

New Zealand Debt Management Insights



New Zealand Sovereign Green Bonds

Background

In November 2021 New Zealand's Minister of Finance and Minster of Climate Change announced that New Zealand Debt Management (NZDM) was leading work to support the first issuance of New Zealand Sovereign Green Bonds by the end of 2022. New Zealand's Sovereign Green Bond Framework and accompanying Second-Party Opinion (SPO) report were published in September 2022 and the inaugural issuance of Green Bonds occurred in November 2022. Tender issuance into the 2034 maturity Green Bond will begin this month.

This note outlines our rationale for establishing a Green Bond Programme and how we intend to integrate Green Bonds into our funding strategy.

Why issue Green Bonds and why now?

Over many years NZDM has engaged with investors in relation to the New Zealand Sovereign's Green, Social and Sustainability (GSS) credentials and policies, to support participation in its generic bond programmes. More recently, we considered whether issuing a labelled bond instrument could complement this approach. This was a common discussion with peers. Poland was the first sovereign to issue Green Bonds in 2016 and by mid-2021 more than 20 sovereigns had issued GSS labelled bonds. We considered, why, in a New Zealand context, a labelled instrument would have additional benefits over our broader approach to date.

We concluded there were several reasons for establishing a Green Bond programme. NZDM hope to:

- i drive improvements in transparency, monitoring and reporting in relation to government climate and environmental expenditure, thereby contributing to improved outcomes
- ii include consideration of Green Bond eligibility of expenditure in the annual Budget decisionmaking process
- iii further diversify our investor base and respond to investor demand for GSS labelled products
- iv contribute to the development of sustainable finance markets in New Zealand.

The timing of the decision to establish a programme was supported by a number of factors.

Liquidity

NZDM place high importance on liquidity in all issued securities. Issuing liquid volumes of Green Bonds requires both sufficient levels of total government bond issuance and sufficient levels of eligible Green Bond expenditure to support the issuance.

Green Bonds are nominal bonds with additional monitoring and reporting requirements and are issued as part of the established borrowing programme, rather than in addition to it. Our intention was to establish Green Bonds as an enduring part of the debt portfolio. We therefore needed to be confident there would be sufficient nominal bond issuance over time to be able to split issuance into liquid volumes of both conventional and Green Bonds.

Prior to the onset of COVID-19, New Zealand Government Bond (NZGB) issuance levels were around NZ\$8 billion per annum and total NZGBs outstanding was less than NZ\$80 billion. Now, NZGBs on issue are NZ\$158 billion, and forecast to rise, and NZGB programmes are forecast to be between NZ\$20-30 billion annually over the period to June 2027. This provided us with greater confidence to introduce a new debt instrument without fear of undermining liquidity in our existing instruments.

Green Bond issuance needs to be underpinned by eligible expenditure. At all times the amount of approved eligible expenditure in the Green Bond Programme needs to exceed the amount of Green Bonds issued. Consequently, another prerequisite for establishing a programme was a high level of certainty there would be ongoing eligible expenditure at scale. Confidence that this is the case has been assisted by recent government policy announcements as outlined below.

The development of New Zealand's climate and environmental strategies, policies, and priorities

For a Green Bond Framework to be credible, there must be coherence between government policies and priorities and the categories of eligible expenditure within the Green Bond Framework. In recent years there has been significant development of government climate policies, including:

- The passing of the Climate Change Response (Zero Carbon) Amendment Act in 2019, which requires New Zealand to reach net zero long life carbon emissions by 2050
- The Zero Carbon Act also requires that the government develop and implement policies for climate change adaptation and mitigation. As a result New Zealand's first Emissions Reduction Plan (ERP) and National Adaptation Plan (NAP) were published in 2022. These plans set out strategies and priorities in relation to climate change mitigation and adaptation.

Establishing a credible Framework by adopting developed best practices

We were conscious of developing a product that would be well received globally and unlikely to be subject to greenwashing criticisms. In order to do this, we looked to follow well established market best practices, which have experienced significant developments in recent years, including:

- i creating a Framework consistent with ICMA (International Capital Markets Association)
 Green Bond Principles and Recommendations
- ii engaging a well-recognised Second Party Opinion (SPO) provider to independently assess the Framework
- iii committing to regular reporting and external assurance
- iv establishing widely accepted categories of eligible green expenditure and eligibility criteria which are consistent with the government's climate and environmental policies and priorities
- appointing an international and a domestic bank to provide expert structuring advice and insights into investor expectations
- vi reviewing well regarded taxonomies and standards to help inform eligibility criteria
- vii discussing with other issuers their experiences and insights.

