Management did not implement adequate controls to prevent and detect non-compliance with the PFMA and the Treasury Regulations, which resulted in the incurrence of irregular expenditure.

Auditor-General

Pretoria
31 July 2022

AUDITOR-GENERAL
SOUTH AFRICA

ANNEXURE – AUDITOR-GENERAL'S RESPONSIBILITY FOR THE AUDIT

1. As part of an audit in accordance with the ISAs, I exercise professional judgement and maintain professional scepticism throughout my audit of the financial statements and the procedures performed on reported performance information for selected objectives and on the entity's compliance with respect to the selected subject matters.

Financial statements

2. In addition to my responsibility for the audit of the financial statements as described in this auditor's report, I also:
   - identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error; design and perform audit procedures responsive to those risks; and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control
   - obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control
   - evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the board of directors, which constitutes the accounting authority
   - conclude on the appropriateness of the accounting authority/entity's use of the going concern basis of accounting in the preparation of the financial statements. I also conclude, based on the audit evidence obtained, whether a material uncertainty exists relating to events or conditions that may cast significant doubt on the ability of the Trans Caledon Tunnel Authority to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements about the material uncertainty or, if such disclosures are inadequate, to modify my opinion on the financial statements. My conclusions are based on the information available to me at the date of this auditor's report. However, future events or conditions may cause an entity to cease operating as a going concern
   - evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and determine whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation

Communication with those charged with governance

3. I communicate with the accounting authority regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

4. I also provide the accounting authority with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence and, where applicable, actions taken to eliminate threats or safeguards applied.

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Annual Financial Statements for the year ended 31 March 2022

General Information

COUNTRY OF INCORPORATION AND DOMICILE	South Africa
REGISTERED NAME OF THE PUBLIC ENTITY	Trans-Caledon Tunnel Authority
REGISTERED OFFICE	1st Floor, Stinkhout Wing Tuinhof Building 265 West Avenue Centurion
POSTAL ADDRESS	PO Box 10335 Centurion 0046
CONTACT TELEPHONE NUMBER	012 683 1200
EMAIL ADDRESS	info@tcta.co.za
WEBSITE ADDRESS	www.tcta.co.za
AUDITOR	Auditor-General of South Africa Chartered Accountant (SA) 300 Middel Street New Muckleneuk Pretoria 0001 PO Box 446 Pretoria 0001
PRIMARY BANKER	Standard Bank of South Africa Ltd 12 Church Square Pretoria 0002
SECRETARY	Wilma De Witt
The Board of directors was appointed on 01 May 2019	
	Non-Executive Directors Mr. Gerald Dumas (Chairperson) Ms. Maemilli Julia Ramataboe (Deputy Chairperson) Mr Simphiwe Nicholas Khondlo Mr. Satish Roopa Mr Tinyiko Norman Baloyi Ms. Mollale Mavis Maponya Mr Gregory Nigel Joseph White Ms Lindelwa Nonjabulo Dlamini
	Executive Director Mr Dinizulu Kumalo Percival Sechemane (Chief Executive Officer)

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Annual Financial Statements for the year ended 31 March 2022

Contents

Chairperson of the Board

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Annual Financial Statements for the year ended 31 March 2022

Statement of Financial Position as at 31 March 2022

	Note(s)	2022 Rmil	2021 Rmil
ASSETS			
Non-Current Assets			
Property, plant and equipment	8	2	3
Right-of-use assets	9&20	-	3
Tariff receivable	10.4	9 083	11 842
Long-term financial market investments	10.5	46	57
AMD Receivable	14	2 089	1 947
		11 220	**13 852**
Current Assets			
Tariff receivable*	10.4	502	1 012
Trade and other receivables	12	35	53
Prepayments	13	43	31
Cash and cash equivalents	19	8 849	9 234
AMD Receivable	14	101	9
Total Current Assets		**9 530**	**10 339**
TOTAL ASSETS		**20 750**	**24 191**
EQUITY AND LIABILITIES			
RESERVES			
Retained income	11	4 240	2 876
TOTAL EQUITY		**4 240**	**2 876**
LIABILITIES			
Non-Current Liabilities			
Borrowings	10.6.3	12 664	9 901
Current Liabilities			
Trade and other payables	15	450	683
Non-contractual amounts	17.1	233	96
Provisions	18	34	13
Borrowings	10.6.2	2 535	10 185
Lease liabilities	20	-	4
Contract liabilities	16	415	433
Refund liability	21	179	-
Total Current Liabilities		**3 846**	**11 414**
TOTAL LIABILITIES		**16 510**	**21 315**
TOTAL EQUITY AND LIABILITIES		**20 750**	**24 191**

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Annual Financial Statements for the year ended 31 March 2022

Statement of Comprehensive Income for the period ended 31 March 2022

	Note(s)	2022 Rmil	2021 Rmil
Construction revenue	22	262	171
Construction costs	22	(262)	(171)
Revenue from services rendered	22	252	242
Cost of services rendered	30	(252)	(242)
Other operating income	22	262	243
Expenses	30	(262)	(243)
Legal fees and litigation costs		(13)	(5)
Depreciation	8&9	(6)	(8)
Employee costs	30.2	(215)	(173)
Non- Executive Directors' emoluments and related costs	26.2	(7)	(7)
Other operating expenses	30	(21)	(50)
Net finance income		1 364	930
Finance income	24.1	2 806	2 695
Finance costs	24.2	(1 442)	(1 765)
Surplus for the year		**1 364**	**930**
Total comprehensive income for the year		**1 364**	**930**

TCTA

Annual Financial Statements for the year ended 31 March 2022

Statement of Changes in Equity for the period ended 31 March 2022

	Retained income Rmil	Total equity Rmil
Balance at 31 March 2020	**1 946**	**1 946**
Surplus for the year	930	930
Total comprehensive income for the year	**930**	**930**
Balance at 31 March 2021	**2 876**	**2 876**
Surplus for the year	1 364	1 364
Total comprehensive income for the year	**1 364**	**1 364**
Balance at 31 March 2022	**4 240**	**4 240**

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Annual Financial Statements for the year ended March 31, 2022

Statement of Cash Flows for the period ended March 31, 2022

	Note(s)	2022 Rmil	2021 Rmil
CASH FLOWS FROM OPERATING ACTIVITIES			
Cash receipts		11,316	11,105
Cash paid to suppliers and employees		(5,407)	(4,309)
Cash generated from project activities	A	5,909	6,796
Other finance costs		(201)	(30)
Non cash flow in other finance costs		23	12
Interest paid	C	(1,511)	(1,744)
Net cash from operating activities		**4,220**	**5,034**
CASH FLOWS FROM INVESTING ACTIVITIES			
Purchase of property, plant and equipment	8	(1)	-
Proceeds on the sale of financial assets		17	606
Interest received	B	300	252
Net cash inflows from investing activities		**316**	**858**
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from long-term borrowings		8,040	60
Repayment of long-term borrowings		(12,957)	(919)
Proceeds from short-term borrowings		-	198
Repayment of short-term borrowings		-	(283)
Payment of portion of lease liabilities		(4)	(5)
Net cash outflow from financing activities		**(4,921)**	**(949)**
Total cash movement for the year		**(385)**	**4,943**
Cash at the beginning of the year		9,234	4,291
Total cash at end of the year	19	**8,849**	**9,234**

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Annual Financial Statements for the year ended March 31, 2022

Notes to the Statement of Cash flows for the period ended 31 March 2022

	Note(s)	2022 Rmil	2021 Rmil
A. CASH GENERATED FROM PROJECT ACTIVITIES			
Profit for the year		1,364	930
Adjustments for non-cash flow items:			
Depreciation on non-current assets		6	6
Net interest expense		1,001	1,377
Interest income and imputed interest on tariff receivable	23.1	(2,365)	(2,307)
Construction revenue	22	(262)	(171)
Revenue from services rendered	22	(252)	(240)
Other operating income	22	(262)	(242)
Non-cash flow in operating expenses		(6)	33
Changes in working capital:			
Decrease in Trade and other receivables		19	177
(Increase) / Decrease in Prepayments		(12)	30
Increase / (Decrease) in Payables and provisions (excluding interest payable)		201	(311)
Capitalised to tariff receivable	10.4.2	9,312	8,975
Cost related payments		(3,261)	(2,157)
Non-cash flow item in accounts receivable		280	188
VAT on tariff receivable debtor	10.4.2	(17)	92
(Decrease) / Increase in Contract liabilities		(16)	416
Increase in Refund liability		179	-
Cash generated from project activities		**5,909**	**6,796**
B. INTEREST RECEIVED			
Amount due at beginning of the year		-	13
Income during the year adjusted for non-cash items		300	239
Interest on financial instruments accrued (after inter-project elimination)	23.2	441	387
AMD interest		(141)	(148)
Interest received		**300**	**252**
C. INTEREST PAID			
Amount not paid at beginning of the year	**15**	(370)	(398)
Expensed during the year adjusted for non-cash items		(1,234)	(1,716)
Amount expensed (after inter-project elimination)	23.2	(1,241)	(1,735)
Interest capitalised to the principal amount		7	4
Interest on lease liability		-	1
Interest on inter-project loan		-	14
Amount not paid at the end of the year	**15**	93	370
Interest paid		**(1,511)**	**(1,744)**

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Annual Financial Statements for the year ended March 31, 2022

Notes to the Statement of Cash flows for the period ended 31 March 2022

	Note(s)	2022 Rmil	2021 Rmil

D. RECONCILIATION OF FINANCIAL MARKET LIABILITIES TO FINANCING ACTIVITIES AS AT 31 MARCH 2022

	Note(s)	2022 Rmil	2021 Rmil
Liabilities at beginning of year		20,090	21,024
Long-term borrowings	10.6.1	9,901	20,113
Short-term borrowings	10.6.1	10,185	902
Long-term lease liability		-	4
Short-term lease liability		4	5
Cash flow from financing activities		(4,920)	(949)
Non-cash flow items		30	17
- Capitalised interest		30	16
- Interest on lease liability		-	1
Liabilities as at end of year		15,199	20,090
Long-term borrowings	10.6.1	12,665	9,901
Short-term borrowings	10.6.2	2,534	10,185
Short-term lease liability		-	4

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Annual Financial Statements for the year ended 31 March 2022

Notes to the Annual Financial Statements

1. General information

The Trans-Caledon Tunnel Authority (TCTA) is a specialised liability management body, established in terms of Government Notice No 2631 in Government Gazette No 10545, dated 12 December 1986. The Notice was replaced by Government Notice No 277 in Government Gazette No 21017, dated 24 March 2000. The Schedule 2 public entity is domiciled in South Africa. The address of the registered office is 265 West Avenue, Tuinhof Building, 1st Floor Centurion.

2. Significant accounting policies

The principal accounting policies applied in the preparation of these annual financial statements are set out below. These accounting policies have been consistently applied to all years presented.

2.1 Statement of compliance

The financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). In terms of IAS 8 section 10, where IFRS do not specifically apply to a transaction, other event or condition, management shall use its judgement in developing and applying an accounting policy where that policy results in reliable financial statements and information which users can use for their economic decision-making needs. These financial statements are a faithful representation of the financial position, financial performance and cash flows of the entity; they reflect the economic substance of transactions, other events and conditions and not merely the legal form, it is neutral and free from bias and it is prudent, complete in all material aspects.

The Accounting Standards Board (ASB), as mandated by the PFMA to set the reporting standards for the preparation of annual financial statements of government institutions, has issued Directive 12 which requires that qualifying entities prepare their annual financial statements in accordance with the Generally Recognised Accounting Practices (GRAP). The Directive has set out the criteria that institutions are to meet in order to qualify for the application of GRAP as the reporting framework. TCTA has conducted the self-assessment in accordance with the criteria in the Directive which indicates, on initial assessment that TCTA qualifies to apply the standards of GRAP in the preparation of the annual financial statements. In terms of section 92 of the PFMA, TCTA has been exempted from applying GRAP as reporting framework and allowed the continuance of the International Financial Reporting Framework (IFRS), as reporting framework. This exemption is granted for the financial years ending 2019 to 2023.

2.2 Basis of preparation

The financial statements have been prepared on the accrual and historical cost convention,except for the items that are measured using fair value. Historical cost is generally based on the fair value of the consideration given in exchange for assets. The preparation of financial statements in conformity with IFRS, requires the use of certain critical accounting estimates and judgements. It also requires management to exercise its judgement in the process of applying TCTA's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in note 4. TCTA presents financial information on an individual project basis (Note 6) on the statement of financial position, statement of comprehensive income of TCTA which will be useful to the users of these financial statements.

Financial statements are presented in South African Rands which is the functional currency for TCTA. The financial statements are rounded to the nearest million unless otherwise stated. Balances less than R500 000 are presented as zero.

These accounting policies are consistent with the previous period.

3 Summary of significant accounting policies

3.1 Property, plant and equipment

Recognition and measurement

On initial recognition property, plant and equipment is measured at cost. An item can only be recognised as property, plant and equipment if it is probable that:

- future economic benefits associated with the item will flow to TCTA;
- the cost of the item can be reliably measured; and
- the item is expected to be used during more than one accounting period.

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Notes to the Annual Financial Statements

3.1 Property, plant and equipment (continued)

Subsequent costs

The costs of day-to-day servicing of assets are not recognised as property, plant and equipment, but are expensed as repairs and maintenance in the year incurred.

Costs of replacing or upgrading components of an asset can be capitalised, provided that the recognition criteria have been met. The costs of replacement / upgrading are capitalised to the carrying amount of the component of property, plant and equipment when that cost is incurred, while the carrying amounts of components replaced, are derecognised. The cost of improvements is also capitalised when it meets the recognition criteria.

TCTA applies the cost model for all classes of assets by recognising it at cost, adjusted for accumulated depreciation and accumulated impairment losses.

Useful life and depreciation method

The current useful lives and depreciation methods of items of property, plant and equipment are:

Class of asset	Depreciation method	Useful life
Furniture and fixtures	Straight line	4-6 years
Computer equipment	Straight line	2-5 years
Networking equipment	Straight line	5-8 years
Office equipment	Straight line	2-5 years
Motor vehicles	Straight line	4-6 years
Video conferencing	Straight line	5-8 years
Leasehold improvements	Straight line	5-10 years

The depreciable amount of an asset is allocated on a systematic basis over its useful life.

Review of useful lives and residual values is done yearly and adjustment only made and disclosed for adjustments that are considered material

Leasehold improvements

These are stated at cost less accumulated depreciation and accumulated impairment. Depreciation is calculated on a straight-line basis over the shorter of the remaining period of the lease and the useful life of the asset. The useful life of the asset will be assessed at least on an annual basis and will depend on an extension of the current lease agreement.

Disposals of property, plant and equipment and derecognition of property, plant and equipment

The carrying amount of an item of property, plant and equipment is derecognised on disposal or when no future economic benefits are expected from its use or disposal. Gains and losses on disposals are determined by comparing proceeds with the carrying amount at the date of sale. These are included in surplus/deficit when the asset is derecognised. An item of property, plant and equipment initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal.

Recoverable amount

Recoverable amount is determined for an individual asset. When the carrying amount of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. The recoverable amount is determined as being the higher of fair value less cost of disposal and value in use.

Fair value less costs of disposal

This is the price that would be received to sell an asset less any incremental costs directly attributable to the disposal of an asset, excluding finance costs. In determining fair value less costs of disposal, recent market transactions are taken into account. Where it is not possible to determine the fair value less costs of disposal because there is no basis for making a reliable estimate of the amount obtainable from the sale of the asset in an arm's length transaction between knowledgeable and willing parties, the value in use is deemed to be its recoverable amount.

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Notes to the Annual Financial Statements

3.1 Property, plant and equipment (continued)

Value in use

Value in use is the present value of the future cash flows expected to be derived from an asset. The discount rate utilised is the weighted average cost of capital applicable to the asset. In instances where the recoverable amount is determined based on present value techniques, the discount rates used to determine the fair value less the cost of disposal and key assumptions and valuation techniques are disclosed.

3.2 Right-of-use asset

Recognition

A right-of-use asset is defined as an asset that represents a lessee's right to use an underlying asset for the lease term.

The right of use asset is recognised at the commencement date and measured at cost, consisting of the amount of the initial measurement of the lease liability, plus any lease payments made to the lessor at or before the commencement date less any lease incentives received, the initial estimate of restoration costs and any initial direct costs incurred by the lessee. TCTA has elected not to apply the requirements of IFRS 16 paragraphs 22 - 49, in terms of paragraph 5 to both short-term leases and leases for which the underlying asset is of low value, TCTA recognises the lease payments associated with those leases as an expense

All lease payments of significant value with a lease period of more than twelve months are capitalised as a right-of-use asset. Non-lease components, for example, maintenance costs, are separated from the lease payments and expensed as they are incurred. Each lease is accounted for separately.

Measurement

Right-of-use assets are initially measured at cost and subsequently measured at cost less accumulated depreciation and accumulated impairment losses and adjusted for remeasurement of the lease liability

Depreciation

Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the useful life of the leased asset. Useful lives of the leased assets are determined using the same criteria as the property, plant and equipment.

Lease modifications

Lease modifications are accounted for as a separate lease if both the modification increases the scope of the lease by adding the right to use one or more underlying assets; the consideration for the lease increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract

Impairment

The impairment of the right-of-use assets is determined in a similar way as that of property, plant and equipment

3.3 Financial assets

Classification

TCTA recognises a financial asset in its statement of financial position when, and only when, it becomes party to the contractual provisions of the instrument. Financial assets are classified based on TCTA's underlying business model. (IFRS 9). TCTA considers if it holds the financial assets to collect contractual cash flows or to sell it prior to maturity to realise fair value changes. TCTA holds its financial assets to maturity and thus elected to collect the cash flows from holding the asset. TCTA considers the characteristics of the contractual cash flows of the financial assets to determine whether the conditions for amortised cost have been met as detailed below. Assets are initially measured at fair value plus, in the case of a financial assets not at fair value through surplus or deficit, particular transaction costs. Assets are subsequently measured at amortised cost.

TCTA measures financial assets at amortised cost when the following conditions for measurement at amortised cost have been met:

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Annual Financial Statements for the year ended 31 March 2022

Notes to the Annual Financial Statements

3.3 Financial assets (continued)

- the assets are held within TCTA's business model where the objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the financial assets result in cash flows on specific dates that are solely payments of principal and interest on the principal amount outstanding.

TCTA's financial assets mainly consist of the redemption assets, the tariff receivable.

Tariff receivable

The tariff receivable is a non-derivative financial asset with determinable receipts based either on costs to be reimbursed or a tariff determined to enable TCTA to repay the project debt over approximately a twenty-year period. This category consists of the right to receive cash from the Department of Water and Sanitation (DWS) with respect to construction work completed on DWS projects or services rendered by TCTA in managing debt on each project. The tariff receivable arises as a result of TCTA incurring costs in terms of the directive from the Minister of Water and Sanitation in each project.

The tariff receivable arises as the contra to the construction revenue earned in each project, and is measured at amortised cost using the effective interest method.

TCTA revises its estimates of costs and revenue annually and adjusts the carrying amount of the tariff receivable to reflect actual and revised estimated cash flows. TCTA recalculates the carrying amount by computing the present value of estimated future cash flows at the financial instrument's effective interest rate determined in accordance with IFRS 9. The adjustment is recognised in the Statement of Comprehensive Income. The critical accounting estimates and judgements from management are included in note 4.

Cash and equivalents

Cash and short-term deposits in the statement of financial position comprise call deposits, cash at banks and on hand where these deposits are short-term with insignificant risk of change in value and have a maturity of three months or lessfrom the date of acquisition.
For the purpose of the aggregated statement of cash flows, cash and cash equivalents consist of bank balances, call deposits and cash on hand and is measured at amortised cost.

Loans and receivables

Loans and receivables are measured at amortised cost.

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Notes to the Annual Financial Statements

3.3 Financial assets (continued)
Impairment of financial assets

Financial assets are individually assessed for impairment at initial recognition and a loss allowance is recognised if there is any indication of impairment as the present value of expected credit losses over the lifetime of the individual asset. At each reporting date, the loss allowance for a financial asset is measured at an amount equal to the lifetime expected credit losses if the credit risk on that financial asset has increased significantly since initial recognition. If the credit risk on the financial asset has not increased significantly since the initial recognition, the loss allowance is measured at an amount equal to 12-month expected credit losses. If, in the next reporting date, the credit risk of a financial asset that was assessed to have significantly increased in the previous reporting date, is assessed to no longer significantly increased the loss allowance is measured at an amount equal to 12-month expected credit losses at the current reporting date, except for trade receivables or contract assets that result from transactions that are within the scope of IFRS 15, and do not contain a significant financing component in accordance with IFRS 15. The loss allowance for these is always measured at an amount equal to lifetime expected credit losses. An impairment gain or loss is recognised at each reporting date if the loss allowance amount as measured at a reporting date is different from the loss allowance amount as measured at a previous reporting period. The impairment gain or loss amount equals the difference between the two amounts being compared. TCTA assumes that the credit risk on a financial asset has not increased significantly since initial recognition if the financial asset is determined to have low credit risk at the reporting date. When assessing the significance of the increase in credit risk, TCTA uses the change in the risk of a default occurring over the expected life of the financial asset instead of the change in the amount of expected credit losses by comparing the risk of a default occurring on the financial asset as at the reporting date with the risk of a default occurring on the financial asset as at the date of initial recognition and consider reasonable and supportable information (both past and forward looking information), that is available without undue cost or effort, that is indicative of significant increases in credit risk since initial recognition

TCTA takes into account the following information in the assessment of its credit risk:

- TCTA's mandate and its importance to the relevant section of South Africa's economy.
- The agreement between TCTA and its counterparties.
- The nature of TCTA's counterparties.
- The recoverability of the counterparties' receivables.
- Any other relevant information.

In addition to the reasonable and supportable information that is available without undue cost or effort, TCTA measures expected credit losses of a financial asset in a way that reflects:

- An unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes; and
- The time value of money.

For certain categories of financial assets, such as trade receivables, assets that are assessed not to be impaired individually, are subsequently assessed for impairment on a collective basis. Objective evidence of impairment for a portfolio of receivables could include TCTA's past experience of collecting payments, an increase in the number of delayed payments in the portfolio past the average credit period, as well as observable changes in national or local economic conditions that correlate with default on receivables.

Loans and receivables comprise amounts due by DWS on projects funded from the fiscus. TCTA recovers the costs incurred on mandated projects from DWS on a monthly basis and the payment terms are as set in the Memorandum of Agreement between TCTA and DWS.

Derecognition of financial assets

TCTA derecognises financial assets when, and only when, the contractual rights to the cash flows from the asset expire; or it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If TCTA neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, TCTA recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If TCTA retains substantially all the risks and rewards of ownership of a transferred financial asset, TCTA continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received. A transfer occurs when the entity transfers the contractual rights to receive the cash flows of the financial asset or assumes a contractual obligation to pay cash flows to one or more recipients in terms of an arrangement that meets the requirements of IFRS 9 (3.2.5).

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Notes to the Annual Financial Statements

3.3 Financial assets (continued)
Effective interest method

The effective interest method is the method used to calculate the amortised cost of a financial instrument and of allocating interest income or expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the financial instrument, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

3.4 Financial liabilities

Financial liabilities are classified as either financial liabilities 'at fair value through surplus or deficit (FVTSD)' or 'other financial liabilities' at amortised cost.. TCTA recognises financial liabilities when it becomes a party to the terms of the contract, which is the trade date or the settlement date. All financial liabilities are initially measured at fair value plus transaction costs.

Short-term financial market liabilities

Funding portfolio

The short-term funding portfolio comprises short-term commercial paper classified as "other liabilities" and are held at amortised cost, using the effective interest method.

Locally registered bonds held-for-trading purposes are carried at fair value, which is determined with reference to exchange rate quoted prices at the close of business on the reporting date. Resultant gains or losses on the subsequent measurement are included in surplus or deficit for the year in which they arise. At present, no such instruments are held by TCTA. Refer to note 6.2.3 for information relating to the management of interest rate risk.

TCTA engages in repurchase agreements in locally registered bonds, within limits, with the panel of market makers to enhance the marketability of the bonds in issue. The repurchase agreements are recognised at transaction value and are classified as "other liabilities" at amortised cost.

Long-term financial market liabilities

Funding portfolio

The funding portfolio comprises the long-term funding for the specific projects as detailed below:

- Locally registered bonds in issue are classified as "other liabilities" and are hence carried at amortised cost, applying the effective interest rate method.
- Local loans are stated at amortised cost and classified as "other liabilities". At the reporting date, foreign loans are stated at amortised cost and restated at the rates of exchange ruling at that date. Gains or losses are recognised in surplus or deficit.
- Long-term commercial paper (more than twelve months to maturity), classified as "other liabilities", are held at amortised cost, using the effective interest method.

Trade and other payables

Trade and other payables are classified as "other liabilities" and are stated at amortised cost, using the effective interest method.

Derecognition of financial liabilities

TCTA derecognises financial liabilities when, and only when, TCTA's obligations are discharged, cancelled or they expire. The difference between the carrying amount of a financial liability extinguished and the consideration paid, is recognised in profit or loss

3.5 Offsetting

Financial assets and financial liabilities are offset, and the net amount reported in the statement of financial position where there is a current legally enforceable right to set off the recognised amounts and there is an intention to settle on a net basis, or to realise the asset and settle the liability simultaneously.

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Annual Financial Statements for the year ended 31 March 2022

Notes to the Annual Financial Statements

3.6 Finance costs

Finance costs are recognised in the period in which they incurred. Finance costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds and leasing activities.

3.7 Employee benefits

Short-term employee benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided.

Leave benefits

TCTA measures the expected cost of accumulating paid annual leave as the additional amount that the TCTA expects to pay as a result of the unused entitlement that has accumulated at the end of the reporting period. In terms of TCTA's policy, employees are entitled to accumulate annual leave not taken to a maximum of 40 working days. Accumulated annual leave exceeding the maximum of 40 working days is forfeited on 30 June of the succeeding year.

Termination benefits

Termination benefits are employee benefits provided in exchange for the termination of an employee's employment as a result of either:

- an entity's decision to terminate an employee's employment before the normal retirement date or;
- an employee's decision to accept an offer of benefits in exchange for the termination of employment.

Incentives

A liability is recognised for the amount expected to be paid under the short-term cash bonus incentive if TCTA has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably. The TCTA remuneration policy allows for a performance bonus to be paid annually based on a formal assessment of each individuals job-related performance during the year. This short term incentive enhances the pay at risk element of the total cost of employment and aims to retain and incentivise high performers.

3.8 Contract liabilities

Contract liabilities relating to working capital advances represent balances which are due to DWS as a result of payments made to TCTA to enable TCTA to construct infrastructure on behalf of DWS for those projects which are completely socially funded and for those which have a combination of commercial and social funding.
Contract liabilities are recongised if a particular payment received from DWS for costs incurred to date, exceeds the revenue recognised to date under the input method

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Notes to the Annual Financial Statements

3.9 Cost related payments

The Lesotho Highlands Water Project (LHWP) was configured to augment the water supply to South Africa and to generate hydro-electrical power for Lesotho. In terms of the provisions of the Treaty between the Government of the Republic of South Africa (RSA) and the Government of the Kingdom of Lesotho (GOL), the RSA is responsible for all costs relating to the water transfer component of the project and the GOL is responsible for the total cost of the components relating to the generation of hydro-electrical power.

TCTA's Notice of Establishment (NOE) of March 2000 places the obligation on TCTA as part of its non-Treaty functions to fulfil all the RSA's financial obligations in terms of or resulting from the Treaty.

The RSA's financial obligations in terms of the Treaty on the water transfer part located within Lesotho include making cost-related payments to the LHDA in terms of Article 10, Royalty Payments to GOL in terms of Article 12 (refer to note 2.3.11) and contributions to the operating costs of the Lesotho Highlands Water Commission (LHWC) in terms of Article 9.

The cost-related payments include all costs wholly and reasonably incurred by the LHDA for the implementation and operation and maintenance of the water transfer component of the project. The cost-related payments are payable when the costs become due for payment by the LHDA, in the case of borrowings raised by the LHDA, the payments will become due when the loans become redeemable. The RSA has elected to repay loans raised by the LHDA directly to the lenders. Article 10(5) further provides that cost related payments to the LHDA may be made on cash flow forecasts presented by the LHDA to allow the LHDA to meet its payment obligations. TCTA and LHDA entered into a Memorandum of Understanding (MOU) effective 1 April 2005 that provides an operating framework for making funds available to the LHDA for the payment of water transfer costs incurred by the LHDA. The framework requires the LHDA to submit cash-flow forecasts on a monthly/weekly basis to TCTA for payment. This arrangement has the effect that the borrowings for the project are centralised within the TCTA and ensures better management of the RSA's contingent liabilities associated with Government guarantees.

The LHWC is a bi-national commission established in terms of the Treaty and is responsible and accountable to the two Governments for the successful implementation of the LHWP. The LHWC comprises of two delegations representing the respective Governments and is administered by a Secretariat. The LHWC located in Maseru, has approval, monitoring and advisory powers over the activities of the LHDA and TCTA. Decision making by the LHWC is on a consensus basis and serves as the channel for government inputs on the LHWP. The running costs of the LHWC are shared by the governments of the RSA and the GOL. Each party is liable for the costs of its delegation and all other costs are met by the parties on an equal basis. TCTA makes monthly funding contributions to the LHWC for the RSA share of the operating costs.

Cost related payments are recognised when they are due to the LHDA and to the LHWC and are measured at cost.

3.10 Construction contracts

TCTA construction contracts relate to infrastructure projects that the Minister of Water and Sanitation directs TCTA to implement on behalf of DWS. These infrastructure projects are accounted for in terms of IFRS 15 and deal with the construction of a single asset such as a dam or pipeline, and in some instances several assets that are closely interrelated or interdependent in terms of their design, technology and function or ultimate purpose or use. TCTA applies IFRS 15 Revenue from Contracts with Customers separately for each construction contract as required in the directive from the Minister of Water and Sanitation.

When the performance obligation of a construction contract is satisfied over time, TCTA recognises contract revenue and contract costs associated with the construction contract as revenue and expenses respectively by reference to the input method in IFRS 15.

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Notes to the Annual Financial Statements

3.10 Construction contracts (continued)

Contract costs comprise:
a) costs that relate directly to the specific contract;
b) costs that are attributable to contract activity, in general, and can be allocated to the contract; and
c) such other costs as are specifically chargeable to the customer under the terms of the contract.

Costs that are included as part of contract activity in general can be allocated to specific projects and include:
a) insurance;
b) costs of design and technical assistance that are not directly related to a specific project; and
c) construction overheads.

Such costs are allocated using appropriate methods that best reflect project utilisation and are applied consistently to all costs having similar characteristics. This allocation is based on all costs being absorbed by the projects, in a ratio that reflects a normal level of construction activity in each project.

Costs that are specifically chargeable to DWS under the terms of each project contract are included in the construction costs. These costs may include general administrative costs during construction and development costs for which reimbursement is specified in terms of the Implementation Agreement or any other relevant contract relating to each project.

Contract revenue

Contract revenue is revenue from contracts with customers and comprises:
a) the initial amount of revenue agreed in the contract; and
b) variations in contract work, and claims:
   (i) to the extent that is probable that they will result in revenue; and
   (ii) they are capable of being reliably measured.

The input method of recognizing revenue is determined by the proportion that contract costs incurred for work performed to date bear to the estimated total contract cost. TCTA will recognise revenue using the input methods as it closely reflects the amounts due as revenue as it recovers all costs incurred at cost. This is relevant for capital expenditure costs and costs that relate to project management and project finance, contribute to TCTA's progress in satisfaction of its performance obligations.

Revenue recognition happens on a yearly basis as TCTA satisfies the performance obligations set out per project. The timing of recognition typically differes to the payment relating to the revenue recognised. Payment terms are set out in the implementation agreements. The timing of payment will occure when certgain conditions per the implementation agreements have been satisfied by TCTA, such as substantial completion of a project. The repayment terms are normally over a period of 20 years. In instances where payments are receoved in advance, TCTA recognises a contract liability (refer to contract liability accounting policy in 3.8)

3.11 Services rendered

Cost of services rendered

Cost of services rendered comprises of costs incurred in the fulfilling of performance obligations towards DWS in regards to the debt management of infrastructure assets financial liabilities as well as the operations and maintenance costs of the LHWP Delivery Tunnel North as well the AMD treatment plants. Debt management costs are recognised when the applicable service costs are incurred, these costs are mainly staff related costs of the Project Finance and Treasury division. The operations and maintenance costs are recognised when the services relating to the operations and maintenance is provided by the service provider and the expenditure is incurred.

Revenue from services rendered

This comprises of revenue earned for the debt management and operations and maintenance services provided to DWS. The revenue is recognised when the cost is incurred. TCTA operates on a cost recovery basis and charges no margin on the costs incurred.

