



NSW Sustainability Bond Programme

Annual Report 2022



About this report

This is the fourth annual report for the NSW Sustainability Bond Programme.

The report is compiled by the Reporting Group, a sub-committee of the NSW Sustainability Bond Committee, led by the Office of Social Impact Investment division of NSW Treasury, and published by TCorp. It will continue to be published on an annual basis over the life of the programme.

The report provides an overview of the programme, our governance and certification/assurance, and how bond proceeds were utilised, including dollar amounts and details of each project. It is intended to cover the programme as a whole, highlighting financial year 2022 bond issuance and the projects/assets brought into the asset pool.

All dollar amounts quoted are Australian, unless otherwise noted.

Electronic copies of current and previous reports are available at www.tcorp.nsw.gov.au.

This report is dated as at 3 November 2022.

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Feedback

We welcome your feedback on our report to help improve future editions – please contact the Head of Marketing at TCorp on + 61 2 9325 9325 and the Associate Director at the Office of Social Impact Investment on +61 2 9228 3191.

Stay up to date

Follow us on www.linkedin.com/company/tcorp-nswtreasurycorporation/

Cover photo

Sunset at Byron Bay.

Acknowledgement of Country

TCorp acknowledges Aboriginal and Torres Strait Islander peoples as the First Peoples and Traditional Custodians of Australia, and recognises their continued custodianship of Country – land, seas and skies.

We pay respect to Elders past, present and emerging.



Artwork: 'Regeneration' by Josie Rose 2020

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Year in review

\$7.2bn bonds on issue as at 30 June 2022

- Added over \$4.8bn into the Programme's asset pool
- Issued second sustainability bond in February 2022
- Bonds issued across 4 lines – 2 green and 2 sustainability

Supported NSW communities and people

Added new social projects to the asset pool:

- Critical Communications Enhancement Program
- Social Housing Stimulus Program.

Strong governance

- Independent assurance provided by EY
- Guided by NSW Sustainability Bond Framework, reviewed by Sustainalytics
- Aligned to NSW Government's sustainability policies and goals
- Asset pool oversight by the NSW Sustainability Bond Committee

Diversified and delivered value to our investor base

- The February 2022 issuance attracted 55 unique client orders with 71% of investors from Australia and 29% from offshore
- Included the Programme in TCorp reverse enquiry activities (bilateral transaction between TCorp and 1 of its panel banks)
- Delivered access to ESG bonds for investors' portfolios; the prime mechanism for the fixed income investor base to engage with the state on ESG issuance

Aligned to United Nations Sustainable Development Goals*



* The Sustainable Development Goals (SDGs) were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. Source: <https://www.undp.org/sustainable-development-goals>

Impact snapshot

Supporting positive environmental and social outcomes for NSW*

Clean transportation

17.6mn

passenger trips on public transport

(Metro North West line*, Newcastle Light Rail and CBD and South East Light Rail)

* Sydney Metro Northwest project

Sustainable water and wastewater management

Removed

436 cubic metres of litter and 247 tonnes of combined sediment and litter from installed stormwater quality improvement devices

(Waterway naturalisation and stormwater improvement and Green Square Trunk Stormwater Improvement)

Affordable housing

Maintenance and upgrade of

over 2,300

social housing properties and 140 social housing waitlist applicants housed

(Social Housing Maintenance Stimulus Program – Tranche 1)

Access to essential services

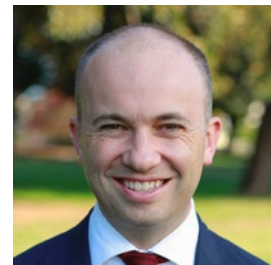
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disability and mobility access upgrades completed at train stations

(Transport Access Program – Tranche 3)

* Please refer to the Reporting section on page 21 and the footnotes in Tables 5-8.

NSW Treasurer's foreword



New South Wales is unleashing opportunity and prosperity for our people – and opening the door for investors to be part of the sustainable future we are building together.

Our state already enjoys a well-entrenched reputation as a regionally significant financial hub and for its pioneering agenda to seize the opportunities arising from the transition to a decarbonised economy.

We've set clear targets and delivered a meaningful plan to achieve net zero by 2050, which is why capital, technology and innovation are pouring into renewable energy projects that are flourishing across NSW.

But we know there are broader opportunities to align and achieve our economic, social and environmental goals in a way that enhances our economic resilience as a state and delivers a more sustainable society and planet.

That's why the NSW Government was the first state in the nation to establish a Sustainability Bond Programme in 2018 – and has the largest programme in Australia, with \$7.2bn as at 30 June 2022.

Our green and sustainability bonds allow NSW to capture the growing appetite from investors to allocate capital to projects that tackle environmental and social challenges.

It also means the NSW Government can support Australia's ongoing commitment to meet the United Nations Sustainable Development Goals.

Our success to date helps diversify the state's investor base and cement our reputation for first-class financial management, low sovereign risk and commitment to innovation.

In the past year alone, NSW has:

- Issued a \$1.5bn sustainability bond in support of clean transportation, affordable basic infrastructure and housing, sustainable water and wastewater management, and improved access to essential services
- Met investor demand in green and sustainability bonds by adding over \$4.8bn of assets to the Sustainability Bond Programme's asset pool, including access to critical telecommunications services that our emergency services regard as mission critical.

We have ambition to grow and further diversify the asset pool, as well as continually improve and elevate reporting of impact indicators to give greater transparency to investors.

The NSW Sustainability Bond Programme builds on a suite of initiatives across Government to build a more sustainable future and harness our state's competitive advantage.

These include our nation-leading plans to expand economic opportunities for women, foster new energy sources like hydrogen, adapt to climate change and empower our First Nations people.

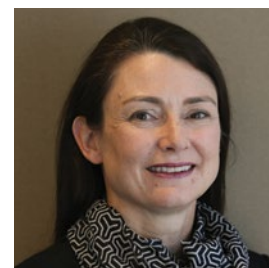
As the global shift to ESG-based investments grows, NSW is determined to consolidate its position as a destination of choice for domestic and global investors.

We look forward to the role green, social and sustainability bonds can play in creating a more sustainable future for our state and our citizens.

A handwritten signature in blue ink, appearing to read 'Matt Kean'. The signature is stylized and fluid.

The Hon. Matt Kean, MP
NSW Treasurer

A message from TCorp and NSW Treasury



In the face of ongoing crises at home and around the globe—including floods, recovery from the COVID-19 pandemic, a volatile economic environment, and geopolitical tensions—the NSW Government has maintained a focus on helping deliver solutions that benefit the people of the state, including through the growth and development of the NSW Sustainability Bond Programme.

From transport to water management, and social housing, the Programme offers investors the opportunity to support environmental and social outcomes, both immediate and long term, working in partnership with the NSW Government public sector through the assets financed by green, social and sustainable bond issuances. This environmental, social and governance (ESG) debt raising programme exists alongside TCorp's benchmark bond programme and plays an important complementary role in the sustainable financing of NSW Government expenditures and the work of its delivery agencies.

Launched in 2018, TCorp and NSW Treasury are proud of the Programme's impact and its progress in encouraging sustainability of government assets and programmes supported by transparent measurement and reporting.

NSW Government sustainability initiatives

Against the backdrop of volatile market conditions, a constant has been the NSW Government's continuing emphasis on driving sustainable growth with its \$112.7bn infrastructure programme over the next 4 years.

During FY22 the NSW Government strengthened its commitment to achieving net zero emissions by 2050 through a range of initiatives that included updating the Government's objective to reduce emissions by 50% below 2005 levels by 2030, and driving decarbonisation through the NSW Hydrogen Strategy, the Net Zero Plan Stage 1: 2020-2030 (as updated) and the Electricity Infrastructure Roadmap.

There have also been economic reform initiatives that align with the state's ESG ethos. For example, looking through a social lens, we have seen an announcement on creating more opportunities for women in the workforce, early childhood development, and closing the gap for First Nations communities.

The evolution of the NSW Sustainability Bond Programme

Over the course of FY22, and many periods of heightened volatility and limited liquidity in the global fixed income market, the bond issuance through the Programme has delivered superior value to the state and investors. Our approach has continued to mature, with reverse enquiry (bilateral transaction between TCorp and 1 of its panel banks) issuance now playing a prominent role alongside syndications (procedure for offering new issues of securities to investors) and tenders, thereby allowing investors greater opportunity to engage with NSW on ESG-labelled issuance.

As at 30 June 2022, there have been 4 bonds issued under the Programme since its launch, totalling \$7.2bn. TCorp remains the largest Australian semi-government issuer across green, social and sustainability format; the assets funded by the Programme represent a broad diversity of sectors, across 7 different government agencies and state-owned corporations and 5 different green and social categories.

This year, we expanded our offshore investor base through the syndication of a new \$1.5bn November 2032 Sustainability Bond with 29% of the bonds allocated to foreign investors, highlighting the depth of demand for green-certified and social-certified assets and the strong regard for our Programme. This bond was 2 times oversubscribed at a yield of 2.565% – an excellent outcome in challenging market conditions. Further, we increased the existing November 2030 Green Bond and added additional liquidity to the November 2032 Sustainability Bond via reverse enquiry during the year.

While interest continues to grow internationally, it is also important to acknowledge the enormous support we have received from local asset managers, insurance companies, banks, and official institutions, across Australia who have invested in the Programme's bonds. The consistency of interest and the fact that each issuance to date has been oversubscribed reflects the appetite for the Programme and is pleasing recognition of its maturity.

It is gratifying to hear from participants in the Programme on their journey and the impact to their own organisation. This annual report includes an absorbing conversation with Sydney Water, which has had assets included in all 4 issuances under the Programme.

