



Green Bond Impact Report 2021.

Westpac New Zealand Limited.

June 2021



Contents.

1.	Introduction.	3
2.	Green Bond overview.	4
3.	Thank you from the CEO of Westpac New Zealand.	5
4.	Annual allocation of proceeds and eligibility reporting.	7
4.1	Alignment with Westpac New Zealand's climate change solutions target.	7
4.2	Green Bond Asset Pool.	7
5.	Impact assessment.	8
5.1	Renewable energy.	8
5.2	Renewable energy case study: solarZero.	9
5.3	Green buildings.	10
5.4	Green buildings case study: Precinct Properties – Mason Brothers.	12
5.5	Pollution prevention and control.	13
5.6	Pollution prevention and control case study: Azwood.	13
5.7	Clean transportation.	14
6.	Further information.	14
7.	Methodology.	15
8.	Alignment of the Green Bond with the Sustainable Development Goals.	16
9.	Term sheet details.	17
10.	Disclaimer.	17

1. Introduction.

On 25 June 2019, Westpac Securities NZ Limited¹ issued a EUR500m Senior Green Bond in the European market (**Green Bond**) under Westpac New Zealand Limited's Green Bond Framework (**Framework**). The transaction was a milestone for the New Zealand sustainable finance market, being the first offshore green bond by a New Zealand issuer, and the first green bond issued by a New Zealand banking group.²

Westpac New Zealand Limited (**Westpac New Zealand**) is pleased to present this inaugural Green Bond Impact Report (**Report**), which outlines Westpac New Zealand's use of the funds received from the issuance of the Green Bond (**Green Bond Proceeds**) (see Section 4) and the environmental benefits generated by that allocation of Green Bond Proceeds (see Section 5).

Westpac New Zealand has classified lending assets in accordance with the eligibility criteria outlined in the Framework (**Eligible Assets**).

Westpac New Zealand has allocated Green Bond Proceeds to certain Eligible Assets (such assets form the **Green Bond Asset Pool**).

This Report provides transparent insight into the environmental performance of projects financed or refinanced through the allocation of Green Bond Proceeds.

The Report aligns to the International Capital Markets Association (**ICMA**) Green Bond Principles³ (**GBP**) and where possible, follows the Harmonised Framework for Impact Reporting.⁴ To ensure maximum integrity, Westpac New Zealand has chosen to calculate the impact metrics based only on the proportion of our lending to the Eligible Assets (we do not solely claim the gross or total environmental impact). Further information on the calculation methodologies of impacts can be found in Section 7.

DNV Business Assurance Australia Pty Ltd. has provided an independent assessment of this Report in the form of External Review over the content of this Report and a copy of their report can be found at: <https://www.westpac.com.au/about-westpac/investor-centre/fixed-income-investors/>

This Report covers the 21-month period from 1 July 2019 (being the first complete calendar month post the issuance of the Green Bond) through to 31 March 2021 (**Green Bond Reporting Period**). Each subsequent report will cover a 12-month period from 1 April – 31 March of the next reporting year, with each report being published in June of that reporting year.

We welcome your feedback on this Report and our contact details are set out on page 14.

¹ Westpac Securities NZ Limited is a wholly owned and guaranteed funding subsidiary of Westpac New Zealand Limited and the dedicated entity that provides all offshore wholesale funding for Westpac New Zealand.

² Term Sheet details are included Section 9. Note, this refers to New Zealand based organisations and not overseas issuers to the New Zealand Debt Capital Markets.

³ <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>

⁴ <https://www.icmagroup.org/green-social-and-sustainability-bonds/impact-reporting/>

2. Green Bond overview.

Key highlights

- Westpac New Zealand (via Westpac Securities NZ Limited) issued its inaugural 5-year EUR 500m Green Bond in June 2019
- First offshore green bond by a New Zealand issuer
- First New Zealand banking group to issue a green bond
- First New Zealand issuer to include hydroelectric generation assets in a Green Bond
- Transaction enables Westpac New Zealand to align its source of funding with its sustainability strategy and climate change lending objectives

Use of proceeds

Green Bond Asset Pool includes the financing or refinancing of:

- Renewable Energy: 38 existing hydroelectric assets, 4 low emissions geothermal assets, 6 wind assets and 5,200 solar installations
- Green Buildings: 31 green buildings that meet 'Excellent', 'Market leading' or 'World Leadership' ratings under national building standards
- Pollution Prevention and Control: 559 food waste processing units and over tens of thousands of metric tonnes of forestry waste removed and processed into wood energy products
- Clean Transportation: 109 electric vehicles

Management of Green Bond Proceeds using a portfolio-based allocation approach

Total number of business customers whose Eligible Assets were allocated Green Bond Proceeds: 26

Pool of eligible green loans:

- Renewable Energy NZD 418m
- Green Buildings NZD 436m
- Pollution Prevention and Control NZD 41m
- Clean Transportation NZD 3m
- **Total Green Bond Asset Pool NZD 898m⁵**

Key impact metrics – Over the Green Bond Reporting Period and proportionate to Westpac New Zealand's share of lending

- 100% of EUR 500m has been allocated to Eligible Assets under the Framework
 - 2,020 GWh renewable energy supplied
 - 1.76 million kWh energy savings achieved
 - 220,756 tonnes of greenhouse gas emissions avoided
 - 73,923 tonnes of waste diverted from landfill⁶
-

⁵ Westpac New Zealand's green loan portfolio materially exceeds NZD 898m (as at 30 September 2020, Climate Change Solutions lending was NZD 1.6 bn). However, due to the categories of eligibility in the Framework, the availability of impact reporting metrics and the importance of complying with market best practice, Westpac New Zealand has selected only those green loan assets (as Eligible Assets) for which it can efficiently and accurately access the appropriate impact reporting data.

⁶ Due to data limitations, the impact metrics for waste diverted from landfill (and the emissions avoided from this) are based on the expected annual impact from the 559 units funded as at 31 March 2021, and does not reflect the full Green Bond Reporting Period.

3. Thank you from the CEO of Westpac New Zealand.

Dear Green Bond Investors,

Thank you for supporting Westpac New Zealand to play our part in financing the world's transition to a net zero greenhouse gas emissions economy.

At Westpac New Zealand Limited, we believe financial institutions are key to moving the market on social and environmental outcomes, and to driving capital flows into sustainable business models. For more than a decade, we've prioritised the targeting of lending for sustainable infrastructure and climate change solutions. We have long been the leading voice in the New Zealand financial sector on the urgency of financing the country's transition towards a net zero emissions economy and building a more equitable future for all Kiwis.

We're proud to be recognised as the leading New Zealand bank in Sustainable Finance.⁷ We are the first, and to date only, bank in New Zealand to disclose lending exposure to fossil fuel extraction and production (decreased by 21% to \$222m since 30 Sep 2020). Last November, we published our Climate Risk Report,⁸ becoming the first New Zealand bank to formally disclose its exposure to climate risk. We've ended lending to coal mining and production in New Zealand and we have set and reported on progress towards a target of NZ\$10b in sustainable finance by 2025; the majority of which is sustainable lending to customers to help mitigate climate change (currently \$2.25b as at 31 March 2021).⁹

We're pleased to see political action on climate change as well. The passage of the 'Zero Carbon Bill' in 2019¹⁰ put New Zealand firmly on a pathway to net zero emissions by 2050, and a more productive, sustainable, and inclusive economy as a result. Parliament has also introduced legislation mandating climate risk disclosure, to come into force in 2022. Together, these initiatives are driving deeper engagement by Kiwi businesses on climate risk and sustainable borrowing.

Our 2025 Sustainability Strategy - *He rau ringa manaaki / Many Hands Working Together* - sets an example as a bank and a business leader to help strengthen our communities and empower Kiwis from all walks of life to build a better and fairer New Zealand. Our commitment is *Manaaki te ao, manaaki te tāngata, e tipu pūtea ora* - Care for the planet, care for people and growing financial wellbeing.¹¹ While we're always striving to do more, here are few more of our recent achievements:

- Converted 35% of our fleet to electric vehicles, with a goal of going fully electric by 2025;
- Became the first New Zealand bank to be carbonzero certified by Toitū Envirocare;
- Unveiled the 'Westpac Warm Up' interest free loan for customers to improve the energy efficiency of their homes (\$21m lent to date);
- Entered into one of New Zealand's first sustainability-linked loans (a \$50m deal with Contact Energy)
- Arranged and helped facilitate a number of green and sustainability bonds issued in the New Zealand capital markets;
- Co-chaired the Sustainable Finance Forum and co-authored the recently released Roadmap for building a sustainable financial system by 2030.¹²

We want to have meaningful impact, which is why we've made our sustainability strategy an integral part of our first green bond. Reporting on the impact of the bond is further outlined in this report.