Costs and revenue from services are recognised in the Statement of Comprehensive Income in the period they are incurred.

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Annual Financial Statements for the year ended 31 March 2022

Notes to the Annual Financial Statements

3.12 Finance income

Interest income comprises interest receivable on loans, advances, trade receivables and income from financial market investments. Interest is only recognised when it is probable that the economic benefits associated with the transaction will flow to TCTA. The total interest income (calculated using the effective interest method) for financial assets that are measured at amortised cost are recognised in the Statement of Comprehensive Income.

3.13 Related party transactions

TCTA has applied the government-related entities exemption in terms of IAS 24: Related Party Disclosures and has only disclosed significant transactions with entities controlled by the Government of South Africa in note 26 and . Management considered the closeness of the related party relationship in determining the information to be disclosed.

Other factors relevant in determining the significance of transactions which should be disclosed include:

- significant in amount
- carried out on non-market terms;
- outside normal day-to-day business operations;
- disclosed to regulatory or supervisory authorities; or
- reported to the Executive Committee (Exco) and the Board of Directors.

3.14 Fruitless and wasteful and irregular expenditure

Fruitless and wasteful expenditure is defined as expenditure that was made in vain and would have been avoided had reasonable care been exercised.

Irregular expenditure means expenditure, other than unauthorised expenditure, incurred in contravention of or that is not in accordance with a requirement of any applicable legislation, including the PFMA, or any regulations made in terms of that Act.

Both fruitless and wasteful expenditure and irregular expenditure are recognised as expenditure in the aggregated statement of comprehensive income.

3.15 Impairment of non-finacial assets

The entity assesses at each end of the reporting period whether there is any indication that an asset, including a right-of-use asset may be impaired. If any such indication exists, the entity estimates the recoverable amount of the asset.

If there is any indication that an asset may be impaired, the recoverable amount is estimated for the individual asset.

The recoverable amount of an asset is the higher of its fair value less costs to sell and its value in use.

If the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. That reduction is an impairment deficit.

An impairment deficit of assets carried at cost less any accumulated depreciation or amortisation is recognised immediately in profit or loss. Any impairment deficit of a revalued asset is treated as a revaluation decrease.

An entity assesses at each reporting date whether there is any indication that an impairment deficit recognised in prior periods for assets other than goodwill may no longer exist or may have decreased. If any such indication exists, the recoverable amounts of those assets are estimated.

The increased carrying amount of an asset other than goodwill attributable to a reversal of an impairment deficit does not exceed the carrying amount that would have been determined had no impairment deficit been recognised for the asset in prior periods.

A reversal of an impairment deficit of assets carried at cost less accumulated depreciation or amortisation other than goodwill is recognised immediately in profit or loss. Any reversal of an impairment deficit of a revalued asset is treated as a revaluation increase.

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Annual Financial Statements for the year ended March 31, 2022

Notes to the Annual Financial Statements

3.16 Contingent liabilities

Contingent liabilities are possible obligations whose existence will be confirmed by uncertain future events that are not wholly within the control of the entity.

Contingent liabilities also include obligations that are not recognised because their amount cannot be measured reliably or because settlement is not probable. Contingent liabilities do not include provisions for which it is certain that the entity has a present obligation that is more likely than not to lead to an outflow of cash or other economic resources, even though the amount or timing is uncertain.

Contingent liabilities are disclosed unless the possibility of an outflow of resources embodying economic benefits is remote. A provision is recognised in the accounting records if the contingency is probable and the amount of the liability can be reasonably estimated.

Contingent liabilities are not recognized in the annual financial statements, however disclosure is provided in the notes. Contingent liabilities are disclosed in note 25.1.

3.17 Contingent assets

Contingent assets are possible assets whose existence wil be confirmed by the occurence or non-occurence of uncertain future events that are not wholly within the control of TCTA. TCTA does not recognise contingent assets but disclose contingent assets when it is more likely than not that an inflow of benefits will occur. When this inflow of benefits is almost certain an asset is recognised in the Statement of Financial Position, because that asset is no longer considered to be contingent. Contingent assets are disclosed in note 25.2

4 Critical accounting estimates, assumptions and judgements

In the process of applying TCTA's accounting policies, management makes various estimates and judgements based on past experience, expectations of the future and other information. The key sources of estimation uncertainty and the critical judgements that can significantly affect the amounts recognised in the financial statements are disclosed below:

Estimates and assumptions

The following key assumptions and other key sources of estimation uncertainty have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities, as presented in these financial statements, within the next financial year. TCTA based its assumptions and estimates on parameters available when the financial statements were prepared. Any changes to existing conditions, such as market changes or circumstances beyond TCTA's control, are reflected in the assumptions when they occur.

4.1 Estimates of cash flows imputed in the tariff receivable financial asset

At the inception of each project, TCTA estimates the construction costs to be incurred and tariffs to be received over the debt repayment period.

The projected costs are based on the estimates of timing and cost as approved by the TCTA Board and the respective project off-takers in the project charters. At each reporting date, these estimates are revised to take into account changes in the timing of the contract, costs due to escalation and variation orders.

TCTA estimates the future receipt of tariffs from DWS using projected demand consumption as forecast by DWS, to arrive at a tariff that will repay all debt and operating costs when the long-term facilities expire. The estimated tariff will also include the forecasting of inflation where the project water supply agreement with DWS allows for inflationary increases in the tariff over the life of the project. Water demand consumption and inflation are revised on an annual basis using the best estimates available from DWS and reputable economic research agencies respectively. Refer to note 10.

4.2 Operating segments

IFRS 8 requires that the results and information with regards to identified segments are regularly reviewed by the entity's Chief Operating Decision Maker (CODM) to make decisions about resources to be allocated to the segment and assess its performance. TCTA considers the monthly reporting to and review by the CODM as "regular". Refer to note 6 for further disclosures.

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Notes to the Annual Financial Statements

4. Critical accounting estimates, assumptions and judgements (continued)

4.3 Property Plant and Equipment estimation of useful lives

The useful life of an asset is defined in terms of the asset's expected utility to TCTA. The asset management policy of TCTA may specify the disposal of assets after a specified time or after consumption of a specified proportion of the future economic benefits embodied in the asset. Thus, the useful life of an asset may be shorter than its economic life and the estimation of the useful life of the asset is a matter of judgement based on the experience of TCTA with similar assets.

The useful life of an asset is an estimation of the time an asset can reasonably generate income and be of benefit to TCTA. Useful life does not refer to the time the asset will last. The useful life of identical assets varies by user, and that life depends on the asset's age, frequency of use, condition of the business environment, and the repairs done to the asset.

- the period over which an asset is expected to be available for use by TCTA; or
- the number of production or similar units expected to be obtained from the asset by TCTA.

Tangible assets have a useful life of more than one year. Factors involved in determining the useful life of a tangible asset will include inter alia:

- The age of the asset when purchased;
- How frequently the asset is used; and
- The environmental conditions for which TCTA purchased the asset.

Additional factors that affect an asset's useful life include the expected technological improvements and changes in laws and the economy.

Useful life may differ from division to division and may differ from asset to asset. if there are two similar machines, but the one machine runs at a higher capacity than the other, the useful life of the machine running at the higher capacity will probably be shorter than the other machine. If circumstances relating to the usage of an asset change, this may necessitate a change in the useful life of that asset.

In accordance with TCTA's approved Asset Management Procedure provide, a third party will do the annual re-assessment of the useful lives of assets.

4.4 Determination of the lease term

The term of the lease was determined to be the non-cancellable period of the lease. There was no additional requirement to estimate the additional possible periods as management had already exhausted the contract extension allowances granted to TCTA and TCTA has no option but to terminate the contract due to the effluxion of the lease term.

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4.5 Estimating lease incremental borrowing rate

In determining the incremental borrowing rate to used TCTA approached various financial institutions to obtain a quote of the interest rate that would be charged to TCTA were TCTA to consider financing the purchase of the office building. The lowest rate quoted was utilised as the best estimate of the incremental borrowing rate..

4.6 Impairment of non-financial assets

TCTA holds non-financial assets which are as a result of construction contracts, as well as those which are not as a result of construction contracts. Prepayments are as a result construction contracts are not considered for impairment. Property, plant and equipment will be considered as impaired when there are indicators that the carrying amount is higher than the amount to be recovered through use or the sale of the assets. Internal sources have been utilised to assess for impairment by noting those assets which are obsolescence or physically damaged. Management judgement on the condition of assets following asset verification exercises and it was concluded that no impairment indicators were present.

4.7 Provision for expected credit losses on trade and other receivables

Trade receivables comprise amounts due to TCTA from DWS on socially funded projects. These receivables are short-term in nature as DWS is compelled to provide TCTA with funding in order to fulfil our performance obligations. In applying the simplified approach the assumptions are based on historical loss rates and trends noted on the payment patterns of the department. Any potential future changes in the economic outlook of the DWS are factored in during the project planning phase where the availability of funds is secured.

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Annual Financial Statements for the year ended 31 March 2022

Notes to the Annual Financial Statements

4. Critical accounting estimates, assumptions and judgements (continued)

4.8 Fair value measurement on financial instruments

The fair value assessments of TCTA bonds involves estimation and judgements utilised to discount future cash flows. Management utilises market information of similar instruments at the current market interest rate.

4.9 Critical accounting judgements and key soiurces of uncertainty

TCTA is characterised by contract risk with significant judgements and estimates involved in the assessment of both current and future contractual performance

In terms of IFRS 15: Revenue from contracts with customers (IFRS 15) revenue is recognised over time, measured at the fair value of the consideration received or receivable and includes variations and claims. The input method of recognising revenue is determined by the proportion that contract costs incurred for work performed to date bear to the estimated total contract cost. TCTA will recognise revenue using the input method as a faithful depiction of trasfer of goods and services as it closely reflects the amounts due as revenue as it recovers all costs incurred at cost.. This is relevant for capital expenditure costs and costs thatr relate to project management and project finance, contribute to TCTA's progress in satisfaction of its performance obligations. The timing of the performance obligations is estimated to closely reflect the contract terms.

Contract modifications and contractual claims to existing performance obligations are considered when measuring the revenue over time.

The Staus of expenditure on contracts is updated on a regular basis. In doing so, management is required to exercise judgement when recognising the revenue over time which invloves assessing the progress made towards completing the specific perfoamnce obligation and their assessment of the vaulation of contract variations and claims. Dependent on the level of judgement and estimate in each, the range on each contract can be individually significant. In addition, changes in these judgments, and the related estimates as contracts progress, can result in material adjustments to revenue, which can be both positive and negative.

For all its contracts, TCTA took in account:

a) Construction contracts were assessed against the revenue recognition criteria of IFRS 15 focusing on contract classification, allocation of income and cost of performance obligations.

b) Tested the contract status through examination externally generated evidence, such as approved variations and DWS correspondance.

c) Analysed , through inspection of contract documentation through the annual budgetting process, the estimates, for the total forecast revenue and costs to complete in order to perform a reasonability test of the estimates made by management of the progress made towards completion of the performance obligations. This included taking into account the historical accuracy of such estiamtes. The forecasted revenue amd cost is critical in determining the effective interest rate with which the revenue earned but not yet due is discounted.

We assessed the adequacy of the disclosure made in the financial statements with reference to the disclosure requirements of IFRS 15.

5. NEW STANDARDS AND INTERPRETATIONS

5.1 Standards and interpretations effective and adopted in the current year

In the current year, the entity has adopted the following standards and interpretations that are effective for the current financial year and that are relevant to its operations:

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Annual Financial Statements for the year ended 31 March 2022

Notes to the Annual Financial Statements

5. NEW STANDARDS AND INTERPRETATIONS (continued)

'Prepayment Features with Negative Compensation (Amendments to IFRS 9): Interest Rate Benchmark Reform/

In September 2020, the IASB published Interest Rate Benchmark Reform Phase 2 (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16), finalising its response to the ongoing reform of interest rate benchmarks around the world.

These amendments aim to assist reporting entities to provide investors with useful information about the effects of the reform on their financial statements.:
- when determining whether a forecast transaction is highly probable, TCTA shall assume that the interest rate benchmark on which the hedged cash flows are based is not altered as a result of the reform. The amendment also applies to cash flow hedges that have been discontinued with an amount remaining in the cash flow hedge reserve;
- when performing prospective assessments, TCTA shall assume that the interest rate benchmark on which the hedged item, hedged risk and/or hedging instruments are based is not altered as a result of the interest rate benchmark reform;
- TCTA is not required to undertake the IAS 39 retrospective assessment for hedging relationships directly affected by the reform; however, must comply with all other IAS 39 hedge accounting requirements, including the prospective assessment;
- TCTA shall apply separately identifiable requirement only when an instrument is initially designated as a hedged item in a 'macro hedge' relationship;
- when TCTA designates a group of items as a hedged item, or a combination of financial instruments as the hedging instruments, the end of application requirement should be applied to each item in the hedge; and
- For hedging relationships affected by the amendments, companies are required to provide the following disclosures:

* the significant interest rate benchmarks to which TCTA's hedging relationships are exposed;
the extent of the risk exposure manages that is directly affected by the interest rate benchmark reform.
* how TCTA is managing the process to transition to alternative benchmark rates;
* description of significant assumptions or judgements TCTA made in applying the exceptions (for example, assumptions or judgements about when the uncertainty arising from interest rate benchmark reform is no longer present); and
* the nominal amount of the hedging instruments in those hedging relationships.

The amendments apply for annual reporting periods beginning on or after 01 January 2020. Earlier application is permitted.

At present, TCTA has not embarked on hedging as part of its activities and hence, the adoption of the amendments have no impact on TCTA's annual financial statements.

COVID-19-Related Rent Concessions (Amendment to IFRS 16)

The amendment provides the lessee with an exemption from assessing whether a COVID-19-related rent concession (a rent concession that reduces lease payments due on or before 30 June 2022) is a lease modification.

The COVID-19 pandemic has created an additional burden on entities all over the world. As a result, lessors are still providing lessees with rent concessions. These can be in the form of rent holidays or rent reductions for an agreed timeframe (possibly followed by increased rentals in future periods). In some jurisdictions, governments are making rent concessions a requirement, in others, they are merely encouraging them.

The amendment was issued on 1 June 2020(The exemption was extended by one year with effect from 1 April 2021).

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5. NEW STANDARDS AND INTERPRETATIONS (continued)

Interest Rate Benchmark Reform Phase 2 (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16)
These amendments were issued inSeptember 2020. It introduces a practical expedient for modifications required by the reform which means entities will not need to derecognise the carrying amount of financial assets or financial liabilities for changes required by the reform. Instead reporting entities are required to account for the modification by updating the effective interest rate to reflect the change to the alternative benchmark rate.

Hedge accounting is not discontinued solely because of the IBOR reform. Hedging documentation and relationships should be updated to reflect modifications to the hedge item, and entities can continue hedge accounting if the new hedging relationship meets all the criteria.

Entities are required to make additional disclosures that allow users to understand the nature and extent of risks arising from the IBOR reform to which the entity is exposed to and how the entity manages those risks as well as the entity'sprogress in transitioning from IBORs to alternative benchmark rates, and how the entity is managing this transition.

The amendments are effective for annual periods beginning on or after 1 January 2021, with earlier application permitted.

Adoption of this amendment does not have a material impact on TCTA's annual financial statements

Covid-19-Related Rent Concessions beyond 30 June 2021 (Amendment to IFRS 16)

In April 2021 the IASB issued 'Covid-19-Related Rent Concessions beyond 30 June 2021 (Amendment to IFRS 16)', an extension to the practical expedient period in the amendments to IFRS 16 made last year. This extension is for one year, so the application period now extends until 30 June 2022.

In light of the impact the COVID-19 pandemic has had on business activity across the world, and response from feedback received from stakeholders, the IASB decided to extend this relief for one year to provide relief for recent concessions in relation to COVID-19 that reduce payments up until 30 June 2022.

The amendment is effective for annual reporting periods beginning on or after 1 April 2021.

TCTA has elected not to apply the Covid-19 concessions as there were no changes in the lease contract that would qualify to be a lease modification as required by IFRS 16.

5.2 Standards and Interpretations early adopted

The entity has chosen to early adopt the following standards and interpretations:

Property, Plant and Equipment: Proceeds before Intended Use - Amendments to IAS 16
The amendment prohibits entities from deducting from the cost of an item of property, plant and equipment (PP&E), any proceeds of the sale of items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognises the proceeds from selling such items, and the costs of producing those items, in profit or loss.

The amendments to the standard do not currently impact TCTA, as the entity applies the relevant IAS 16 and/or IFRS and currently doesn't deduct from the cost of an item of property, plant and equipment (PP&E), any proceeds of the sale of items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management.

5.3 Standards and interpretations not yet effective

The entity has chosen not to early adopt the following standards and interpretations, which have been published and are mandatory for the entity's accounting periods beginning on or after 01 April 2022 or later periods:

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Annual Financial Statements for the year ended 31 March 2022

Notes to the Annual Financial Statements

5. NEW STANDARDS AND INTERPRETATIONS (continued)

Classification of Liabilities as Current or non- current

Amendments to IAS 1 Presentation of Financial Statements with regards to the Classification of liabilities as current and non-current were issued in January 2020. The amendments entail the following:

1. the right to defer settlement of the liability for at least twelve months after the reporting period no longer needs to be unconditional for the liability to be classified as current. It has now been clarified that the right needs to be in existence at the end of the reporting period

2. an entity's right to defer settlement of a liability for at least twelve months after the reporting period must have substance. If the right to defer settlement is subject to the entity complying with specified conditions, the right exists at the end of the reporting period only if the entity complies with those conditions at the end of reporting. The entity must comply with the conditions at the end of the reporting period, even if the lender does not test compliance until a later date;

3. the words 'expects' and 'refine' have been removed and 'discretion' replaced with the 'right' under the paragraph dealing with rolling over of obligation;

4. the word 'provision' has been replaced with, 'condition' when the reference is to a long-term arrangement, and the word 'unconditional' has been removed from the right to defer settlement;

5. classification of a liability is unaffected by the likelihood that the entity will exercise its right to defer settlement of the liability for at least twelve months after reporting period. If a liability meets the criteria for classification as non-current. It is classified as non-current even if management intends or expects the entity to settle the liability within twelve months after the reporting period, or even if the entity settles the liability between the end of the reporting period and the date the financial statements are authorised for issue. However, in either of these circumstances, the entity may need to disclose information about the timing of the settlement to enable users of its financial statement to understand the impact of the liability on the entity's financial position;

6. if the settlement of a liability classified as non-current occurs between the end of the reporting period and the date of the financial statements are authorised for issue, the event is disclosed as a non-adjusting even in accordance with IAS 10 Events after Reporting Period;

7. for the purpose of classifying a liability as current or non-current, settlement refers to a transfer to the counterparty that results in the liability's extinguishment. The transfer could be of:

- cash or other economic resources - for example, goods or services; or
- the entity's own equity instruments, unless (h) below applies.

8. terms of a liability that could, at the option of the counterparty, result in its settlement by the transfer of the entity's own equity instruments do not affect its classification as current or non-current. If applying IAS 32 *Financial Instruments: Presentation*, the entity classifies the option as an equity instrument, recognising it separately from the liability as an equity component of a compound financial instrument.

The amendments were initially effective from accounting periods beginning on or after 1 January 2022. However, as a result of the COVID-19 pandemic, the IASB decided to give entities more time to implement any classification changes that may result from the above amendments. As such in July 2020 changed the effective date of the amendments and they are now effective from 1 January 2023. Earlier application is permitted. If an entity applies those amendments for an earlier period, it shall disclose that fact.

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Annual Financial Statements for the year ended 31 March 2022

Notes to the Annual Financial Statements

5. NEW STANDARDS AND INTERPRETATIONS (continued)

TCTA has not elected to early adopt the amendments and the impact of the amendments will depend on TCTA's obligations upon the adoption of the amendments.

Onerous Contracts - Costs of Fulfilling a Contract - Amendments to IAS 37

In May 2020, the IASB issued amendments to IAS 37 Provisions, Contingent Liabilities and Contingent Assets to specify which costs an entity needs to include when assessing whether a contract is onerous or loss-making.

The amendments apply a 'directly related cost approach'. The costs that relate directly to a contract to provide goods or services include both incremental costs (e.g., the costs of direct labour and materials) and an allocation of costs directly related to contract activities (e.g., depreciation of equipment used to fulfil the contract as well as costs of contract management and supervision). General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract.

TCTA has not elected to early adopt the amendments and the impact of the amendments will depend on TCTA's obligations upon the adoption of the amendments.

Disclosure of Accounting Policies - Amendments to IAS 1 and IFRS Practice Statement 2

In February 2021, the Board issued amendments to IAS 1 and IFRS Practice Statement 2 Making Materiality Judgements (the PS), in which it provides guidance and examples to help entities apply materiality judgements to accounting policy disclosures.
The amendments aim to help entities provide accounting policy disclosures that are more useful by:
" Replacing the requirement for entities to disclose their 'significant' accounting policies with a requirement to disclose their 'material' accounting policies; and
" Adding guidance on how entities apply the concept of materiality in making decisions about accounting policy disclosures
TCTA has not elected to early adopt the amendments and the impact of the amendments will depend on TCTA's obligations upon the adoption of the amendments.

Definition of Accounting Estimates - Amendments to IAS 8
In February 2021, the Board issued amendments to IAS 8, in which it introduces a new definition of 'accounting estimates.

The amendments clarify the distinction between changes in accounting estimates and changes in accounting policies and the correction of errors. Also, they clarify how entities use measurement techniques and inputs to develop accounting estimates.

5.4 Standards and interpretations not yet effective or relevant

The following standards and interpretations have been published and are mandatory for the entity's accounting periods beginning on or after 01 April 2022 or later periods but are not relevant to its operations:

IFRS 17 *Insurance Contracts*

The entity has chosen not to early adopt the following standards and interpretations, which have been published and are mandatory for the entity's accounting periods beginning on or after 01 April 2020 or later periods:

IFRS 17 sets out the requirements that an entity should apply in reporting information about insurance contracts it issues and reinsurance contracts it holds. The standard was issued in May 2017 and amended in June 2020; and it replaces IFRS 4: *Insurance contracts*.

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Notes to the Annual Financial Statements

5. NEW STANDARDS AND INTERPRETATIONS (continued)

The standard is effective for annual reporting periods beginning on or after 1 January 2023. Early adoption is permitted but only if IFRS 9 *Financial Instruments* and IFRS 15 *Revenue from Contracts with Customers* is being applied.

TCTA has elected not to early adopt the standard and the standard will have no impact on TCTA as TCTA does not issue any insurance contracts nor holds any reinsurance contracts.

Deferred Tax related to Assets and Liabilities arising from a Single Transaction - Amendments to IAS 12

In May 2021, the Board issued amendments to IAS 12, which narrow the scope of the initial recognition exception under IAS 12, so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences.

The amendments clarify that where payments that settle a liability are deductible for tax purposes, it is a matter of judgement (having considered the applicable tax law) whether such deductions are attributable for tax purposes to the liability recognised in the financial statements (and interest expense) or to the related asset component (and interest expense). This judgement is important in determining whether any temporary differences exist on initial recognition of the asset and liability.

TCTA is a not-for-profit organisation established by Government to raise off-budget funding and implement projects (both on and off-budget) on its behalf. By allowing non-profit organisations preferential tax treatment, Government assist by augmenting their financial resources. TCTA applied for this preferential tax treatment as prescribed and its application for tax exemption in terms of the Income Tax Act, 1962, was approved. TCTA is exempted from Income tax as it is an Institution, Board, or Body established by or under any law as defined in the Income Tax Act, 1962

TCTA is tax excempted and therefore this standard does not apply to TCTA.

Reference to the Conceptual Framework - Amendments to IFRS 3

In May 2020, the IASB issued Amendments to IFRS 3 Business Combinations - Reference to the Conceptual Framework. The amendments are intended to replace a reference to a previous version of the IASB's Conceptual Framework (the 1989 Framework) with a reference to the current version issued in March 2018 (the Conceptual Framework) without significantly changing its requirements.

The amendments add an exception to the recognition principle of IFRS 3 to avoid the issue of potential 'day 2' gains or losses arising for liabilities and contingent liabilities that would be within the scope of IAS 37 Provisions, Contingent Liabilities and Contingent Assets or IFRIC 21 Levies, if incurred separately. The exception requires entities to apply the criteria in IAS 37 or IFRIC 21, respectively, instead of the Conceptual Framework, to determine whether a present obligation exists at the acquisition date.

IFRS 3 is not applicable to TCTA.

IAS 28 Investments in Associates and Joint Ventures

Sale or Contribution of Assets between an Investor and its Associate or Joint Venture (Amendments to IFRS 10 and IAS 28): Narrow scope amendment to address an acknowledged inconsistency between the requirements in IFRS 10 and those in IAS 28 (2011), in dealing with the sale or contribution of assets between an investor and its associate or joint venture.

The effective date of this amendment has been deferred indefinitely until further notice

This amendment will not have an impact on TCTA's financial statements.

6. SEGMENTAL INFORMATION

TCTA is required to disclose segmental information as required by IFRS 8: Operating Segments as TCTA’s debt instruments are traded in a public market. This information aims to assist in evaluating the nature and financial effects of TCTA’s business activities and the economic environments in which TCTA operates. The standard has specific disclosure requirements about TCTA’s services, the geographical areas in which it operates, and major customers.

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Annual Financial Statements for the year ended 31 March 2022

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6. SEGMENTAL INFORMATION (continued)

6.1. Operating segments

Each segment is identified in terms of separate directives received from the Minister of Water and Sanitation. Each of these segments (projects) meets the criteria as an identifiable component of TCTA's business as it (a) may earn revenues and incur expenses; (b) each segment's operating results are regularly reviewed by the entity's Chief Operating Decision Maker (CODM) to determine the allocation of resources and assess its performance, and (c) discrete financial information for it is available. The function of CODM is fulfilled by the Chief Executive Officer and EXCO members who review the financial results of TCTA on a monthly basis.

Presently the operating segments of TCTA are aligned to the project orientated model of the organisation.

6.2. Identification of operating segments

An important criterion for identifying operating segments is that the operating results are regularly reviewed by the entity's CODM to make decisions about resources to be allocated to the segment and assess its performance. TCTA considers monthly reporting to be 'regularly'.

TCTA provides various services to its customers such as liability management, treasury management services as well as project implementation. TCTA is required to report and account separately for each project and reports to the CODM (on a monthly basis), government (as determined by legislation) as well as external stakeholders (as determined in individual agreements) on the performance and financial position of each project as directed by the Minister of Water and Sanitation.

The mandate and directives are funded by government or TCTA arranges commercial funding and manages the debt repayment. In the second instance, TCTA earns revenue for the services it provides in respect of its liability management, project implementation and treasury management services. The revenue ensures that TCTA is able to repay the liabilities incurred.

In terms of IFRS 8, two or more operating segments may be aggregated into a single operating segment if aggregation is consistent with the core principle of the standard, have similar economic characteristics, and if the segments are similar in certain aspects. The aggregated financial statements are merely a sum total of TCTA's assets, liabilities, income and expenses. TCTA therefore includes a full statement of financial position and statement of comprehensive income in note 6.4 below as well as the segmental cash flows as an annexure (Annexure A) to these financial statements to fulfil its obligation of separate reporting.

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Annual Financial Statements for the year ended 31 March 2022

Notes to the Annual Financial Statements

6. SEGMENTAL INFORMATION (continued)

6.3. Entity-wide disclosures

DESCRIPTION OF THE SEGMENT	CURRENT WORK	ACRONYM
Vaal River System Treaty Functions as per Section 21 of the Notice of Establishment Delivery Tunnel North of the Lesotho Highlands Water Project Sections 24 (a), (b) and (c) -To fulfil the RSA financial obligations in terms of or resulting from the Treaty -To receive the water from LHDA and discharge into the Ash River -Additional functions pertaining to the release of the water	Royalty payments to the Government of Lesotho. Payments for : the operation and maintenance of the water transfer component in Lesotho undertaken by Lesotho Highlands Development Authority for the construction of Phase II and Lesotho Highlands Water Commission costs	VRS
Vaal River System Advice to institutions on various matters pertaining to the construction of infrastructure and the viability of the water sector. The Income Agreement, signed in 2001 between DWS and TCTA, established the principle of using water use charges on the Vaal River System to enable TCTA to meet its financial obligations incurred when carrying out a directive of the Minister, where no alternative source of income was provided (transfers or separate income streams).	Strategic Integrated Project-3 & 18 Mzimvubu Water project	VRS
Berg River Water Project The project comprises the Berg River Dam and supplementary scheme located in the reaches of the Berg River near Franschhoek, Western Cape.	Management of debt, Project close-out	BWP
Vaal River Eastern Sub-System Augmentation Project The project comprises of a scheme to convey water 121 km from the Vaal Dam to the Secunda area.	Management of debt, Project close-out	VRESAP
Mooi Mgeni Transfer Scheme - 2 The project comprises of the Spring Grove Dam on the Mooi River, a fish barrier upstream of the dam and augmentation of the Water Transfer System from the Mooi to the Mpofana River.	Management of debt, Project close-out	MMTS-2
Komati Water System Augmentation Project This project forms part of the Vaal River Eastern Subsystem. The project comprises the installation of a system to convey water to Eskom's power stations in Mpumalanga.	Management of debt.	KWSAP
Olifants River Water Resource Development Project Phase 2C: The project comprises a 40 km pipeline from De Hoop Dam to Steelpoort.	Implementation	ORWRDP

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Notes to the Annual Financial Statements

6. SEGMENTAL INFORMATION (continued)

Mokolo Crocodile Water Augmentation Project Phase 1: The project comprises of a scheme to convey water 43 km from the Mokolo Dam to the Lephalale area Phase 2A: The project comprises of a scheme to transfer water 160 km from the Crocodile River, near Thabazimbi, to the Lephalale area	Management of debt Project close-out Pre-implementation	MCWAP
UMGENI The MMTS-2 directive was amended on 20 March 2014 to include the construction of a potable water pipeline for Umgeni Water as part of the water transfer project.	Project close-out	UMGENI
KRIEL The project comprises of a 3 km pipeline from the KWSAP to Kriel Water treatment works and the upgrading of the works	Project management services	KRIEL
Mzimvubu River Water Project This project is in the Mzimvubu area in the Eastern Cape. The scope of work and the sources of funding are still to be determined.	Advisory stage.	MRWP
Trans Caledon Tunnel Authority - Corporate		TCTA-C
Berg River-Voëlvlei Augmentation Scheme The project comprises a diversion weir and pump station in the Berg river to transfer water into the Voelvlei Dam to augment the Western Cape Water Supply system	Pre-implementation	BRVAS
uMkhomazi Water Project uMWP-1 consists of: Bulk raw water – implementation by TCTA: 81m high dam and appurtenant works at Smithfield on the uMkhomazi River near Bulwer.Conveyance infrastructure (32km 3.5m diameter tunnel and 5km 2.6m diameter raw water pipeline) to the proposed Umgeni Water's Water Treatment Works (WTW) in the uMlaza River valley.	Pre-implementation	UMWP

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Notes to the Annual Financial Statements

6. SEGMENTAL INFORMATION (continued)

6.4. Operating segments: financial results

TCTA will report detailed statements of financial position as well as statements of comprehensive income, for each project.