A wide range of government participants

The growing appetite for authentic and transparent ESG investment opportunities has led to strong interest in our Programme, which relies on the partnership and collaboration between TCorp, the NSW Treasury's Office of Social Impact Investment and Office of Energy and Climate Change, and asset delivery agencies.

The success of the Programme has been underpinned by our wide range of agency participants. From foundational partners such as Sydney Water and Transport for NSW (including Sydney Metro), to more recent partners from Department of Education, Land and Housing Corporation and NSW Telco Authority, the programme has succeeded in channeling financial support from international capital markets towards government sustainability initiatives.

Over FY22, proceeds raised were earmarked to finance projects that included the Sydney Metro Northwest, Social Housing Maintenance Stimulus Program, Public School Infrastructure, Waterway Naturalisation and Stormwater Improvement and the CBD and South East Light Rail.

The continued growth of the ESG bond market

The Australian ESG bond market remains structurally undersupplied with many investors who work towards applying ESG criteria to their investments. They are looking for a robust programme with appropriate assessment and metrics and these aspects have been key to our success. As issuance continues to mature, we will be able to showcase a greater range of assets and bond formats. While we are yet to issue a designated social bond, these assets are well represented within the sustainability format.

Acknowledgements

We would like to thank the participating agencies Transport for NSW (including Sydney Metro), Land and Housing Corporation, Department of Education, the NSW Telco Authority and Sydney Water who have worked in close collaboration with the Office of Social Impact Investment, the Office of Energy and Climate Change and the TCorp teams.

As we look to the Programme's future, we will strive to continually improve and elevate our reporting of impact indicators and articulate the NSW Government's commitment to sustainability through policies, initiatives and related expenditures.



Rob Kenna
General Manager,
Financial Markets
TCorp



Katherine Palmer
Executive Director, Strategic
Balance Sheet Management
NSW Treasury

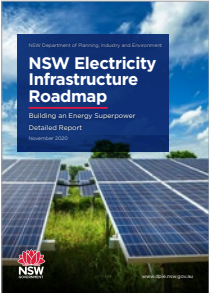
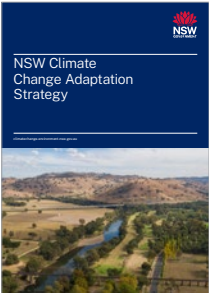

NSW ESG policies and initiatives

Long-term prosperity depends on economic, environmental and social sustainability. Beyond managing the challenges posed by the ongoing recovery from the COVID-19 pandemic, the NSW Government is investing in a sustainable and resilient economy.

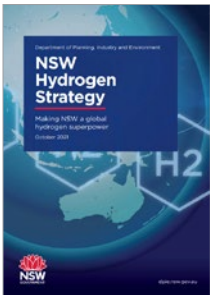
In FY22, the government continued to prioritise actions which will protect our planet, grow the state's clean economy, improve quality of life, and support a more agile and skilled workforce. It also continued anchoring NSW's position as a sustainable finance leader in the region. The 2022-23 NSW Budget announced the NSW Sustainable Finance Framework, which will ensure the NSW Government's financial activities are aligned with its environmental and social priorities.

Examples of initiatives released and/or implemented in FY22 which demonstrate the Government's efforts in aligning our funding activities with more sustainable outcomes are shown in Table 1.



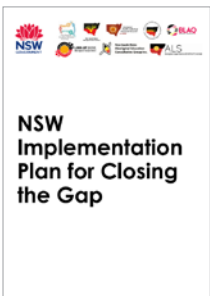
Table 1: NSW Government policies and initiatives, FY22

Environmentally focused	
Policy/initiative	Description
	<p>The NSW Transmission Acceleration Facility will fund the development stages of transmission and other infrastructure to help expedite the delivery of the Electricity Infrastructure Roadmap and Renewable Energy Zones. The Facility will be used to undertake development activities to fast-track critical transmission projects, including the Central-West Orana Renewable Energy Zone, the New England Renewable Energy Zone and the Hunter Transmission Project, and is expected to help create 2,700 direct construction jobs across the state.</p> <p>The facility has \$1.2bn of net funding (maximum, after recycling proceeds) allocated over 10 years.</p>
	<p>The strategy sets out key decision-making principles and objectives for climate adaptation, priorities and a suite of government actions, including:</p> <ul style="list-style-type: none"> • Develop robust and trusted metrics and information on climate change risk • Complete climate change risk and opportunity assessments • Develop and deliver adaptation action plans • Embed climate change adaptation in NSW Government decision-making. <p>The strategy has \$93.7mn of funding allocated over 8 years.</p>
	<p>The Primary Industries Productivity and Abatement program is a key element of the NSW Net Zero Plan Stage 1: 2020-2030.</p> <p>This will support farmers and land managers across the state to reduce emissions, improve carbon management, and enhance biodiversity on their land, alongside production.</p> <p>It will also support the sector to increase revenue by accessing environmental markets, accelerating finance for natural capital and low carbon farming, and demonstrating environmental performance to consumers and the supply chain.</p> <p>The program has \$125.0mn of funding allocated over 8 years.</p>

Environmentally focused

Policy/initiative	Description
	<p>The NSW Hydrogen Strategy sets out the Government's vision and path for developing a thriving hydrogen industry in NSW. It aims to:</p> <ul style="list-style-type: none"> • Reduce the cost of green hydrogen by \$5.80 per kg in the next decade • Provide incentives to support industry development • Deliver our 2030 stretch targets of 110,000 tonnes of annual green hydrogen production and 700 megawatts (MW) of electrolyser capacity • Drive decarbonisation in the hard to abate transport, industrial and energy sectors to help us reach net zero emissions by 2050. <p>The strategy has up to \$3.0bn in funding allocated to support industry development.</p>

Socially focused

Policy/initiative	Description
	<p>The Women's Opportunity Statement sets out the NSW Government's plan to make the state the best place in Australia for women to live, work and raise a family.</p> <p>Priority areas for reform are to:</p> <ul style="list-style-type: none"> • Increase women's workforce participation • Improve the experience of women in the workforce • Support women in small business and entrepreneurs • Support and raise awareness of women's health needs • Increase respect for women and women's financial security. <p>The statement has up to \$16.5bn of funding allocated over the next decade.</p>
	<p>Social Impact Investment Policy 2.0 sets out NSW's vision for the social impact investment sector with 3 core priorities to deliver over the next 3 years:</p> <ul style="list-style-type: none"> • Strengthen and streamline our approach to deliver more social impact investments • Enhance sector capability to embed principles of social impact investment • Build a broader and more diverse impact investing ecosystem. <p>The policy is supported by \$30.0mn allocated in the 2021-22 Budget.</p>
	<p>The NSW Government will continue to invest in empowering First Nations communities through supporting First Nations policies, programs, and helping meet NSW's targets under the National 'Closing the Gap' agreement (e.g. through the NSW Implementation Plan for Closing the Gap).</p> <p>As part of the 2022-23 Budget, this investment covers a range of areas including:</p> <ul style="list-style-type: none"> • Appropriate housing, land rights, essential community infrastructure • Supporting young First Nations people to thrive and • Supporting First Nations languages, culture and survivors of the Stolen Generations and to accelerate the repatriation of First Nations remains. <p>\$715.8mn has been allocated over 4 years.</p>

Sustainable investing in Australia and globally

The total value of ESG bonds outstanding in the Australian market reached \$68bn in 2022, up from \$43bn in 2021, according to data compiled from Bloomberg. The value of such investments remains dominated by green, social and sustainability bonds.

Internationally, 2021 marked yet another record year for ESG debt markets with combined issuance volumes breaking through the annual US\$1tn mark for the first time according to the Climate Bond Initiative's [Sustainable Debt Global State of the Market 2021 report](#).

In FY22 key trends in international ESG debt markets included the need for climate mitigation and adaptation financing, accelerated decarbonisation efforts to achieve net zero goals and growing regulatory attention on sustainability, including development of robust taxonomies across different countries. These trends will likely continue following the Russia/Ukraine situation, the subsequent European energy crisis, and the publication of 2 new [Intergovernmental Panel on Climate Change \(IPCC\)](#) reports. These papers highlight the magnitude of physical climate risks, that many of these are now being realised, the urgency of action required to address these and, therefore, the need for accelerated financing of both climate mitigation and adaptation efforts.

Several notable developments in disclosure standards and reporting were made in financial year 2022 including:

- The creation of the [International Sustainability Standards Board \(ISSB\)](#) in November 2021 to build further trust and transparency in the market, to meet the increasing demand from international investors with global investment portfolios for a global baseline of sustainability-related disclosure standards. The ISSB released a draft climate-related disclosure standard in March 2022.
- Progression in taxonomy with the publication of advice to the European Commission on the development of its Social Taxonomy and recommendations to extend its Environmental Taxonomy in early 2022.
- The Taskforce on Nature-related Financial Disclosures (TNFD) continued to develop a risk management and disclosure framework to support a shift in finance towards nature-positive outcomes, releasing the second iteration of its beta framework in June 2022.
- Progression on codifying the sustainability linked bond (SLB) market with the [International Capital Market Association \(ICMA\)](#) launching a registry of nearly 300 key performance indicators for SLBs that classifies the KPIs by sector and provides guidance on the core or secondary nature of the indicators. ICMA has also recently provided new guidance on green standardisation and other secured structures in the appendix to its Green Bond principles, to help foster growth in a lagging area of the sustainable capital markets.

In Australia these developments culminated in:

- Valuable insights and considered published feedback by various industry associations, peak bodies and regulators being provided directly to the ISSB on the Exposure Draft on IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information ([Draft] IFRS S1) and Exposure Draft IFRS S2 Climate-related Disclosures ([Draft] IFRS S2).
- The Australian Sustainable Finance Institute's (ASFI's) commencement of the market-led Australian Sustainable Finance Taxonomy project.
- The [Department of Agriculture, Water and Environment](#) supporting a series of information sessions on TNFD and its beta framework for industry on related developments and to gather feedback to influence the development of the framework and its implementation in Australia.¹

¹ Workshop slides and recordings can be found on the ASFI website [here](#).