Green, Social or Sustainable?

One of the first decisions to be made about the structure of a Green, Social or Sustainable (known as GSS) Bond Programme was which type of Framework to establish. We considered all options and determined that, on balance, the best option for New Zealand was to establish a Green Bond Framework. We decided to concentrate on setting up a high-quality Framework that would align to a number of key government priorities and would focus attention for improvements in transparency, monitoring and reporting. Learnings from this process could be applied to a broader framework in the future if considered desirable. In the meantime, the Green Bond Framework still allows us to report on social outcomes where good quality, appropriate data is available.

New Zealand Sovereign Green Bond Framework

Like most Green Bond Frameworks, ours is broken into a section that outlines what the New Zealand Government's key climate and environmental policies and strategies are, as the sovereign issuer. This is followed by a section that describes the mechanics and commitments of the Programme. The general structure closely follows the International Capital Markets Association (ICMA) Green Bond Principles. This includes defining use of proceeds categories, describing the process for project evaluation and selection, explaining how proceeds raised from the issuance of the bonds will be managed and committing to reporting.

Where our Framework is different to most is in the number of categories we have included and the large proportion of expenditure in the biodiversity category. In New Zealand we have unique, and uniquely challenged biodiversity. As a result of 80 million years of evolution in isolation from other land masses, a large number of New Zealand's native species are endemic. The introduction of animals, plants and people have had a devastating impact on our natural landscapes, plants, and animals. We see protecting biodiversity as important for many reasons, including culturally and in contributing to global biodiversity. This is reflected in the significant expenditure included in the Terrestrial and Aquatic Biodiversity category.

We have included 10 of the 11 ICMA Green Project Categories. We've combined some categories resulting in 8 Green Categories, as shown in Figure 1 below. Sovereign issuers typically include 3-6 ICMA Green Project Categories. The large number of categories we have included is representative of the New Zealand Government's broad climate and environmental agenda. It also allows us to include a wide range of initiatives, maximising the pool of eligible expenditures to support Green Bond issuance.

We considered the development of our Green Bond Framework in the context of the He Ara Waiora framework¹ and have incorporated three elements of He Ara Waiora in aspects of the Programme. Tiakitanga (guardianship of the environment or other important systems) has been used to frame the responsibilities of the Green Bond Committee. Tikanga (making decisions in accordance with the right values and processes) and Manaakitanga (supporting each other and demonstrating an ethic of care and respect) have been incorporated into our evaluation and selection process.

Our Eligibility Window has been defined to include expenditures from the previous financial year, current financial year and the next two financial years. We have also committed to ensuring that at least 50% of bond proceeds will be applied to current or future year expenditure. By doing this we have endeavoured to find a balance between ensuring there is sufficient known eligible expenditure to stand the programme up and including forward looking expenditures, which contributes to investors' desire to see their funds supporting new initiatives.

Figure 1: Current eligible categories of expenditure and approved eligible expenditure

Green Categories	2021/22 \$m	2022/23-2024/25 \$m	Total \$m	Share %
Clean Transport	\$750	\$2,339	\$3,089	45.4%
Energy Efficiency and Renewable Energy	\$172	\$775	\$947	13.9%
Green Buildings	TBC	TBC	TBC	TBC
Living and Natural Resources and Land Use	\$17	\$74	\$91	1.3%
Terrestrial and Aquatic Biodiversity	\$410	\$1,410	\$1,820	26.8%
Climate Change Adaptation	\$72	\$116	\$188	2.8%
Sustainable Water and Wastewater Management	\$322	\$150	\$472	6.9%
Pollution Prevention and Control	\$36	\$157	\$193	2.8%
Total	\$1,779	\$5,021	\$6,800	100%

Source: The Treasury²

¹ He Ara Waiora is a framework built on Māori knowledge and perspectives of wellbeing. It presents a holistic, intergenerational approach to wellbeing.

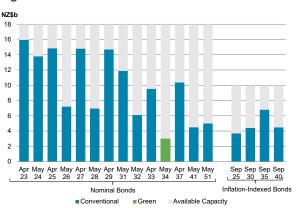
² Approved eligible expenditures as at September 2022.

Currently our pool of eligible expenditures, which has been through our evaluation process and endorsed by the Green Bond Committee³, is NZ\$6.8 billion, over the Eligibility Window. Over time the amount of eligible expenditure will grow. The Green Buildings category is expected to have eligible expenditure included before the end of the financial year as work on this category is completed. In addition, there will be a process, included in the annual Budget cycle, to identify, evaluate and endorse new expenditures into the programme.