6.4.1. Segmental Statement of Financial Position as at 31 March 2022

	Note(s)	VRS Rmil	BWP Rmil	VRESAP Rmil	MCWAP-1 Rmil	MMTS-2 Rmil	ORWRDP Rmil	KWSAP Rmil	UMGENI Rmil	KRIEL Rmil	TCTA-C Rmil	MRWP Rmil	MCWAP-2 Rmil	BRVAS Rmil	UMWP Rmil	TOTAL Rmil
ASSETS																
Non-Current Assets																
Property, plant and equipment	8	2	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Right-of-use assets	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Intangible assets		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tariff receivable*	10.4	4 969	208	2 847	337	-	-	722	-	-	-	-	-	-	-	9 083
Long-term financial market investments	10.5	46	-	-	-	-	-	-	-	-	-	-	-	-	-	46
AMD Receivable	14	2 089	-	-	-	-	-	-	-	-	-	-	-	-	-	2 089
		7 106	**208**	**2 847**	**337**	**-**	**-**	**722**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**11 220**
Current Assets																
Tariff receivable*	10.4	-	71	291	33	-	-	107	-	-	-	-	-	-	-	502
Trade and other receivables**	12	611	-	-	12	21	4	-	4	6	-	1	326	-	-	985
Prepayments	13	41	-	-	-	1	1	-	-	-	-	-	-	-	-	43
Non-contractual amounts	17.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash and cash equivalents	19	5 652	77	208	999	959	47	260	-	-	5	-	610	20	12	8 849
AMD Receivable	14	101	-	-	-	-	-	-	-	-	-	-	-	-	-	101
		6 405	**148**	**499**	**1 045**	**981**	**52**	**367**	**4**	**6**	**5**	**1**	**936**	**20**	**12**	**10 480**
Total Assets		**13 511**	**356**	**3 346**	**1 382**	**981**	**52**	**1 089**	**4**	**6**	**5**	**1**	**936**	**20**	**12**	**21 701**

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Notes to the Annual Financial Statements

6. SEGMENTAL INFORMATION (continued)

	Note(s)	VRS Rmil	BWP Rmil	VRESAP Rmil	MCWAP-1 Rmil	MMTS-2 Rmil	ORWRDP Rmil	KWSAP Rmil	UMGENI Rmil	KRIEL Rmil	TCTA-C Rmil	MRWP Rmil	MCWAP-2 Rmil	BRVAS Rmil	UMWP Rmil	TOTAL Rmil
EQUITY AND LIABILITIES																
EQUITY																
Retained income / (loss)		3 382	69	493	146	151	-	(14)	3	-	3	-	-	7	-	4 240
LIABILITIES																
Non-Current Liabilities																
Borrowings	10.6.3	8 683	206	2 509	244	-	-	1 023	-	-	-	-	-	-	-	12 665
Current Liabilities																
Trade and other payables**	15	373	2	28	335	47	52	8	1	2	2	1	542	4	3	1 400
Non-contractual amounts	17.1	185	2	16	3	22	-	5	-	-	-	-	-	-	-	233
Provisions	18	34	-	-	-	-	-	-	-	-	-	-	-	-	-	34
Borrowings	10.6.2	854	77	300	654	582	-	67	-	-	-	-	-	-	-	2 534
Lease liabilities	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contract liabilities	16	-	-	-	-	-	-	-	-	4	-	-	394	9	9	416
Other liability 1	21	-	-	-	-	179	-	-	-	-	-	-	-	-	-	179
		1 446	**81**	**344**	**992**	**830**	**52**	**80**	**1**	**6**	**2**	**1**	**936**	**13**	**12**	**4 796**
Total Liabilities		**10 129**	**287**	**2 853**	**1 236**	**830**	**52**	**1 103**	**1**	**6**	**2**	**1**	**936**	**13**	**12**	**17 461**
Total Equity and Liabilities		**13 511**	**356**	**3 346**	**1 382**	**981**	**52**	**1 089**	**4**	**6**	**5**	**1**	**936**	**20**	**12**	**21 701**

* Department of Water and Sanitation (DWS) invoiced debtor 2022: R803m (2021: R762m); additional disclosure in note 10.4.3

** These balances include inter-project receivables and payables. These are reflected per project and eliminated in the aggregated Statement of Financial Position. These are the balances before elimination.

Financial statements are rounded to the nearest million. Where balances are zero, the amount is less than R500 000.

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6. SEGMENTAL INFORMATION (continued)

6.4.2. Segmental Statement of Financial Position as at 31 March 2021

	Note(s)	VRS Rmil	BWP Rmil	VRESAP Rmil	MCWAP-1 Rmil	MMTS-2 Rmil	ORWRDP Rmil	KWSAP Rmil	UMGENI Rmil	KRIEL Rmil	TCTA-C Rmil	MRWP Rmil	MCWAP-2 Rmil	BRVAS Rmil	UMWP Rmil	TOTAL Rmil
ASSETS																
Non-Current Assets																
Property, plant and equipment	8	3	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Right-of-use assets	9	3	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Intangible assets		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tariff receivable*	10.4	6 956	299	3 180	406	68	-	933	-	-	-	-	-	-	-	11 842
Long-term financial market investments	10.5	57	-	-	-	-	-	-	-	-	-	-	-	-	-	57
AMD Receivable	14	1 947	-	-	-	-	-	-	-	-	-	-	-	-	-	1 947
		8 966	**299**	**3 180**	**406**	**68**	**-**	**933**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**13 852**
Current Assets																
Tariff receivable*	10.4	-	93	339	95	426	-	59	-	-	-	-	-	-	-	1 012
Trade and other receivables**	12	222	-	-	6	21	20	-	4	6	-	8	528	43	28	885
Prepayments	13	30	-	-	-	-	1	-	-	-	-	-	-	-	-	31
Cash and cash equivalents	19	6 654	68	95	1 351	857	26	180	-	-	3	-	-	-	-	9 234
AMD Receivable	14	9	-	-	-	-	-	-	-	-	-	-	-	-	-	9
		6 915	**161**	**434**	**1 452**	**1 304**	**47**	**239**	**4**	**6**	**3**	**8**	**528**	**43**	**28**	**11 171**
Total Assets		**15 881**	**460**	**3 614**	**1 858**	**1 372**	**47**	**1 172**	**4**	**6**	**3**	**8**	**528**	**43**	**28**	**25 023**

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6. SEGMENTAL INFORMATION (continued)

	Note(s)	VRS Rmil	BWP Rmil	VRESAP Rmil	MCWAP-1 Rmil	MMTS-2 Rmil	ORWRDP Rmil	KWSAP Rmil	UMGENI Rmil	KRIEL Rmil	TCTA-C Rmil	MRWP Rmil	MCWAP-2 Rmil	BRVAS Rmil	UMWP Rmil	TOTAL Rmil
EQUITY AND LIABILITIES																
EQUITY																
Retained income / (loss)		2 210	77	541	33	37	-	(27)	3	-	2	-	-	-	-	2 876
LIABILITIES																
Non-Current Liabilities																
Borrowings	10.6.3	3 251	303	2 802	1 227	1 178	-	1 140	-	-	-	-	-	-	-	9 901
Current Liabilities																
Trade and other payables**	15	656	2	31	539	52	45	8	1	2	1	-	176	3	-	1 516
Non-contractual amounts	17.1	65	1	7	7	10	2	5	-	-	-	-	-	-	-	96
Provisions	18	13	-	-	-	-	-	-	-	-	-	-	-	-	-	13
Borrowings	10.6.2	9 682	77	233	52	95	-	46	-	-	-	-	-	-	-	10 185
Lease liabilities	20	4	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Contract liabilities	21&16	-	-	-	-	-	-	-	-	4	-	8	352	40	28	432
		10 420	**80**	**271**	**598**	**157**	**47**	**59**	**1**	**6**	**1**	**8**	**528**	**43**	**28**	**12 246**
Total Liabilities		**13 671**	**383**	**3 073**	**1 825**	**1 335**	**47**	**1 199**	**1**	**6**	**1**	**8**	**528**	**43**	**28**	**22 147**
Total Equity and Liabilities		**15 881**	**460**	**3 614**	**1 858**	**1 372**	**47**	**1 172**	**4**	**6**	**3**	**8**	**528**	**43**	**28**	**25 023**

* Department of Water and Sanitation (DWS) debtor R762m (2020 R1.42bn); additional disclosure in note 10.4.3

** These balances include inter-project receivables and payables. These are reflected per project and eliminated in the aggregated Statement of Financial Position. These are the balances before elimination

Financial statements are rounded to the nearest million. Where balances are zero, the amount is less than R500 000

6. SEGMENTAL INFORMATION (continued)

6.4.3. Segmental Statement of Comprehensive Income for the year ended 31 March 2022

	Note(s)	VRS R mil	BWP R mil	VRESAP R mil	MCWAP-1 R mil	MMTS-2 R mil	ORWRDP R mil	KWSAP R mil	UMGENI R mil	TCTA-C R mil	MCWAP-2 R mil	MRWP R mil	BRVAS R mil	UMWP R mil	TOTAL R mil
Construction revenue	22	-	-	-	-	(2)	43	-	-	-	181	-	26	14	262
Construction costs		-	-	-	-	2	(43)	-	-	-	(181)	-	(26)	(14)	(262)
Revenue from services rendered	22	244	1	1	1	3	1	1	-	-	-	-	-	-	252
Costs of services rendered		(244)	(1)	(1)	(1)	(3)	(1)	(1)	-	-	-	-	-	-	(252)
Other operating income	21	212	5	7	8	10	10	5	-	-	-	5	-	-	262
Expenses		(212)	(5)	(7)	(8)	(10)	(10)	(5)	-	-	-	(5)	-	-	(262)
Legal fees and litigation costs		(13)	-	-	-	-	-	-	-	-	-	-	-	-	(13)
Depreciation	8	(6)	-	-	-	-	-	-	-	-	-	-	-	-	(6)
Employee costs	28,2	(182)	(4)	(5)	(6)	(7)	(7)	(4)	-	-	-	-	-	-	(215)
Directors' emoluments and related costs	24,3	(7)	-	-	-	-	-	-	-	-	-	-	-	-	(7)
Other operating expenses	30	(4)	(1)	(2)	(2)	(3)	(3)	(1)	-	-	-	(5)	-	-	(21)
Operating loss		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Net finance income/(costs)		1172	(8)	(48)	113	114	0	13	-	1	-	-	7	-	1364
Finance income	24,1	2019	21	225	215	205	3	113	-	1	27	-	7	1	2837
Finance costs	24,2	(847)	(29)	(273)	(102)	(91)	(3)	(100)	-	- -	27	-	- -	1	(1473)
Profit for the year		**1172**	**(8)**	**(48)**	**113**	**114**	**-**	**13**	**-**	**1**	**-**	**-**	**7**	**-**	**1364**

6. SEGMENTAL INFORMATION (continued)

6.4.6. Segmental Statement of Comprehensive Income for the year ended 31 March 2021

	Note(s)	VRS	BWP	VRESAP	MCWAP-1	MMTS-2	ORWRDP	KWSAP	UMGENI	KRIEL	MCWAP-2	MRWP	BRVAS	UMWP	TOTAL
		R mil	R mil	R mil	R mil	R mil	R mil	R mil	R mil	R mil	R mil	R mil	R mil	R mil	R mil
Construction revenue		-	-	-	3	(5)	36	-	1	-	89	-	20	27	171
Construction costs		-	-	-	(3)	5	(36)	-	(1)	-	(89)	-	(20)	(27)	(171)
Revenue from services rendered		236	(2)	1	1	4	1	1	-	-	-	-	-	-	242
Costs of services rendered		(236)	2	(1)	(1)	(4)	(1)	(1)	-	-	-	-	-	-	(242)
Other operating income		197	5	7	7	7	11	5	-	-	-	4	-	-	243
Expenses		(197)	(5)	(7)	(7)	(7)	(11)	(5)	-	-	-	(4)	-	-	(243)
Legal fees and litigation costs		(5)	-	-	-	-	-	-	-	-	-	-	-	-	(5)
Depreciation		(8)	-	-	-	-	-	-	-	-	-	-	-	-	(8)
Amortisation		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Employee costs		(148)	(3)	(5)	(5)	(5)	(4)	(3)	-	-	-	-	-	-	(173)
Directors' emoluments and related costs		(7)	-	-	-	-	-	-	-	-	-	-	-	-	(7)
Other operating expenses		(29)	(2)	(2)	(2)	(2)	(7)	(2)	-	-	-	(4)	-	-	(50)
Operating loss		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Net finance income/(costs)		831	(5)	(43)	20	140	-	(13)	-	-	-	-	-	-	930
Finance income		1930	33	244	148	248	-	92	-	-	-	-	-	-	2695
Finance costs		(1099)	(38)	(287)	(128)	(108)	-	(105)	-	-	-	-	-	-	(1765)
Profit for the year		**831**	**(5)**	**(43)**	**20**	**140**	**-**	**(13)**	**-**	**-**	**-**	**-**	**-**	**-**	**930**

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT

7.1. Capital management

TCTA manages its capital to ensure that projects will be able to continue as a going concern while optimising the debt for each project.

The capital structure of TCTA consists of short-, medium and long-term debt (borrowings as detailed in note 10.6) and equity (comprising accumulated surpluses or deficits).

TCTA is not subject to any externally imposed capital requirements except for adherence to the debt ceiling as approved by DWS with concurrence from the Minister of Finance. TCTA's Finance Committee reviews each project's capital structure on a quarterly basis. As part of this review, the Committee considers the cost of capital and the risks associated with each class of debt.

TCTA's borrowing limits per project is reviewed on an annual basis by the Minister of Human Settlements,Water and Sanitation, with the concurrence of the Minister of Finance. The borrowing limits are based on TCTA's borrowing requirements in order to fulfil the Republic of South Africa's financial obligations in terms of, or resulting from, the Treaty and other directives received from the Minister (Refer to note 7.2.1).

Optimal capital structure:
In principle, TCTA prefers to maintain a capital structure of a minimum 70% fixed rate debt to 30% floating rate debt ratio after construction of the infrastructure. This ensures that there is less volatility on the debt curve and furthermore there is a high predictability of cash flows, thus minimising the associated interest rate risk to each project.

7.2. Financial risk management objectives

The Board has overall responsibility for the establishment and oversight of risk management within the organisation and approves all risk management policies. Risk management in TCTA is carried out through a central risk management function. The user departments identify, assess and monitor the management of financial risks. The Finance Committee, comprising of at least four non-executive directors and the CEO, provides oversight on the management of financial risks and provides guidance on key finance activities of the TCTA business.

TCTA's treasury activities comprise of raising finance and managing investments (e.g. liquidity and treasury investment portfolios). TCTA's treasury operates within the financial markets, as such, is subject to associated risks, which could have financial implications on the organisation. In line with the approved Risk Management Framework and Treasury Risk Management policy, the Treasury Department monitors treasury risks on a daily, weekly and monthly basis, in order to ensure that controls in place are working effectively, to mitigate any possible financial losses to the organisation.

TCTA's market activities expose it to market risk (including currency risk, interest rate risk, etc.) credit risk and liquidity risk (Refer notes 7.2.1-7.2.3).

TCTA seeks to minimise the effects of these risks by using derivative financial instruments to hedge risk exposures where possible and appropriate within Board approved policies.

The various types of financial, treasury and risks pertaining to each of the projects are identified, assessed, managed and monitored in a prudent manner, within a Board approved Treasury Risk Management policy.

The liability is managed in a very prudent and conservative manner, which is further underscored by the adoption of the following portfolio approaches and objectives:

- ***asset and liability matching:*** TCTA strives to minimise both refinancing and repricing risks associated with maturing debt by matching the maturity dates of debt issued with free cash generated by the project.

TCTA has taken a more proactive approach to short-term cash management. The cash flow requirements for the next 12 months are assessed, and where required, the required funding is procured. Furthermore, in order to promote interest in the commercial paper program, funds are raised ahead of any financing requirement and invested until the specific need for funding arises. Consequently, TCTA has maintained a strong presence in the commercial paper market and has been able to secure funding at competitive prices.

The set guiding principles and objectives have been applied consistently over the years.

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

7.2.1. Liquidity stress test scenarios as at Thursday, 31 March 2022

TCTA has performed a liquidity stress test in order to assess its ability to meet its debt obligations in the next 12 months and beyond. The assessment considers two scenarios:

Scenario 1

- This scenario which assumes the estimated time from the 31 March 2022 until the date that the cash resources are fully depleted assuming no cash is recovered through the tariff receivable and no additional funding is obtained.
- The table below represents stress tests to determine the number of days each project's cash resources would last, assuming TCTA does not receive any payments from DWS. The calculation takes the opening cash balance and deducts all the cash outflow forecast over the period.

Estimated number of days as at 31 March 2022 exhaustion of cash resources assuming no tariffs are received in the foreseeable future

Project	Current cash balances Rmil	Days till cash is depleted	Anticipated depletion date (1)	Undrawn liquidity facilities (2) Rmil
VRS	5 848	228	29 December 2022	5 500
BWP	77	283	After March 2023	700
VRESAP	207	145	14 September 2022	450
MCWAP-1	999	>365	After March 2023	200
MMTS-2	959	>365	After March 2023	622
KWSAP	260	>365	After March 2023	750
ORWRDP	32	130	30 August 2022	-
MCWAP-2	610	>365	After March 2023	-
BRVAS	19	97	28 July 2022	-
MRWP	-	6	28 April 2022	-
UMWP	11	68	29 June 2022	-

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

(1) Expected date at which the cash resources will be depleted
(2) TCTA has available facilities that enables each project to drawdown if required, except ORWRDP which is funded from the fiscus.

Scenario 2

This scenario considers the estimated time from the 31 March 2022 until the date that the cash resources are fully depleted assuming that cash is received through the tariff receivable but no additional funding is obtained.

The table below represents the number of days each project's cash resources would last assuming TCTA receives timely payments (in respect of the tariff receivable) from DWS.

Estimated number of days as at 31 March 2022 exhaustion of cash resources assuming the forecast tariff receivable is received

Project	Current cash balances Rmil	Days till cash is depleted	Anticipated depletion date (1)	Undrawn liquidity facilities (2) Rmil
VRS	5 848	>365	After March 2023	5 500
BWP	77	>365	After March 2023	700
VRESAP	207	>365	After March 2023	450
MCWAP-1	999	>365	After March 2023	200
MMTS-2	959	>365	After March 2023	622
ORWRDP	32	130	30 August 2022	-
KWSAP	260	>365	After March 2023	750
MRWP	-	68	29 June 2022	-
MCWAP-2	610	>365	After March 2023	-
BRVAS	19	97	28 July 2022	-
UMWP	11	6	28 April 2022	-

(1) Expected date at which the cash resources will be depleted
(2) TCTA has available facilities that enables each project to drawdown if required, except for those projects which are funded from the fiscus.

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Notes to the Annual Financial Statements

7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

1. The liquidity of all the projects under this scenario is robust, subject to DWS making payments to TCTA on time.

TCTA and DWS are presently investigating mechanisms for ring-fencing of the receipt of tariff revenue by DWS from consumers to only be used to repay the tariff that is due to TCTA. This will ensure timely payment of tariffs by DWS to TCTA.

VRS

A. Financing facilities

Funding sources and utilisation at 31 March:

	2022 Rmil	2021 Rmil
Total borrowing authority		
Global limit (1)	19 076	20 600
Utilisation	(9 538)	(12 941)
Available	**9 538**	**7 659**

The table above includes the total utilisation of all facilities, including both local and foreign loans, against the borrowing limit.

(1) The Global limit are as set by National Treasury and governs the total limit of gross liabilities of the project. The individual limit is set internally from time to time when markets are suitable to move from one instrument to the other.

Total utilisation of capital market and commercial paper facilities

The following tables reflect the bonds and commercial paper and excludes local and foreign loans as the latter do not have authorised limits.

Each year the Finance Committee reviews and approves facility utilisation for the financial year.

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

2022 Approved facilities	Facility amount R'mil	Issued R'mil	Available R'mil	Outstanding debt (3) R'mil
Total issued to date				
Commercial Paper Programme (including Term Paper)	4 000	-	4 000	-
	4 000	**-**	**4 000**	**-**
Repurchases				
Repurchases for the year	1 000	-	1 000	-

2022 Utilisation of approved facilities	Facility amount Rmil	Disbursed (3) Rmil	Available (3) Rmil	Outstanding debt Rmil
Investec	1 000	1 000	-	951
Investec (2)	500	-	500	-
Investec	1 650	1 650	-	1 568
Standard Bank of SA	3 000	3 000	-	2 300
Standard Bank of SA (2)	1 000	-	1 000	-
Standard Bank of SA	1 500	1 500	-	1 329
Firstrand Bank Ltd	3 800	2 390	1 410	2 390
Nedbank Ltd	2 000	-	2 000	-
DBSA	3 000	-	3 000	-
DBSA	2 500	-	2 500	-
Absa	1 000	1 000	-	1 000
	20 950	**10 540**	**10 410**	**9 538**

2021 Approved facilities	Facility amount Rmil	Issued Rmil	Available Rmil	Outstanding debt (3) Rmil
Total issued to date				
Commercial Paper Programme (including Term Paper)	4 000	-	4 000	-
Capital Market - WSP5 (1)	13 824	9 433	4 391	9 433
	17 824	**9 433**	**8 391**	**9 433**
Repurchases				
Repurchases for the year	1 000	-	1 000	-

2021 Utilisation of approved facilities	Facility amount R mil	Disbursed (3) R mil	Available (3) R mil	Outstanding debt R mil
Investec	1 000	1 000	-	1 000
Investec (2)	500	-	500	-
Standard Bank of SA	3 000	3 000	-	2 500
Standard Bank of SA (2)	1 000	-	1 000	-
Absa (2)(4)	1 000	-	-	-
	6 500	**4 000**	**1 500**	**3 500**

(1) The borrowing limits for bonds is as approved from time to time by the Board as recommended by the Finance committee. The borrowing limits for the bonds are governed by the total acceptable issuance limit of R21 billion.
(2) This is a revolving credit facility.
(3) This excludes loan commitments reflected in the table below.
(4) The facility expired on the 25 July 2020

The limits for commercial paper and the individual bonds are the authorised limits for utilisation of the individual bonds and commercial paper. The aggregate utilisation of the commercial paper and bonds is capped by the total borrowing authority limit.

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

B. Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and includes the contractual maturity analysis reports for non-derivative financial assets and liabilities as well as the liquidity analysis for derivatives.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities.
The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 10.5 and 10.6.

As at 31 March, VRS had contractual maturities as summarised below:

2022	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
Non-derivative financial assets / (liabilities)	**%**	**R mil**	**1-5 years R mil**	**>5 years R mil**	**R mil**	**R mil**
Financial assets						
Tariff receivable	24,67%	5 118	8 204	18 938	27 142	32 260
Loans and receivables	Not applicable	622	-	-	-	622
Fixed term investments	7.00%	-	-	73	73	73
Cash and cash equivalents (1)	4.44%	5 652	-	-	-	5 652
Financial asset maturities		11 392	8 204	19 011	27 215	38 607
Financial liabilities						
Variable rate loans: local (1)	6.71%	(1 547)	(8 160)	(4 618)	(12 778)	(14 325)
Trade and other payables (excluding interest payable) (2)	Not applicable	(316)	-	-	-	(316)
Financial liabilities maturities		(1 863)	(8 160)	(4 618)	(12 778)	(14 641)
Net financial asset/ (liabilities)		**9 529**	**44**	**14 393**	**14 437**	**23 966**

2021	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
Non-derivative financial assets / (liabilities)	**%**	**R mil**	**1-5 years R mil**	**>5 years R mil**	**R mil**	**R mil**
Financial assets						
Tariff receivable	23.48	1 562	13 349	13 966	27 315	28 877
Loans and receivables	Not applicable	222	-	-	-	222
Fixed term investments	7	-	89	-	89	89

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

Cash and cash equivalents (1)	3.99	6 654	-	-	-	6 654
Financial asset maturities		8 438	13 438	13 966	27 404	35 842
Financial liabilities						
Bonds	9.08	(9 857)	-	-	-	(9 857)
Fixed rate loans: Local	10.16	-	-	-	-	-
Variable rate loans: local (1)	6.32	(471)	(2 058)	(3 422)	(5 480)	(5 951)
Lease liability	8.90	-	-	-	-	-
Trade and other payables (excluding interest payable) (2)	Not applicable	(343)	-	-	-	(343)
Financial liabilities maturities		(10 671)	(2 058)	(3 422)	(5 480)	(16 151)
Net financial asset/ (liabilities)		**(2 233)**	**11 380**	**10 544**	**21 924**	**19 691**

(1) The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities are subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.
(2) Accrued interest has been included with the applicable instruments in the table above.

The above contractual maturities reflect the net cash outflows and inflows and are therefore different from the carrying values of the liabilities at reporting date.

BWP

A. Financing facilities

Funding sources and utilisation at 31 March:

	2022 Rmil	2021 Rmil
Total borrowing authority		
Global limit (1)	411	488
Utilisation	(283)	(380)
Available	**128**	**108**

The table above includes the total utilisation of all facilities, including both local and foreign loans, against the borrowing limit.

(1) The Global limit is as set by National Treasury and governs the total limit of gross liabilities of the project. The individual limit is set internally from time to time when markets are suitable to move from one instrument to the other.

Total utilisation of capital market and commercial paper facilities

The following tables reflect the commercial paper and excludes local and foreign loans as the latter do not have authorised limits.

Each year the Finance Committee reviews and approves facility utilisation for the financial year.

2022 **Approved facilities** **Total issued to date**	**Facility amount mil**	**Issued mil**	**Available (3)(4) Rmil**	**Outstanding debt (3) Rmil**
Commercial Paper Programme	R450		450	-
DBSA (1)	R500	R400	-	140
European Investment Bank (1) (2) (3)	R800	R890	-	143
Absa	R300	-	300	-
			750	**283**

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

2021	**Individual limit**	**Disbursed (3)**	**Available (3)(4)**	**Outstanding debt**
Approved facilities	**mil**	**mil**	**Rmil**	**Rmil**
Total issued to date				
Commercial Paper Programme	R450	-	450	-
DBSA (1)	R500	R400	-	160
European Investment Bank (1) (2) (3)	R800	R890	-	200
Absa	R300	20	280	20
			730	**380**

(1) The facilities are not available for further drawdowns.
(2) This is a Euro facility drawn in Rands and repaid in Rands. The utilisation is based on the actual Euro/ZAR exchange rates and the facility is based on the original contract exchange rates.
(3) All amounts are in ZAR unless otherwise stated.
(4) Where the available amount is zero, the drawdown period has expired.

B. Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and include the contractual maturity analysis reports for non-derivative financial assets and liabilities. There is no liquidity analysis for derivatives as there were no derivative instruments in BWP.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities. The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 10.5 and 10.6.

As at 31 March, BWP had contractual maturities as summarised below:

2022	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Tariff receivable	4,44	132	285	29	314	446
Cash and cash equivalents (1)	4.3	77	-	-	-	77
Financial asset maturities		209	285	29	314	523
Financial liabilities						
Fixed rate loans: Local	8.43	(100)	(203)	(44)	(247)	(347)
Variable rate loans: local (1)	5.65	-	-	-	-	-
Trade and other payables (excluding interest payable) (2)	Not Applicable	(1)	-	-	-	(1)
Financial liabilities maturities		(101)	(203)	(44)	(247)	(348)
Net financial asset/ (liabilities)		**108**	**82**	**(15)**	**67**	**175**

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

2021	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Tariff receivable	4.18	110	310	22	332	442
Cash and cash equivalents (1)	3.64	68	-	-	-	68
Financial asset maturities		178	310	22	332	510
Financial liabilities						
Fixed rate loans: Local	8.39	(106)	(278)	(69)	(347)	(453)
Variable rate loans: local (1)	5.65	(1)	(7)	(26)	(33)	(34)
Trade and other payables (excluding interest payable) (2)	Not Applicable	(1)	-	-	-	(1)
Financial liabilities maturities		(108)	(285)	(95)	(380)	(488)
Net financial asset/ (liabilities)		**70**	**25**	**(73)**	**(48)**	**22**

(1) The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities are subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.
(2) Loan repayments are made periodically as per the respective agreements.
(3) Accrued interest has been included with the applicable instruments in the table.

VRESAP

A. Financing facilities

Funding sources and utilisation at 31 March:

	2022 Rmil	2021 Rmil
Total borrowing authority		
Borrowing limit	3 307	3 798
Utilisation	(2 809)	(3 035)
Available	**498**	**763**

2022	Facility amount	Disbursed	Available	Outstanding debt (3)
Approved facilities	**Rmil**	**Rmil**	**Rmil**	**Rmil**
Total issued to date				
Commercial Paper Programme	500	50	450	50
European Investment Bank (1) (2)	R906	R412	-	412
Standard Bank of SA	1 350	1 350	-	1 021
Absa	1 000	1002	-	1 002
Main Street 196 Pty Ltd - a SPV of Investec	155	155	-	91
Nedbank	350	350	-	233
			450	**2 809**

Repurchases

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

2021	**Facility amount**	**Issued**	**Available**	**Outstanding debt (3)**
Approved facilities	**Rmil**	**Rmil**	**Rmil**	**Rmil**
Total issued to date				
Commercial Paper Programme (including Term Paper)	500	50	450	50
European Investment Bank (1) (2)	R906	R412	-	474
Standard Bank of SA	1 350	1 350	-	1 133
Absa	1 000	1005	-	1 005
Main Street 196 Pty Ltd - a SPV of Investec	155	155	-	101
Nedbank	350	350	-	272
			450	**3 035**

(1) This is a Euro denominated facility drawn in Rands and repaid in Rands.
(2) All amounts are in ZAR unless otherwise stated.

B. Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and includes the contractual maturity analysis reports for non-derivative financial assets and liabilities. There is no liquidity analysis for derivatives as there were no derivative instruments in VRESAP.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities. The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 10.5 and 10.6.

As at 31 March, VRESAP had contractual maturities as summarised below:

2022	**Weighted average effective interest rate**	**Total undiscount d current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscount d non-current financial assets / (liabilities)**	**Total undiscount d financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Tariff receivable	7,31	600	3 241	392	3 633	4 233
Cash and cash equivalents (1)	4.4	208	-	-	-	208
Financial asset maturities		808	3 241	392	3 633	4 441
Financial liabilities						
Term paper	5.89	(52)	-	-	-	(52)
Fixed rate loans: Local	10.07	(391)	(1 506)	(524)	(2 030)	(2 421)
Variable rate loans: local (1)	8.16	(91)	(430)	(1 031)	(1 461)	(1 552)
Trade and other payables (excluding interest payable) (2)	Not Applicable	(2)	-	-	-	(2)
Financial liabilities maturities		(536)	(1 936)	(1 555)	(3 491)	(4 027)
Net financial asset/ (liabilities)		**272**	**1 305**	**(1 163)**	**142**	**414**

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

2021	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Tariff receivable	6.2	558	3 254	668	3 922	4 480
Cash and cash equivalents (1)	3.8	95	-	-	-	95
Financial asset maturities		653	3 254	668	3 922	4 575
Financial liabilities						
Term paper	5.65	-	(52)	-	(52)	(52)
Fixed rate loans: Local	10.06	(397)	(1 530)	(893)	(2 423)	(2 820)
Variable rate loans: local (1)	7.07	(84)	(411)	(1 161)	(1 572)	(1 656)
Trade and other payables (excluding interest payable) (2)	Not Applicable	(3)	-	-	-	(3)
Financial liabilities maturities		(484)	(1 993)	(2 054)	(4 047)	(4 531)
Net financial asset/ (liabilities)		**169**	**1 261**	**(1 386)**	**(125)**	**44**

(1) The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities are subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.
(2) Loan repayments are made periodically as per the respective agreements.
(3) Accrued interest has been included with the applicable instruments in the table.

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

MCWAP-1

A. Financing facilities

Funding sources and utilisation at 31 March:

	2022 Rmil	2021 Rmil
Total borrowing authority		
Borrowing limit	4 690	2 041
Utilisation	(899)	(1 279)
Available	**3 791**	**762**

2022	Facility amount	Issued	Available(2)	Outstanding debt (3)
Approved facilities	Rmil	Rmil	Rmil	R
Total issued to date				
Investec	700	498	-	260
Investec(1)	200	-	200	-
Nedbank	600	225	-	-
Rand Merchant Bank iNdwa	700	700	-	639
	2 200	**1 423**	**200**	**899**

2021	Individual limit	Issued	Available	Outstanding debt (3)
Approved facilities	Rmil	Rmil	Rmil	Rmil
Total issued to date				
Investec	700	498	-	438
Investec (1)	200	-	200	-
Nedbank	600	225	-	71
Rand Merchant Bank iNdwa	700	700	-	770
	2 200	**1 423**	**200**	**1 279**

(1) - This is a revolving credit facility.
(2) - Where the available amount is zero, the drawdown period has expired.

B. Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and includes the contractual maturity analysis reports for non-derivative financial assets and liabilities. There is no liquidity analysis for derivatives as there were no derivative instruments in MCWAP-1.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities. The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 10.5 and 10.6.

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

As at 31 March, MCWAP-1 had contractual maturities as summarised below:

2022	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Tariff receivable	17,47	295	393	460	853	1 148
Loans and receivables	NA	12	-	-	-	12
Cash and cash equivalents (1)	4.4	999	-	-	-	999
Financial asset maturities		1 306	393	460	853	2 159
Financial liabilities						
Fixed rate loans: Local	9.49	(724)	(160)	(229)	(389)	(1 113)
Trade and other payables (excluding interest payable) (2)	NA	(325)	-	-	-	(325)
Financial liabilities maturities		(1 049)	(160)	(229)	(389)	(1 438)
Net financial asset/ (liabilities)		**257**	**233**	**231**	**464**	**721**

2021	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Tariff receivable	33.79	263	668	93	761	1 024
Loans and receivables	Not applicable	6	-	-	-	6
Cash and cash equivalents (1)	3.81	1 351	-	-	-	1 351
Financial asset maturities		1 620	668	93	761	2 381
Financial liabilities						
Fixed rate loans: Local	9.50	(122)	(480)	(1 105)	(1 585)	(1 707)
Variable rate loans: local (1)	5.86	(38)	(185)	(378)	(563)	(601)
Trade and other payables (excluding interest payable) (2)	Not Applicable	(527)	-	-	-	(527)
Financial liabilities maturities		(687)	(665)	(1 483)	(2 148)	(2 835)
Net financial asset/ (liabilities)		**933**	**3**	**(1 390)**	**(1 387)**	**(454)**

(1) The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities are subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.
(2) Loan repayments are made periodically as per the respective agreements.
(3) Accrued interest has been included with the applicable instruments in the table.