The NSW Sustainability Bond Programme

Our vision

To lead the way in sustainability bonds in Australia and demonstrate pathways to mobilise capital to support projects with positive environmental or social outcomes.

Overview

The NSW Sustainability Bond Programme provides investors with the opportunity to be part of a more sustainable future by helping to finance or refinance projects that support positive and transparent economic, social and environmental outcomes for the community. Under the Programme, TCorp can issue green, social and sustainability bonds. Each issuance's classification is determined based on the primary objectives of the underlying projects.

In October 2021, TCorp announced the addition of \$4.2bn of eligible projects into the Programme's pool, which supported the issuance of the new November 2032 Sustainability Bond in February 2022. Across the 4 lines, TCorp has over \$7.2bn of bonds on issue at 30 June 2022; we are committed to continuing issuances in this format as eligible assets are added to the pool.

In contrast to TCorp's regular bonds—which are provided to NSW Treasury and borrowing clients for general purpose expenditure—the proceeds of our green, social and sustainability bonds are used to finance or refinance projects and assets that:

- Deliver positive environmental and social outcomes
- Align with and contribute towards meeting the United Nations Sustainable Development Goals (UN SDGs)
- Support the NSW Government's environmental and social objectives.

What are green, social and sustainability bonds?

These bonds are defined by the International Capital Markets Association:

- Green bonds are any type of bond instrument where the proceeds will be exclusively applied to finance or refinance, in part or in full, new and/or existing eligible Green Projects and which are aligned with the four core components of the Green Bond Principles (GBP).
- Social bonds are any type of bond instrument where the proceeds will be exclusively applied to finance or refinance, in part or in full, new and/or existing eligible Social Projects and which are aligned with the four core components of the Social Bond Principles (SBP).
- Sustainability bonds are bonds where the proceeds will be exclusively applied to finance or refinance, a combination of both Green and Social Projects. Sustainability bonds are aligned with the four core components of both the GBP and SBP.

Governance

The Programme is underpinned by sound governance and is overseen by the NSW Sustainability Bond Committee (NSBC). The NSBC comprises subject matter experts from across the NSW public sector, with representation from the NSW Treasury Cluster including TCorp.

Oversight of projects that are included in the asset pool and the allocation of bond proceeds against this pool is undertaken by the NSBC. The Office of Social Impact Investment (OSII), a division of Treasury, is responsible for leading asset identification and annual reporting.

The NSBC is primarily guided by the [NSW Sustainability Bond Framework](#) which governs how TCorp may issue 'use of proceeds' bonds in green, social and sustainability formats under the Programme.

External validation

As the Programme strives to remain impactful in a sector which is constantly evolving, it is critical for its Framework to be credible and relevant. This ambition is supported through the second party opinion provided by Sustainalytics. In addition, the Programme commits on an annual basis to provide validation of robust governance controls; this process is undertaken by an external verifier.

Our objectives

- Seek ways for finance to contribute towards meeting UN SDG outcomes.
- Support the development of the wider sustainable finance sector.
- Draw upon and contribute to global best practice in the discipline of impact and outcomes measurement, reporting and transparent disclosure of sustainability outcomes.
- Highlight and influence of sustainability practices through the lifecycle of government assets and programmes.
- Inspire innovative cross-government solutions to NSW's most pressing environmental and social problems.
- Contribute to NSW Treasury's focus on delivering a sustainable fiscal environment, enabling better outcomes.

The 2032 Sustainability Bond issuance

The NSW Government is committed to the Programme. As the state continues to embed sustainability practices across its assets, along with the delivery of its record infrastructure commitment over the coming years, this will enable TCorp to remain a dominant market player in ESG format.

As a programmatic issuer, TCorp approaches the market with ESG issuance and continues to receive a strong reception from investors domestically and globally, evident from the 2032 Sustainability Bond issuance. This outcome is attributed to the support and collaborative work across the NSW Government family and the Programme's strong governance.

Details of the bond issued in February 2022 and the results are detailed in Tables 2 and 3.

Table 2: Description of the 22 November 2032 Benchmark Sustainability Bond

Bond type	Sustainability
Amount	\$1.5bn
Currency	Australian dollar
Pricing date	9 February 2022
Maturity date	22 November 2032
Coupon	2.50% paid semi-annually in arrears
ISIN	AU3SG0002629
Guarantor	The Crown in Right of New South Wales
Issuer rating	Aaa (Stable) by Moody's Investors Service AAA (Stable) by Fitch Ratings AA+ (Stable) by Standard & Poor's
Joint lead managers	Citigroup Global Markets Australia Pty Limited Merrill Lynch International UBS AG, Australia Branch Westpac Banking Corporation
ICMA project categories	<ul style="list-style-type: none"> • Clean transportation • Affordable basic infrastructure • Affordable housing • Sustainable water and wastewater management • Access to essential services

A [term sheet](#) with full details of the bond is available for investors. The net proceeds raised through the bond were earmarked to support the financing of projects that included the Sydney Metro Northwest, CBD and South East Light Rail, Parramatta Light Rail Stage 1, Improving Access to National Parks Program,² Social Housing Maintenance Stimulus Program, Waterway Naturalisation and Stormwater Improvement, Public School Infrastructure and Transport Access Programme. An overview of these assets is available in the Programme's previous annual reports available on TCorp's website.

² The Improving Access to National Parks Program has been removed from the Nov-32 sustainability bond portfolio of projects and assets and its value replaced by a greater allocation towards Public School Infrastructure. The asset remains in the asset pool.

Table 3: Results of the 22 November 2032 Benchmark Sustainability issuance

Total amount allocated	\$1.5bn
Total amount of bids received at final price	\$2.95bn
Total amount on issue	\$1.5bn
Yield allocated	2.565%
Spread to 10-year bond futures	43bps

Over the years, the Programme has had notable success diversifying our investor base by attracting orders from funds that are restricted to investment in ESG products. This transaction attracted 55 unique client orders, including participation from several new investors.

Chart 1: Investor type

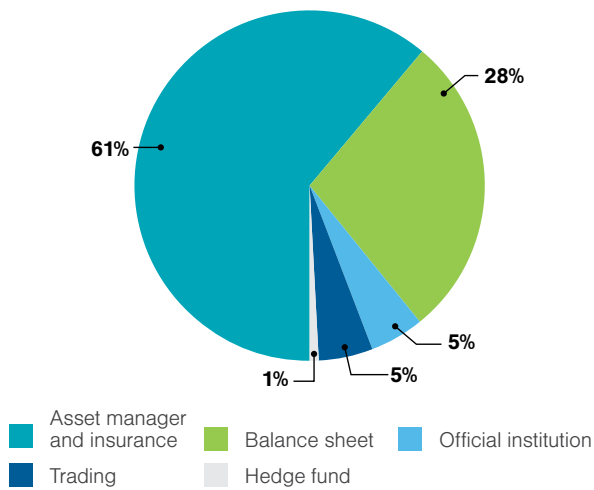
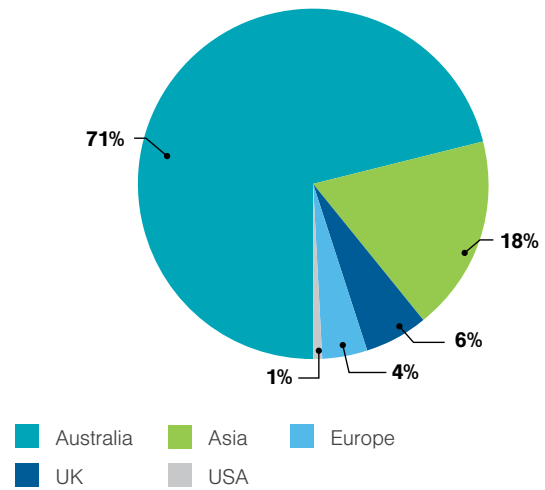