We're all on an urgent journey to finance an essential transition. As investors in our inaugural green bond, you're enabling us to play our part. It's critical that we continue to focus on asset quality, sector diversity, meeting or exceeding stakeholder expectations, and continued transparency and disclosure. That is my commitment to you as our inaugural green bond investors.

I personally want to thank you for your support.



David McLean, CEO
Westpac New Zealand Limited
June 2021

⁷ <https://www.scoop.co.nz/stories/BU2010/S00317/infz-awards-recognise-excellence-in-new-zealands-financial-and-capital-markets-eco-system.htm> and <https://www.kanganews.com/news/12923-kanganews-awards-2020-institution-and-deal-winners-announced>

⁸ <https://www.westpac.co.nz/assets/About-us/legal-information-privacy/documents/2020-November-Climate-Risk-Report-Westpac-NZ.pdf>

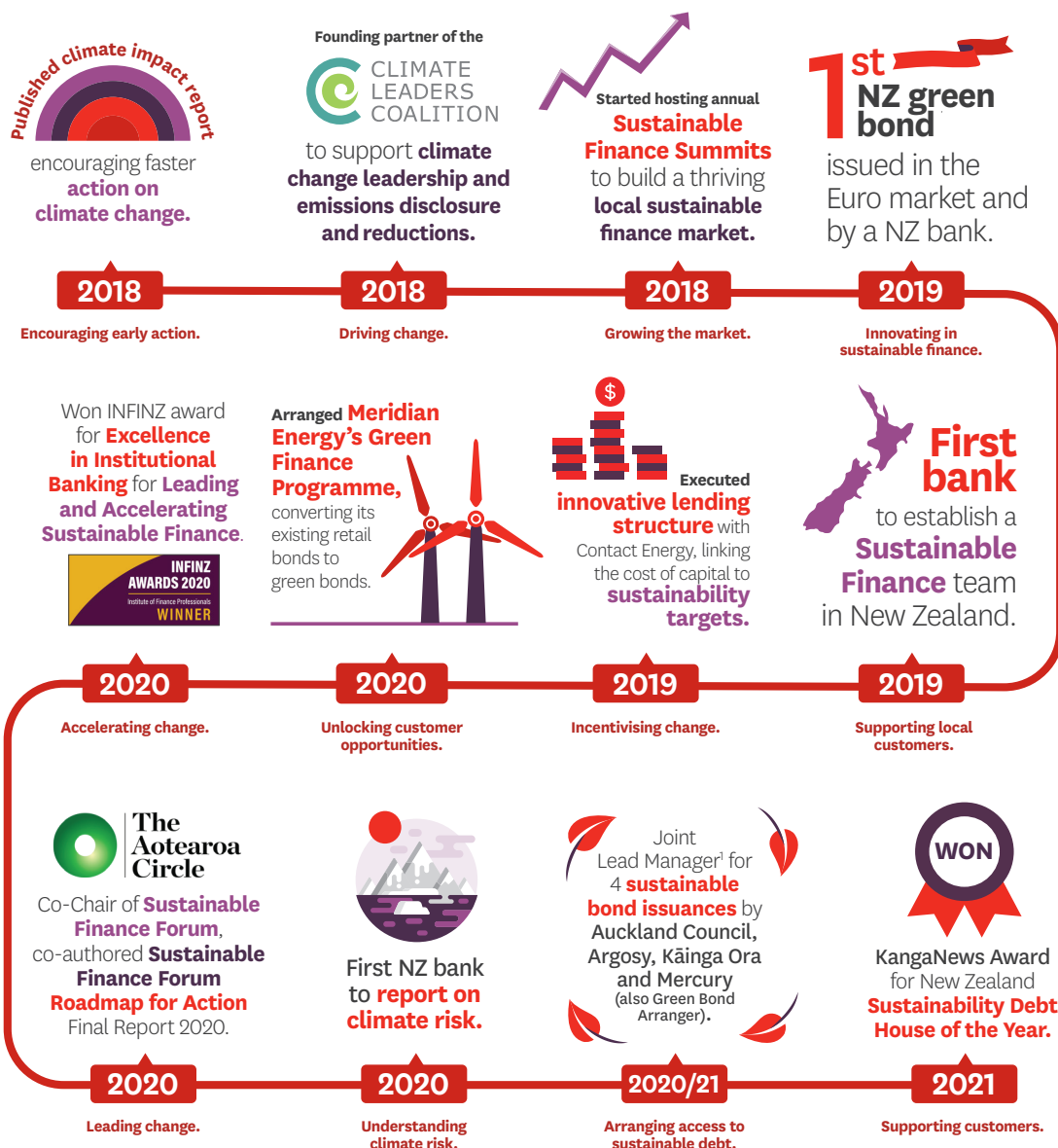
⁹ <https://www.westpac.co.nz/about-us/legal-information-privacy/disclosure-statements/>