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

MMTS-2

A. Financing facilities

Funding sources and utilisation at 31 March:

	2022 Rmil	2021 Rmil
Total borrowing authority		
Borrowing limit	1 273	1 795
Utilisation	(582)	(1 273)
Available	**691**	**522**

2022	**Facility amount**	**Issued**	**Available(2)(4)**	**Outstanding debt (3)**
Approved facilities	**mil**	**mil**	**mil**	**Rmil**
Total issued to date				
Commercial Paper Programme	400	0	R 400	-
DBSA*	222	0	R222	-
European Investment Bank (1)(2)	€ 80	€ 54	€ 0	201
AFD (1) (2)	€ 70	€ 45	€ 0	216
KfW (1) (2)	€ 45	€ 29	€ 0	165
Total				**582**

2021	**Individual limit**	**Issued**	**Available(2)(4)**	**Outstanding debt (3)**
Approved facilities	**mil**	**mil**	**mil**	**Rmil**
Total issued to date				
Commercial Paper Programme	400	0	400	-
DBSA*	230	0	230	-
European Investment Bank (1)(2)	€ 80	€ 54	€ 0	508
AFD (1) (2)	€ 70	€ 45	€ 0	470
KfW (1) (2)	€ 45	€ 29	€ 0	295
				1 273

(1) This is a Euro denominated facility drawn in Rands and repaid in Rands
(2) All amounts are in ZAR unless otherwise stated.
(3) Before the funding strategy is implemented, the borrowing limit is monitored to ensure it is not exceeded.
(4) Where the available amount is zero, the drawdown period has expired.

* The facility reduced from R250m to R230m in April 2020 and to R222m in April 2021. This is in terms of the Finance Agreement and will reduce annually.

B. Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and includes the contractual maturity analysis reports for non-derivative financial assets and liabilities. There is no liquidity analysis for derivatives as there were no derivative instruments in MMTS-2.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities. The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 10.5 and 10.6.

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

As at 31 March, MMTS-2 had contractual maturities as summarised below:

2022	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Loans and receivables	NA	21	-	-	-	21
Cash and cash equivalents (1)	4.15	959	-	-	-	959
Financial asset maturities		980	-	-	-	980
Financial liabilities						
Fixed rate loans: Local	8.93	(211)	-	-	-	(211)
Variable rate loans: local (1)	7.09	(407)	-	-	-	(407)
Trade and other payables (excluding interest payable) (2)	NA	(241)	-	-	-	(241)
Financial liabilities maturities		(859)	-	-	-	(859)
Net financial asset/ (liabilities)		**121**	**-**	**-**	**-**	**121**

2021	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Tariff receivable	27.41	602	42	16	58	660
Loans and receivables	NA	41	-	-	-	41
Cash and cash equivalents (1)	3.4	857	-	-	-	857
Financial asset maturities		1 500	42	16	58	1 558
Financial liabilities						
Fixed rate loans: Local	8.39	(95)	(334)	(316)	(650)	(745)
Variable rate loans: local (1)	9.74	(94)	(463)	(682)	(1 145)	(1 239)
Trade and other payables (excluding interest payable) (2)	NA	(37)	-	-	-	(37)
Financial liabilities maturities		(226)	(797)	(998)	(1 795)	(2 021)
Net financial asset/ (liabilities)		**1 274**	**(755)**	**(982)**	**(1 737)**	**(463)**

(1) The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities are subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.
(2) Loan repayments are made periodically as per the respective agreements.
(3) Accrued interest has been included with the applicable instruments in the table.

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7. **FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)**

ORWRDP

A. Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and include the contractual maturity analysis reports for non-derivative financial assets and liabilities. There is no liquidity analysis for derivatives as there were no derivative instruments in ORWRDP.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities. The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 10.5 and 10.6.

As at 31 March, ORWRDP had contractual maturities as summarised below:

2022	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Loans and receivables	NA	4	-	-	-	4
Cash and cash equivalents (1)	4.06	47	-	-	-	47
Financial asset maturities		51	-	-	-	51
Financial liabilities						
Trade and other payables (excluding interest payable) (2)	NA	(51)	-	-	-	(51)
Financial liabilities maturities		(51)	-	-	-	(51)
Net financial asset/ (liabilities)		**-**	**-**	**-**	**-**	**-**

2021	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Loans and receivables	NA	20	-	-	-	20
Cash and cash equivalents (1)	3.31	26	-	-	-	26
Financial asset maturities		46	-	-	-	46
Financial liabilities						
Trade and other payables (excluding interest payable) (2)	NA	(45)	-	-	-	(45)
Financial liabilities maturities		(45)	-	-	-	(45)
Net financial asset/ (liabilities)		**1**	**-**	**-**	**-**	**1**

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7. **FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)**

(1) The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities are subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.

KWSAP

A. Financing facilities

Funding sources and utilisation at 31 March:

	2022 Rmil	2021 Rmil
Total borrowing authority		
Borrowing limit	1 185	1 375
Utilisation	(1 090)	(1 186)
Available	**95**	**189**

2022	Facility amount	Issued	Available(2)	Outstanding debt (3)
Approved facilities	Rmil	Rmil	Rmil	Rmil
Total issued to date				
Commercial Paper Programme	500	-	500	-
Nedbank	400	369	-	252
Rand Merchant Bank iNdwa(1)	600	600	-	838
Absa	250	-	250	-
	1 750	**969**	**750**	**1 090**

2021	Facility amount	Issued	Available(2)	Outstanding debt (3)
Approved facilities	Rmil	Rmil	Rmil	Rmil
Total issued to date				
Commercial Paper Programme	500	-	500	-
Nedbank	400	369	-	276
Rand Merchant Bank iNdwa(1)	600	600	-	910
Absa	250	-	250	-
	1 750	**969**	**750**	**1 186**

(1) The outstanding debt is higher than the facility amount as interest was capitalised for four years.
(2) Where the availability amount is zero, the drawdown period has lapsed.

B. Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and includes the contractual maturity analysis reports for non-derivative financial assets and liabilities. There is no liquidity analysis for derivatives as there were no derivative instruments in KWSAP.

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities. The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 10.5 and 10.6.

As at 31 March, KWSAP had contractual maturities as summarised below:

2022	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Tariff receivable	11,96	262	720	760	1 480	1 742
Cash and cash equivalents (1)	4.42	260	-	-	-	260
Financial asset maturities		522	720	760	1 480	2 002
Financial liabilities						
Fixed rate loans: Local	9.58	(106)	(485)	(816)	(1 301)	(1 407)
Variable rate loans: local (1)	6.32	(44)	(245)	(76)	(321)	(365)
Trade and other payables (excluding interest payable) (2)	NA	(7)	-	-	-	(7)
Financial liabilities maturities		(157)	(730)	(892)	(1 622)	(1 779)
Net financial asset/ (liabilities)		**365**	**(10)**	**(132)**	**(142)**	**223**

2021	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Tariff receivable	0	933	-	-	-	933
Loans and receivables	NA	13	-	-	-	13
Cash and cash equivalents (1)	3.9	180	-	-	-	180
Financial asset maturities		1 126	-	-	-	1 126
Financial liabilities						
Fixed rate loans: Local	9.58	(119)	(458)	(968)	(1 426)	(1 545)
Variable rate loans: local (1)	5.63	(27)	(161)	(420)	(581)	(608)
Trade and other payables (excluding interest payable) (2)	NA	(7)	-	-	-	(7)
Financial liabilities maturities		(153)	(619)	(1 388)	(2 007)	(2 160)
Net financial asset/ (liabilities)		**973**	**(619)**	**(1 388)**	**(2 007)**	**(1 034)**

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

(1) The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities are subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.
(2) Loan repayments are made periodically as per the respective agreements.
(3) Accrued interest has been included with the applicable instruments in the table.

MCWAP-2

A.Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and includes the contractual maturity analysis reports for non-derivative financial assets and liabilities. There is no liquidity analysis for derivatives as there were no derivative instruments in MCWAP-2.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities .The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 10.5 and 10.6.

As at 31 March, MCWAP-2 had contractual maturities as summarised below:

2022	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Loans and receivables	Not Applicable	326	-	-	-	326
Cash and cash equivalents (1)	4,04	610	-	-	-	610
Financial asset maturities		936	-	-	-	936
Financial liabilities						
Trade and other payables (excluding interest payable) (2)	Not Applicable	(542)	-	-	-	(542)
Financial liabilities maturities		(542)	-	-	-	(542)
Net financial asset/ (liabilities)		**394**	**-**	**-**	**-**	**394**

2021	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Loans and receivables	Not Applicable	527	-	-	-	527

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7. **FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)**

Financial asset maturities		527	-	-	-	527
Financial liabilities						
Trade and other payables (excluding interest payable) (2)	Not Applicable	(176)	-	-	-	(176)
Financial liabilities maturities		(176)	-	-	-	(176)
Net financial asset/ (liabilities)		**351**	**-**	**-**	**-**	**351**

UMGENI

A. Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and includes the contractual maturity analysis reports for non-derivative financial assets and liabilities. There is no liquidity analysis for derivatives as there were no derivative instruments in Umgeni.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities. The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 10.5 and 10.6.

As at 31 March, UMGENI had contractual maturities as summarised below:

2022	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Loans and receivables	NA	4	-	-	-	4
Financial asset maturities		4	-	-	-	4
Financial liabilities						
Trade and other payables (excluding interest payable) (2)	NA	(1)	-	-	-	(1)
Financial liabilities maturities		(1)	-	-	-	(1)
Net financial asset/ (liabilities)		**3**	**-**	**-**	**-**	**3**

2021	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

Loans and receivables	Not Applicable	5	-	-	-	5
Financial asset maturities		5	-	-	-	5
Financial liabilities						
Trade and other payables (excluding interest payable) (2)	Not Applicable	(1)	-	-	-	(1)
Financial liabilities maturities		(1)	-	-	-	(1)
Net financial asset/ (liabilities)		**4**	**-**	**-**	**-**	**4**

MRWP

A. Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and includes the contractual maturity analysis reports for non-derivative financial assets and liabilities. There is no liquidity analysis for derivatives as there were no derivative instruments in MRWP.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities. The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 10.5 and 10.6.

As at 31 March, MRWP had contractual maturities as summarised below:

2022	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Loans and receivables	NA	9	-	-	-	9
Financial asset maturities		9	-	-	-	9
Financial liabilities						
Trade and other payables (excluding interest payable)	Not applicable	(9)	-	-	-	(9)
Financial liabilities maturities		(9)	-	-	-	(9)
Net financial asset/ (liabilities)		**-**	**-**	**-**	**-**	**-**

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

2021	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Loans and receivables	NA	8	-	-	-	8
Financial asset maturities		8	-	-	-	8
Financial liabilities						
Net financial asset/ (liabilities)		**8**	**-**	**-**	**-**	**8**

TCTA-C

A. Liquidity and interest risk tables

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities. The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 10.5 and 10.6.

As at 31 March, TCTA-C had contractual maturities as summarised below:

2022	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Cash and cash equivalents (1)	4.15	5	-	-	-	5
Financial asset maturities		5	-	-	-	5
Financial liabilities						
Trade and other payables (excluding interest payable) (2)	NA	(3)	-	-	-	(3)
Financial liabilities maturities		(3)	-	-	-	(3)
Net financial asset/ (liabilities)		**2**	**-**	**-**	**-**	**2**

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

2021	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
Non-derivative financial assets / (liabilities)	%	Rmil	1-5 years Rmil	>5 years Rmil	Rmil	Rmil
Financial assets						
Cash and cash equivalents (1)	3.4	3	-	-	-	3
Financial asset maturities		3	-	-	-	3
Financial liabilities						
Trade and other payables (excluding interest payable) (2)	NA	(1)	-	-	-	(1)
Financial liabilities maturities		(1)	-	-	-	(1)
Net financial asset/ (liabilities)		**2**	**-**	**-**	**-**	**2**

BRVAS

A. Liquidity and interest risk tables

.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail BRVAS's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities. The tables include the principal cash flows. The contractual maturity is based on the earliest date on which BRVAS may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand BRVAS's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 10.5 and 10.6.

As at 31 March, BRVAS had contractual maturities as summarised below:

2022	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
Non-derivative financial assets / (liabilities)	%	Rmil	1-5 years Rmil	>5 years Rmil	Rmil	Rmil
Financial assets						
Loans and receivables	NA	4	-	-	-	4
Cash and cash equivalents (1)	4.05	20	-	-	-	20
Financial asset maturities		24	-	-	-	24
Financial liabilities						
Trade and other payables (excluding interest payable) (2)	NA	(4)	-	-	-	(4)
Financial liabilities maturities		(4)	-	-	-	(4)
Net financial asset/ (liabilities)		**20**	**-**	**-**	**-**	**20**

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

2021	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
Non-derivative financial assets / (liabilities)		1-5 years	>5 years		
	Rmil	Rmil	Rmil	Rmil	Rmil
Financial assets					
Loans and receivables	43	-	-	-	43
Financial asset maturities	43	-	-	-	43
Financial liabilities					
Net financial asset/ (liabilities)	**43**	**-**	**-**	**-**	**43**

(1) The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities are subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.

(2) Accrued interest has been included with the applicable instruments in the table.

The above contractual maturities reflect the net cash outflows and inflows and are therefore different from the carrying values of the liabilities at reporting date.

KRIEL

A.Liquidity and interest risk tables

This project comprises the construction of a 3km pipeline from the KWSAP to Kriel water treatment works and the upgrading of the works.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities. The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 10.5 and 10.6.

As at 31 March, Kriel had contractual maturities as summarised below

2022	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
Non-derivative financial assets / (liabilities)	%	Rmil	1-5 years Rmil	>5 years Rmil	Rmil	Rmil
Financial assets						
Loans and receivables		2	-	-	-	2
Financial asset maturities		2	-	-	-	2
Financial liabilities						

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

Trade and other payables (excluding interest payable) (2)		(2)	-	-	-	(2)
Financial liabilities maturities		(2)	-	-	-	(2)
Net financial asset/ (liabilities)		**-**	**-**	**-**	**-**	**-**

2021	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
Non-derivative financial assets / (liabilities)	**%**	**Rmil**	**1-5 years Rmil**	**>5 years Rmil**	**Rmil**	**Rmil**
Financial assets						
Loans and receivables	NA	6	-	-	-	6
Financial asset maturities		6	-	-	-	6
Financial liabilities						
Trade and other payables (excluding interest payable) (2)	NA	(2)	-	-	-	(2)
Financial liabilities maturities		(2)	-	-	-	(2)
Net financial asset/ (liabilities)		**4**	**-**	**-**	**-**	**4**

(1) The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities are subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.
(2) Accrued interest has been included with the applicable instruments in the table.

The above contractual maturities reflect the net cash outflows and inflows and are therefore different from the carrying values of the liabilities at reporting date.

7.2.2. Credit risk

TCTA invests excess funds with counterparties and this exposes the organisation to credit risk. Credit risk is defined as the risk that a counterparty defaults on its obligations on maturity or redemption or presentation of paper for settlement, resulting in financial deficit to TCTA.

The credit risk is in two forms i.e. (i) the risk of financial deficit resulting from the failure of a counterparty to honour its obligations in accordance with the terms and conditions of a contract or (ii) the risk of financial deficit resulting from the failure of a counterparty to a financial transaction to effect timely settlement, in the correct amount and currency, of its obligations according to the terms and conditions of the relevant transaction(s). This section relates to the credit risk on financial market investments and derivatives as disclosed in the statement of financial position. Refer to note 10.4 for the assessment of the credit quality of the tariff receivable and note 12.1 for loans and other receivables.

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

TCTA has adopted a policy of only dealing with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial deficit from defaults. TCTA only transacts with entities that are rated the equivalent of investment grade and above. In terms of policy, TCTA will only invest with counterparties with a long-term rating of A or better. This information is supplied by independent rating agencies where available and, if not available, TCTA uses other publicly available financial information and its own trading records to rate its major customers. TCTA's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties. Credit exposure is controlled by setting counterparty limits that are reviewed and approved by the Finance Committee annually.

Hence, credit risk at TCTA is managed through the following:

- ensuring that TCTA deals with reputable counterparties;
- liaison with credit rating agencies;
- allocating counterparty investment limits;
- continuous monitoring of the financial status of counterparties;
- annual review of counterparty limits; and
- daily monitoring of utilisation of counterparty limits.

Limits are allocated based on the following:

- limits are allocated to counterparties with a minimum short-term rating of P-1 and long-term rating of A from Moody's rating agency, or the equivalent from the other rating agencies;
- an internal credit rating score is calculated based on qualitative and quantitative factors;
- the allocated credit limit can be up to 10% of shareholders' funds, depending on the internal credit rating, with a cap of R 1 500 million per counterparty; and
- the credit limit consumption of forward exchange contracts (FECs) with commercial banks is determined according to the Risk Policy whereby the maximum of a calculated risk weighting value or the mark-to-market value of an instrument will be used as the consumption against the credit limit of a specific counterparty.

To further mitigate against the credit risk associated with derivative instruments, TCTA has negotiated International Swap and Derivatives Association Master Agreement (ISDA) agreements with the various market-makers.

The credit limit per counterparty refers to the overall limit for all TCTA projects. Refer to note 6.2.2.1 to 6.2.2.7 for further detail for each project.

Concentration risk

Concentration risk in TCTA is measured per counterparty and per project. According to TCTA policy, the utilisation of a counterparty limit is subject to a 30% concentration limit per counterparty. The concentration limit is further extended to projects whereby investment to a counterparty should not exceed 30% of a single project's funds. This ensures that the portfolio is sufficiently diversified and is exposed to acceptable levels of risk. For each project, the amount of risk exposure to counterparties varies on a day-to-day basis depends on volumes of trades done. TCTA determines this exposure daily and prepares a report before any dealing is performed. An exception to the limits requires approval through exception reporting by the Risk department.

Similar credit ratings in the notes below, refer to different counterparties and are therefore not combined.

Counterparty risk
'The table shows investments with 6 Counterparties, 3 money market funds(MMFs) and the Corporation for Public Deposits (CPD). The maximum approved limit for investment with any one of the above counterparties is R 1 500 million.

TCTA had call investments with counterparties and money market investments with the MMFs.

Investments to each counterparty or MMF is spread across all projects. The available amount shows the difference between amount invested and approved counterparty limit.

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

2022

Investments Moody's Ratings: Long-term	Short-term	Counterparty	Credit imit Rmil	VRS Rmil	BWP Rmil	VRESAP Rmil	MCWAP-1 Rmil	MMTS-2 Rmil	ORWRDP Rmil	KWSAP Rmil	TCTA-C Rmil	MCWAP-2 Rmil	BRVAS Rmil	UMWP Rmil	Total utilisation Rmil	Available Rmil
Aa1	P-1	Counterparty 1	1 500	35	2	1	7	923	13	9	5	100	5	3	2 603	397
Aa1	P-1	Counterparty 2	1 500	387	14	14	44	9	9	10	-	175	7	3	2 172	(2 172)
Aa1	P-1	Counterparty 3	1 500	145	6	9	29	8	9	5	-	167	5	3	1 886	(1 886)
Aa1	P-1	Counterparty 4	1 500	112	6	9	39	8	7	6	-	168	3	3	1 861	(1 861)
NA	NA	Counterparty 5	-	73	-	-	-	-	-	-	-	-	-	-	73	(73)
Aa3	P-1	Counterparty 6	1 500	483	22	18	89	11	9	21	-	-	-	-	2 153	(2 153)
		MMF 1 *	-	798	10	10	111	-	-	21	-	-	-	-	950	-
		MMF 2 *	-	407	1	17	97	-	-	23	-	-	-	-	545	-
		MMF 3 *	-	438	9	32	87	-	-	34	-	-	-	-	600	-
		CPD **	-	2 846	7	98	496	-	-	131	-	-	-	-	3 578	-
		-	**7 500**	**5 724**	**77**	**208**	**999**	**959**	**47**	**260**	**5**	**610**	**20**	**12**	**16 421**	**(7 748)**

** Investments with the CPD cannot exceed 50% of available investment funds at any point
** This investment or counterparty is subject to a maximum of 50% of the project funds

N/A - Note 1:
On 30 March 2021, Moody's withdrew all ratings on Landbank.
R73m invested on VRS is subject to impairment and categorised as Stage 3. All other investments are not subject to impairment. Refer to note 10.10.4 for the reconciliation of movement on the provision for impairment.

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

2021

Investments Moody's Ratings: Long-term	Short-term	Credit limit Rm	VRS Rm	BWP Rm	VRESAP Rm	MCWAP-1 Rm	MMTS-2 Rm	ORWRDP Rm	KWSAP Rm	TCTA-C R	Total utilisation Rm	Available Rm
Aa1	P-1	1500	120	14	11	66	832	7	11	1	1 062	438
Aa1	P-1	1500	245	8	11	105	5	4	16	-	394	1 106
Aa1	P-1	1500	215	6	3	75	5	4	3	-	311	1 189
Aa1	P-1	1500	213	6	4	74	6	4	3	-	310	1 190
NA Note 1	NA	0	90	-	-	-	-	-	-	-	90	(90)
Aa3	P-1	1500	520	16	22	172	9	7	18	-	764	736
		*	1	-	-	-	-	-	-	-	1	-
		**	3 345	2	16	541	-	-	79	-	3 983	-
		*	802	6	11	128	-	-	21	-	968	-
		*	1 192	10	17	190	-	-	30	-	1 439	-
		7 500	**6 743**	**68**	**95**	**1 351**	**857**	**26**	**181**	**1**	**9 322**	**4 569**

* These three counterparties in total are subject to a maximum of 30% of the project funds

** This investment or counterparty is subject to a maximum of 50% of the project funds

Note 1:
As at 31 March 2021,Landbank made a capital repayment of R12m to TCTA , thus reducing the liability to R89m.
On 30 March 2021, Moody's withdrew all ratings on Landbank.
R90m invested on VRS is subject to impairment and categorised as Stage 3. All other investments are not subject to impairment. Refer to note 10.10.4 for the reconciliation of movement on the provision for impairment.

7.2.3. Market risk

Market risk is the risk that the fair value or cash flows of a financial instrument will fluctuate due to change in market prices. Market risk reflects currency risk, interest rate risk, and other price risks.

TCTA's activities expose it primarily to the financial risks of changes in interest rates. There is no foreign currency denominated borrowings.

.
All projects do not have any foreign currency exposures.

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

Interest rate risk

Interest rate risk is the risk of financial loss arising from adverse fluctuations in market interest rates. This is the risk that adverse changes in interest rates will cause a reduction in net income caused by increased cost from financial liabilities including repricing of TCTA's floating debt obligations and the short-term rollover of maturing debt.

TCTA manages interest rate risk by fixing a portion of its debt depending on market conditions. The Finance Committee approved an optimal capital structure where a minimum of 70% debt is fixed for all projects post construction. Currently most of the projects are above the approved capital structure.

TCTA does not have any derivatives hedging interest rate risk, instead attainment of the optimal capital structure and the proactive interest rate risk management strategies are applied.

VRS

Fixed vs. variable rate loans

The following table details the interest rate exposure for VRS.

The optimal capital structure based on the sensitivity simulation is 70% fixed (2021:70%) and 30% floating (2021:30%). This ensures limited fluctuation of the cumulative debt curve.

The ratio of fixed to floating debt as at 31 March 2022 was 100% (2021: 73%) fixed and 0% (2021: 27%) floating.

The proportional interest-rate exposures on total outstanding debt of the project can be summarised as follows:

2022	Borrowings at fixed rates	Borrowings at variable rates	Fixed rate borrowings as % of total debt book	Variable rate borrowings as % of total debt book
Interest -rate exposure on borrowings	**Rmil**	**Rmil**		
Borrowings	-	9 537	- %	100 %

2021	Borrowings at fixed rates	Borrowings at variable rates	Fixed rate borrowings as % of total debt book	Variable rate borrowings as % of total debt book
Interest -rate exposure on borrowings	**Rmil**	**Rmil**		
Borrowings	9 433	3 500	73 %	27 %

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2021: +/- 100bps) and +200bps and -200bps (2021: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on VRS's financial instruments held at the reporting date. All other variables are held constant.

Sensitivity analysis: Impact on surplus / (deficit)	2022 Rmil	2021 Rmil
Financial liabilities		
Change in interest rates of -100bps	89	36
Change in interest rates of +100bps	(89)	(36)
Change in interest rates of -200bps	178	72
Change in interest rates of +200bps	(178)	(72)
Financial assets		
Change in interest rates of -100bps	(45)	(39)
Change in interest rates of +100bps	45	39

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

Change in interest rates of -200bps	(89)	(78)
Change in interest rates of +200bps	89	78

The table above excludes the Tariff receivable.

Currently TCTA does not have any derivatives hedging interest rate risk. Interest rate risk is managed through achievement of optimal capital structure, and continuous monitoring of short-, medium- and long-term interest rates' exposures.

A change in interest rates will not have an impact on equity (2021: no impact).

BWP

Fixed vs. variable rate loans

The ratio of fixed to floating debt as at 31 March 2022 was 100% (2021: 95%) fixed and 0% (2021: 5%) floating.

2022	**Borrowings at fixed rates**	**Borrowings at variable rates**	**Fixed rate borrowings as % of total debt book**	**Variable rate borrowings as % of total debt book**
Interest -rate exposure on borrowings	**Rmil**	**Rmil**		
Borrowings	283	-	100 %	- %

2021	**Borrowings at fixed rates**	**Borrowings at variable rates**	**Fixed rate borrowings as % of total debt book**	**Variable rate borrowings as % of total debt book**
Interest -rate exposure on borrowings	**Rmil**	**Rmil**		
Borrowings	361	20	95 %	5 %

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2021: +/- 100bps) and +200bps and -200bps (2021: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on BWP's financial instruments held at the reporting date. All other variables are held constant.

Sensitivity analysis: Impact on surplus / (deficit)	**2022 Rmil**	**2021 Rmil**
Financial liabilities		
Change in interest rates of -200bps	-	1
Change in interest rates of +200bps	-	(1)
Financial assets		
Change in interest rates of -100bps	(1)	(1)
Change in interest rates of +100bps	1	1
Change in interest rates of -200bps	(2)	(2)
Change in interest rates of +200bps	2	2

The table above excludes the Tariff receivable.

(1) Where the numbers are reflected as zero, the movements are less than R500 000.

A change in interest rates will not have an impact on equity (2021: no impact).

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

VRESAP

to floating debt as at 31 March 2022 was 62% (2021: 64%) fixed and 38% (2021: 36%) floating.

2022	Borrowings at fixed rates	Borrowings at variable rates	Fixed rate borrowings as % of total debt book	Variable rate borrowings as % of total debt book
Interest -rate exposure on borrowings	**Rmil**	**Rmil**		
Borrowings	1 748	1 060	62 %	38 %

2021	Borrowings at fixed rates	Borrowings at variable rates	Fixed rate borrowings as % of total debt book	Variable rate borrowings as % of total debt book
Interest -rate exposure on borrowings	**Rmil**	**Rmil**		
Borrowings	1 952	1 083	64 %	36 %

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2021: +/- 100bps) and +200bps and -200bps (2021: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on VRESAP's financial instruments held at the reporting date. All other variables are held constant.

Sensitivity analysis: Impact on surplus / (deficit)	2022 Rmil	2021 Rmil
Financial liabilities		
Change in interest rates of -100bps	11	12
Change in interest rates of +100bps	(11)	(12)
Change in interest rates of -200bps	22	23
Change in interest rates of +200bps	(22)	(23)
Financial assets		
Change in interest rates of -100bps	(2)	(2)
Change in interest rates of +100bps	2	2
Change in interest rates of -200bps	(3)	(3)
Change in interest rates of +200bps	3	3

The table above excludes the Tariff receivable.

A change in interest rates will not have an impact on equity (2021: no impact).

MCWAP-1

Fixed vs. variable rate loans

The ratio of fixed to floating debt as at 31 March 2022 was 100% (2021: 73%) fixed and 0% (2021: 27%) floating.

2022	Borrowings at fixed rates	Borrowings at variable rates	Fixed rate borrowings as % of total debt book	Variable rate borrowings as % of total debt book
Interest -rate exposure on borrowings	**Rmil**	**Rmil**		
Borrowings	898	-	100 %	- %

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

2021	**Borrowings at fixed rates**	**Borrowings at variable rates**	**Fixed rate borrowings as % of total debt book**	**Variable rate borrowings as % of total debt book**
Interest -rate exposure on borrowings	**Rmil**	**Rmil**		
Borrowings	932	347	73 %	27 %

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2021: +/- 100bps) and +200bps and -200bps (2021: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on MCWAP's financial instruments held at the reporting date. All other variables are held constant.

Sensitivity analysis: Impact on surplus / (deficit)	**2022 Rmil**	**2021 Rmil**
Financial liabilities		
Change in interest rates of -100bps	2	3
Change in interest rates of +100bps	(2)	(3)
Change in interest rates of -200bps	3	7
Change in interest rates of +200bps	(3)	(7)
Financial assets		
Change in interest rates of -100bps	(12)	(10)
Change in interest rates of +100bps	12	10
Change in interest rates of -200bps	(24)	(19)
Change in interest rates of +200bps	24	19

The table above excludes the Tariff receivable.

A change in interest rates will not have an impact on equity (2021: no impact).

MMTS-2

Fixed vs. variable rate loans

The ratio of fixed to floating debt as at 31 March 2022 was 40% (2021: 40%) fixed and 60% (2021: 60%) floating.

2022	**Borrowings at fixed rates**	**Borrowings at variable rates**	**Fixed rate borrowings as % of total debt book**	**Variable rate borrowings as % of total debt book**
Interest -rate exposure on borrowings	**Rmil**	**Rmil**		
Borrowings	201	381	40 %	60 %

2021	**Borrowings at fixed rates**	**Borrowings at variable rates**	**Fixed rate borrowings as % of total debt book**	**Variable rate borrowings as % of total debt book**
Interest -rate exposure on borrowings	**Rmil**	**Rmil**		
Borrowings	508	765	40 %	60 %

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2021: +/- 100bps) and +200bps and -200bps (2021: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on MMTS's financial instruments held at the reporting date. All other variables are held constant.

Sensitivity analysis: Impact on surplus / (deficit)	2022 Rmil	2021 Rmil
Financial liabilities		
Change in interest rates of -100bps	5	8
Change in interest rates of +100bps	(5)	(8)
Change in interest rates of -200bps	11	16
Change in interest rates of +200bps	(11)	(16)
Financial assets		
Change in interest rates of -100bps	(8)	(6)
Change in interest rates of +100bps	8	6
Change in interest rates of -200bps	(15)	(12)
Change in interest rates of +200bps	15	12

The table above excludes the Tariff receivable.

A change in interest rates will not have an impact on equity (2021: no impact).

KWSAP

Fixed vs. variable rate loans

The following table details the interest rate exposure for KWSAP.

There ratio of fixed to floating debt as at 31 March 2022 was 75% (2021: 72%) fixed and 25% (2021: 28%) floating.

2022	Borrowings at fixed rates	Borrowings at variable rates	Fixed rate borrowings as % of total debt book	Variable rate borrowings as % of total debt book
Interest -rate exposure on borrowings	Rmil	Rmil		
Borrowings	820	269	75 %	25 %

2021	Borrowings at fixed rates	Borrowings at variable rates	Fixed rate borrowings as % of total debt book	Variable rate borrowings as % of total debt book
Interest -rate exposure on borrowings	Rmil	Rmil		
Borrowings	858	327	72 %	28 %

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2021: +/- 100bps) and +200bps and -200bps (2021: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on KWSAP's financial instruments held at the reporting date. All other variables are held constant.

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

Sensitivity analysis: Impact on surplus / (deficit)	2022 Rmil	2021 Rmil
Financial liabilities		
Change in interest rates of -100bps	2	2
Change in interest rates of +100bps	(2)	(2)
Change in interest rates of -200bps	5	5
Change in interest rates of +200bps	(5)	(5)
Financial assets		
Change in interest rates of -100bps	(2)	(2)
Change in interest rates of +100bps	2	2
Change in interest rates of -200bps	(5)	-3
Change in interest rates of +200bps	5	3

The table above excludes the Tariff receivable.

(1) Where the numbers are reflected as zero, the movements are less than R500 000.

A change in interest rates will not have an impact on equity (2021: no impact).

MMTS-1, UMGENI and KRIEL

These projects do not carry interest rate risk as they are being funded from the fiscus.

ORWRDP

Fixed vs. variable rate loans

There are no borrowings in this project for the current and 2021 financial year as this project is funded from the fiscus.