Chart 2: Geographic breakdown

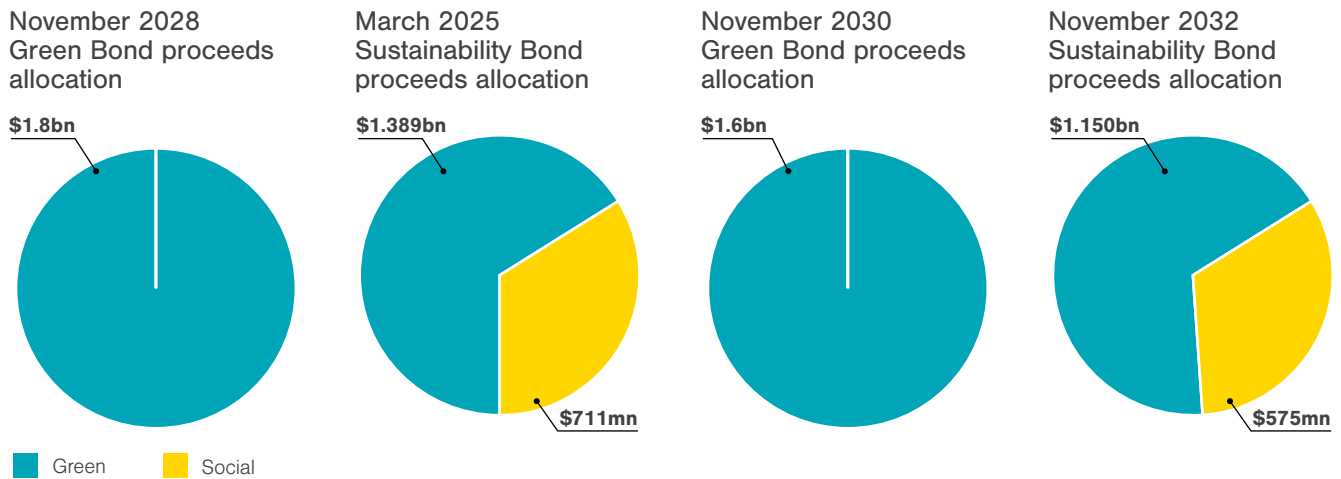


Source: TCorp

How the bond proceeds were allocated

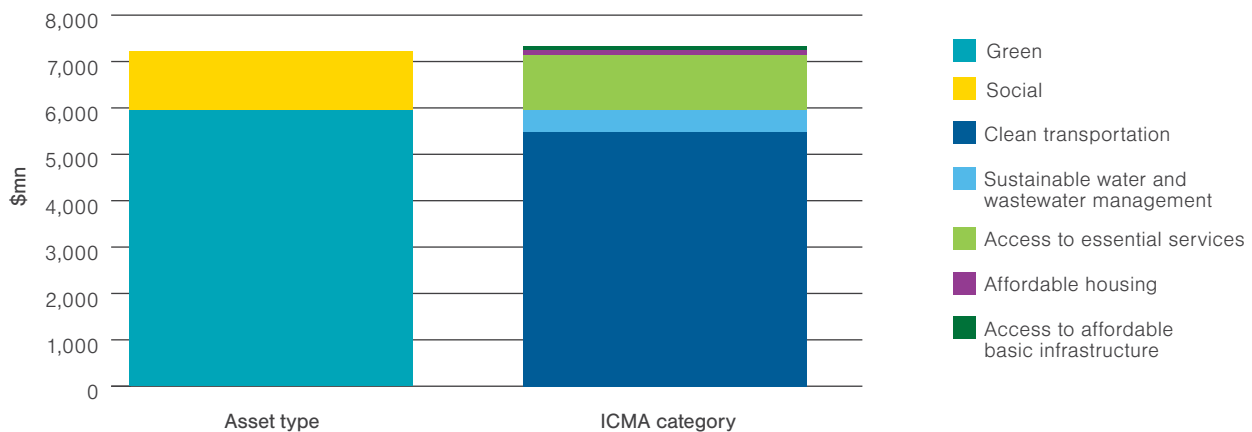
While the asset pool was dominated by green assets during the early phase of the Programme, it was established with a vision to enable the financing of social assets as standards continue to develop in this space. The current strategy showcases social assets in the form of sustainability bonds, as it enables TCorp to increase liquidity in these lines on a more programmatic basis, given the skew of our pool to green assets.

Chart 3: Allocation of proceeds by asset type



Source: TCorp analysis as at 30 June 2022

Chart 4: Allocation of total proceeds by asset type and ICMA category



Source: TCorp analysis at 30 June 2022

This year, the Programme has had good momentum in building both green and social asset pools with a diverse range of projects. This has been achieved by expanding the existing green and social project categories. New projects are outlined in the table, The Programme’s milestones: 2018-2022, on page 32.

Asset highlight



Clean transportation

Parramatta Light Rail Stage 1

By 2036, more than half of all Sydneysiders will live in western Sydney and the population of the Parramatta Local Government Area is expected to grow from 240,000 residents in 2016 to more than 415,000 by 2036. Over the same period, employment in Greater Parramatta is projected to increase from 96,000 jobs to around 160,000.

Stage 1 of the Parramatta Light Rail (PLR) is a 12km 2-way track that will support the development of Parramatta as Sydney's second CBD and is expected to open in 2024. With 16 stops along its route, the PLR will provide high-frequency 'turn-up-and-go' services 7 days a week, departing approximately every 7.5 minutes in peak periods with each vehicle able to carry up to 300 people (equivalent to 6 standard buses).

Sustainability highlights

- The Enabling Works package³ achieved an Infrastructure Sustainability Council (ISC) IS 'Excellent' As-Built rating.
- The Infrastructure Works package⁴ has achieved an Infrastructure Sustainability Council (ISC) 'Leading' rating for Design and As-Built, demonstrating the project's commitment to achieve sustainable outcomes throughout the delivery of light rail.
- The Infrastructure Works package has achieved an energy impact reduction of 34% with key initiatives such as the use of dimmer functions on LED luminaires; a water use reduction of 22% using a subsoil drip irrigation system with soil moisture sensors; and a 28% material use reduction through the re-use of heavy rail elements, use of Macro Synthetic Fibres (MSF) and recycled materials in concrete, asphalt, and aggregates. The estimated cumulative impact of all the initiatives is a CO₂ output reduction of over 76,000 tonnes.

Industry recognised sustainability innovations

- The PLR will be the first in NSW to have 'grass track', where grass or groundcover is planted between and beside the track, and requires 81% less concrete compared to standard embedded track form. In a state first, it will reduce urban heat island effect and materials usage.
- Australian first – bespoke rail boot system installed within the track form, meeting stringent noise and vibration attenuation requirements.
- State first – installation of MSF in concrete for track form, which reduces steel reinforcement and increases concrete durability and performance.



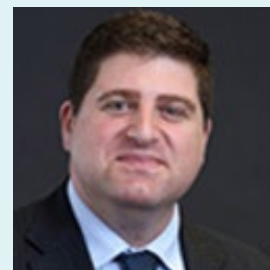
³ The Enabling Works package includes local road network improvements to increase road capacity to make it easier for traffic to move in and around Parramatta.

⁴ The Infrastructure Works package includes the design and construction of civil works, public domain and light rail construction up to road level.

A sustainability journey



Christine Turner



George Boulous

What is the experience for organisations to take part in the NSW Sustainability Bond Programme? Australia's largest water utility, Sydney Water, participated in the inaugural 2018 issuance and has contributed assets to all the NSW Government's green and sustainable bond issuances since. Here, Sydney Water's Operating Licence Lead, Customer Delivery, Christine Turner and Manager, Corporate Finance, George Boulous talk through the organisation's path to more sustainable operations and services and how it continues to embrace a circular economy mindset that will deliver better value to its customers.

TCorp: How did Sydney Water first hear about the NSW Sustainability Bond Programme and what was behind the reason to participate?

Christine Turner: At Sydney Water I have consistently advocated for ways that demonstrate our path to becoming a more sustainable organisation. Key for me, as a sustainability champion in our business, is being able to talk about this from an environmental and financial perspective, as well as the social benefits such as enhanced public health and wellbeing. My vision has always been to give nature and the environment a more prominent voice.

I learned about how green bonds can help in transitioning to a low carbon economy and improve environmental performance at a conference several years ago, so when I heard about the NSW Sustainability Bond Programme being launched, I thought it would be valuable to explore further. Beyond reconfiguring Sydney Water's debt, we wanted to unlock further value from the services we provide through new sustainable finance mechanisms. It was also a great opportunity for us to showcase our sustainability credentials to a broader audience, particularly in the financial sector, and demonstrate how a water utility is helping to address the UN Sustainable Development Goals (SDGs).

George Boulous: Coming on board for the first bond in 2018 showed true foresight and a major way to show how we have implemented and embedded sustainability practices across our organisation. We had already looked at environmental and social issues, but how these interact with financial sustainability was one we had yet to fully explore; the Programme provides a mechanism for capital to flow more directly to projects which deliver positive environmental and social outcomes.

Sydney Water has taken its sustainability activities further by incorporating circular economy principles into everything we do. As a water utility, overseeing a resource vital for future generations, we have an

important role to play in shaping a low carbon future by mitigating the impacts of climate change as well as protecting and enhancing the environment.

TCorp: Which Sydney Water assets are part of the Programme?

George: So far we have 9 assets – Lower South Creek Treatment Program, Green Square Trunk Stormwater Improvement and 7 stormwater naturalisation and improvement projects. These represent over \$460mn in assets, earmarked against all 4 of TCorp's green and sustainability bonds issued to date.

Sydney Water has put forward "green" projects that showcase our approach to renewable energy, energy efficiency, pollution prevention and control, sustainable stormwater management, climate change mitigation, and circular economy adapted production technologies that recover resources from waste streams.

Christine: The approach to stormwater asset renewal is a great example. We reimagined this through a naturalisation lens, which gave Sydney Water and our stakeholders the opportunity to rethink water infrastructure by incorporating more natural and innovative design solutions. It's part of our desire to maximise the value of our natural capital and extent of our green assets that also increases the lifespan of our assets and improves resilience to climate change. Even further, these types of assets produce a variety of other benefits like water quality improvements, reduced carbon emissions, recreational opportunities and habitat protection.

We have also been able to demonstrate improved integration of sustainability practices by measuring, reporting and ensuring transparent disclosure of our outcomes and it's a key element of our transition to an SDG-aligned and net zero carbon economy.

We believe the success of participating in the Programme was a driver that led to the NSW

Department of Planning and Environment (DPE) starting the Recognising Natural Capital Program (ReNCaP) to look at how green assets can be better valued in decision making. This is a national initiative that aims to develop fit-for-purpose methodology to recognise natural capital in financial decision making and accounting, which is a very important development for Sydney Water as it is linked to our environmental stewardship efforts and circular economy framework. It will help Sydney Water to assess the real value of nature and the ecosystem services provided that are not fully realised by current, linear economy measures.

TCorp: What was the process to get assets into the pool?

Christine: Firstly, the robust framework that underpins the Programme is integral to its success. The Asset Identification Group (AIG) is instrumental in delivering new assets that can be considered for inclusion in the programme, and we've found that it's a very streamlined process, well-structured and easy to implement.

Ultimately, any successful process comes out of collaboration and, to that end, Office of Energy and Climate Change's (OECC's) Environment and Heritage Group has been an enormous help; they've worked with me to ensure Sydney Water's documentation meets all asset eligibility criteria set by the Climate Bonds Standard and that we can provide the evidence to support the claim. We also deeply value the great support from TCorp and NSW Treasury.