Treatment of Green Bond lines

From a debt management perspective, Green Bonds will be treated in a similar way to conventional nominal bonds. We expect Green Bond lines will be launched via syndication in volumes consistent with recent bond syndications. Subsequently, after the syndication blackout window, we anticipate Green Bond lines will be tendered into at a similar rate to an equivalent nominal bond line, with the volume quickly brought up to a minimum of NZ\$4 billion. We generally see NZ\$4 billion as a minimum volume to promote solid liquidity in our nominal bonds. The pace at which the bond is brought up to NZ\$4 billion will depend on the size of annual NZGB borrowing programmes, the term of the bond line, as well as the pool of eligible green expenditures.

Figure 2: New Zealand Government Bond Portfolio



Source: The Treasury

NZDM decided not to take a twin bond approach, where the Green Bond maturity matches that of a nominal bond on the curve. Instead, Green Bond lines are expected to have different maturity years from conventional nominal bond lines and form part of the nominal bond curve. Consequently, we expect Green Bonds to be attractive to our investors in our existing instruments, as well as investors with GSS-specific mandates.

Our primary focus for Green Bond issuance, in the near-term, is to issue into the 15 May 2034 maturity until it reaches a satisfactory volume to promote liquidity. Subsequently, once there is adequate eligible green expenditure to support a syndication, we will consider launching a second Green Bond line. We will monitor performance of the 2034 maturity Green Bond in the secondary market. Should it exhibit inferior liquidity to conventional nominal lines for a given term, we may look to build higher volumes in Green Bond, earlier than for conventional lines.

Issuance of inaugural Green Bond

The 2034 maturity Green Bond was issued at a yield to maturity of 4.355%, at a spread of 5 basis points to the April 2033 nominal bond. This was the tightest end of the initial price guidance of 5 to 8 basis points. Total book size, at final price guidance, exceeded NZ\$7.5 billion.

There has been broad independent commentary that there may have been a 'greenium' associated with the deal. It is not possible to conclusively disentangle a 'greenium' from any usual new issue premium and the range of estimates for fair value.

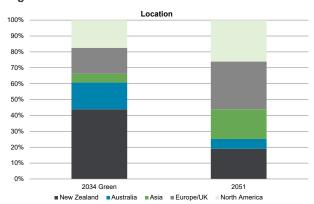
As we intend to treat Green Bonds similarly to nominal bonds, we felt it was important that we applied the same allocation principles to this syndication as to our syndications for conventional bonds. The allocation statistics (Figure 3) show diverse participation grouped by investor type and region, consistent with previous deals. Relative

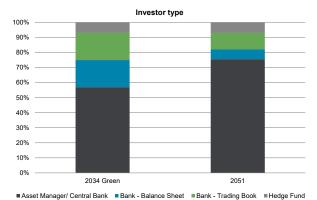
The Green Bond Committee is a cross-agency committee, chaired by the Treasury. It endorses eligible expenditures and any amendments to the Framework. It also oversees the management of Green Bond proceeds and reporting.

to the 2051 nominal bond syndication, both New Zealand and Bank Balance Sheet allocation were higher, reflecting the shorter term of the Green Bond line.

That said, the deal also attracted some first-time participants in a NZGB syndication. Some appeared to be GSS-dedicated investors, and we also saw investors that had not participated in syndications for several years. However, we recognise that some of this new participation may have been due to the recent inclusion of NZGBs in the FTSE-Russell World Government Bond Index, rather than due to the bond being issued from the Green Bond Framework.

Figure 3: Allocation statistics





Source: The Treasury

Conclusion

Alongside Nominal Bonds and Inflation-Indexed Bonds, Green Bonds are expected to be an important and enduring part of the NZGB portfolio. Green Bonds will help ensure high quality government projects with robust environmental outcomes are financed, delivered, monitored and reported on.

The issuance of Green Bonds is expected to provide further diversification of our investor base and support development in the broader New Zealand sustainable finance market. Design of the Green Bond Programme has been informed by international best practice and incorporates New Zealand specific elements. NZDM will monitor market developments and update the Framework over time as appropriate.

Contacts:

investor.relations@treasury.govt.nz

) +64 4 890 7274

New Zealand Debt Management: The Treasury

1 The Terrace, PO Box 3724, Wellington 6011, New Zealand