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2019: +/- 100bps) and +200bps and -200bps (2019: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on ORWRDP's financial instruments held at the reporting date. All other variables are held constant.

The results of the sensitivity analysis are less than R500 000

MCWAP-2

Fixed vs. variable rate loans

There are no borrowings in this project for the current financial year

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2021: +/- 100bps) and +200bps and -200bps (2021: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on MCWAP-2's financial instruments held at the reporting date. All other variables are held constant.

Sensitivity analysis: Impact on surplus / (deficit)	2022 Rmil	2021 Rmil
Financial liabilities		
Financial assets		
Change in interest rates of -100bps	(5)	-
Change in interest rates of +100bps	5	-
Change in interest rates of -200bps	(9)	-
Change in interest rates of +200bps	9	-

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

The table above excludes the Tariff receivable.

(1) Where the numbers are reflected as zero, the movements are less than R500 000.

A change in interest rates will not have an impact on equity (2021: no impact).

BRVAS

Fixed vs. variable rate loans

There are no borrowings in this project for the current financial year .

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2021: +/- 100bps) and +200bps and -200bps (2021: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on BRVAS's financial instruments held at the reporting date. All other variables are held constant.

Sensitivity analysis: Impact on surplus / (deficit)	2022 Rmil	2021 Rmil

The table above excludes the Tariff receivable.

(1) Where the numbers are reflected as zero, the movements are less than R500 000.

A change in interest rates will not have an impact on equity (2021: no impact).

UMWP

Fixed vs. variable rate loans

There are no borrowings in this project for the current financial year.

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2021: +/- 100bps) and +200bps and -200bps (2021: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on uMWP's financial instruments held at the reporting date. All other variables are held constant.

Sensitivity analysis: Impact on surplus / (deficit)	2022 Rmil	2021 Rmil
Financial liabilities		
Financial assets		
Change in interest rates of -100bps	-	-
Change in interest rates of +100bps	-	-
Change in interest rates of -200bps	-	-
Change in interest rates of +200bps	-	-

The table above excludes the Tariff receivable.

(1) Where the numbers are reflected as zero, the movements are less than R500 000.

A change in interest rates will not have an impact on equity (2021: no impact).

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7. FINANCIAL INSTRUMENT RISK MANAGEMENT (continued)

7.2.4. Refinancing risk

Refinancing risk is the possibility that TCTA cannot refinance by borrowing to repay its existing debt. The duration of liabilities can be viewed as the rate at which liabilities will reprice when refinanced. In terms of duration analysis, liabilities with short duration stand to gain by repricing at lower levels on refinancing date in a downward trending environment. But, since managing interest rate risk is more complex than increasing or decreasing the duration mismatch, duration matching is used as a guiding principle. In TCTA, duration is used in conjunction with other interest rate risk mitigation measures such as the sensitivity of the debt curve to changes in the capital structure, water demand, inflation and interest rates.

VRS

There were no bonds in issue as at 31 March 2022.

The table below shows the duration of bonds issued by TCTA as at 31 March:

2021	Maturity Date	Amount issued Rmil	Duration Years
WSP5	2021/05/28	9 433	0,14

Term paper is issued for a period less than a year.

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8. PROPERTY, PLANT AND EQUIPMENT

Summary of property, plant and equipment

	2022			2021		
	Cost or revaluation Rmil	Accumulated depreciation Rmil	Carrying value Rmil	Cost Rmil	Accumulated depreciation Rmil	Carrying value Rmil
Furniture and fixtures	4	(3)	1	4	(3)	1
Computer equipment	7	(7)	-	7	(6)	1
Office equipment	4	(4)	-	4	(4)	-
Motor vehicles	2	(1)	1	2	(1)	1
Leasehold improvements	18	(18)	-	18	(18)	-
Total	**35**	**(33)**	**2**	**35**	**(32)**	**3**

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8. PROPERTY, PLANT AND EQUIPMENT (continued)

Reconciliation of property, plant and equipment - 2022

	Opening balance Rmil	Additions Rmil	Depreciation Rmil	Carrying value Rmil
Furniture and fixtures	1	-	-	1
Computer equipment	1	1	(2)	-
Motor vehicles	1	-	-	1
	3	**1**	**(2)**	**2**

The depreciation for office equipment, motor vehicles and leasehold improvements is individually less than R500k but in aggregate can be rounded to R1m which will make the total depreciation to be equal to the amount disclosed on the Statement of Comprehensive Income of R3m.

Reconciliation of property, plant and equipment - 2021

	Opening balance Rmil	Disposals Rmil	Other changes / movements Rmil	Depreciation Rmil	Carrying value Rmil
Furniture and fixtures	-	-	1	-	1
Computer equipment	3	-	-	(2)	1
Motor vehicles	1	-	1	(1)	1
Leasehold improvements	1	(1)	-	-	-
	5	**(1)**	**2**	**(3)**	**3**

Property, plant and equipment encumbered as security

There are no assets that have been pledged as security.

Figures reported are in R'million.

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9. RIGHT OF USE OF ASSETS

The company has the option to purchase the plant at a nominal amount on completion of the lease term.

Details pertaining to leasing arrangements, where the company is lessee are presented below:

Net carrying amounts of right-of-use assets

The carrying amounts of right-of-use assets are as follows:

2022 **Net carrying amounts of right-of-use-assets**	**Cost** **Rmil**	**Accumulated depreciation** **Rmil**	**Depreciation** **Rmil**	**Carrying value** **Rmil**
Buildings	12	(9)	(3)	-
	12	(9)	(3)	-

2021 **Net carrying amounts of right-of-use-assets**	**Additions** **Rmil**	**Accumulated depreciation** **Rmil**	**Depreciation** **Rmil**	**Carrying value** **Rmil**
Buildings	12	(4)	(5)	3

2022 **Reconciliation of right-of-use asset**	**Opening balance** **Rmil**	**Depreciation** **Rmil**	**Carrying value** **Rmil**
Buildings	3	(3)	-
	3	(3)	-

2021 **Reconciliation of right-of-use asset**	**Opening balance** **Rmil**	**Depreciation** **Rmil**	**Carrying value** **Rmil**
Buildings	8	(5)	3

10. FINANCIAL INSTRUMENTS

10.1. Financial instruments by category

The accounting policies for financial instruments have been applied to the line items below:

The carrying values of financial assets and liabilities not carried at fair value, approximate their respective fair values.

10.1.1. Accounting classifications of financial assets

Financial assets as per the Statement of Financial Position at 31 March 2022:

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10. FINANCIAL INSTRUMENTS (continued)

Financial assets	**Note**	**Carrying amount Financial assets at amortised cost Rmil**	**Total carrying amount Rmil**
Financial assets measured at amortised cost			
Non-current financial assets			
Tariff receivable	10.4	9 083	9 083
AMD Receivables		2 089	2 089
Financial market investments	10.5	46	46
Current financial assets			
Tariff receivable	10.4	502	502
Trade and other receivables	12	35	35
AMD Receivables		101	101
Cash and cash equivalents	19	8 849	8 849
Total financial assets		**20 705**	**20 705**
Current/Non-current financial assets		**20 705**	**20 705**
Non-current		11 218	11 218
Current		9 487	9 487

Financial assets as per statement of financial position at 31 March 2021:

Financial assets	**Note**	**Carrying amount Financial assets at amortised cost Rmil**	**Total carrying amount Rmil**
Financial assets measured at amortised cost			
Non-current financial assets			
Tariff receivable	10.4	11 842	11 842
AMD Receivable		1 947	1 947
Financial market investments	10.5	57	57
Current financial assets			
Tariff receivable	10.4	1 012	1 012
Trade and other receivables	12	53	53
AMD Receivable		9	9
Cash and cash equivalents	19	9 234	9 234
Total financial assets		**24 154**	**24 154**
Current/Non-current financial assets		**24 154**	**24 154**
Non-current		13 846	13 846
Current		10 308	10 308

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10. FINANCIAL INSTRUMENTS (continued)

10.1.2. Accounting classifications of financial liabilities

Liabilities per the Statement of Financial Position at 31 March 2022:

Financial liabilities	Note	Carrying amount At amortised cost Rmil	Total carrying amount Rmil
Financial liabilities measured at amortised cost			
Non-current financial liabilities			
Borrowings	10.6.3	12 665	12 665
Fixed rate loans		2 759	2 759
Variable rate loans		9 466	9 466
CPI rate loans		440	440
Current financial liabilities	10.6.2		
Borrowings	10.6.2	2 534	2 534
Fixed rate loans		1 193	1 193
Variable rate loans		1 320	1 320
CPI rate loans		21	21
Foreign loans	10.6.2		
Total financial market liabilities measured at amortised cost		15 199	15 199
Trade and other payables		450	450
Total financial liabilities		**15 649**	**15 649**
Current/Non-current financial liabilities		**15 649**	**15 649**
Non-current		12 665	12 665
Current		2 984	2 984

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10. FINANCIAL INSTRUMENTS (continued)

Liabilities per the Statement of Financial Position at 31 March 2021:

		Carrying amount		Total carrying amount
Financial liabilities	**Note**	**At fair value through surplus or deficit Rmil**	**At amortised cost Rmil**	**Rmil**
Financial liabilities measured at amortised cost				
Non-current financial liabilities				
Borrowings	10.6.3	-	9 901	9 901
Fixed rate loans		-	4 207	4 207
Variable rate loans		-	5 258	5 258
CPI rate loans		-	436	436
Current financial liabilities	10.6.2			
Local debt	10.6.3			
Bonds		9 433	-	9 433
Other bonds		9 433	-	9 433
Other borrowings	10.6.2			
Other borrowings by TCTA		-	753	753
Fixed rate loans		-	404	404
Variable rate loans		-	330	330
CPI rate loans		-	19	19
Lease liabilities		-	4	4
Total financial market liabilities measured at amortised cost		9 433	10 658	20 091
Trade and other payables		-	683	683
Total financial liabilities		**9 433**	**11 341**	**20 774**
Current/Non-current financial liabilities		**9 433**	**11 341**	**20 774**
Non-current		-	9 901	9 901
Current		9 433	1 440	10 873

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10. FINANCIAL INSTRUMENTS (continued)

10.2. Significance of financial instruments

10.2.1. Financial assets

Details on the components of the tariff receivable are in note 10.4. The interest earned on the tariff receivable to compensate for the time value of money, is disclosed as "Finance income" on the Statement of Comprehensive Income and details provided in note 24.1.

10.2.2. Financial liabilities

The most significant financial liability is the bonds issued by TCTA. Note 10.8 provides detail on the respective redemption dates, the interest rate and the value of the issued bonds. Interest is paid semi-annually to bond holders.

10.3. Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

As part of the disclosure requirements for fair value measurements, TCTA classifies fair value measurements using a 'fair value hierarchy' that reflects the significance of the inputs used in making the measurements.

Fair value measurements are categorised into a three-level hierarchy, based on the type of inputs to the valuation techniques used, as follows:
- level 1 inputs are quoted prices in active markets for items identical to the asset or liability being measured;
- level 2 inputs are other observable inputs other than quoted market prices included in level 1 that are observable either directly or indirectly; and
- level 3 inputs are unobservable inputs which management has developed to reflect the assumptions that market participants would use when determining an appropriate price for the asset or liability.

The categorisation of the fair value measurement into one of the three different levels is determined on the basis of the lowest level input that is significant to the fair value measurement in its entirety. The significance of an input is assessed against the fair value measurement in its entirety. Assessing the significance of a particular input to the fair value measurement in its entirety requires judgement, considering factors specific to the asset or liability.

The carrying value of financial assets and liabilities not carried at fair value approximate their respective fair values, except for the bonds issued by LHWP. Disclosed in note 10.3.1.

There have been no transfers between level 1 and level 2 during the year.

10.3.1. Financial liabilities

The fair value of financial liabilities for disclosure purposes is estimated by discounting the contractual future cash flows at the current market interest rate that is available to TCTA for similar financial instruments. These are non-recurring.

Fair value gains determined for disclosure purposes are R354m.

VRS

	2022	2021	Fair value hierarchy	Valuation technique(s) and key input(s)
Instruments	**Rmil**	**Rmil**		
Other bonds	-	9 787	Level 2	Market data

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10. FINANCIAL INSTRUMENTS (continued)

10.4. Tariff receivables

10.4.1. Totals

	2022			2021		
	Non-Current	Current	Tariff receivable	Non-Current	Current	Tariff receivable
Project	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**
VRS	4 969	-	4 969	6 956	-	6 956
BWP	208	71	279	299	93	392
VRESAP	2 847	291	3 138	3 180	339	3 519
MCWAP-1	337	33	370	406	95	501
MMTS-2	-	-	-	68	426	494
KWSAP	722	107	829	933	59	992
Total	**9 083**	**502**	**9 585**	**11 842**	**1 012**	**12 854**

10.4.2. Reconciliation of movements in the tariff receivable

The tariff receivable arises as the contra to the construction revenue earned in each project, and is measured at amortised cost using the effective interest method.

2022	**Opening Balance 1 April 2021**	**Construction revenue earned**	**Cost related payment reimbursement**	**Revenue from services rendered and Other income**	**Tariffs or transfers received from DWS**	**Interest income earned on the tariff receivable**	**VAT on debtors**	**Closing Balance 31 March 2022**
Project	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**
VRS	6 956	-	3 261	280	(7 231)	1 678	23	4 969
BWP	392	-	-	7	(138)	18	-	279
VRESAP	3 519	-	-	8	(608)	219	-	3 138
MCWAP-1	501	-	-	7	(303)	169	(4)	370
MMTS-2	494	(2)	-	15	(683)	177	(1)	-
KWSAP	992	-	-	6	(270)	104	(3)	829
	12 854	**(2)**	**3 261**	**323**	**(9 233)**	**2 365**	**15**	**9 585**

2021	**Opening Balance 1 April 2020**	**Construction Revenue earned**	**Cost related payment reimbur-sement**	**Revenue from services rendered and Other income**	**Tariffs or transfers received from DWS**	**Interest income earned on the tariff receivable**	**Net VAT on debtors**	**Closing Balance 31 March 2021**
Project	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**
VRS	9 881	**-**	1 984	441	(6 878)	1 617	(89)	6 956
BWP	530	**-**	-	2	(170)	30	-	392
VRESAP	3 804	**-**	-	8	(529)	236	-	3 519
MCWAP-1	633	**-**	-	9	(257)	112	4	501
MMTS-2	939	**(5)**	-	10	(686)	225	10	494
KWSAP	1 062	**-**	-	6	(164)	84	4	992
	16 849	**(5)**	**1 984**	**476**	**(8 684)**	**2 304**	**(71)**	**12 854**

10.4.3. DWS Debtor

The DWS invoiced debtor relates to amounts outstanding from the DWS for commercially funded projects. Included in the tariff receivable are invoiced amounts outstanding from the DWS amounting to R803m (2021:R762m). The ageing of those amounts are reflected below:

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10. FINANCIAL INSTRUMENTS (continued)

2022	Neither past due nor impaired	Past due but not impaired				Total
		<30 days	30-60 days	61-90 days	>90 days	
Project	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**
VRS	642	-	-	-	-	642
VRESAP	59	-	-	-	-	59
MMTS-2	85	-	-	-	-	85
KWSAP	17	-	-	-	-	17
Total	**803**	**-**	**-**	**-**	**-**	**803**

2021	Neither past due nor impaired	Past due but not impaired				Total
		<30 days	30-60 days	61-90 days	>90 days	
Project	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**
VRS	561	-	-	-	201	762
VRESAP	55	-	-	-	-	55
MCWAP-1	76	-	-	-	-	76
MMTS-2	43	-	-	-	-	43
KWSAP	27	-	-	-	-	27
Total	**762**	**-**	**-**	**-**	**201**	**963**

TCTA invoices to the DWS are due 30 days after the date of invoice for VRS, BWP and MMTS-2. VRESAP invoices are due 30 days after the DWS has billed the users and KWSAP invoices are due 35 days after DWS has billed the user.
TCTA issued invoices to the Department in May 2020 relating to interest raised on overdue invoices issued from 2015 financial year. The Department has indicated no intentions of settling these invoices. Based on the ageing and the unlikelyhood of receipt of these invoices it is therefore prudent for TCTA to impair these invoices.

Credit risk

The following table sets out information about the credit quality of financial instruments to which the impairment requirements in IFRS 9 are applicable'.

Maturity analysis of Trade receivables	**Current Rmil**	**>30 days R mil**	**>60 days Rmil**	**>90 days Rmil**	**Total Rmil**
Receivables - invoices issued	803	-	-	-	803
Receivables - interest invoices issued	-	-	-	201	201
Total per maturity interval	**803**	**-**	**-**	**201**	**1 004**

The credit losses (Impairment) relates to interest on overdue invoices not paid by DWS in previous years. These were only issued in 2021 and remain unpaid by the Department since issued and based on management judgement these will likely not be paid due to engagements with the Department.

Maturity analysis of Trade receivables	**Current Rmil**	**>30 days R mil**	**>60 days Rmil**	**>90 days Rmil**	**Total Rmil**
Expected credit losses	-	-	-	-	-
Estimated gross carrying amount at default	-	-	-	201	201
Lifetime ECL	**-**	**-**	**-**	**201**	**201**

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Notes to the Annual Financial Statements

10. FINANCIAL INSTRUMENTS (continued)

	2022		2021	
Financial market investments	**Current Rmil**	**Non-current Rmil**	**Current Rmil**	**Non-current Rmil**
VRS	-	46	-	57

10.5.1. Balances per project

The following are the total current and non-current financial assets disclosed on the Statement of Financial Position:

	2022		2021	
Project	**Current Rmil**	**Non-current Rmil**	**Current Rmil**	**Non-current Rmil**
VRS	6,364	7,104	6,885	8,960
BWP	148	208	161	299
VRESAP	499	2,847	434	3,180
MCWAP-1	1,044	337	1,452	406
MMTS-2	980	-	1,303	68
ORWRDP	51	-	46	-
KWSAP	367	722	239	933
UMGENI	4	-	5	-
KRIEL	6	-	6	-
TCTA-C	5	-	3	-
MRWP	1	-	8	-
MCWAP-2	936	-	527	-
BRVAS	20	-	43	-
UMWP	12	-	28	-
Inter-project loan elimination	(950)	-	(832)	-
Balance on statement of financial position	**9,487**	**11,218**	**10,308**	**13,846**

The inter-project loan balances are the overhead cost recovery mechanism between VRS and the other projects. In addition, an inter-project receivable is refelected when funds for one project are received in another project's Bank account while the bank account for the other project is still in the process of being opened. A receivable will result in an equal and reciprocal disclosure in payables. These inter-project balances are then eliminated on aggregation.

Reconciliation of current and non-current financial assets disclosed on the statement of financial position:

	2022	2021 Current	2022	2021 Non-current
Balances on statement of position	**Rmil**	**Rmil**	**Rmil**	**Rmil**
Tariff receivable	502	1,012	9,083	11,842
Trade and other receivables	35	53	-	-
Financial market investments	-	-	46	57
Cash and cash equivalents	8,849	9,234	-	-
AMD Receivables	101	9	2,089	1,947
Total financial assets	**9,487**	**10,308**	**11,218**	**13,846**

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Notes to the Annual Financial Statements

10. FINANCIAL INSTRUMENTS (continued)

10.5.2. Current financial assets per project

Current financial assets	**2022 Rmil**	**2021 Rmil**
VRS		
Trade and other receivables	611	222
Cash and cash equivalents	5 652	6 654
AMD Receivable	101	9
Inter-project loan elimination	(606)	(215)
	5 758	**6 670**
BWP		
Trade and other receivables (amortised cost)	71	93
Cash and cash equivalents	77	68
	148	**161**
VRESAP		
Trade and other receivables	291	339
Cash and cash equivalents	208	95
	499	**434**
MCWAP-1		
Trade and other receivables	33	95
Trade and other receivables	12	6
Cash and cash equivalents	999	1 351
Inter-project loan elimination	(12)	(6)
	1 032	**1 446**
MMTS-2		
Trade and other receivables	-	426
Trade and other receivables	21	21
Cash and cash equivalents	960	857
	981	**1 304**
ORWRDP		
Trade and other receivables	4	20
Cash and cash equivalents	47	26
	51	**46**
KWSAP		
Trade and other receivables	107	59
Cash and cash equivalents	260	180
	367	**239**
MCWAP-2		
Trade and other receivables	325	527
Cash and cash equivalents	610	-
Inter-project loan elimination	(325)	(527)
	610	**-**

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10. FINANCIAL INSTRUMENTS (continued)

	2022 Rmil	2021 Rmil
UMGENI		
Trade and other receivables	4	5
KRIEL		
Trade and other receivables	6	6
Inter-project loan elimination	(6)	(6)
	-	**-**
TCTA-C		
Cash and cash equivalents	5	3
MRWP		
Trade and other receivables	1	8
Inter-project loan elimination	(1)	(8)
	-	**-**
BRVAS		
Trade and other receivables	-	43
Cash and cash equivalents	20	-
Inter-project loan elimination	-	(43)
	20	**-**
UMWP		
Trade and other receivables	-	28
Cash and cash equivalents	12	-
Inter-project loan elimination	-	(28)
	12	**-**
Total current financial assets	**9 487**	**10 308**

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Annual Financial Statements for the year ended 31 March 2022

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10. FINANCIAL INSTRUMENTS (continued)

10.5.3. Non- current financial assets per project

		2022	Total noncurrent financial assets		2021	Total noncurrent financial assets
Non-current financial assets	**1 to 5 year Rmil**	**>5 years Rmil**	**Rmil**	**1 to 5 year Rmil**	**>5 years Rmil**	**Rmil**
VRS						
Tariff receivable	-	4 969	4 969	-	6 956	6 956
Held to maturity (amortised cost)	46	-	46	57	-	57
AMD receivables	2 089	-	2 089	1 947	-	1 947
	2 135	**4 969**	**7 104**	**2 004**	**6 956**	**8 960**
BWP						
Tariff receivable	208	-	208	277	22	299
VRESAP						
Tariff receivable	2 429	445	2 874	1 978	1 202	3 180
MCWAP-1						
Tariff receivable	131	206	337	406	-	406
MMTS-2						
Tariff receivable	-	-	-	68	-	68
KWSAP						
Tariff receivable	394	328	722	254	679	933
Total non-current financial assets	**5 297**	**5 948**	**11 245**	**4 987**	**8 859**	**13 846**

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Notes to the Annual Financial Statements

10. FINANCIAL INSTRUMENTS (continued)

10.6. Financial liabilities: current versus non-current

10.6.1. Totals

	2022		2021	
Project	**Current Rmil**	**Non-current Rmil**	**Current Rmil**	**Non-current Rmil**
VRS	1,227	8,683	10,342	3,251
BWP	79	206	79	303
VRESAP	328	2,509	264	2,802
MCWAP-1	989	244	591	1,227
MMTS-2	629	-	147	1,178
ORWRDP	52	-	45	-
KWSAP	75	1,023	54	1,140
UMGENI	1	-	1	-
KRIEL	2	-	2	-
TCTA-C	2	-	1	-
MRWP	1	-	-	-
MCWAP-2	542	-	176	-
BRVAS	4	-	3	-
UMWP	3	-	-	-
Interproject elimination	(950)	-	(832)	-
Balance on Statement of Financial Position	**2,984**	**12,665**	**10,873**	**9,901**

The inter-project loan balances are the overhead cost recovery mechanism between VRS and the other projects. In addition, an inter-project receivable is refelected when funds for one project are received in another project's Bank account while the bank account for the other project is still in the process of being opened. A receivable will result in an equal and reciprocal disclosure in payables. These inter-project balances are then eliminated on aggregation.

Reconciliation of current and non-current financial liabilities disclosed on the statement of financial position:

	2022	2021	2022	2021
		Current		Non-current
Balances on statement of position	**Rmil**	**Rmil**	**Rmil**	**Rmil**
Borrowings	2,534	10,185	12,665	9,901
Finance Lease liability	-	4	-	-
Trade and other payables	450	684	-	-
Total financial liabilities	**2,984**	**10,873**	**12,665**	**9,901**

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Annual Financial Statements for the year ended March 31, 2022

Notes to the Annual Financial Statements

10. FINANCIAL INSTRUMENTS (continued)

10.6.2. Current financial market liabilities

	2022 Rmil	2021 Rmil
VRS		
Borrowings	854	9,682
Lease liabilities	-	4
Trade and other payables	373	656
Inter-project elimination	(12)	(84)
Total per project	**1,215**	**10,258**
BWP		
Borrowings	77	77
Trade and other payables	2	2
Inter-project elimination	(1)	(1)
Total per project	**78**	**78**
VRESAP		
Borrowings	300	233
Trade and other payables	28	31
Inter-project elimination	(2)	(1)
Total per project	**326**	**263**
MCWAP-1		
Borrowings	654	52
Trade and other payables	335	539
Inter-project elimination	(325)	(527)
Total per project	**664**	**64**
MMTS-2		
Borrowings	582	95
Trade and other payables	47	52
Inter-project elimination	(3)	(1)
Total per project	**626**	**146**
ORWRDP		
Trade and other payables	52	45
Inter-project elimination	(52)	(38)
Total per project	**-**	**7**
KWSAP		
Borrowings	67	46
Trade and other payables	8	8
Inter-project elimination	(7)	(7)
Total per project	**68**	**47**
UMGENI		
Trade and other payables	1	1
KRIEL		
Trade and other payables	2	2
Inter-project elimination	(2)	(2)

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10. FINANCIAL INSTRUMENTS (continued)

	2022 Rmil	2021 Rmil
TCTA-C		
Trade and other payables	2	1
Inter-project elimination	(2)	(1)
Total per project	**-**	**-**
MRWP		
Trade and other payables	1	-
Inter-project elimination	(1)	-
Total per project	**-**	**-**
MCWAP-2		
Trade and other payables	542	176
Inter-project elimination	(537)	(170)
Total per project	**5**	**6**
BRVAS		
Trade and other payables	4	3
Inter-project elimination	(3)	-
Total per project	**1**	**3**
UMWP		
Trade and other payables	3	4
Inter-project elimination	(3)	(4)
Total per project	**-**	**-**
Total current financial liabilities	**2 985**	**10 873**

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Annual Financial Statements for the year ended 31 March 2022

Notes to the Annual Financial Statements

10. FINANCIAL INSTRUMENTS (continued)

10.6.3. Non-current financial liabilities

		2022	Total non-current financial liabilities		2021	Total non-current financial liabilities
Project	**1 to 5 year Rmil**	**>5 years Rmil**	**Rmil**	**1 to 5 year Rmil**	**>5 years Rmil**	**Rmil**
VRS						
Other borrowings	5 557	3 126	8 683	1 062	2 189	3 251
BWP						
Borrowings	166	40	206	223	80	303
VRESAP						
Borrowings	1 191	1 318	2 509	1 154	1 648	2 802
MCWAP-1						
Borrowings	75	169	244	267	960	1 227
MMTS-2						
Borrowings	-	-	-	433	745	1 178
KWSAP						
Borrowings	379	644	1 023	238	902	1 140
Total	7 367	5 297	12 664	3 377	6 524	9 901

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10. FINANCIAL INSTRUMENTS (continued)

10.7. Interest rates

Project	2022 %	2021 %
VRS		
Loans bear effective interest at rates ranging from	*6,26 to 6,97	*6.04 to 6,41
Project weighted average rate including Bonds and Commercial Paper	6,47	9,02
Project weighted average rate including Capital Market and Commercial Paper	6,47	8,29

The project funded at a weighted average rate of:

Project	2022 %	2021 %
BWP	8,43	8,24
VRESAP	9,35	9,08
MCWAP-1	9,49	8,51
MMTS-2	7,73	7,38
KWSAP	8,77	8,49

ORWRDP, MRWP, UMWP, MCWAP2 and Umgeni are funded from the fiscus and the weighted average cost of capital is therefore not applicable.

10.8. Bonds

TCTA is the legal issuer of the following LHWP local registered bonds:

Loan No	Type	Redemption date	Interest rate	Authorised nominal/ principal value Rmil	Nominal/ capital indexed issued Rmil
WSP5	Nominal	2021/05/28	- %	-	-

Value of bonds	2022 Fair value Rmil	2022 Nominal value Rmil	2021 Fair value Rmil	2021 Nominal value Rmil
Authorised		-		29500***
Issued	-	-	9787*	9433**

* The fair value of the locally registered bonds issued is measured at the market price at financial year-end.
** The amounts in issue may not exceed the consolidated capital market guarantee of R21 billion.
*** This includes the limit of R45 billion on WS03, R7bn on WS05, R2.1bn on WSP2 and R1bn on WSP3.

10.9. Long-term liability maturity profile

The tables below indicate TCTA’s exposure to fixed and floating interest rates:

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10. FINANCIAL INSTRUMENTS (continued)

10.9.1. Exposure to floating interest rates: liabilities

	2022				2021			
	<1 year	1-5 years	>5 years	Total exposure to floating interest rates	<1 year	1-5 years	>5 years	Total exposure to floating interest rates
Project	Rmil	Rmil	Rmil	Rmil	Rmil	Rmil	Rmil	Rmil
VRS	854	5 557	3 126	9 537	249	1 062	2 189	3 500
BWP	-	-	-	-	-	-	20	20
VRESAP	82	138	841	1 061	30	178	876	1 083
MCWAP	-	-	-	-	18	83	246	347
MMTS-2	381	-	-	381	44	230	491	765
KWSAP	25	174	71	270	8	52	267	327
	1 342	**5 869**	**4 038**	**11 249**	**349**	**1 605**	**4 089**	**6 042**

10.9.2. Exposure to fixed interest rates: Liabilities

	2022				2021			
	<1 year	1-5 years	>5 years	Total exposure to fixed interest rates	<1 year	1-5 years	>5 years	Total exposure to fixed interest rates
Project	Rmil	Rmil	Rmil	Rmil	Rmil	Rmil	Rmil	Rmil
VRS	-	-	-	-	9 433	-	-	9 433
BWP	77	166	40	283	77	223	60	360
VRESAP	218	1 052	478	1 748	204	976	772	1 952
MCWAP	654	75	169	898	34	184	714	932
MMTS-2	201	-	-	201	51	203	254	508
KWSAP	42	205	573	820	38	187	634	859
	1 192	**1 498**	**1 260**	**3 950**	**9 837**	**1 773**	**2 434**	**14 044**

10.9.3. Exposure to floating interest rates: Assets

	2022				2021			
	<1 year	1-5 years	>5 years	Total exposure to floating interest rates	<1 year	1-5 years	>5 years	Total exposure to floating interest rates
Project	Rmil	Rmil	Rmil	Rmil	Rmil	Rmil	Rmil	Rmil
VRS	5 652	-	40	5 692	6 653	-	57	6 710
BWP	77	-	-	77	68	-	-	68
VRESAP	208	-	-	208	95	-	-	95
MCWAP	999	-	-	999	1 352	-	-	1 352
MMTS-2	959	-	-	959	857	-	-	857
ORWRDP	47	-	-	47	26	-	-	26
KWSAP	260	-	-	260	180	-	-	180
TCTA-C	5	-	-	5	1	-	-	1
MCWAP-2	610	-	-	610	-	-	-	-
BRVAS	20	-	-	20	-	-	-	-
UMWP	12	-	-	12	-	-	-	-
	8 849	**-**	**40**	**8 889**	**9 232**	**-**	**57**	**9 289**

The table above excludes the maturity periods for loans and other receivables and cash and equivalents.

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10. FINANCIAL INSTRUMENTS (continued)

Reconciliation of provision for impairment of held to maturity financial assets

	2022 Rmil	2021 Rmil
Financial market investments		
Opening balance	33	-
Provision for impairment	-	33
Other	(6)	-
	27	**33**

11. RETAINED INCOME

Throughout the project life-cycle, the projects will reflect net surpluses and deficits depending on the phase and repayment profile of the project. This is as a result of the interest expense at that point in time exceeding the interest on the financial asset, a factor that will always reverse by the time the financial asset is extinguished. Management confirms and has illustrated in the going concern analysis that while the surplus/deficit position may vary during the life of the project, all the projects will ultimately repay all their debt, the financial asset will also be nil and hold no surplus or deficit when all the loans for the project are repaid

12. TRADE AND OTHER RECEIVABLES

The total includes amounts due from DWS for projects that are funded from the fiscus. UMGENI is funded by Umgeni Water. Loans and other receivables also includes inter-project loan accounts with between projects.

Current	2022 Rmil	2021 Rmil
VRS	611	222
MCWAP-1	12	6
MMTS-2	21	21
ORWRDP	4	20
UMGENI	4	4
KRIEL	6	6
MRWP	1	8
MCWAP-2A	326	527
BRVAS	-	43
UMWP	-	28
Total before inter-project elimination	985	885
Inter-project eliminations	(950)	(832)
Total	**35**	**53**

12.1. Credit quality of financial assets that are neither past due nor impaired

When a counterparty fails to make a payment when it is contractually due, that financial asset is past due, even though this does not mean that the counterparty will never pay. This does however mean that it can trigger various actions such as renegotiation, enforcement of covenants or legal proceedings. ORWRDP, Kriel and MRWP are funded from the fiscus. The customer is the DWS and the credit risk is deemed limited even though DWS is the sole customer.