TCorp: What has been your experience of the reporting requirements?

Christine: Sydney Water has vigorous processes in place generating large amounts of verified information that can support our inclusion in the Programme. Reporting on our assets is not cumbersome – what is required under the Programme is already part of Sydney Water's annual reporting processes.

Our aim is to keep things simple; our reporting team across Sydney Water really helps home in on the most relevant information that demonstrates the value of the assets and the outcomes being sought. This is an extraction exercise from our information database; it's data that is always verified because we use it for our regulatory reporting as well. Repurposing this information to put forward to the Programme reinforces our environmental performance and stewardship efforts and puts a spotlight on how that has improved over time.

The process helps with our other communications too. The 2021 Sydney Water Annual Report featured our financial sustainability performance for the first time and it opened up more internal and external conversations about the value that this Programme provides to our organisation on our pathway towards becoming a more sustainable and resilient water utility.

George: Part of embracing the circular economy is about finding more value from what you already do. Our reporting is a great illustration of that. We want to grow awareness of sustainable finance among all our stakeholders, to choose natural over technical solutions that help improve Sydney Water's environmental performance. It's also led to more conversations with other water authorities around Australia who are very interested in what we're doing. As with all new initiatives, everyone has a different starting point when looking for better and strategic ways to recognising the value of our natural capital – and ours was through the participation in the Programme.

TCorp: In your view, what outcome was achieved from participating in the Programme?

Christine: Implementing circular economy principles through focusing on nature-based solutions will help improve liveability for Sydney Water customers and communities now and into the future. Continuing to focus on new and innovative ways to meet our sustainability goals cements Sydney Water's environmental stewardship efforts and sustainability credentials. Being part of the Programme also provides a great opportunity to show other sectors such as financial markets how we're implementing projects that will improve sustainability outcomes and test investor interest in natural assets.

George: TCorp always told us that investors were interested in this area, rather than solely built or engineered assets. That gave us a signal of their worth and that there was change in the market with natural assets starting to be viewed as more valuable.

TCorp: What would you say to other organisations thinking about participating in the Programme?

Christine: I think we've been part of the Programme the longest of any of the participating organisations. Involvement improves your reputation and your sustainability credentials both externally and internally. An example of the internal benefit to Sydney Water is the way participation resonates with our people and how our approach to protecting the environment and delivering services in a more sustainable way aligns with their values.

Being part of this Programme makes us feel that we're part of a great big family; it's an amazing partnership of passionate people where we get to learn from everyone else that's involved. This is a Programme that not only brings more investment into the state but contributes to increasing NSW's resilience, helping it transition to a low carbon economy that will provide a better place for future generations.

Showcasing the breadth of NSW sustainability initiatives



Dr Aleksandra Simic



Nic Tan

To be considered for the NSW Sustainability Bond Programme, assets and projects must meet due diligence and annual reporting requirements.

Having taken over the leadership of the Programme's Asset Identification Group (AIG) in 2019, the Office of Social Impact Investment (OSII) says there is a robust process in place for evaluating and selecting assets and projects for inclusion into the Programme's asset pool.

Head of OSII, Dr Aleksandra Simic, says larger projects, with an estimated total cost of \$25-50mn are given priority by AIG. "In addition to growing the Programme, we are also looking to diversify the asset pool, so we can demonstrate how the government is aligning the state's financial activities with more sustainable outcomes across a wide range of initiatives."

To support diversification, OSII Associate Director Nic Tan says well-targeted smaller projects that aim to address a specific social and/or environmental need can also be considered.

In engaging with NSW government entities and organisations, AIG members (which also include TCorp and the Office of Energy and Climate Change) identify eligible green and social assets and projects that meet several threshold criteria:

- Currently underway (or have been completed within the previous 2 years)
- Wholly or partially funded by state debt
- Address or mitigate a specific environmental/social issue and/or seek to achieve positive environmental/social outcomes
- Have established (or have ability to establish) timely, robust and accurate data collection to enable annual impact reporting.

"To assess the eligibility of projects we are guided by the NSW Sustainability Bond Programme Framework, which sets out our core principles and the global standards we align to," Dr Simic said. "Regardless of the size of assets, we apply the same focus on transparency and disclosure. There is a requirement for robust data to participate in the Programme and a key part of our engagement is encouraging potential participating entities to adopt more outcome-oriented performance measures."

"It's important for us to stay abreast of global developments in impact reporting standards. We give consideration to how best to apply the standards within a local context and also consider if there are alternatives better suited to Australia."

OSII was established in 2015, and sits within the Strategic Balance Sheet Management division of NSW Treasury. "We take a whole-of-state view in supporting financial, environmental and social sustainability of NSW," Dr Simic said. "OSII's remit is to drive better services, outcomes and value through impact investing. During our first couple of years, we worked strictly in the domain of Social Impact Bonds and have since expanded into the Programme. We have been involved with the Programme since its inception, initially by driving the impact reporting side and then in 2019 we assumed responsibility for asset identification. Having both asset identification and impact reporting led by OSII has streamlined the process."

The 2 components of identification and reporting have become more closely linked as the Programme has evolved. “Through our work, we’ve found that NSW government agencies are doing a lot of work in sustainability and we can support them to capture and present impact indicators in a way that meets investor expectations,” Mr Tan said. “Working with agencies we look to leverage the data they already collect or can collect to enable participation in the Programme. As the Programme matures we are looking for opportunities to embed our reporting requirements earlier in the process of design and delivery of assets/projects.”

A key success of the Programme is to diversify NSW’s investor base, while contributing to the UN Sustainable Development Goals. “At a high level, what we’re aiming to achieve with this Programme is to diversify NSW’s investor base and further the state’s ambitions in terms of delivering positive, transparent environmental and social outcomes. Beyond that, we are aiming to raise the bar across the NSW Government in achieving transparent and verifiable outcome reporting. By showcasing the sustainability work of participating asset owners, we can encourage and support other government asset owners to adopt robust reporting practices.”

With governments around the world seeking to demonstrate and finance their commitment to sustainable outcomes there is a need to report on how such initiatives benefit the wellbeing of citizens. “What we are looking to do here is give investors an opportunity to contribute to the actions government is taking towards a sustainable future,” Mr Tan said. “It’s about supporting sustainability practices and seeking alignment on priorities. Data is a very powerful form of evidence in support of this, so we are pleased to see a lot of agencies making the effort to tell their story in a way that investors understand.”



Waterway Naturalisation and Stormwater Improvement, Cooks River.

Reporting: NSW Sustainability Bond Programme assets

The tables in this section outline the assets earmarked against the Programme's Green and Sustainability Bonds. Impact reporting is an important and ongoing process.

The NSW Sustainability Bond Committee has assigned a Reporting Group to oversee this process and meet regularly throughout the year with asset owners. The impact indicators in Tables 4 to 8 are intended to capture global principles on green and social bonds impact reporting. For assets under construction or in early stages of operation, the impact indicators related to operations contain estimates. Where assets are already operational, impact indicators related to operations contain actual data for FY22, unless otherwise stated. The impact indicators have not been pro-rated for the share of project financed by NSW state debt.

Information on project costs have been provided by the relevant NSW Government entities and NSW Treasury.


Table 4: Use of proceeds

Project name	Delivery partner	International Capital Market Association (ICMA) green or social bond category	Cumulative Green Bond proceeds allocation (\$mn)	Cumulative Sustainability Bond proceeds allocation (\$mn)	Total proceeds allocation (\$mn)
Sydney Metro Northwest	Sydney Metro	Clean transportation	2,916	1,303	4,219
Newcastle Light Rail	Transport for NSW	Clean transportation	240	100	340
CBD and South East Light Rail	Transport for NSW	Clean transportation		800	800
Parramatta Light Rail Stage 1	Transport for NSW	Clean transportation		119	119
Lower South Creek Treatment Programme: Quakers Hill and St Marys Water Recycling Plants Process and Reliability Renewal	Sydney Water	Sustainable water and wastewater management	244	50	294
Green Square Trunk Stormwater Improvement	Sydney Water	Sustainable water and wastewater management		63	63
Waterway Naturalisation and Stormwater Improvement – Tranche 1 – Astrolabe Park, Strangers Creek, Powells Creek and Cooks River	Sydney Water	Sustainable water and wastewater management		73	73

Project name	Delivery partner	International Capital Market Association (ICMA) green or social bond category	Cumulative Green Bond proceeds allocation (\$mn)	Cumulative Sustainability Bond proceeds allocation (\$mn)	Total proceeds allocation (\$mn)
Waterway Naturalisation and Stormwater Improvement – Tranche 2 – Johnstons Creek, Milson Park, Parkside Drive	Sydney Water	Sustainable water and wastewater management		30	30
Transport Access Program – Tranche 3	Transport for NSW	Access to essential services		450	450
Public School Infrastructure	Department of Education	Access to essential services		747	747
Social Housing Maintenance Stimulus Program – Tranche 1	NSW Land and Housing Corporation	Affordable Housing		47	47
Improving Access to National Parks Program ⁵	NSW National Parks and Wildlife Service	Affordable basic infrastructure		42	42
Total			3,400	3,825	7,225

⁵ The Improving Access to National Parks Program was removed from the Nov-32 sustainability bond portfolio of projects and assets and its value replaced by a greater allocation towards Public School Infrastructure. The asset remains in the asset pool.

Table 5: Impact indicators – Clean transportation

Project name	Project description	SDG	Indicator
 <p>Sydney Metro Northwest</p>	<p>Metro North West Line is the first stage of Sydney Metro – Australia's biggest public transport project.</p> <p>A high frequency single deck train system connecting Sydney's growing north west with Chatswood.</p> <p>First fully automated metro rail system in Australia, delivering 36km of new metro rail, and 8 new and 5 upgraded railway stations.</p> <p>The line is estimated to provide public transport travel time savings of 10 to 30 minutes between popular destination pairs along its route.</p> <p>Status: Operational as of May 2019.</p> <p>Target population: General population in Sydney's main statistical area with highest car ownership per household.⁶</p>	  	<p>10,665,924 total passenger trips.⁷</p> <p>100% of grid electricity required for operations (76 GWh) is offset by renewable energy through the voluntary surrender of LGCs, avoiding emissions of 53,136 tCO₂-e.⁸</p>
 <p>Newcastle Light Rail</p>	<p>A 2.7-km system providing a frequent and reliable travel option throughout the city centre, with capacity to transport 1,200 people per hour. The project is a key part of the programme to revitalise Newcastle's city centre.</p> <p>Status: Operational as of February 2019.</p> <p>Target population: General population.</p>	  	<p>493,366 total passenger trips.⁹</p> <p>1,393 tCO₂-e total emissions.¹⁰</p>





⁶ ABS, 2016 Census.

⁷ Trips are measured by tap on/off activity. Includes school travel using concessional cards, trips paid for using contactless payment cards and single tap-on or tap-off. Excludes activity from transport concession entitlements, integrated ticketing for major events and fare non-compliance.

⁸ From electricity purchased to operate stations, traction power and a depot. Emissions calculated using the forecast emission factor of 0.70 tonnes CO₂-e per MWh for scope 2 and 3 emissions for 2022. Factors sourced from Australia's emissions projections 2021, Australian Government Department of Industry, Science, Energy and Resources (October 2021).

⁹ Same as footnote 7.

¹⁰ Same as footnote 8.










Project name	Project description	SDG	Indicator
CBD and South East Light Rail 	<p>A 12-km route that features, 2 new lines (L2 Randwick and L3 Kingsford) and 19 stops, designed to service major city and inner-city transport hubs and create easy interchange points with buses, trains, ferries and the Inner West Light Rail. Each light rail service can carry around 450 passengers, which is as many as up to 9 standard buses.</p> <p>Status: The L2 Randwick Line opened on 14 December 2019 followed by the L3 Kingsford Line which opened on 3 April 2020.</p> <p>Target population: General population.</p>		<p>6,391,306 total passenger trips.¹¹</p> <p>10,210 tCO₂-e total emissions.¹²</p>
Parramatta Light Rail Stage 1 	<p>A 12-km light rail 2-way track infrastructure that will connect Westmead to Carlingford via the Parramatta CBD and Camellia via 16 stops and a fleet of 13 light rail vehicles. The project will support the Greater Sydney Commission's vision for the Greater Parramatta Olympic Peninsula priority growth area.</p> <p>Status: Under construction, expected completion in 2024.</p> <p>Target population: General population.</p>		<p>Construction¹³</p> <p>Over 30% reduction in GHG emissions.</p> <p>22% reduction in water use.</p> <p>99% of waste diverted from landfill.</p> <p>1,243 trees planted.</p>











¹¹ Same as footnote 7.

¹² Same as footnote 8.

¹³ The infrastructure package only, excludes the smaller scale enabling works and supply, operate and maintain packages. Indicators are cumulative from the construction start to June 2022.

Table 6: Impact indicators – Sustainable water and wastewater management








Project name	Project description	SDG	Indicator
<p>Lower South Creek Treatment Programme: Quakers Hill and St Marys Water Recycling Plants Process and Reliability Renewal</p> 	<p>Sydney Water is delivering the largest anaerobic granulated sludge bioreactor in Australia (as at construction) and infrastructure upgrades to meet the demands of a growing Western Sydney. Working towards a circular economy, the Lower South Creek Treatment Program includes the upgrade of St Marys and Quakers Hill water recycling plants which will deliver improved sustainability and significant energy and carbon savings. When fully operational, the improved treatment processes will produce a higher grade of stabilised biosolid and also generate more biogas captured through co-generation to increase energy efficiency and allow a large proportion of self-supply of electricity at the plants.</p> <p>Status: Most construction works completed and staged process commissioning began March 2022. Upgraded facilities expected to be fully operational from mid-2023.</p> <p>Target population: General population.</p>	  	<p>Operations (current):</p> <p>100% (~7748 tonnes) of biosolids recovered from wastewater beneficially reused.</p> <p>Operations (post-upgrades):</p> <p>42% estimated reduction in GHG emissions during construction and across its 50 year operation.</p>
<p>Waterway naturalisation and stormwater improvement – Tranche 1</p> 	<p>Replacement of deteriorating concrete sections with sandstone and stabilisation of banks with native plants, trees and rocks.</p> <p>Naturalising the stormwater channels increases the asset life from approximately 80 to 150+ years.</p> <p>Naturalisation and restoration works improve water quality, mitigate flooding, increase amenity and liveability, as well as provide greater park access for the community.</p> <p>Status: Completed in stages up to March 2019 with vegetation establishment periods of 24 months and ongoing maintenance.</p> <p>Target population: General population.</p>	   	<p>Operations</p> <p>Removal of 436 cubic metres of litter and 179 tonnes of combined sediment and litter.</p>

Project name	Project description	SDG	Indicator
<p>Waterway naturalisation and stormwater improvement – Tranche 2</p> 	<p>Tranche 2 activities include:</p> <ul style="list-style-type: none"> • Replacement of deteriorating concrete sections with sandstone and stabilisation of banks with native plants, trees and rocks. • Construction of several water sensitive urban design projects, developed in collaboration with Councils and community input across three major Sydney catchments. <p>Naturalisation and restoration works improve water quality, mitigate flooding, increase amenity and liveability, as well as provide greater park access for the community.</p> <p>Status: Completed in stages up to April 2023 with vegetation establishment periods of 24 months and ongoing maintenance.</p> <p>Target population: General population.</p>	   	<p>Infrastructure¹⁴</p> <p>0.6km of waterways naturalised and rehabilitated.</p> <p>Approximately 0.3 hectares native vegetation gain with more than 24,000 local natives planted including 2,700m³ of endangered saltmarsh.</p> <p>40m of new paths, 1 boardwalk, 1 bridge and 4 lookouts constructed, 8 seats installed, and 2 interpretive signage provided.</p>
<p>Green Square Trunk Stormwater Improvement</p> 	<p>Construction of a 2km underground stormwater drain from Zetland to the existing stormwater system at Alexandra Canal.</p> <p>The project significantly reduces flooding in the area, improves water quality and enables future development projects in Green Square.</p> <p>Demand for drinking water is reduced through the harvest and purification of 900 kL/day of stormwater at full capacity - the equivalent of 150 Olympic swimming pools of stormwater every year.</p> <p>Status: Completed as of October 2019.</p> <p>Target population: General population.</p>	   	<p>Operations</p> <p>Removal of ~68 tonnes of combined litter and sediment.¹⁵</p>

¹⁴ Tranche 2 figures are for Johnstons Creek only. Infrastructure for Milson Park and Parkside Drive will be reported once complete.


¹⁵ Combined litter and sediment from gross pollutant traps (GPTs) only. Desilting of the concrete channel before the GPT was not completed in FY22 due to adverse weather conditions. More frequent desilting activities are scheduled for FY23.

Table 7: Impact indicators – Access to essential services

Project name	Project description	SDG	Indicator
Public School Infrastructure 	<p>New builds and major upgrades that will provide school-aged children with access to high quality education facilities at their local public school.</p> <p>The new and upgraded schools aim to improve the way classrooms are designed, creating open-planned, interactive and multipurpose indoor and outdoor spaces that include state-of-the-art technology.</p> <p>Status: Ongoing.</p> <p>Target population: Children.</p>	  	<p>Infrastructure¹⁶</p> <p>42,535 teaching spaces for the State.</p> <p>Operations</p> <p>84% of primary and 64% of secondary public school students reporting a sense of belonging, expectations for success and advocacy at school.</p> <p>805,474 enrolments for the state.</p>
Transport Access Program – Tranche 3 (TAP3) 	<p>Upgrade of train stations across the Sydney Trains, Regional Trains and Intercity Trains network to improve accessibility for people with disability and limited mobility.</p> <p>The initiative will provide a better experience for public transport customers by delivering accessible, safe and integrated transport infrastructure.</p> <p>Status: Underway, due for completion 2023.</p> <p>Target population: People with disabilities and limited mobility; and parents with prams.</p>	  	<p>Infrastructure</p> <p>16 train station upgrades completed.</p> <p>Operations</p> <p>67% of NSW train stations accessible to people with physical disability and limited mobility.</p>

16 Impact indicators are for 2021.

Table 8: Impact indicators – Affordable housing

Project name	Project description	SDG	Indicator
Social Housing Maintenance Stimulus Program – Tranche 1	<p>Accelerated maintenance of social housing infrastructure.¹⁸</p> <p>Status: Completed as of June 2020.</p> <p>Target population: NSW social housing residents and applicants.</p>		<p>Operations¹⁷</p> <p>Maintenance and upgrade of over 2,300 properties, which included:</p> <ul style="list-style-type: none"> • over 150 new energy efficient air conditioners installed to replace flued gas space heaters that were more than 10 years old. • over 150 properties received a solar system to assist tenants in reducing the operational cost of heating and cooling their home. <p>140 social housing waitlist applicants were housed as a result of untenable properties being renewed through the program.</p> <p>More than 90% client satisfaction rating for completed works.</p>



¹⁷ Data are for FY20. Indicators will not be updated annually as they reflect one-off activities.

¹⁸ The key objective of Tranche 1 included: addressing critical asset condition needs; increasing supply of social housing through upgrading untenanted stock in areas with social housing wait times of more than 10 years; improving access to affordable and clean energy; improving residents housing experience, wellbeing and satisfaction; and support employment in the construction and trade industries.