12.2. Ageing of loans and receivables

As at 31 March, the ageing analysis of loans and other receivables are as follows:

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12. TRADE AND OTHER RECEIVABLES (continued)

2022	**Total**	**Neither past due nor impaired**	**30-60 days**	**Past due but not impaired 61-90 days**	**>90 days**
Project	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**
VRS	611	611	-	-	-
MCWAP-1	12	12	-	-	-
MMTS-2	21	21	-	-	-
ORWRDP	4	4	-	-	-
KRIEL	6	6	-	-	-
MRWP	1	1	-	-	-
MCWAP-2	326	326	-	-	-
UMGENI	4	4	-	-	-
Balance at end of year	**985**	**985**	**-**	**-**	**-**

(1) Balances outstanding are deemed past due when a counterparty has failed to make a payment when contractually due.

2021	**Total**	**Neither past due nor impaired**	**30-60 days**	**Past due but not impaired 61-90 days**	**>90 days**
Project	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**
VRS	222	222	-	-	-
MCWAP-1	6	6	-	-	-
MMTS-2	21	21	-	-	-
ORWRDP	20	20	-	-	-
UMGENI	4	4	-	-	-
KRIEL	6	6	-	-	-
MRWP	8	8	-	-	-
MCWAP-2	527	527	-	-	-
BRVAS	43	43	-	-	-
UMWP	28	28	-	-	-
Balance at end of year	**885**	**885**	**-**	**-**	**-**

13. PREPAYMENTS

Prepaid expenditure includes advance payments made to contractors, annual insurance and treasury related license fees. The advance payments are recouped from future payment certificates. Other prepaid expenditure is amortised to the statement of comprehensive income in the periods that the expenses are incurred.

Project	**2022 Rmil**	**2021 Rmil**
VRS	41	30
MMTS-2	1	1
ORWRDP	1	-
Balance at end of year	**43**	**31**

.

14. AMD RECEIVABLE

Two-thirds of the costs incurred on the AMD short-term intervention is recoverable from the fiscus. Prior to the current financial year, the repayment terms had not yet been agreed with DWS and hence TCTA incorporated this into the VRS model which implied a recovery period of 20 years. The implementation agreement, which will provide the payment terms, is still in the process of being finalised.

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14. AMD RECEIVABLE (continued)

	2022 Rmil	2021 Rmil
AMD Receivable Totals		
Non-current	2 089	1 947
Current	101	9
Total	**2 190**	**1 956**

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15. TRADE AND OTHER PAYABLES

2022

	Interest payable	Trade Creditors	Loan Account	Other Creditors	Total before inter-project elimanations	Inter-project elimination	Balance per project
	Rmil	Rmil	Rmil	Rmil	Rmil	Rmil	Rmil
VRS	48	283	12	29	373	(12)	361
BWP	1	-	1	-	2	(1)	1
VRESAP	26	-	2	1	29	(2)	27
MCWAP-1	10	-	325	-	335	(325)	10
MMTS-2	7	-	3	36	46	(3)	43
ORWRDP	-	-	52	-	52	(52)	-
KWSAP	1	-	7	-	8	(7)	1
KRIEL	-	-	2	-	2	(2)	-
UMGENI	-	-	-	1	1	-	1
MRWP	-	-	1	-	1	(1)	-
TCTA-C	-	-	2	-	2	(2)	-
MCWAP-2	-	-	537	5	542	(537)	5
BRVAS	-	1	3	1	4	(3)	1
UMWP	-	-	3	-	3	(3)	-
Balance at end of year	**93**	**284**	**950**	**73**	**1 400**	**(950)**	**450**

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15. TRADE AND OTHER PAYABLES (continued)

2021

	Interest payables	Trade creditors	Loan Account	Other creditors	Total before inter-project eliminatios	Inter-project elimination	Balance per project
	Rmil	Rmil	Rmil	Rmil	Rmil	Rmil	Rmil
VRS	313	213	84	46	656	(84)	572
BWP	1	-	1	-	2	(1)	1
VRESAP	28	-	2	1	31	(2)	29
MCWAP-1	12	-	527	-	539	(527)	12
MMTS-2	15	-	1	36	52	(1)	51
ORWRDP	-	-	38	7	45	(38)	7
KWSAP	1	-	7	-	8	(7)	1
KRIEL	-	-	2	-	2	(2)	-
UMGENI	-	-	-	1	1	-	1
TCTA-C	-	-	1	-	1	(1)	-
MCWAP-2	-	6	170	-	176	(170)	6
BRVAS	-	1	-	2	3	-	3
Balance at end of year	**370**	**220**	**833**	**93**	**1 516**	**(833)**	**683**

(1) The loan account comprises of funds received from Umgeni Water (in terms of the Addendum to the MOA, November 2014) for the construction of the potable water pipeline from the water treatment works at the Spring Grove Dam to a terminal reservoir at Nottingham Road.

16. CONTRACT LIABILITIES

Summary of contract liabilities

	2022 Rmil	2021 Rmil
Working capital advance	415	433

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Notes to the Annual Financial Statements

16. CONTRACT LIABILITIES (continued)

Reconciliation of contract liabilities

	2022 Rmil	2021 Rmil
Opening balance	433	16
Revenue recognised on delivery of goods/services previously paid for	(243)	(141)
Payments received in advance of delivery of performance obligations	225	649
Prior years costs previously reported as trade receivables	-	(91)
	415	**433**

Contract liabilities relating to working capital advances represent balances which are due to DWS as a result of payments made to TCTA to enable TCTA to construct infrastructure on behalf of DWS for those projects which are completely socially funded and for those which have a combination of commercial and social funding.
These will also arise if a particular payment received from DWS for costs incurred to date, exceeds the revenue recognised to date under the input method.

17. NON-CONTRACTUAL AMOUNTS

Non-contractual amounts relate to liabilities and/or assets arising from legislation. This includes payments to the South African Revenue Service (SARS) relating to Value Added Tax (VAT), Skills Development Levy (SDL) and to the Unemployment Insurance Fund (UIF).

TCTA manages its projects separately and records the VAT payable or VAT receivable for each project. The net VAT payable is paid over to SARS.

As at year end there were no balances outstanding for SDL and UIF.

The table below indicates the net amount payable to SARS at the end of March:

17.1. Value Added Tax

	2022 Rmil	2021 Rmil
Net non-contractual amount		
Liability	(233)	(96)

The tables below indicate the non-contractual assets and non-contractual liabilities, per project, as disclosed in the statement of financial position:

MCWAP-2	-	2
Balance at end of year	**-**	**2**

Non-contractual liabilities - Value Added Tax

VRS	(185)	(65)
BWP	(2)	(1)
VRESAP	(16)	(7)
MCWAP-1	(3)	(7)
MMTS-2	(22)	(10)
ORWRDP	-	(2)
KWSAP	(5)	(6)
Balance at end of year	**(233)**	**(98)**

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Annual Financial Statements for the year ended 31 March 2022

Notes to the Annual Financial Statements

17. NON-CONTRACTUAL AMOUNTS (continued)

17.2. Income Tax

TCTA is a not-for-profit organisation established by Government to raise off-budget funding and implement projects (both on and off-budget) on its behalf. By allowing non-profit organisations preferential tax treatment, Government assists by augmenting their financial resources. TCTA applied for this preferential tax treatment as prescribed and its application for tax exemption in terms of the Income Tax Act, 1962, was approved. TCTA is exempted from Income tax as it is an Institution, Board, or Body established by or under any law as defined in the Income Tax Act, 1962.

18. PROVISIONS

Total provisions

The following provisions are relating to employee liabilities:

Current	2022 Rmil	2021 Rmil
Provision for leave pay	15	13
Provision for incentives	19	-
	34	**13**

19. CASH AND CASH EQUIVALENTS

Cash and cash equivalents comprises cash at banks and cash on hand. Cash and cash equivalents also includes highly liquid investments that are readily available, generally on a “same day” basis.

TCTA prioritises liquidity across all it’s projects, as such, most investments are allocated to Call and Money Market Funds.

	2022			2021		
Project	**Cash on hand Rmil**	**Other cash and cash equivalents Rmil**	**Total Rmil**	**Cash on hand Rmil**	**Other cash and cash equivalents Rmil**	**Total Rmil**
VRS	-	5 652	5 652	-	6 654	6 654
BWP	-	77	77	-	68	68
VRESAP	-	208	208	-	95	95
MCWAP-1	-	999	999	-	1 351	1 351
MMTS-2	-	959	959	-	857	857
ORWRDP	-	47	47	-	26	26
KWSAP	-	260	260	-	180	180
TCTA-C	-	5	5	2	1	3
MCWAP-2	-	610	610	-	-	-
BRVAS	-	20	20	-	-	-
UMWP	-	12	12	-	-	-
Total	**-**	**8 849**	**8 849**	**2**	**9 232**	**9 234**

TCTA’s cash management practice is to maintain a minimum amount of cash on hand.
Cash and bank balances which were less than R500 000 as at the end of 31 March 2021 and March 2020 are reflected as nil.

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20. LEASE LIABILITIES

	2022 Rmil	2021 Rmil
Current liabilities	-	4

As at 31 March 2022 TCTA is committed to RNil (2021; R623 695) for short term leases. This differs from the portfolio of leases for which an expense was recognised in the current financial period.

The average lease term was 2-3 years and the average effective borrowing rate was 9%-

Interest rates are fixed at the contract date.

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	2022 Rmil	2021 Rmil

21. REFUND LIABILITY

The refund liability is as a result of an overpayment received from DWS on the MMTS-2 project. The amounts receivable from DWS in relation to work performed by TCTA on their behalf was settled, and this over-payment will be refunded to DWS following the completion of TCTA's internal processes.

	2022 Rmil	2021 Rmil
Refund liability		
Overpayment received from DWS	179	-

22. REVENUE

Revenue from contracts with customers

TCTA generates revenue from contracts entered into with DWS as the sole customer. Agreements are entered into for all projects implemented and or maintained and operated by TCTA on behalf of DWS. TCTA does not have any other source of revenue.

Project	Construction revenues: Rmil	Revenue from services rendereds: Rmil	Other operating income Rmil	Total: Rmil
2022				
VRS	-	244	212	456
BWP	-	1	5	6
VRESAP	-	1	7	8
MCWAP-1	-	1	8	9
MMTS-2	(2)	3	10	11
ORWRDP	43	1	10	54
KWSAP	-	1	5	6
MCWAP-2	181	-	-	181
MRWP	-	-	5	5
BRVAS	26	-	-	26
UMWP	14	-	-	14
Total revenue	**262**	**252**	**262**	**776**

Project	Construction revenues: Rmil	Revenue from services rendereds: Rmil	Other income Rmil	Total: Rmil
2021				
VRS	-	236	197	433
BWP	-	(2)	5	3
VRESAP	-	1	7	8
MCWAP-1	3	1	7	11
MMTS-2	(5)	4	7	6
ORWRDP	36	1	11	48
KWSAP	-	1	5	6
UMGENI	1	-	-	1
MCWAP-2	89	-	-	4
MRWP	-	-	4	89
BRVAS	20	-	-	20
UMWP	27	-	-	27
Subtotal	171	242	243	656
Total revenue	**171**	**242**	**243**	**656**

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Notes to the Annual Financial Statements

22. REVENUE (continued)

Disaggregation of revenue from contracts with customers

The company disaggregates revenue from customers as follows:

Construction contracts

2022	Engineering	Enivronmental	Overheads	Construction	Total Revenue from customers
Project	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**
MMTS-2	-	(2)	-	-	(2)
ORWRDP	6	-	-	37	43
MCWAP-2	29	-	52	100	181
BRVAS	-	-	26	-	26
UMWP	-	-	14	-	14
	35	**(2)**	**92**	**137**	**262**

2021	Engineering	Enivronmental	Overheads	Construction	Total Revenue from customers
Project	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**
MCWAP-1	-	-	-	3	3
MMTS-2	-	(5)	-	-	(5)
ORWRDP	12	-	-	24	36
UMGENI	-	-	-	1	1
MCWAP-2	49	3	37	-	89
BRVAS	1	-	19	-	20
UMWP	-	-	27	-	27
	62	**(2)**	**83**	**28**	**171**

Revenue from services rendered

2022	LHWP operations and maintenance	AMD operations and maintenance	Debt management services	Total Revenue from customers
Project	**Rmil**	**Rmil**	**Rmil**	**Rmil**
VRS	-	234	10	244
BWP	-	-	1	1
VRESAP	-	-	1	1
MCWAP-1	-	-	1	1
MMTS-2	-	-	3	3
KWSAP	-	-	1	1
ORWRDP	-	-	1	1

2021	LHWP operations and maintenance	AMD operations and maintenance	Debt management services	Total Revenue from customers
Project	**Rmil**	**Rmil**	**Rmil**	**Rmil**
VRS	(2)	231	7	236
BWP	-	-	(2)	(2)
VRESAP	-	-	1	1
MCWAP-1	-	-	1	1
MMTS-2	-	-	4	4

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22. REVENUE (continued)

ORWRDP	-	-	1	1
KWSAP	-	-	1	1

Timing of revenue recognition

Revenue recognised over time

2022 Project	Rendering of services Rmil	Construction Revenue Rmil	Other operating income Rmil	Total revenue from customers Rmil
VRS	244	-	212	456
BWP	1	-	5	6
VRESAP	1	-	7	8
MCWAP-1	1	-	8	9
MMTS-2	3	(2)	10	11
ORWRDP	1	43	10	54
KWSAP	1	-	5	6
MRWP	-	-	5	5
MCWAP-2	-	181	-	181
BRVAS	-	26	-	26
UMWP	-	14	-	14
	252	**262**	**262**	**776**

2021 Project	Rendering of services Rmil	Construction Rmil	Other income Rmil	Total revenue from customers Rmil
VRS	236	-	196	432
BWP	(2)	-	5	3
VRESAP	1	-	7	8
MCWAP-1	1	3	7	11
MMTS-2	4	(5)	7	6
ORWRDP	1	36	11	48
KWSAP	1	-	5	6
UMGENI	-	1	-	1
MRWP	-	-	4	4
MCWAP-2	-	89	-	89
BRVAS	-	20	-	20
UMWP	-	27	-	27
	242	**171**	**243**	**655**

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22. REVENUE (continued)

Performance obligations

A performance obligation is a promise to provide a distinct good or service or a series of distinct goods or services. TCTA is charged with financing and implementing bulk raw water infrastructure projects. These infrastructure projects are accounted for in terms of IFRS 15: Revenue from Contracts with Customers and deal with the construction of a single asset such as a dam or pipeline. In some instances, they deal with several assets that are closely interrelated or interdependent in terms of their design, technology and function or ultimate purpose or use. TCTA applies IFRS 15: Revenue from Contracts with Customers separately for each construction contract as required in the directive from the Minister of Water and Sanitation. TCTA's performance obligations per contract can be summarised as follows:

• provide project financing expertise in order to secure funding for the project (only applicable to off-budget projects);
• implementing the construction of the assets to be delivered to DWS; and
• operations and maintenance of DWS infrastructure.

Remaining perfomance obligations are based on contract values for construction contracts and management estimates on revenue from other performance obligations to be fulfilled.

2022 **Project**	**< one year** **Rmil**	**> one year** **Rmil**
VRS	5 903	125 519
BWP	17	71
VRESAP	16	133
MCWAP-1	9	253
MMTS-2	33	86
KWSAP	10	150
	5 988	**126 212**

2021 **Project**	**< one year** **Rmil**	**> one year** **Rmil**
VRS	4 605	127 540
BWP	17	101
VRESAP	16	112
MCWAP-1	17	265
MMTS-2	36	216
KWSAP	10	170
	4 701	**128 404**

Construction costs relate to TCTA's performance obligation to implement raw water infrastructure on behalf of DWS. This comprises of engineering, environmental and construction activities. Overhead expenses incurred during the implementation of the project are also considered construction related costs.
The analysis of each class of activity is provided below. Further detail per project is provided in note 22 as revenue is recognised to the extent that cost has been incurred.

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. CONSTRUCTION COST (continued)

Construction cost Class of activity	2022 Rmil	2021 Rmil
Engineering Costs	35	62
Environmental Costs (1)	(2)	(2)
Construction Costs	137	28
Overhead Costs	92	83
Balance at end of year	**262**	**171**

(1) - Negative amounts represent reversal of costs previously recognised

23. OTHER OPERATING INCOME

Other operating income relates to the recovery of TCTA overhead costs which are necessary for the achievement of services rendered and cost recoveries from the DWS. The other income each year will be recovering the expenses incurred for that project.

Other operating income	2022 Rmil	2021 Rmil
VRS	212	197
BWP	5	5
VRESAP	7	7
MCWAP-1	8	7
MMTS-2	10	7
ORWRDP	10	11
KWSAP	5	5
MRWP	5	-
BRVAS	-	4
Other income	**262**	**243**

Refer to note 30 for the break down of the costs for which the revenue has been earned.

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24. FINANCE INCOME AND COSTS

24.1. Finance income

2022

	Interest income for financial assets at amortised cost				
	Interest income on financial instruments	Interest income on the tariff and other receivables	Total: Interest income for financial assets at amortised cost	Elimination of Intercompany interest	Total Interest income
	Rmil	Rmil	Rmil	Rmil	Rmil
VRS	341	1 678	2 019	(23)	1 996
BWP	3	18	21	-	21
VRESAP	6	219	225	-	225
MCWAP-1	46	169	215	(1)	214
MMTS-2	28	177	205	-	205
ORWRDP	3	-	3	-	3
KWSAP	9	104	113	-	113
TCTA-C	1	-	1	-	1
BRVAS	7	-	7	(7)	-
UMWP	-	1	1	-	1
MCWAP-2	-	27	27	-	27
Finance income	**444**	**2 393**	**2 837**	**(31)**	**2 806**

2021

	Interest income for financial assets at amortised cost				
	Interest income on financial instruments	Interest income on the tariff receivable	Finance income per project	Total elimination of inter-project related finance income	Total: Finance Income
	Rmil	Rmil	Rmil	Rmil	Rmil
VRS	302	1 618	1 920	10	1 930
BWP	3	30	33	-	33
VRESAP	7	237	244	-	244
MCWAP-1	36	112	148	-	148
MMTS-2	22	226	248	-	248
KWSAP	7	85	92	-	92
Finance income	**377**	**2 308**	**2 685**	**10**	**2 695**

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24.2. Finance costs

Finance costs for the year ended are analysed as follows:

2022	Interest expense for borrowings at amortised cost					
	Locally issued bonds	Other local debt	Total: Interest cost	Other Finance costs	Eimination of inter-project related finance cost	Finance cost per project
	Rmil	Rmil	Rmil	Rmil	Rmil	Rmil
VRS	138	556	694	153	-	847
BWP	-	28	28	1	-	29
VRESAP	-	250	250	23	-	273
MCWAP-1	-	101	101	1	-	102
MMTS-2	-	69	69	22	-	91
ORWRDP	-	-	-	3	(3)	-
KWSAP	-	99	99	1	-	100
MCWAP-2	-	-	-	27	(27)	-
UMWP	-	-	-	1	(1)	-
Finance costs	**138**	**1 103**	**1 241**	**232**	**(31)**	**1 442**

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24.2. FINANCE COSTS (continued)

2021	Interest expense for borrowings at amortised cost					
	Locally issued bonds Rmil	Other local debt Rmil	Interest on lease liabilty Rmil	Total: Interest Costs Rmil	Other Finance costs Rmil	Finance cost per project Rmil
VRS	849	235	1	1 085	14	1 099
BWP	-	37	-	37	1	38
VRESAP	-	275	-	275	12	287
MCWAP-1	-	127	-	127	1	128
MMTS-2	-	107	-	107	1	108
KWSAP	-	104	-	104	1	105
Finance costs	**849**	**885**	**1**	**1 735**	**30**	**1 765**

Other finance costs amounting to R201 million (2021: R30 million) have been shown separately from interest expenses and disclosed as a separate category within finance costs. These comprise of commitment fees and arranging fees for new facilities.

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25. CONTINGENCIES

25.1. Contingent Liabilities

In the ordinary course of business, TCTA is involved in various legal actions and claims, including those related to contract awards, and land or land rights expropriation required to execute its directives. Although the outcome of the legal proceedings cannot be predicted with certainty, TCTA discloses all possible or present obligations as a result of these events and whose existence will be confirmed only by the occurrence of one or more uncertain future events not wholly within the control of the entity.

The litigation matters have been detailed below:

25.1.1. PHASE 2 OF THE MOOI-MGENI TRANSFER SCHEME ("MMTS-2")

TCTA was served with a combined summons from the remaining two landowners claiming an amount of R1 300 000.00 in respect of the expropriation of fishing rights associated with their properties. TCTA is defending the matter however latest set of attorneys acting on behalf of the landowner have withdrawn. TCTA is now awaiting further steps to be taken by the landowners and the matter is being monitored.

25.1.2. LESOTHO HIGHLANDS WATER PROJECT ("LHWP")

TCTA was served with a Writ of Execution and Notice of Attachment in execution of incorporeal property or rights in incorporeal property 17 May 2021 emanating from a dispute between Frazer Solar GMBH, a company incorporated in Germany and the Kingdom of Lesotho ("KOL"). TCTA was not a party to the original proceedings between the Company and KOL. The Writ of Execution and Notice of Attachment make provision for the attachment of the KOL's right to receive payment of royalties from the RSA, through TCTA for water delivered into the RSA. The matter is being opposed by the KOL, the LHDA, TCTA and the Minister of Water and Sanitation and postponed to dates to be arranged between them. Separately, the KOL has applied for a review and set aside of the original contract concluded between it and Frazer, in the Lesotho High Court.

25.1.3. ACID MINE DRAINAGE ("AMD")

TCTA put out 2 requests for tender for the Operation and Maintenance of the AMD Central and Eastern Basin Treatment Plants. The plaintiff was not successful in the first stage of the tender process and was subsequently disqualified. It then proceeded with an application for an urgent interdict and a review application. The plaintiff was not successful on the interdict application and eventually proceeded on the review application. The matter was heard on the 4 February 2022, judgement has been reserved and is awaited.

25.1.4. 13TH CHEQUE PAYMENT DISPUTE

One of TCTA's former employees was part of a small group of employees who did not qualify to receive a 13th cheque gratuity in December 2017. The matter is before the Labour Court and the hearing date is now awaited. However the Labour Court has a significant backlog and the allocation of the hearing date has not been made..

25.2. CONTINGENT ASSET

TCTA was served with an order from the High Court that TCTA be joined to the proceedings as it has a material interest in the proceedings together with DWS and the Public Protector, regarding a matter concerning the previous Chief Delegate: LHWP. That application was dismissed and applied to the Supreme Court of Appeal for leave to appeal. That application for leave to appeal was dismissed with costs. Since no further steps have been taken, TCTA has instructed its attorneys to draw up its bill and the same for taxing. A contingent asset of R130 094 is raised in this regard.

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26. RELATED PARTIES

TCTA is a state-owned entity established under the National Water Act. TCTA is a special purpose vehicle under the Department of Water and Sanitation and ultimately reporting to the Minister of Water and Sanitation. As such, TCTA is a government-related entity and has applied the exemption in paragraph 25 of IAS 24 Related Party Disclosure. These related parties are either controlled, jointly controlled or significantly influenced by the government of the Republic of South Africa. The significant transactions below are as a result of contractual agreements entered into between TCTA and the related parties in fulfilling TCTA's mandate in terms of directives issue in various projects.

26.1. Trading transactions

26.1.1. DWS

For related party transactions and balances with DWS refer to note 10.4.

26.1.2. DBSA

A government-related entity is an entity that is controlled, jointly controlled or significantly influenced by a government. TCTA and DBSA are both schedule 2 Major Public Entities in terms of the PFMA and report to National Government.

Borrowings per Project	Opening balance 1 April 2021 Rmil	Drawdowns Rmil	Repayments Rmil	Closing balance 31 March 2022 Rmil	Interest incurred for the period Rmil
BWP	160	-	(20)	140	14

Borrowings per Project	Opening balance 1 April 2020 Rmil	Drawdowns Rmil	Repayments Rmil	Closing balance 31 March 2021 Rmil	Interest incurred for the period Rmil
BWP	180	-	(20)	160	15
MMTS-2	50	60	(110)	-	1
Total transactions with DBSA	**230**	**60**	**(130)**	**160**	**16**

26.1.3. ESKOM

The following transactions which are collectively significant have occurred with Eskom:

Project	2022 Rmil	2021 Rmil
VRS	87	83
MCWAP-2	137	2
BRVAS	1	-
Total transactions with ESKOM	**225**	**85**

26.1.4. LANDBANK

TCTA and Landbank are both schedule 2 Major Public Entities in terms of the PFMA and report to National Government. TCTA invested in promissory notes issued by the Land Bank in 2019.

Figures in Rmillion	Opening balance 1 April 2021	Maturities/ECL adjustment	Closing balance 31 March 2022	Interest income	Interest receivable 31 March 2022
VRS	57	(11)	46	6	-

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26. RELATED PARTIES (continued)

Figures in Rmillion	Opening balance 1 April 2020	Capitalised interest	Maturities/ ECL adjustment	Closing balance 31 March 2021	Interest income	Interest receivable 31 March 2021
PROJECT						
VRS	97	5	(45)	57	4	1

26.2. Compensation of directors and executive management

Short-term employee benefits

TCTA does not contribute to any defined retirement or medical aid fund. It does not have a liability for the provision of retirement funding. The emoluments paid to management include a sum for the provision of their own medical aid and pension benefits.

Total compensation to directors and executive management	2022 Rmil	2021 Rmil
Non-executive Directors	7	7
Executive Director	6	6
Executive Management	26	24
Total for the year	**39**	**37**

26.2.1. Non-executive directors

Directors' emoluments and related costs	2022 Rmil	2021 Rmil
Emoluments	7	7

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. **DIRECTOR'S AND PRESCRIBED OFFICER'S EMOLUMENTS (continued)**

2022

	Board fees	Ad hoc fees	Travel /other expenses	Nominations and Governance Committee	Finance Committee	Audit and Risk Committee	Human Capital and Ethics Committee	ATTENDANCE FEES Board meetings	ATTENDANCE FEES Technical Committee	Grand total
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
G Dumas	1 261	-	5	153	-	-	-	-	72	1 491
Ms M Ramataboe	1 009	-	-	107	-	163	-	-	72	1 351
S Khondlo	363	-	-	107	107	-	-	31	102	710
S Roopa	363	-	-	-	89	114	94	31	-	691
N Baloyi	363	33	9	107	128	141	-	31	-	812
M Maponya	363	-	-	-	-	129	94	31	-	617
G White	363	4	5	107	107	57	136	31	-	810
L Dlamini	363	4	-	-	-	-	90	31	72	560
	4 448	**41**	**19**	**581**	**431**	**604**	**414**	**186**	**318**	**7 042**

2021

	Board fees	Ad hoc fees	Travel/other expenses	Nominations and Governance Committee	Finance Committee	Audit and Risk Committee	Human Capital & Ethics Committee	ATTENDANCE FEES Board meetings	ATTENDANCE FEES Technical Committee	Grand total
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
G Dumas	1 261	-	-	133	-	-	-	-	72	1 466
M Ramataboe	1 009	-	-	93	-	179	-	-	72	1 353
S Khondlo	363	12	5	93	111	-	-	21	102	707
S Roopa	363	12	-	-	94	125	82	21	-	697
N Baloyi	363	31	-	93	134	125	-	21	-	767
M Maponya	363	12	5	-	-	125	82	21	-	608
G White	363	43	-	93	125	-	118	20	-	762
L Dlamini	363	13	-	-	-	-	82	13	72	543
	4 448	**123**	**10**	**505**	**464**	**554**	**364**	**117**	**318**	**6 903**

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. **DIRECTOR'S AND PRESCRIBED OFFICER'S EMOLUMENTS (continued)**

26.2.2. Executive director

2022

Director	Date appointed or resigned	Earnings R'000	Employer contributions (1) R'000	Total Guaranteed Package (1) R'000
DKP Sechemane (Chief Executive Officer)	2018/10/22	5 153	610	5 763

(1) This amount refers to employer contributions(ie. Medical Aid, Pension, Group Life, SDL and UIF).
(2) This amount refers to the guaranteed portion of the Executive's remuneration.

2021

Director	Date appointed or resigned	Earnings R'000	Employer contributions (1) R'000	Total Guaranteed Package R'000	Other Payments (2) R'000	Total R'000
DKP Sechemane (Chief Executive Officer)	2018/10/22	4 977	485	5 462	583	6 045

(1) This amount refers to employer contributions(ie. Medical Aid, Pension, Group Life, SDL and UIF).
(2) Other payments consist of leave pay, long service awards and attraction bonus.

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. **DIRECTOR'S AND PRESCRIBED OFFICER'S EMOLUMENTS (continued)**

26.2.3. Executive management

The remuneration of directors and key executives is determined by the Human Capital & Ethics Committee having regard to the performance of individuals and market trends.

2022

	Position	Date appointed or resigned	Earnings	Medical Aid, Group Life & Pension contributions	Total Guaranteed Package (1)	Other Payments (2)	Total
Executive Managers			R'000	R'000	R'000	R'000	R'000
B Shongwe	Chief Financial Officer	2020/01/03	3 307	262	3 569	-	3 569
Prof O Busari	Chief Strategy Officer	2009/11/01	3 912	422	4 334	-	4 334
J Claassens	Executive Manager: Project Management	2007/04/01	3 667	395	4 062	-	4 062
L Radzuma	Chief Risk Officer	2010/07/01	2 961	301	3 262	-	3 262
N Nkabinde	Executive Manager: Project Finance and Treasury	2015/09/01	2 909	313	3 222	-	3 222
C Kistasamy	Executive Manager: EWSS	2020/06/01	2 757	233	2 990	-	2 990
H Botha	Executive Manager: Human Resource and Organisational Development	2016/02/01	2 459	266	2 725	-	2 725
W De Witt	Corporate Secretary	2018/10/01	1 954	211	2 165	82	2 247
Total Executive Management remuneration			**23 926**	**2 403**	**26 329**	**82**	**26 411**

(1) This amount refers to guaranteed portion of the Executives remuneration
(2) Other payments consist of leave pay and long service awards

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. **DIRECTOR'S AND PRESCRIBED OFFICER'S EMOLUMENTS (continued)**

2021

Executive Managers	Position	Date appointed or resigned	Earnings R'000	Employer contributions (1) R'000	Total Guaranteed Package R'000	Other Payments (2) R'000	Total R'000
B Shongwe	Chief Financial Officer	2020/01/03	3 141	241	3 382	-	3 382
Prof O Busari	Chief Strategy Officer	2009/11/01	3 732	383	4 115	878	4 993
J Claassens	Executive Manager: Project Management	2007/04/01	3 495	353	3 848	-	3 848
L Radzuma	Chief Risk Officer	2010/07/01	2 809	275	3 084	246	3 329
N Nkabinde	Executive Manager: Project Finance and Treasury	2015/09/01	2 634	278	2 912	10	2 922
C Kistasamy	Executive Manager: EWSS	2020/06/01	2 177	185	2 362	422	2 784
H Botha	Executive Manager: Human Resource and Organisational Development	2016/02/01	2 367	214	2 581	-	2 582
W De Witt	Corporate Secretaty	2018/10/01	1 842	210	2 052	117	2 169
Total Executive Management remuneration			**22 197**	**2 139**	**24 336**	**1 673**	**26 009**

(1) This amount refers to employer contributions(ie. Medical Aid, Pension, Group Life, SDL and UIF)
(2) Other payments consist of leave pay, long service awards and attraction bonus

27. GOING CONCERN

The underlying operating model has remained the same as it has been in previous years and continues to assure the long-term solvency of TCTA, as well as the liability to meet all its obligations as they fall due. TCTA's solvency is secured by undertakings by the Department of Water and Sanitation in project implementation or income agreements between TCTA and the Department, or government guarantees granted by the executive authority to project funders, acting in concurrence with the Minister of Finance.

The undertakings in project implementation or income agreements provide that all projects costs incurred by TCTA will be fully funded by the Department of Water and Sanitation through water use charges and/or from other resources of the Department, should payments recovered from users tariffs be insufficient.

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27. GOING CONCERN (continued)

The agreements also provide that the Department will step in and fulfil TCTA's obligations to its funders, should TCTA fail to perform such obligations. That is, should TCTA be in breach of its obligations to funders in terms of funding agreements concluded with such funders, and fail to remedy such breach, DWS will perform such obligations. The undertakings by DWS are made in favour of the funders and the funders may accept the benefits of the undertakings from the Minister of Water and Sanitation, acting in concurrence with the Minister of Finance, in writing. Government approval has been obtained to issue guarantees for the Mokolo-Crocodile (West) Water Augmentation Project if required.