Expansion of existing asset categories in the Sustainability Bond Programme pool during FY22

Social project categories

In FY22, the Programme expanded the existing asset pool into new areas – NSW Telco Authority’s Critical Communications Enhancement Program, a once in a generation investment in radio communication, and further capital investments into social housing maintenance.

Access to essential services

Critical Communications Enhancement Program



NSW Telco Authority’s Critical Communications Enhancement Program (CCEP) will expand and enhance the NSW Public Sector Network (PSN), providing emergency services with mission critical communication tools. Next to Australia’s triple zero emergency hotline, the PSN is the most critical communications network in NSW, with an average 1.33mn calls per month.

The PSN is a radio network used by frontline emergency services, government agencies and essential services to communicate via radio handsets and other devices during emergencies. The network is used by NSW Police Force, Fire and Rescue NSW, NSW Ambulance, the NSW Rural Fire Service and the NSW State Emergency Service.

Investment in critical communications will support our frontline responders to:

- Increase the sharing of information during emergencies, such as floods and fires
- Improve network access, resilience and reliability
- Improve responses to communities affected by disasters and critical incidents
- Allow for cross-border connections to networks in other states
- Enable access to new communication technologies.

Work on the CCEP began in September 2016 and will consolidate multiple separate agency radio networks into a single interoperable network, allowing critical communications to occur across a reliable and efficient network. Much of this expansion takes place in regional and rural communities including remote and rugged terrain.

Upon completion of the CCEP, the total number of PSN sites will increase from 150 to 675 and provide 85% geographic coverage (from a 35% baseline) and 99.7% population coverage (from an 80% baseline). The PSN will also extend into western NSW for the first time and will provide radio communications coverage over 390,000 sq kms (from a baseline of 353,000 sq kms).

CCEP is a once-in-a-generation investment in radio communications infrastructure. Communities affected by the 2019-20 Black Summer bushfires and recent flooding events benefited from CCEP, with many high-risk areas receiving new or enhanced radio sites.

During the March 2022 floods, approximately 1.59mn radio calls were made – a 23% increase – while the PSN availability and reliability was maintained at around 99%.

Public Safety Network

“Investment in radio communications infrastructure saves lives. By expanding the PSN, we are providing emergency services with the tools to stay safe as they protect the people and places of NSW.”

Kylie De Courteney,
NSW Telco Authority Managing Director

Affordable housing

Social Housing Maintenance Stimulus Program – Tranche 2



To improve social housing conditions and support jobs during the COVID-19 pandemic, the NSW Government made further capital investments through Tranche 2 of the Social Housing Maintenance Stimulus Program (SHMSP).

Tranche 2 was completed from November 2020 to June 2022 and included:

- Improving property condition and extending the useful life of aged social housing properties
- Improving access to affordable and sustainable energy
- Improving residents housing experience and wellbeing
- Supporting employment in the construction and trade industries
- Strengthening partnerships with the community housing sector.

Under tranche 2, 80% of the capital works were delivered by the NSW Land and Housing Corporation (LAHC), the largest social housing provider in the State. The remaining 20% was delivered by community housing providers (CHPs). Between March and June 2021, 31 CHPs participated in the delivery of SHMSP Tranche 2. The CHPs were able to leverage their local knowledge and trade networks to deploy the program on time and on budget.

Community Housing Providers in NSW

There are more than 100 registered non-profit community housing providers (CHPs) in NSW who are responsible for providing and managing social and affordable housing to support community members on lower incomes. At present, about 25% of LAHC owned social housing properties is managed and maintained by CHPs.

Tranche 2 encouraged program participation from Aboriginal organisations and small-to-medium enterprises. It provided a great opportunity for the construction and maintenance sector to expand their delivery capacity and deepen their collaborations with LAHC and local communities. Tranche 2¹⁹ of the SHMSP supported over 4,200 tradespeople through accelerated capital maintenance works and boosted local economies in regional and metropolitan communities. It was particularly important to regional communities, which were disproportionately affected by bushfires and the pandemic.

The key achievements of tranche 2 included²⁰:

- Maintenance and upgrade of over 12,600 properties across the State, with about two-thirds of the properties in regional NSW^{21,22}
- Tenant satisfaction rating for completed works was close to 90% for LAHC's delivered works
- Installation of energy efficient air-conditioning at over 800 properties
- Installation of rooftop solar systems at over 2,200 properties.

¹⁹ All Tranche 2 related indicators are indicative at this stage and will be finalised in FY23.

²⁰ Impact indicators will not be updated annually as they reflect one-off activities.

²¹ The main capital works included: internal and external painting; replacements of kitchens, bathrooms, floor coverings, roofs and windows; fencing and concrete work; and multi-unit building upgrades.

²² Compared to the SHMSP tranche 1 (see Table 8 Impact Indicators – Affordable Housing), capital works delivered by LAHC under tranche 2 had: 1. longer lead time for planning and design for challenging and complex works, which were often required at multi-unit properties; and 2. more internal upgrade works done as the COVID-19 Health Orders had become less restrictive enabling LAHC to work in closer proximity to social housing tenants.

An upgraded social housing property at Bidwill, South Western Sydney, delivered by LAHC



An upgraded social housing property at Windale, Central Coast, delivered by LAHC



An upgraded social housing property delivered by a CHP



NSW Sustainability Bond Programme milestones: 2018-2022

2018

March 2018 – Treasury Asset and Liability Committee (ALCO) endorsed the creation of the NSW Sustainability Bond Programme, the first programme of its type among semi-government issuers in Australia

September 2018 – ALCO approved the NSW Sustainability Bond Framework

November 2018 – Issued inaugural \$1.8bn 15 November 2028 Green Bond

- Largest single green bond in the Australian dollar market at the time of issuance
- Climate Bonds Standard certified
- Won 3 industry awards

Bond proceeds were earmarked to:

- Sydney Metro Northwest
- Newcastle Light Rail
- Quakers Hill and St Marys Water Recycling Plants upgrade.

2019

October 2019 – Published first annual report for the Programme – Creating a Sustainable Future

Updated the NSW Sustainability Bond Framework and obtained Second Party Opinion by Sustainalytics

November 2019 – Issued inaugural \$1.8bn 20 March 2025 Sustainability Bond

- Largest single sustainability bond in the Australian dollar market at the time of issuance
- First Australian semi-government authority to issue a sustainability bond
- Won 5 industry awards both locally and globally

Eligible assets new to the pool:

- Green Square Trunk Stormwater Improvement
- Waterway naturalisation and stormwater improvement
- Public School Infrastructure
- Transport Access Programme – Tranche 3.

2020

September 2020 – Tendered for a A\$300mn increase to the 20 March 2025 Sustainability Bond

Eligible asset new to the pool:

- Improving Access to National Parks Program.

October 2020 – Issued \$1.3bn of a new 20 November 2030 Green Bond

- Climate Bonds Standard certified
- Established an ESG curve
- Largest Australian semi-government issuer in green and sustainability format with A\$5.2bn outstanding at the time of issuance

December 2020 – Published second annual report for the Programme – Recovery and Growth

Updated the NSW Sustainability Bond Framework and Second Party Opinion by Sustainalytics

2021

October 2021 – Published third annual report for the Programme

Eligible assets new to the pool:

- Social Housing Maintenance Stimulus Program – Tranche 1
- Waterway naturalisation and stormwater improvement – Tranche 2
- CBD and South East Light Rail
- Parramatta Light Rail.

2022

February 2022 – Issued \$1.5bn of a new 22 November 2032 Sustainability Bond

Eligible assets new to the pool:

- Critical Communications Enhancement Program.

May 2022 – Eligible assets new to the pool:

- Social Housing Maintenance Stimulus Program – Tranche 2.

About TCorp

Our mission is to provide best-in-class financial management, solutions and advice to the NSW public sector.

TCorp is the financial services partner to the NSW public sector, providing best-in-class investment management, financial management solutions and advice. With \$100.7bn of assets under management, TCorp is a top 10 Australian institutional investor and is the central borrowing authority of the state of NSW, with a balance sheet of \$124.3bn.

Created by the *Treasury Corporation Act 1983*, TCorp is a wholly owned entity of the state of NSW and is part of the NSW Treasury cluster. We have the same legal capacity, powers and authorities as a company under the *Corporations Act 2001* (Cth), which allows us to raise and manage money to help the NSW Government and ultimately, the people of NSW.

TCorp is a public financial corporation (PFC) and not a budget dependent agency. PFCs provide financial services including insurance, lending and investment management, trade in financial assets and liabilities of the state and operate commercially in the financial markets.

Furthermore, TCorp is a net contributor to the state through the payment of tax equivalents and dividends and in FY22, we generated a dividend of \$95.0mn.

Our borrowing, investment and financial management activities are regulated by the *Government Sector Finance Act 2018*.

Partnership and collaboration

In providing solutions and advice for our clients across the NSW public sector, we build relationships with the private sector.

Our reputation and scale in financial markets allows us to partner with leading domestic and global institutions including fund managers, banks, technology and other service providers, to design and implement strategies delivering the most appropriate outcomes for our clients.

Our objectives

Financial management

Best-in-class for financial management, solutions and advice.

People and culture

Sought after for the capability and conduct of our people.

Whole-of-state outcomes

A sustainable and aligned organisation always focused on delivering for all of NSW.

For the benefit of NSW

TCorp has a unique remit, being the only public sector organisation that acts as both a fund manager and a government central borrowing authority. We combine both functions to our clients' advantage and provide long-term benefits to the people and communities of NSW. Our scale, market presence and strong credit rating provide access to a broader range of opportunities at lower costs, compared with the private sector.

TCorp provides 2 main service lines to clients:

Investment Management

Our activities include:

- Providing investment advice and portfolio management solutions tailored to clients' specific risk and return objectives
- Managing cash and fixed income portfolios, infrastructure and property and portfolios.