The government guarantees are provided in favour of funders of the Vaal River System Augmentation Projects by the Minister of Water and Sanitation acting in concurrence with the Minister of Finance.

TCTA annually provides the Department with information on the amount of capital charges that the Department should include in water use charges, after consultations with water users, to enable the Department to fulfil its obligations to TCTA. The charges are adjusted annually to take into account any changes in conditions, assumptions or actual costs and revenue, so that under all circumstances sufficient revenue will be generated to repay debt over the remaining debt repayment period.

TCTA sources short term liquidity facilities to fund short-term mismatches in the timing of expenditure on project costs and debt service, and receipt of revenues.

TCTA has considered factors that may affect TCTA's ability to raise funding, DWS' ability to fulfil it's financial obligations to TCTA, liquidity management and adequacy of projected tariffs to repay debt in full over the debt repayment period (debt sustainability, taking into account the ability to adjust tariffs annually to ensure their adequacy to recover all projects costs should conditions and assumptions change). The projected tariffs are sustainable and adequate to discharge TCTA's financial obligations.

TCTA will continue to monitor the impact of COVID-19 on funding, despite the lower propensity to impose lockdowns in response to new outbreaks.

In respect of TCTA's obligations in relation to the Lesotho Highlands Water Project, the Notice of Establishment provides, in clause 25(1)(d), that the funds of TCTA consist of money appropriated by Parliament if its other sources of funds (including proceeds of loans and income derived from the performance of its Treat and Non-Treaty functions) are not sufficient to enable TCTA to fulfill all the Republic's financial obligations in terms of or resulting from the Treaty, including the raising of money and liability and financial risk management (as set out in clause 24(a) of the Notice of Establishment. This serves as a further guarantee of TCTA's solvency in relation to LHWP, in that TCTA may obtain an appropriation from Parliament to ensure that it performs all its functions related to LHWP.

All project borrowing limit authorisations are in effect until 31 March 2023. TCTA has requested the Minister of Water and Sanitation to extend all the authorisation with the concurrence of the Minister of Finance.

In TCTA's view, an event of default would not affect TCTA as going concern as all its financial obligations are secured by government undertakings and guarantees.

TCTA has considered the funding of TCTA's operations following an event of default, to the extent that despite the settlement of debt, TCTA is unable to access funding from the market. This would be the case if the residual effects of the event of default in question cannot be cured by the settlement of outstanding debt. Funding of the operations of the Lesotho Highlands Water Project is guaranteed by the provision of clause 25(1)(d) of the Notice of Establishment as described above. In terms of the other projects that are currently under implementation, namely the Berg River-Voelvlei Augmentation Scheme, Phase 2 of the Mokolo-Crocodile Rover (West) Water Augmentation Project and Phase 1 of the uMkhomazi Water Project are at the project preparation phase and management believes that their strategic importance would be prioritised for government funding for TCTA to continue their implementation, or if suspended sufficient provision would be made to fund incurred costs and costs of suspension.

TCTA has further considered the proposed incorporation of the TCTA and the Water Trading Entity of the DWS into the National Water Resources Infrastructure Agency and is satisfied that government will take the necessary care to avoid disruption of the funding and operations currently carried out by TCTA.

The impact of events of default, having been evaluated by TCTA with due regard to the government undertakings and guarantee underpinning its financial obligations, including government's undertakings to step-in and assume TCTA obligations should it fail to perform such obligations, do not change TCTA's assumption of TCTA's going concern status.

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Annual Financial Statements for the year ended 31 March 2022

Notes to the Annual Financial Statements

28. EVENTS AFTER THE REPORTING PERIOD

The term of the Board expired at the end of May 2022.The current Board's term was extended by the Minister indefinitely until a new Board was appointed

TCTA

Annual Financial Statements for the year ended 31 March 2022

Notes to the Annual Financial Statements

29. COMPLIANCE WITH THE PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999, AND TREASURY REGULATIONS

29.1. Irregular, fruitless and wasteful expenditure

Section 55(2)(b)(i) of the PFMA requires that a public entity disclose particulars of any material losses through criminal conduct and any irregular expenditure and fruitless and wasteful expenditure that occurred during the financial year.

Irregular expenditure that was incurred during the year under review is included in “Other operating expenses” in the Aggregated Statement of Comprehensive Income.

29.1.1. Irregular expenditure

Irregular expenditure is defined as expenditure incurred in contravention of, or that is not in accordance with, any legislative identified requirements notwithstanding that value was received. Irregular expenditure and incurred in the current year, is disclosed below.

The majority of reported irregular expenditure relates to contracts that were entered into in prior years. There has been an improvement in the procurement control environment, and this has resulted in a few incidences of non-compliance being reported in the current financial year. A new procedure manual and consequence management guideline were developed to enhance the process for management of irregular, fruitless and wasteful expenditure. In addition, a Loss Control Committee was also established to quantify the losses and make recommendations to the Chief Executive Officer on the actions to be taken. This was also done to fast track the process dealing with both current and historical reported irregular, fruitless and wasteful expenditure, and to ensure that consequence management is implemented before an application for condonation is made to National Treasury.

Reconciliation of irregular expenditure	**2022 Rand**	**2021 Rand**
Opening balance	806 286 863	804 991 798
Irregular expenditure previously incorrectly disclosed - note A	-	(417 130)
Irregular expenditure current year	2 143 107	544 893
Corporate matters	2 143 107	544 893
Irregular expenditure from prior years identified and confirmed in the current year	30 808 721	1 157 302
Corporate matters	30 808 721	1 157 302
Less: Expenditure was incorrectly declared as irregular expenditure. (Note 1)	(55 052)	-
Irregular expenditure awaiting condonement	**839 183 639**	**806 286 863**

Note A:

Section 6.3 of National Treasury (NT) Instruction Note 2 of 2019/2020 which came into effect on the 17 May 2019 prescribes that:

Any reference to non-compliance of internal policies being regarded as irregular expenditure in terms of Treasury Instruction No 1 of 2018/2019 must be disregarded The Accounting to accord with the definition of "irregular expenditure" in section 1 of the PFMA.

Four transactions reported as irregular, and which are dating back to 2017/2018 are removed from the irregular expenditure reported in the current period as they relate to noncompliance with policies.

Note 1

TCTA issued an open tender for rental of 11 multifunctional printing devices (MFPD). One of the conditioned of the tender was that ownership of the MFPDs should be transferred to TCTA at the end of 37th month. The 37th month was December 2018, and the MFPDs became TCTA property with effect from 01 January 2019. Same was confirmed in writing by the previous service providerIn 2017/2018 and 2018/2019, TCTA recorded and declared amounts R 65 677 681.73 and R 23 830 467.52 for Claims, respectively. In the same period, TCTA also recorded and declared amounts R0 and R6 231 157,04 for Variation Orders respectively.

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Annual Financial Statements for the year ended 31 March 2022

Notes to the Annual Financial Statements

29. COMPLIANCE WITH THE PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999, AND TREASURY

2022 IRREGULAR EXPENDITURE CURRENT YEAR

Incident	Actions taken	Recovery, condonation or removal or irregular expenditure	Amount Rand
Irregular appointment of external legal advisors.	Assessed and referred for determination	Not yet condoned	708 375
Irregular appointment of external legal advisors.	Assessed and referred for determination	Not yet condoned	519 378
Irregular appointment of external legal advisors.	Assessed and referred for determination	Not yet condoned	268 719
Irregular appointment of external legal advisors.	Assessed and referred for determination	Not yet condoned	290 596
Irregular appointment of external legal advisors.	Assessed and referred for determination	Not yet condoned	258 644
Irregular appointment of external legal advisors.	Assessed and referred for determination	Not yet condoned	97 395
			2 143 107

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Notes to the Annual Financial Statements

29. COMPLIANCE WITH THE PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999, AND TREASURY

2021 IRREGULAR EXPENDITURE PRIOR YEAR

Other

Incident	Actions taken	Recovery, condonation or removal of irregular expenditure	Amount Rand
			-
Appointment of supplier on emergency basis for the supply of hand sanitizers and office disinfection. The service provider was not registered on National Treasury Supplier Database (CSD).	Assessed and referred for determination	Not yet condoned	84 400
The service provider was appointed to provide assistance with psychometric assessments and the contract amount was exceeded due to poor contract management.	Assessed and referred for determination	Not yet condoned	200
Irregular expenditure on Subcontractor portion of SMEC contract due to competitve tender process not being followed.	Assessed and referred for determination	Not yet condoned	470 293
The service provider for recruitment verification rendered services without a valid contract after the initial contract had expired.	Assessed and referred for determination	Not yet condoned	69 287
Recurring irregular expenditure from previous financial years, expenditure for the taxing of the legal bill by the Taxing Master of the High Court.	Assessed and referred for determination	Not yet condoned	10 425
The transgression emanated from the reinstatement of the agreement between TCTA and its Executive which is in contravention of the National Treasury and SCM Instruction Note 3 of 2016/17. Documents supplied reflected that no losses were suffered by TCTA.	Assessed and referred for determination	Not yet condoned	803 460
The irregular expenditure for the payment of the acting allowance to the irregularly appointed Acting CEO, who was appointed by the former Chairperson of the Board, without obtaining concurrence of the Executive Authority as prescribed by the Notice of Establishment.	Assessed and referred for determination	None	274 130
Total for Other			**1 712 195**

Other Notes

TCTA has commenced the condonation process in line with the requirements of PFMA Framework on Irregular Expenditure issued in May 2020. A re-submission of evidence on consequence management is being finalised and will be made available to National Treasury to support a request for condonation that was rejected on the basis of incompleteness.

2) Certain adjustments will be made on irregular expenditure which fall within the provisions of Instruction Note 2 of 2019/2020 being expenditure incurred in contravention of internal policies.

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Notes to the Annual Financial Statements

29. COMPLIANCE WITH THE PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999, AND TREASURY

IRREGULAR EXPENDITURE FROM PRIOR YEARS IDENTIFIED AND CONFIRMED IN THE 2022 YEAR

Incident	Actions taken	Recovery, condonation or removal of irregular expenditure	Amount Rand
OE Consultant appointed using an irregular policy.	None	Not yet condoned	96 000
OE Consultant appointed using an irregular policy.	None	Not yet condoned	124 875
OE Consultant appointed using an irregular policy.	None	Not yet condoned	31 875
Acid Mine Drainage Operations and Maintenance, The contract with Operations and maintenance service provider Western Basin was varied by more than 20% without obtaining prior approval from National Treasury. As per 20/21 AGSA audit finding irregular expenditure declaration from initiation 16/17.	None	Not yet condoned	30 555 971
Total irregular expenditure from prior years identified and confirmed in the current year			**30 808 721**

Irregular expenditure which was incurred during the 2017/2018 financial year was submitted to the Board for consideration. The Board resolved that such irregular expenditure must be submitted to National Treasury for consideration.

29.1.2. Fruitless and wasteful expenditure

Fruitless and wasteful expenditure means expenditure which was made in vain and would have been avoided had reasonable care been exercised. All expenditure relating to fruitless and wasteful expenditure is recognised as an expense in the statement of profit and loss in the year that the expenditure was incurred. The expenditure is classified in accordance with the nature of the expense, and where recovered, it is subsequently accounted for as revenue in the statement of financial performance. During the reporting period, the public entity enhanced its processes for dealing with fruitless and wasteful expenditure by implementing a new procedure manual and consequence management guideline and referring all confirmed incidents to the Loss Control Committee to ensure consistency of sanctions imposed through the consequence management process, as well as in alignment with the National Treasury Framework on fruitless and wasteful expenditure.

Reconciliation of fruitless and wasteful expenditure	2022 Rand	2021 Rand
Opening balance	4 646 179	4 182 978
Fruitless and wasteful expenditure current year	194 488	1 302 758
Fruitless and wasteful expenditure recovered	(12 320)	(601 361)
Write off of Fruitless and wasteful expenditure approved by Board	-	(238 196)
	-	-
Total at the end of the financial year	**4 828 347**	**4 646 179**

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Notes to the Annual Financial Statements

29. COMPLIANCE WITH THE PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999, AND TREASURY

2022 **Incident**	**Action taken**	**Amount Rand**
Services rendered and invoice received with TCTA received 15% value for money from services rendered	Assessed and referred for determination	180 625
Former employee paid a salary even though no longer in the employment of TCTA.	Deducted/Paid back	13 863
Work Dynamics	Paid back	220
A payment of R927 000 was not included in the cash flow for MMTS- resulting in an overdraft for one day. Interest differential between overdraft and borrowing rate declared as fruitless	Paid back	46
		194 754

2021 **Incident**	**Action taken**	**Amount Rand**
Expenditure for catering for a meeting which was cancelled (due to Covid regulations on travelling) after the food order was confirmed and prepared by the service provider.	#Appropriate consequence management process to be initiated.	2 628
Late payment of Eskom invoices: Eskom invoices on Eastern and Central basins.	# as above	150 321
		-
CORPORATE Two instances whereby interest on late payment was charged, value for money not achieved.	# as above	1 149 168
Late payment of Telkom invoice	To be paid by the Facilities and Logistics manager	247
Total fruitless and wasteful expenditure for the prior year		**1 302 364**

30. OTHER OPERATING EXPENSES

All construction costs including general administration costs that can be considered as construction overheads (specifically contracted to by DWS) are taken to surplus or deficit as part of project costs. Construction revenues will include this amount. (note 22)

After construction, all administration/overhead expenses are expensed as either costs for services rendered or as operating expenses in the Statement of Comprehensive Income. The projects listed below are in the post-construction phase and operating expenses are recognised in the Statement of Comprehensive Income; all other projects are still in the construction phase.

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30. OTHER OPERATING EXPENSES (continued)

Other operating expenses include the following:

2022	Short-term lease	Auditors remuneration - external auditors	Other expenditure	Total operating expenditure
Operating expenditure	**Rmil**	**Rmil**	**Rmil**	**Rmil**
VRS	3	17	(16)	4
BWP	-	-	1	1
VRESAP	-	-	2	2
MCWAP-1	-	-	2	2
MMTS-2	-	-	3	3
ORWRDP	-	-	3	3
KWSAP	-	-	1	1
MRWP	-	-	5	5
Operating expenses recognised in surplus and deficit	**3**	**17**	**1**	**21**

2021	Short-term lease	Auditors remuneration - external auditors	Expected credit losses	Other expenditure	Total operating expenditure
Operating expenditure	**Rmil**	**Rmil**	**Rmil**	**Rmil**	**Rmil**
VRS	3	15	33	(22)	29
BWP	-	-	-	2	2
VRESAP	-	-	-	2	2
MCWAP-1	-	-	-	2	2
MMTS-2	-	-	-	2	2
ORWRDP	-	-	-	7	7
KWSAP	-	-	-	2	2
MRWP	-	-	-	4	4
Operating expenses recognised in surplus and deficit	**3**	**15**	**33**	**(1)**	**50**

Other costs incurred are in relation to insurance, non-audit services, repairs and maintenance, stationery and printing, etc. In the TCTA model, administration costs are determined by aggregating the expected time to be spent on each project to determine the overall ratio of allocating overhead and administrative costs amongst our projects. During construction this recovery is included in the construction costs. Post construction these costs are recognised as other operating expenditure.

Other Operating Income	**Staff Costs Rmil**	**Other Costs Rmil**	**2022 Total Rmil**	**Staff Cost Rmil**	**Other Costs Rmil**
VRS	182	30	212	148	48
BWP	4	1	5	3	2
VRESAP	5	2	7	5	2
MCWAP-1	6	2	8	5	2
MMTS-2	7	3	10	5	3
ORWRDP	7	3	10	3	2
KWSAP	4	1	5	4	7
MRWP	-	5	5	-	4
	215	**47**	**262**	**173**	**70**

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Notes to the Annual Financial Statements

30. OTHER OPERATING EXPENSES (continued)

The low value lease relates to a lease agreement for the parking bays within the office building. The original lease payments escalated with 7.5% compounded with the first escalation that took effect on 1 January 2015. The lease subsequently expired on 31 December 2017 and an addendum was signed to extend the contract to a year-on-year agreement commencing on 1 January 2018 and expiring on 31 December 2018. Following the expiration of the lease during the year, the agreement was further extended for an additional 3 years effective 1 January 2019 with lease payments escalating by 7% per annum.

30.1.2. Payments recognised as an expense

Lease expense	2022 Rmil	2021 Rmil
Lease expense: parking bays	1	1

30.2. Breakdown of staff related costs disclosed separately as well as costs included in construction costs

During the construction phase, all staff related costs are included in the construction costs for each individual project. The costs related to each project is calculated based on an approved cost recovery model.

Previously all costs recovered have been included in the other operating expense line on the Statement of Comprehensive Income and have not been netted against the related expense. Management believes that by separating the costs which have been allocated to the operating expenses of a project compared to where the costs are still included as construction costs (which is a different line in the Statement of Comprehensive Income) information provided to the users of the annual financial statements would be improved.

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Annual Financial Statements for the year ended 31 March 2022

Notes to the Annual Financial Statements

30. OTHER OPERATING EXPENSES (continued)

	2022			2021		
Staff costs	**Costs disclosed separately Rmil**	**Staff costs included as other costs Rmil**	**Total staff expenses Rmil**	**Costs disclosed separately Rmil**	**Staff costs included as other costs Rmil**	**Total staff expenses Rmil**
VRS	182	9	191	148	17	165
BWP	4	-	4	3	-	3
VRESAP	6	-	6	5	-	5
MCWAP-1	6	-	6	5	-	5
MMTS-2	7	1	8	5	-	5
ORWRDP	7	1	8	4	-	4
KWSAP	4	-	4	3	-	3
MCWAP-2	-	24	24	-	26	26
Balance at end of year	**215**	**35**	**251**	**173**	**43**	**216**

The staff costs have been split between construction costs and are disclosed separately upon receipt of the Taking Over Certificates.

28.3 Costs of services rendered

2022	**LHWP operations and maintenance Rmil**	**AMD operations and maintenance Rmil**	**Debt management services Rmil**	**Total Rmil**
VRS	-	235	9	244
BWP	-	-	1	1
VRESAP	-	-	1	1
MCWAP-1	-	-	1	1
MMTS-2	-	-	3	3
KWSAP	-	-	1	1
MRWP	-	-	1	1
Total cost of services rendered	**-**	**235**	**17**	**252**

2021	**LHWP operations and maintenance Rmil**	**AMD operations and maintenance Rmil**	**Debt management services Rmil**	**Total Rmil**
VRS	(3)	231	8	236
BWP	-	-	(2)	(2)
VRESAP	-	-	1	1
MCWAP-1	-	-	1	1
MMTS-2	-	-	4	4
ORWRDP	-	-	1	1
KWSAP	-	-	1	1
Total cost of services rendered	**(3)**	**231**	**14**	**242**

ANNEXURE A - Segmental Statement of Cash Flows
for the period ended 31 March 2022

	Notes	TCTA-C Mar 2022 R'million	VRS (1) Mar 2022 R'million	BWP (2) Mar 2022 R'million	VRESAP (3) Mar 2022 R'million	MCWAP (4) Mar 2022 R'million	MMTS-2 (5) Mar 2022 R'million	ORWRDP (6) Mar 2022 R'million	KWSAP (7) Mar 2022 R'million	MCWAP 2 Mar 2022 R'million	MMTS-1 (9) Mar 2022 R'million	UMGENI (10) Mar 2022 R'million	MRWP Mar 2022 R'million	BRVS Mar 2022 R'million	uMwp Mar 2022 R'million	KRIEL (11) Mar 2022 R'million	TOTAL Mar 2022 R'million
CASH FLOW FROM OPERATING ACTIVITIES																	
Cash receipts		-	8,462	160	715	591	991	85	310	1	-	-	-	1	-		11,316
Cash transfer to / (from) projects		183	-355	-5	-7	-457	-9		-4	617			-	25	12		-
Cash paid to suppliers and employees		-182	-4,813	-23	-99	-48	-118	-64	-39	-8	-	-	-	-13	-	-	-5,407
Cash generated from project activities	A	1	3,294	132	609	86	864	21	267	610	-	-	-	13	12	-	5,909
Other Finance Costs			-153	-1	-23	-1	-22		-1								-201
Non cash flow in other finance costs					23												23
Interest paid	C	-	-959	-28	-245	-103	-77	-	-99	-	-	-	-	-	-	-	-1,511
Net cash (outflow)/inflow from operating activities		**1**	**2,182**	**103**	**363**	**-17**	**765**	**21**	**167**	**610**	**-**	**-**	**-**	**13**	**12**	**-**	**4,220**
CASH FLOW FROM INVESTING ACTIVITIES																	-
Payments to acquire financial assets							-										-
Proceeds on the sale of financial assets		-	17			-	-										17
Interest received	B	1	200	3	6	46	28	-	9	-	-	-	0	7	-	-	300
Disposals of property, plant and equipment		-	-														-
Additions to property, plant and equipment	8	-	-1														-1
Additions to intangible assets																	-
Net cash inflow from investing activities		**1**	**216**	**3**	**6**	**46**	**28**	**-**	**9**	**-**	**-**	**-**	**0**	**7**	**-**	**-**	**316**
CASH FLOW FROM FINANCING ACTIVITIES																	
Proceeds from long-term borrowings		-	8,040	-			-										8,040
Repayments on long-term borrowings		-	-11,436	-97	-256	-381	-691		-96								-12,957
Payment of principal portion of lease liabilities			-4														-4
Proceeds from short-term borrowings		-															-
Repayments on short-term borrowings		-	-														-
Net cash outflow from financing activities		**-**	**-3,400**	**-97**	**-256**	**-381**	**-691**	**-**	**-96**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-4,921**
Net (decrease) in cash and cash equivalents		2	-1,002	9	113	-352	102	21	80	610	-	-	0	20	12	-	-385
Cash and cash equivalents at beginning of period	19	3	6,654	68	95	1,351	857	26	180	-	-	-	-		-	-	9,234
Cash and cash equivalents at end of period	**19**	**5**	**5,652**	**77**	**208**	**999**	**959**	**47**	**260**	**610**	**-**	**-**	**0**	**20**	**12**	**-**	**8,849**

		TCTA-C Mar 2022 Rand	VRS (1) Mar 2022 R'million	BWP (2) Mar 2022 R'million	VRESAP (3) Mar 2022 R'million	MCWAP (4) Mar 2022 R'million	MMTS-2 (5) Mar 2022 R'million	ORWRDP (6) Mar 2022 R'million	KWSAP (7) Mar 2022 R'million	MCWAP 2 Mar 2022 R'million	MMTS-1 (9) Mar 2022 R'million	UMGENI (10) Mar 2022 R'million	MRWP Mar 2022 R'million	BRVS Mar 2022	uMwp	KRIEL (11) Mar 2022 R'million	TOTAL Mar 2022 R'million
A. CASH GENERATED FROM PROJECT ACTIVITIES																	
Net surplus / (deficit) for the year		1	1,172	-8	-48	113	114	-	13	-	-	-	-	7		-	1,364
Adjustments for non cash flow items and amounts separately disclosed:																	
Depreciation on non-current assets			6														6
Net interest expense		-1	506	26	267	56	63	-	91	-	-	-	-	-7	-	-	1,001
Interest income and imputed interest on tariff receivable	23.1		-1,678	-18	-219	-169	-177		-104					-			-2,365
Loss on disposal of property, plant and equipment																	-
Construction revenue	22		-	-	-	-	2	-43	-	-181	-	-	-	-26	-14	-	-262
Revenue from services rendered	22		-244	-1	-1	-1	-3	-1	-1								-252
Other operating income	22		-212	-5	-7	-8	-10	-10	-5	-	-	-	-5	-	-	-	-262
Non cash flow in operating expenses			-6														-6
Changes in working capital:																	-
(Increase) / decrease in loans and other receivables			-389	-	-	-6	-	16	-	202	-	-	7	43	28	-	-99
(Increase) / decrease in prepayments			-11	-	-	-	-1	-	-		-	-				-	-12
(Decrease)/ increase in payables and provisions(excluding interest payable)		1	123	1	9	-206	15	5	-0	366	-	-	1	1	3	-	319
(Decrease)/ increase in contract liabilities							-			42			-8	-31	-19	-	-16
Refund liabilities							179										179
Cost related payments			-3,261														-3,261
Capitalised to / (removed from) Tariff Receivable	10.4.2		7,311	137	608	303	683	-	270	-							9,312
Vat on tariff receivable debtor	10.4.2		-23	-	-	4	-1	-	3								-17
Non cash flow item in accounts receivable								54		181	-	-	5	26	14	-	280
Non cash flow item in accounts payable			-														-
Cash generated from project activities		**1**	**3,294**	**132**	**609**	**86**	**864**	**21**	**267**	**610**	**-**	**-**	**-**	**13**	**12**	**-**	**5,909**
B. INTEREST RECEIVED																	
Amount due at beginning of the year			-	-	-	-	-	-	-								-
Income during the year adjusted for non-cash items		1	200	3	6	46	28	-	9	-	-	-	0	7		-	300
Interest income on financial instruments (1)	23.1	1	341	3	6	46	28	3	9	27			0	7	1		472
AMD interest			-141														-141
Inter-project interest			-					-3		-27				-	-1		-31
Amount due at the end of the year			-	-	-	-	-		-								-
Interest received		**1**	**200**	**3**	**6**	**46**	**28**	**-**	**9**	**-**	**-**	**-**	**0**	**7**	**-**	**-**	**300**
C. INTEREST PAID																	
Amount not paid at beginning of the year	15		-313	-1	-28	-12	-15	-	-1								-370

Expensed during the year adjusted for non-cash items		-	-694	-28	-243	-101	-69	-	-99		-	-				-	-1,234
Amount expensed (excluding imputed interest)	**23.2**		-694	-28	-250	-101	-69	-3	-99	-27		-			-1		-1,272
Less: inercompany interest			-			-		3		27					1		31
Interest on lease liability			-														-
Interest capitalised to the principal amount (2)					7			-	-						-		7
Accrued interest on switched bonds			-														-
Amount not paid at the end of the year	**15**		48	1	26	10	7	-	1								93
Interest paid		**-**	**-959**	**-28**	**-245**	**-103**	**-77**	**-**	**-99**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-1,511**

D. RECONCILIATION OF FINANCIAL MARKET LIABILITIES TO FINANCING ACTIVITIES		**TCTA-C**	**VRS (1)**	**BWP (2)**	**VRESAP (3)**	**MCWAP (4)**	**MMTS-2 (5)**	**ORWRDP (6)**	**KWSAP (7)**	**MCWAP 2**	**MMTS-1 (9)**	**UMGENI (10)**	**MRWP**	**BRVS**	**uMwp**	**KRIEL (11)**	**TOTAL**
Long-term borrowings at 1 April	**10.6.1**		3,251	303	2,802	1,227	1,178		1,140								9,901
Short-term borrowings at 1 April	**10.6.2**		9,682	77	233	52	95		46								10,185
Long-term lease liability at 1 April			-														-
Short-term lease liability at 1 April			4														4
Total borrowings 1 April		-	12,937	380	3,036	1,279	1,273	-	1,185		-	-				-	20,090
Net cash outflow from financing activities			-3,400	-97	-256	-381	-691	-	-96		-	-				-	-4,920
Non-cash flow items:		-	-	-	30	-	-	-	-		-	-				-	30
- Capitalised interest					7				-								7
_ Capital adjustment to inflation-linked liability		-	-		23												23
- Capitalisation of office building lease			-														-
- Loss on swich auction			-														-
- Interest on lease liability			-														-
- Bond discount / premium		-	-														-
Non=cash flow items																	
Long-term borrowings at 31 March	**10.6.1**		8,683	206	2,509	244	-		1,023								12,665
Short-term borrowings at 31 March	**10.6.2**		854	77	300	654	582		67								2,534
Long-term lease liability at 31 March			-														-
Short-term lease liability at 31 March			-														-
Total borrowings at 31 March		-	9,537	283	2,809	898	582	-	1,091		-	-				-	15,199

E. NET DEBT RECONCILIATION

	TCTA-C Mar 2022 R'million	VRS (1) Mar 2022 R'million	BWP (2) Mar 2022 R'million	VRESAP (3) Mar 2022 R'million	MCWAP (4) Mar 2022 R'million	MMTS-2 (5) Mar 2022 R'million	ORWRDP (6) Mar 2022 R'million	KWSAP (7) Mar 2022 R'million	MCWAP 2 Mar 2022 R'million	MMTS-1 (9) Mar 2022 R'million	UMGENI (10) Mar 2022 R'million	MRWP Mar 2022 R'million	BRVS Mar 2022 R'million	uMwp Mar 2022 R'million	KRIEL (11) Mar 2022 R'million	TOTAL Mar 2022 R'million
Cash and cash equivalents at 1 April	3	6,654	68	95	1,351	857	26	180	-	-	-	-	-	-	-	9,234
Long-term borrowings at 1 April	-	-3,251	-303	-2,802	-1,227	-1,178	-	-1,140	-	-	-	-	-	-	-	-9,901
Short-term borrowings at 1 April	-	-9,682	-77	-233	-52	-95	-	-46	-	-	-	-	-	-	-	-10,185
Long-term lease liability at 1 April	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Short-term lease liability at 1 April	-	-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-4
Net debt at 1 April	3	-6,283	-312	-2,940	72	-416	26	-1,005	-	-	-	-	-	-	-	-10,856
																-
Increase / (decrease) in cash and cash equivalents	2	-1,002	9	113	-352	102	21	80	610	-	-	0	20	12	-	-383
Net cash outflow from financing activities	-	3,400	97	256	381	691	-	96	-	-	-	-	-	-	-	4,921
																-
Non cash flow items	-	-	-	-30	-	-	-	-	-	-	-	-	-	-	-	-30
																-
Cash and cash equivalents at 31 March	5	5,652	77	208	999	959	47	260	610	-	-	0	20	12	-	8,850
Long-term borrowings at 31 March	-	-8,683	-206	-2,509	-244	-	-	-1,023	-	-	-	-	-	-	-	-12,665
Short-term borrowings at 31 March	-	-854	-77	-300	-654	-582	-	-67	-	-	-	-	-	-	-	-2,534
Long-term lease liability at 31 March	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Short-term lease liability at 31 March	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net debt at 31 March	5	-3,885	-206	-2,601	101	377	47	-830	610	-	-	0	20	12	-	-6,349

ANNEXURE A - Segmental Statement of Cash Flows
for the period ended 31 March 2022

	Notes	TCTA-C Mar 2021 R'million	VRS (1) Mar 2021 R'million	BWP (2) Mar 2021 R'million	VRESAP (3) Mar 2021 R'million	MCWAP (4) Mar 2021 R'million	MMTS-2 (5) Mar 2021 R'million	ORWRDP (6) Mar 2021 R'million	KWSAP (7) Mar 2021 R'million	MCWAP 2 Mar 2021 R'million	MMTS-1 (9) Mar 2021 R'million	UMGENI (10) Mar 2021 R'million	MRWP Mar 2021 R'million	BRVS Mar 2021 R'million	uMwp Mar 2021 R'million	KRIEL (11) Mar 2021 R'million	TOTAL Mar 2021 R'million
CASH FLOW FROM OPERATING ACTIVITIES																	
Cash receipts		-	8,407	196	617	809	790	97	189	-	-		-	-	-		11,105
Cash transfer to / (from) projects		148	-90	-9	-13	-14	-13		-9								0
Cash paid to suppliers and employees		-151	-3,858	-12	-63	-40	-89	-89	-7	-	-	-	-	-	-	-	-4,309
Cash generated from project activities	A	-3	4,459	175	541	755	688	8	173	-	-	-	-	-	-	-	6,796
Other Finance Costs			-14	-1	-12	-1	-1		-1								-30
Non cash flow in other finance costs					12												12
Interest paid	C	-	-1,100	-37	-276	-113	-114	-	-104	-	-	-	-	-	-	-	-1,744
Net cash (outflow)/inflow from operating activities		**-3**	**3,345**	**137**	**265**	**641**	**573**	**8**	**68**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**5,034**
CASH FLOW FROM INVESTING ACTIVITIES																	-
Payments to acquire financial assets							-										-
Proceeds on the sale of financial assets		-	514			44	48										606
Interest received	B	0	175	3	7	37	23	0	7		-	-				-	252
Disposals of property, plant and equipment		-	-														-
Additions to property, plant and equipment	8	-	-														-
Additions to intangible assets																	-
Net cash inflow from investing activities		**0**	**689**	**3**	**7**	**81**	**71**	**0**	**7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**858**
CASH FLOW FROM FINANCING ACTIVITIES																	
Proceeds from long-term borrowings		-	-	-			60										60
Repayments on long-term borrowings		-	-297	-107	-232	-47	-198		-38								-919
Payment of principal portion of lease liabilities			-5														-5
Proceeds from short-term borrowings		-			197		1										198
Repayments on short-term borrowings		-	-		-197		-86										-283
Net cash outflow from financing activities		**-**	**-302**	**-107**	**-232**	**-47**	**-223**	**-**	**-38**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-949**
Net (decrease) in cash and cash equivalents		-3	3,732	33	40	675	421	8	37	-	-	-	-	-		-	4,943
Cash and cash equivalents at beginning of period	18	6	2,922	35	55	676	436	18	143	-	-	-	-			-	4,291
Cash and cash equivalents at end of period	18	**3**	**6,654**	**68**	**95**	**1,351**	**857**	**26**	**180**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**9,234**