Financial Markets

Our activities include:

- Raising funds in local and international debt markets
- Managing risk on the TCorp balance sheet
- Managing liquidity assets
- Providing lending and tailored financial risk management solutions to the NSW Government family.

References

- 1 Workshop slides and recordings can be found on the ASFI website [here](#).
- 2 The Improving Access to National Parks Program has been removed from the Nov-32 sustainability bond portfolio of projects and assets and its value replaced by a greater allocation towards Public School Infrastructure. The asset remains in the asset pool.
- 3 The Enabling Works package includes local road network improvements to increase road capacity to make it easier for traffic to move in and around Parramatta.
- 4 The Infrastructure Works package includes the design and construction of civil works, public domain and light rail construction up to road level.
- 5 The Improving Access to National Parks Program was removed from the Nov-32 sustainability bond portfolio of projects and assets and its value replaced by a greater allocation towards Public School Infrastructure. The asset remains in the asset pool.
- 6 ABS, 2016 Census.
- 7 Trips are measured by tap on/off activity. Includes school travel using concessional cards, trips paid for using contactless payment cards and single tap-on or tap-off. Excludes activity from transport concession entitlements, integrated ticketing for major events and fare non-compliance.
- 8 From electricity purchased to operate stations, traction power and a depot. Emissions calculated using the forecast emission factor of 0.70 tonnes CO₂-e per MWh for scope 2 and 3 emissions for 2022. Factors sourced from Australia's emissions projections 2021, Australian Government Department of Industry, Science, Energy and Resources (October 2021).
- 9 Same as footnote 7.
- 10 Same as footnote 8.
- 11 Same as footnote 7.
- 12 Same as footnote 8.
- 13 The infrastructure package only, excludes the smaller scale enabling works and supply, operate and maintain packages. Indicators are cumulative from the construction start to June 2022.
- 14 Tranche 2 figures are for Johnstons Creek only. Infrastructure for Milson Park and Parkside Drive will be reported once complete.
- 15 Combined litter and sediment from gross pollutant traps (GPTs) only. Desilting of the concrete channel before the GPT was not completed in FY22 due to adverse weather conditions. More frequent desilting activities are scheduled for FY23.
- 16 Impact indicators are for 2021.
- 17 Data are for FY20. Indicators will not be updated annually as they reflect one-off activities.
- 18 The key objective of Tranche 1 included: addressing critical asset condition needs; increasing supply of social housing through upgrading untenanted stock in areas with social housing wait times of more than 10 years'; improving access to affordable and clean energy; improving residents housing experience, wellbeing and satisfaction; and support employment in the construction and trade industries.
- 19 All Tranche 2 related indicators are indicative at this stage and will be finalised in FY23.
- 20 Impact indicators will not be updated annually as they reflect one-off activities.
- 21 The main capital works included: internal and external painting; replacements of kitchens, bathrooms, floor coverings, roofs and windows; fencing and concrete work; and multi-unit building upgrades.
- 22 Compared to the SHMSP tranche 1 (see Table 8 Impact Indicators – Affordable Housing), capital works delivered by LAHC under tranche 2 had: 1. longer lead time for planning and design for challenging and complex works, which were often required at multi-unit properties; and 2. more internal upgrade works done as the COVID-19 Health Orders had become less restrictive enabling LAHC to work in closer proximity to social housing tenants.

Appendix – Independent Reasonable Assurance Report



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Independent Reasonable Assurance Report to the Executive and Management of Treasury Corporation of NSW ('TCorp')

Assurance Conclusion

Based on our reasonable assurance procedures, as described in this statement as of 8 November 2022, in our opinion TCorp's bond issuance process in relation to its 2018, 2019, 2020 and 2022 Sustainability Bonds, inclusive of its Sustainability Bond Framework and nominated projects and assets, meets the requirements of the ICMA Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines and the CBI Climate Bond Standard (inclusive of sectoral criteria) in all material respects. Further, based on our reasonable assurance procedures, in our opinion TCorp's 2022 Impact Report meets the requirements of the ICMA Sustainability Bond Guidelines, and TCorp's self-declared criteria stated in TCorp's Sustainability Bond Framework, in all material respects.

Scope

Ernst & Young ('EY') has performed a reasonable assurance engagement in relation to TCorp's 2018, 2019, 2020 and 2022 Sustainability Bonds, Sustainability Bond Framework and TCorp's 2022 Sustainability Bond Impact Report in order to provide an opinion as to whether, as of 8 November 2022, the Subject Matter detailed below, meets in all material respects the Criteria presented below.

Subject Matter and Criteria

Subject Matter	Criteria
<p>TCorp's Sustainability Bond process, as described in TCorp's Sustainability Bond Framework that sets out:</p> <ul style="list-style-type: none"> ▶ Policies and procedures related to the use of proceeds and management of proceeds raised from the Bond. ▶ Processes for project evaluation and selection for inclusion in the Bond. ▶ Procedures for reporting on the use of proceeds and environmental and social performance of the Bond. 	<ul style="list-style-type: none"> ▶ The Climate Bond Standard ('CBS') v2.1 and v3 ▶ The Climate Bond Standard Sector Eligibility Criteria for Low Carbon Transport ▶ The Climate Bond Standard Sector Eligibility Criteria for Water Infrastructure ▶ The International Capital Market Association's ('ICMA') Sustainability Bond Guidelines ('SBG'), comprising the Green Bond Principles ('GBP'), and the Social Bond Principles ('SBP') ▶ TCorp's own internal policies and procedures, as documented in TCorp's Sustainability Bond Framework
<ul style="list-style-type: none"> ▶ The structure of, and disclosures within, TCorp's 2022 Sustainability Bond Impact Report 	<ul style="list-style-type: none"> ▶ The International Capital Market Association's ('ICMA') Sustainability Bond Guidelines ('SBG'), comprising the Green Bond Principles ('GBP'), and the Social Bond Principles ('SBP')

<ul style="list-style-type: none"> ▶ The asset values disclosed within TCorp's 2022 Sustainability Bond Impact Report ▶ Select impact data disclosed within TCorp's 2022 Sustainability Bond Impact Report 	<ul style="list-style-type: none"> ▶ TCorp's own internal policies and procedures, as documented in TCorp's Sustainability Bond Framework
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Management Responsibility

The management of TCorp ('Management') is responsible for the collection, preparation and presentation of the subject matter in accordance with the Criteria, and for maintaining adequate records and internal controls that are designed to support the Sustainability Bond issuance process.

Assurance Practitioner's Responsibility

Our responsibility is to express a reasonable assurance conclusion as to whether the subject matter is presented in accordance with the Criteria, in all material aspects. Our assurance engagement has been planned and performed in accordance with the Australian Standard on Assurance Engagements 3000 (revised) *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* ('ASAE 3000').



Level of Assurance

A reasonable assurance engagement consists of making enquiries and applying analytical, controls testing, and other evidence-gathering procedures sufficient for us to obtain a meaningful level of assurance as the basis for providing a positive form of conclusion. The procedures performed depend on the assurance practitioner's judgement including the risk of material misstatement of the specific activity data, whether due to fraud or error. While we considered the effectiveness of Management's internal controls when determining the nature and extent of our procedures, these procedures were not designed to provide assurance on internal controls. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Our Approach

The assurance procedures we undertook included, but were not limited to:

- ▶ Assessing policies and procedures established by TCorp related to the issuance of the 2018, 2019, 2020, and 2022 Sustainability Bonds
- ▶ Confirming eligibility of nominated projects for inclusion in TCorp's 2018, 2019, 2020, and 2022 Sustainability Bonds against the Use of Proceeds Criteria within the CBS, SBP and GBP
- ▶ Interviewing selected business unit and group level personnel to understand key issues related to TCorp's policies and procedures
- ▶ Reviewing selected performance information for nominated projects, and documentation supporting assertions made in the subject matter
- ▶ Reviewing the impact report and checking that its structure and disclosures met the requirements of the framework, that asset values were disclosed accurately, and that individual impact data had been appropriately transcribed from the associated links in the 'source of information'.
- ▶ Checking the accuracy of calculations performed
- ▶ Confirming internal systems and processes were functioning as indicated and obtaining supporting evidence
- ▶ Confirming the maximum potential value of debt to understand the basis and integrity for the value of the bond
- ▶ Obtaining and reviewing evidence to support key assumptions and other data
- ▶ Seeking management representation on key assertions

Limitations

There are inherent limitations in performing Assurance; for example, assurance engagements are based on selective testing of the information being examined and it is possible that fraud, error or non-compliance may occur and not be detected. There are additional inherent risks associated with

assurance over non-financial information including reporting against standards which require information to be assured against source data compiled using definitions and estimation methods that are developed by the reporting entity. Finally, adherence to ASAE 3000 and the Climate Bond Standard is subjective and could be interpreted differently by different stakeholder groups.

Our assurance was limited to TCorp's 2018, 2019, 2020 and 2022 Sustainability Bonds, and did not include statutory financial statements. Our assurance is limited to policies and procedures in place as at 8 November 2022, after issuance of TCorp's 2018, 2019, 2020 and 2022 Sustainability Bonds.

Use of Report

Our responsibility in performing our assurance activities is to the Executive and Management of TCorp only, and in accordance with the terms of reference for this engagement, as agreed with TCorp. We do not therefore accept or assume any responsibility for any other purpose or to any other person or organisation. Any reliance any such third party may place on the 2018, 2019, 2020 and 2022 Sustainability Bond assurance is entirely at its own risk. No statement is made as to whether the Criteria are appropriate for any third party purpose.

Our Independence and Assurance Team

In accordance with APES 110, we can confirm we have met the requirements of the Code of Ethics for Professional Accountants, including on independence. Our team has the required competencies and experience for this assurance engagement.

Ernst & Young

Emma Herd
Partner
Sydney, Australia
8 November 2022

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