		TCTA-C Mar 2021 Rand	VRS (1) Mar 2021 R'million	BWP (2) Mar 2021 R'million	VRESAP (3) Mar 2021 R'million	MCWAP (4) Mar 2021 R'million	MMTS-2 (5) Mar 2021 R'million	ORWRDP (6) Mar 2021 R'million	KWSAP (7) Mar 2021 R'million	MCWAP 2 Mar 2021 R'million	MMTS-1 (9) Mar 2021 R'million	UMGENI (10) Mar 2021 R'million	MRWP Mar 2021 R'million	BRVS Mar 2021	uMwp	KRIEL (11) Mar 2021 R'million	TOTAL Mar 2021 R'million
A. CASH GENERATED FROM PROJECT ACTIVITIES																	
Net surplus / (deficit) for the year			831	-5	-43	20	140	-	-13	-	-	-	-			-	930
Adjustments for non cash flow items and amounts separately disclosed:																	
Depreciation on non-current assets			8														8
Net interest expense		-0	787	35	279	92	86	-0	98		-	-	-			-	1,377
Interest income and imputed interest on tariff receivable	23.1		-1,618	-30	-236	-112	-226		-85								-2,307
Loss on disposal of property, plant and equipment																	-
Construction revenue	22		-	-	-	-3	5	-36	-	-89	-	-1	-	-20	-27	-	-171
Revenue from services rendered	22		-236	2	-1	-1	-3		-1								-240
Other operating income	22		-196	-5	-7	-7	-7	-11	-5	-	-	-	-4	-	-	-	-242
Non cash flow in operating expenses			33														33
Changes in working capital:																	-
(Increase) / decrease in loans and other receivables			-87	10	15	11	22	29	13	-412	-	12	4	-28	-24	-	-435
(Increase) / decrease in prepayments			20	-	-	-	-	10	-		-	-				-	30
(Decrease)/ increase in payables and provisions(excluding interest payable)		-3	-198	-2	2	501	-4	-31	4	60	-	-12	-	-12	-4	-	301
(Decrease)/ increase in contract liabilities										352			-4	40	28		416
Refund liabilities																	
Cost related payments			-2,157														-2,157
Capitalised to / (removed from) Tariff Receivable	10.4.2		7,163	170	532	257	686	-	165	-							8,973
Vat on tariff receivable debtor	10.4.2		109	-	-	-3	-11		-3								92
Non cash flow item in accounts receivable								47		89	-	1	4	20	27	-	188
Non cash flow item in accounts payable			-														-
Cash generated from project activities		**-3**	**4,459**	**175**	**541**	**755**	**688**	**8**	**173**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**6,796**
B. INTEREST RECEIVED																	
Amount due at beginning of the year			11	-	-	1	1	-	-								13
Income during the year adjusted for non-cash items		0	164	3	7	36	22	0	7		-	-				-	239
Interest income on financial instruments (1)	23.1	0	312	3	7	36	22	0	7								387
AMD interest			-148														-148
Inter-project interest			-														-
Amount due at the end of the year			-	-	-	-	-		-								-
Interest received		**0**	**175**	**3**	**7**	**37**	**23**	**0**	**7**		**-**	**-**	**-**	**-**	**-**	**-**	**252**
C. INTEREST PAID																	
Amount not paid at beginning of the year	15		-329	-1	-33	-12	-22	-	-1								-398

Expensed during the year adjusted for non-cash items		-	-1,084	-37	-271	-113	-107	-	-104		-	-				-	-1,716
Amount expensed (excluding imputed interest)	**23.2**		-1,085	-37	-275	-127	-107	-	-104			-					-1,735
Less: inercompany interest			-			14											14
Interest on lease liability			1														1
Interest capitalised to the principal amount (2)					4				-								4
Accrued interest on switched bonds			-														-
Amount not paid at the end of the year	**15**		313	1	28	12	15	-	1								370
Interest paid		**-**	**-1,100**	**-37**	**-276**	**-113**	**-114**	**-**	**-104**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-1,744**
D. RECONCILIATION OF FINANCIAL MARKET LIABILITIES TO FINANCING ACTIVITIES		**TCTA-C**	**VRS (1)**	**BWP (2)**	**VRESAP (3)**	**MCWAP (4)**	**MMTS-2 (5)**	**ORWRDP (6)**	**KWSAP (7)**	**MCWAP 2**	**MMTS-1 (9)**	**UMGENI (10)**	**MRWP**		**uMwp**	**KRIEL (11)**	**TOTAL**
Long-term borrowings at 1 April	**10.6.1**		12,933	411	3,031	1,280	1,273		1,185								20,113
Short-term borrowings at 1 April	**10.6.2**		297	77	219	47	224		38								902
Long-term lease liability at 1 April			4														4
Short-term lease liability at 1 April			5														5
Total borrowings 1 April		-	13,239	488	3,250	1,327	1,497	-	1,223		-	-				-	21,024
Net cash outflow from financing activities			-302	-107	-232	-47	-223	-	-38		-	-				-	-949
Non-cash flow items:		-	1	-	16	-	-	-	-		-	-				-	18
- Capitalised interest					4				-								4
_ Capital adjustment to inflation-linked liability		-	-		12												12
- Capitalisation of office building lease			-														-
- Loss on swich auction			-														-
- Interest on lease liability			1														1
- Bond discount / premium		-	-														-
Non=cash flow items																	
Long-term borrowings at 31 March	**10.6.1**		3,251	303	2,802	1,227	1,178		1,140								9,901
Short-term borrowings at 31 March	**10.6.2**		9,682	77	233	52	95		46								10,185
Long-term lease liability at 31 March			-														-
Short-term lease liability at 31 March			4														4
Total borrowings at 31 March		-	12,937	380	3,035	1,279	1,273	-	1,186		-	-				-	20,090

E. NET DEBT RECONCILIATION	TCTA-C Mar 2021 R'million	VRS (1) Mar 2021 R'million	BWP (2) Mar 2021 R'million	VRESAP (3) Mar 2021 R'million	MCWAP (4) Mar 2021 R'million	MMTS-2 (5) Mar 2021 R'million	ORWRDP (6) Mar 2021 R'million	KWSAP (7) Mar 2021 R'million	MCWAP 2 Mar 2021 R'million	MMTS-1 (9) Mar 2021 R'million	UMGENI (10) Mar 2021 R'million	MRWP Mar 2021 R'million	BRVS Mar 2021 R'million	uMwp Mar 2021 R'million	KRIEL (11) Mar 2021 R'million	TOTAL Mar 2021 R'million
Cash and cash equivalents at 1 April	6	2,922	35	55	676	436	18	143	-	-	-	-	-	-	-	4,291
Long-term borrowings at 1 April	-	-12,933	-411	-3,031	-1,280	-1,273	-	-1,185	-	-	-	-	-	-	-	-20,112
Short-term borrowings at 1 April	-	-297	-77	-219	-47	-224	-	-38	-	-	-	-	-	-	-	-902
Long-term lease liability at 1 April	-	-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-4
Short-term lease liability at 1 April	-	-5	-	-	-	-	-	-	-	-	-	-	-	-	-	-5
Net debt at 1 April	6	-10,317	-453	-3,194	-651	-1,061	18	-1,080	-	-	-	-	-	-	-	-16,732
Increase / (decrease) in cash and cash equivalents	-3	3,732	33	40	675	421	8	37	-	-	-	-	-	-	-	4,944
																-
Net cash outflow from financing activities	-	302	107	232	47	223	-	38	-	-	-	-	-	-	-	949
																-
Non cash flow items	-	-1	-	-16	-	-	-	-	-	-	-	-	-	-	-	-17
																-
Cash and cash equivalents at 31 March	3	6,654	68	95	1,351	857	26	180	-	-	-	-	-	-	-	9,235
Long-term borrowings at 31 March	-	-3,251	-303	-2,802	-1,227	-1,178	-	-1,140	-	-	-	-	-	-	-	-9,901
Short-term borrowings at 31 March	-	-9,682	-77	-233	-52	-95	-	-46	-	-	-	-	-	-	-	-10,185
Long-term lease liability at 31 March	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Short-term lease liability at 31 March	-	-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-4
Net debt at 31 March	3	-6,283	-312	-2,940	72	-416	26	-1,005	-	-	-	-	-	-	-	-10,855

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GLOBAL REPORTING INITIATIVE CONTENT INDEX

Ref No.	Description	Compliant	Comment
1.	**Strategy and analysis**		
1.1	Statement from the most senior decision-makers of the organisation	Fully	Refer to pages 4 and 11.
1.2	Description of key impacts, risks and opportunities	Fully	Refer to page 90.
2.	**Organisational profile**		
2.1	Name of the organisation	Fully	Trans-Caledon Tunnel Authority.
2.2	Primary brands, products and/or services	Fully	Refer to page 17.
2.3	Operational structure of the organisation, including main divisions, operating companies, subsidiaries and joint ventures	Fully	Refer to page 22.
2.4	Location of organisation's headquarters	Fully	TCTA operates from its offices in Centurion, Gauteng, South Africa.
2.5	Number of countries where the organisation operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	Fully	TCTA is only active in South Africa. On Phase 2 of the Lesotho Highlands Water Project, it raises the money in South Africa for the water transfer component and pays it over to the Lesotho Highlands Development Authority for the implementation.
2.6	Nature of ownership and legal form	Fully	Refer to page 14.
2.7	Markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	Fully	Not applicable
2.8	Scale of the reporting organisation	Fully	Refer to Section B: Performance Information
2.9	Significant changes during the reporting period regarding size, structure or ownership	Fully	None
2.10	Awards received in the reporting period	Fully	None
3.	**Report parameters**		
3.1	Reporting period (e.g. fiscal or calendar year) for information provided	Fully	This report relates to the financial year from 1 April 2021 to 31 March 2022.
3.2	Date of most recent previous report (if any)	Fully	May 2022
3.3	Reporting cycle (annual, biennial, etc.)	Fully	Annual
3.4	Contact point for questions regarding the report or its contents	Fully	Feedback on the report is welcome. The Chief Executive Officer may be contacted in this regard.
3.5	Process for defining report content	Fully	Refer to page 8: About the Integrated Annual Report.

Ref No.	Description	Compliant	Comment
3.6	Boundary of the report (e.g. countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers)	Fully	The report covers the activities of TCTA with regard to the mandate and the directives received from the Minister and associated activities.
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope)	Fully	There were no specific limitations on the scope or boundary of the report.
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organisations	Fully	None.
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the Global Reporting Initiative Indicator Protocols	Fully	Refer to page 27.
3.10	Explanation of the effect of any restatements of information provided in earlier reports, and the reasons for such restatement (e.g. mergers and acquisitions, change of base years or periods, nature of business, measurement methods)	Fully	None.
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	Fully	No significant changes were identified from the previous reporting period.
3.12	Table identifying the location of the Standard Disclosures in the report	Fully	Refer to pages 'Global Reporting Initiative content index'.
3.13	Policy and current practice with regard to seeking external assurance for the report	Fully	The predetermined objectives and the Annual Financial Statements are assured in line with the requirements of the Auditor-General of South Africa.
4.	Governance, commitments and engagement		
4.1	Governance structure of the organisation, including Committees under the highest governance body responsible for specific tasks, such as setting strategy or organisational oversight	Fully	Refer to Section E: Governance.
4.2	Indicate whether the Chair of the highest governance body is also an executive officer	Fully	The Chairperson of the TCTA Board is an independent non-executive director.

Ref No.	Description	Compliant	Comment
4.3	For organisations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members	Fully	Refer to pages 78 and 79.
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	Fully	In line with Treasury Regulations shareholder input is received through the Shareholder Compact.
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organisation's performance (including social and environmental performance)	None	
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	Fully	Refer to page 73.
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its Committees, including any consideration of gender and other indicators of diversity	Fully	Refer to pages 78 and 79 for details of Board. Process of determining composition is the prerogative of the Minister and occurs when the Board is appointed.
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation	Fully	Refer to Section C: Sustainability
4.9	Procedures of the highest governance body for overseeing the organisation's identification and management of economic, environmental, and social and labour performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct and principles	Fully	Refer to Section C: Sustainability
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental and social performance	None	
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organisation	None	

Ref No.	Description	Compliant	Comment
4.12	Externally developed economic, environmental and social charters, principles or other initiatives to which the organisation subscribes or endorses	Fully	In the implementation of its projects TCTA subscribes to the principles contained in the Construction Sector Charter.
4.13	Memberships in associations	Fully	Institute of Internal Auditors, South African National Committee on Large Dams, World Economic Forum, Water Institute of Southern Africa, Association of Corporate Treasurers of Southern Africa and Corporate Executive Board.
4.14	List of stakeholder groups engaged by the organisation	Fully	Refer to page 19.
4.15	Basis for identification and selection of stakeholders with whom to engage	Fully	TCTA implements projects on behalf of the Department of Water and Sanitation. Engagement with off-takers is through the Department's structures.
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	Fully	Refer to page 19.
4.17	Key topics and concerns that have been raised through stakeholder engagement	Fully	None
DMA EC	**Disclosure on management approach: Economic**		
Aspects	Economic performance	None	
	Market presence	Fully	Refer to page 14.
	Indirect economic impacts	Fully	Refer to page 17. TCTA delivers in support of the Government Outcomes
DMA EN	**Disclosure on management approach: Environmental**		
Aspects	Materials	Partially	In line with other major organisations, TCTA does not report on the materials consumed in capital projects.
	Energy	Partially	In line with other major organisations, TCTA does not report on the energy consumed in capital projects. Electricity consumption in head office is recorded on page 47.
	Water	Partially	In line with other major organisations, TCTA does not report on the water consumed in capital projects. Water consumption in head office is recorded on page 47.
	Biodiversity	Fully	Refer to page 45.
	Emissions, effluents and waste	Fully	None. In line with other major organisations, TCTA does not report on the emissions, effluents and waste produced in capital projects.
	Products and services	Fully	Refer to page 17.
	Compliance	Partially	Refer to page 50 for Health and Safety on site.

Ref No.	Description	Compliant	Comment
	Transport	Fully	None. In line with other major organisations, TCTA does not report on the transport requirement in capital projects.
	Overall	Partially	Each element reported separately
DMA LA	**Disclosure on management approach: Labour**		
Aspects	Employment	Fully	Refer to pages 62, 63 and 66.
	Labour/management relations	Fully	Refer to page 68.
	Occupational health and safety	Partially	Refer to page 51 (for project sites).
	Training and education	Fully	Refer to page 65.
	Diversity and equal opportunity	Fully	Refer to page 66.
	Equal remuneration for women and men	None	
DMA HR	**Disclosure on management approach: Human Resources**		
Aspects	Investment and procurement practices	Fully	Refer to page Note 29 in AFS for compliance.
	Non-discrimination	Fully	Refer to Employment Equity as reflected on page 66.
	Freedom of association and collective bargaining	None	
	Child labour	Fully	All project sites comply with South African legislation
	Prevention of forced and compulsory labour	Fully	All project sites comply with South African legislation.
	Security practices	Fully	All project sites comply with South African legislation.
	Indigenous rights	Fully	TCTA complies with South African legislation in terms of employment equity.
	Assessment	Fully	Not required.
	Remediation	Fully	Not required.
DMA SO	**Disclosure on management approach: Social**		
Aspects	Local communities	Fully	No projects are under construction.
	Corruption	Partially	Refer to Note 29 in AFS
	Public policy	None	
	Anti-competitive behaviour	Fully	Not applicable

Ref No.	Description	Compliant	Comment
Compliance		Fully	TCTA seeks to create sustainable value for the Shareholder and establish itself as a leader in water infrastructure development. TCTA is committed to responsible business conduct and best practice. An ethical governance framework and a commitment to legal compliance guide all its organisational activities. TCTA upholds the principles expressed in the King IV™ Code that good governance combines both regulatory requirements and voluntary standards of excellence.
DMA PR	**Disclosure on management approach: Product responsibility**		
Aspects	Customer health and safety	Fully	Not applicable
	Product and service labelling	Fully	Not applicable
	Marketing communications	Fully	Not applicable
	Customer privacy	Fully	Not applicable
	Compliance	Fully	Not applicable
Performance indicators			
Economic			
EC1	Direct economic value generated and distributed	Fully	Not applicable. TCTA is a non-profit organisation and does not create a surplus or loss. Refer to page 15.
EC3	Coverage of the organisation's defined benefit plan obligations	Fully	Not applicable.
Market presence			
EC6	Policy, practices and proportion of spending on locally based suppliers at significant locations of operation	Partially	TCTA subscribes to the Construction Sector Charter, which stipulates employment, preferential procurement and enterprise development targets for local development on each project site.
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation	Fully	TCTA is based in South Africa only and all staff are hired locally.
Indirect economic impacts			
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement	Fully	Refer to page 17.
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	Fully	Refer to page 17.

Ref No.	Description	Compliant	Comment
Environmental			
Materials			
EN1	Materials used by weight or volume	None	None. In line with other major organisations, TCTA does not report on the materials consumed in capital projects.
EN3	Percentage of materials used that are recycled input materials	None	None. In line with other major organisations, TCTA does not report on recycled materials consumed in capital projects.
Energy			
EN3	Direct energy consumption by primary energy source	None	None. In line with other major organisations, TCTA does not report on direct energy consumption by primary energy source in capital projects.
EN4	Indirect energy consumption by primary source	None	None. In line with other major organisations, TCTA does not report on indirect energy consumption by primary energy source in capital projects.
EN5	Energy saved due to conservation and efficiency improvements	None	
EN6	Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these initiatives	None	On once-off capital projects, each of which is unique in nature and of limited lifespan, it is difficult to institute programmes which record reduction in consumption of energy.
EN7	Initiatives to reduce indirect energy consumption and reductions achieved (internal)	Fully	On once-off capital projects, each of which is unique in nature and of limited lifespan, it is difficult to institute programmes which record reduction in consumption of energy.
Water			
EN8	Total water withdrawal by source	None	Each project withdraws from the adjacent source and the head office draws water from the Vaal River System through Rand Water and Tshwane Metropolitan Municipality.
Biodiversity			
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Fully	Refer to Section C: Mitigation of Environmental Impacts on page 45.
EN13	Habitats protected or restored	Fully	Refer to Section C: Mitigation of Environmental Impacts on page 45.
EN14	Strategies, current actions and future plans for managing impacts on biodiversity	Fully	Refer to Section C: Mitigation of Environmental Impacts on page 45.

Ref No.	Description	Compliant	Comment
Emissions, effluents and waste			
EN16	Total direct and indirect greenhouse gas emissions by weight	None	Not applicable
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	None	Not applicable
EN22	Total weight of waste by type and disposal method	None	Not applicable
EN23	Total number and volume of significant spills	Partially	None
Products and services			
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	Fully	Not applicable
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	Fully	Not applicable
Compliance			
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non¬compliance with environmental laws and regulations	Fully	No significant non-compliance with environmental laws and regulations was identified.
Transport			
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce	Fully	None. In line with other major organisations, TCTA does not report on significant environmental impacts of transporting products and other goods and materials used for the organisation's capital projects.

Social: Labour practices and decent work			
Employment			
LA1	Total workforce by employment type, employment contract and region, broken down by gender	Fully	Refer to pages 62, 63 and 66.
LA2	Total number and rate of new employee hires and employee turnover by age group, gender and region	Fully	Refer to pages 62, 63 and 66.
Labour/management relations			
LA4	Percentage of employees covered by collective bargaining agreements	None	

Ref No.	Description	Compliant	Comment
Occupational health and safety			
LA6	Percentage of total workforce represented in formal joint management–worker health and safety Committees that help monitor and advise on occupational health and safety programmes	None	
LA7	Rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities by region and by gender	None	
Training and education			
LA10	Average hours of training per year per employee by gender and by employee category	Partially	Refer to page 65.
LA11	Programmes for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	None	
LA12	Percentage of employees receiving regular performance and career development reviews, by gender	Fully	All TCTA employees receive regular performance reviews and are required to submit a Personal Development Plan each year.
Diversity and equal opportunity			
LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership and other indicators of diversity	Fully	Refer to pages 62, 63, 66, 78 and 79.
Equal remuneration for women and men			
LA14	Ratio of basic salary and remuneration of women to men (internal)	None	

Social: Human rights			
Non-discrimination			
HR4	Total number of incidents of discrimination and actions taken	Fully	No incidents of discrimination were reported during the period under review.
Freedom of association and collective bargaining			
HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights	Fully	No violations were identified.

Ref No.	Description	Compliant	Comment
Child labour			
HR6	Measures taken to contribute to the effective abolition of child labour	Fully	No violations were identified.
Forced and compulsory labour			
HR7	Measures to contribute to the elimination of all forms of forced or compulsory labour	Fully	No violations were identified.
Indigenous rights			
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	Fully	No violations were identified.
Assessment			
HR10	Percentage and total number of operations that have been subject to human rights reviews and/ or impact assessments	Fully	None
Remediation			
HR11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms	Fully	None

Social: Society			
Local comcommunities			
SO1	Percentage of operations with implemented local community engagement, impact assessments and development programmes	None	No projects are under construction.
Public policy			
SO5	Public policy positions and participation in public policy development and lobbying	Fully	As a government institution, TCTA does not take any policy positions but works with Government in the development of policy to ensure a financially sustainable water sector.
SO6	Total value of financial and in-kind contributions to political parties, politicians and related institutions by country	Fully	None
Anti-competitive behaviour			
SO7	The total number of legal actions for anti-competitive behaviour, anti-trust and monopoly practices and their outcomes	Fully	Not applicable

Ref No.	Description	Compliant	Comment
Compliance			
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	Fully	No significant fines were incurred for non-compliance with laws and regulations.
Social: Product responsibility			
Customer health and safety			
PR1	Life-cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	Fully	Not applicable
Product and service labelling			
PR3	Type of product and service information required by procedures and percentage of significant products and services subject to such information requirements	Fully	Not applicable
Marketing communications			
PR6	Programmes for adherence to laws, standards and voluntary codes related to marketing communications, including advertising, promotion and sponsorship	Fully	Not applicable
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion and sponsorship by type of outcomes	Fully	Not applicable
Customer privacy			
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	Fully	Not applicable
Compliance			
PR9	Monetary value of significant fines for non¬compliance with laws and regulations concerning the provision and use of products and services	Fully	Not applicable

LIST OF ABBREVIATIONS/ACRONYMS

AFD	Agence Française de Développement
AfDB	African Development Bank
AFS	Annual Financial Statements
AGSA	Auditor-General of South Africa
AMD	Acid Mine Drainage
AMD-STI	Acid Mine Drainage-Short-term Intervention
AMD -LTS	Acid Mine Drainage – Long-term Solution
ARC	Audit and Risk Committee
ASB	Accounting Standards Board
BAC	Bid Adjudication Committee
BCM	Business Continuity Management
bps	basis points
BRVAS	Berg River – Voelvlei Augmentation Scheme
BWP	Berg Water Project
CAF	Combined Assurance Forum
CAPEX	Capital Expenditure
CEO	Chief Executive Officer
CHS	Construction Health and Safety
CIA	Chief Internal Auditor
CODM	Chief Operating Decision Maker
COSO	Committee of Sponsoring Organizations of the Treadway Commission
COVID	Coronavirus disease
CPD	Corporation for Public Deposits
CPI	Consumer Price Index
CPP	Commercial Paper Programme
CRO	Chief Risk Officer
CSA	Control self-assessment
CSD	Central Supplier Database
DAB	Dispute Adjudication Board
DBSA	Development Bank of Southern Africa
DFFE	Department of Forestry, Fisheries and Environment
DFI	Development Finance Institution
DMRE	Department of Minerals and Energy
DTN	Delivery Tunnel North
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EA	Executive Authority
EAD	Exposure at Default
ECL	Expected Credit Loss
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
ER	Employee Relations
ERM	Enterprise Risk Management

ERP	Enterprise resource planning
ESMS	Environmental and Social Management System
ETS	Emissions Trading Scheme
EU	European Union
EUR	Euro
Exco	Executive Committee
FEC	Forward Exchange Contract
FGD	Flue Gas Desulphurisation
FPL	Formal pay line
FVTPL	Fair value through surplus or deficit
GoL	Government of Lesotho
GHG	Green House Gases
GRAP	Generally Recognised Accounting Practices
HCSEC	Human Capital, Social and Ethics Committee
HR & OD	Human Resources and Organisational Development
IA	Internal Audit
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IBOR	interbank offered rates
ICT	Information and Communications Technology
ICWG	Integrated Change Working Group
IFRS	International Reporting Standards
IFWE	Irregular, Fruitless and Wasteful Expenditure
IIA	Institute of Internal Auditors
ISA	International Standards on Auditing
ISDA	International Swap and Derivatives Association
ISO	International Organisation for Standardisation
IT	Information Technology
IWP	Independent Water Producer
KfW	KFW Development Bank
KOL	Kingdom of Lesotho
KPI	Key Performance Indicator
Kwh	Kilowatt hour
KWSAP	Komati Water Scheme Augmentation Project
LHDA	Lesotho Highlands Development Authority
LHWC	Lesotho Highlands Water Commission
LHWP	Lesotho Highlands Water Project
LHWP-2	Phase 2 of the Lesotho Highlands Water Project
MEC	Member of Executive Council
MCWAP - 1	Phase 1 of the Mokolo – Crocodile (West) Augmentation Project
MCWAP – 2A	Phase 2A of the Mokolo – Crocodile (West) Augmentation Project
MMTS-2	Phase 2 of the Mooi – Mgeni Transfer Scheme
MOU	Memorandum of Understanding
MRWP	uMzimvubu River Water Project
uMWP	uMkhomazi Water Project

NED	Non-executive director
NGC	Nominations and Governance Committee
NoE	Notice of Establishment
NPO	Non-profit Organisation
NT	National Treasury
OHS	Occupation Health and Safety
ORWRDP – 2B	Phase 2B of the Olifants River Water Resource Development Project
ORWRDP - 2C	Phase 2C of the Olifants River Water Resource Development Project
PAA	Public Audit Act
PAJA	Promotion of Administrative Justice Act
PD	Probability of default
PFMA	Public Finance Management Act
PF&T	Project Finance & Treasury
PP&E	Plant, property & equipment
PSP	Professional Service Provider
RCR	Recordable Case Rate
RMS	River Management System
RSA	Republic of South Africa
SA	South Africa
SARS	South African Revenue Service
SC	Shareholder's Compact
SCM	Supply Chain Management
SDL	Skills Development Levy
SED	Social and Economic Development
SIP	Strategic Infrastructure Project
SLA	Service Level Agreement
SPV	Special Purpose Vehicle
TCTA	Trans-Caledon Tunnel Authority
TCTA - C	Trans-Caledon Tunnel Authority - Corporate
UIF	Unemployment Insurance Fund
USD	United States Dollar
VAT	Value Added Tax
VPN	Virtual Private Network
VRESAP	Vaal River System Augmentation Project
VRS	Vaal River System
WACC	Weight average cost of capital
WSA	Water Supply Agreement
WUL	Water Use Licence
ZAR	South African Rand

BEE ONLINE

In accordance with the Codes of Good Practice issued under Section 9(1) of the Broad-Based Black Economic Empowerment Act No 53 of 2003, as amended on 11 October 2013

This is to certify that

TRANS - CALEDON TUNNEL AUTHORITY

T/A TCTA

COMPANY REGISTRATION NO:	N/A
VAT REGISTRATION NO:	4360104923
CLIENT VERIFICATION NO:	BE12075-261121
ADDRESS :	265 West Avenue, Centurion, 0046

Has a current overall Broad-Based BEE Status of

NON- COMPLIANT

In terms of the Amended General DTIC Codes – Specialised Generic Scorecard (Gazette No: 38766)

SCORECARD ELEMENT	ENTITY SCORE	MAXIMUM SCORE
MANAGEMENT CONTROL	16.41	20.00
SKILLS DEVELOPMENT	0.00	25.00
ENTERPRISE AND SUPPLIER DEVELOPMENT	0.00	50.00
SOCIO-ECONOMIC DEVELOPMENT	0.00	5.00
TOTAL	16.41	100.00
PARTICIPATED IN Y.E.S	NO	
ACHIEVED YES TARGET + 2.5% ABSORPTION	NO	
ACHIEVED YES TARGET + 5% ABSORPTION	NO	
ACHIEVED 2 X YES TARGET + 5% ABSORPTION	NO	

VALIDATIONS	
An Empowering Supplier	YES
Black Owned percentage	N/A
Black Women Owned Percentage	N/A
Designated Group Supplier	NO
Black designated group percentage	0.00%
Black Youth percentage	0.00%
Black Disabled percentage	0.00%
Black Unemployed percentage	0.00%
Black People in Rural areas percentage	0.00%
Black Military Veterans percentage	0.00%
Principle Applied	FTP
Exclusion Principle	NO
Discounting Principle Applied	YES
FINANCIAL YEAR END	MAR 2021

And a BEE Procurement Recognition Level of 0%

Period of Validity: 12 Months from Issue Date

Issue Date: 26-11-2021

Expiry Date: 25-11-2022

Hlumelo Mavume

Technical Signatory

sanas BBBEE Verification Agency

BVA 038

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VERIFIED RATING

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2091
DIRECTORS : T NAIDOO & D RAO
Company Registration 2004/004257/07 **VAT** 4240214355


TCTA
A new word for water

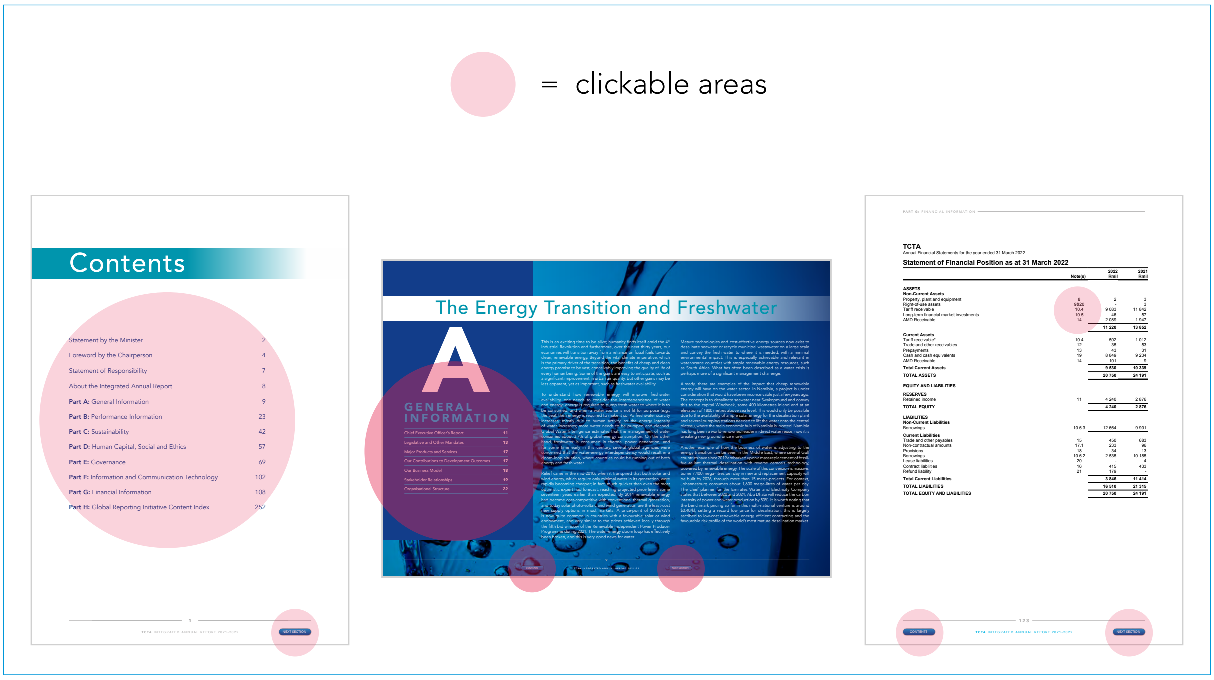
Additional Information

This is an interactive pdf.

This means that there are active (clickable) links to specific pages within the report for ease of navigation.

The following links are active:

- Contents page
- Section starters
- Page references
- Notes references



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