¹⁰ The Climate Change Response (Zero Carbon) Amendment Act 2019 was passed in November 2019

¹¹ <https://www.westpac.co.nz/assets/About-us/sustainability-community/documents/Westpac-NZ-2025-Sustainability-Strategy.pdf>

¹² To read the report visit: <https://www.theaotearoacircle.nz/sustainablefinance>

Westpac New Zealand: Accelerating Sustainable Finance.



Westpac New Zealand is committed to supporting its customers build more sustainable and resilient businesses, and achieve New Zealand's pathway towards a net zero emissions economy and a just transition.

¹Through Westpac Banking Group acting through its New Zealand branch, Westpac New Zealand Limited.



4. Annual allocation of proceeds and eligibility reporting.

4.1 Alignment with Westpac New Zealand's climate change solutions target.

As part of Westpac New Zealand's 2025 [Sustainability Strategy](#), we have committed to the lending and facilitation of NZD 10 billion in sustainable finance. A key part of this overall target is to provide NZD 5 billion in lending towards climate change solutions,¹³ which are broadly defined as projects or assets that are consistent with the investment required to achieve the goals of the Paris Agreement and address the impacts of climate change as further defined in the GBP, the Framework and Westpac New Zealand's climate change solutions guidance.

Westpac New Zealand also monitors our Total Committed Exposure¹⁴ to climate change solutions on an ongoing basis, ensuring the Green Bond Proceeds remain continually allocated to Eligible Assets under the Framework.

4.2 Green Bond Asset Pool.

As at 31 March 2021, loans to 26 customers that operate Eligible Assets within four GBP categories, were selected to form the Green Bond Asset Pool. 100% of the Green Bond Proceeds have financed or refinanced these Eligible Assets, as outlined in the table below.

GBP Eligible Asset category	Total Committed Exposure (NZD m)	Share of total Green Bond Proceeds (%)
Renewable energy	417.9	46.6%
Green Buildings	436.0	48.6%
Pollution prevention and control	40.6	4.5%
Clean Transportation	3.1	0.3%
Eligible Asset Portfolio Balance	897.6	100%

Green Bond Issuance	Outstanding Issuance (as at 31/3/21, NZD m)	Original Currency	Bond Type
EUR Senior 5 year	859.9 ¹⁵	EUR 500m	Public EMTN
Total	859.9	-	-
Remaining Asset Pool Capacity¹⁶	37.7		

While Green Buildings and Renewable Energy assets form the majority of the Green Bond Asset Pool, Westpac New Zealand is committed to several categories of Eligible Assets. A portion of the Green Bond Proceeds have also been allocated to the categories of Clean Transportation and Pollution Prevention and Control. Westpac New Zealand is focussed on helping all sectors of the economy transition to net zero emissions and anticipates that lending to these and other sectors for greenhouse gas (GHG) mitigation and also for climate change adaptation, may increase in time.

¹³ The NZD 5bn target is a total commitment, measuring the cumulative flow of lending to climate change solutions by FY25, building on the FY20 disclosure. Refer Disclosure Statement for further information.

¹⁴ Total Committed Exposure (also referred to as TCE) represents the lending committed to fund the projects and/or assets. TCE includes drawn and undrawn facilities and excludes pre-settlement risk on derivative products.

¹⁵ FX rate used to derive the NZX equivalent is at the time of the Green Bond issuance.

¹⁶ Remaining capacity is the amount of TCE of Eligible Assets in the Green Bond Asset Pool, less the net proceeds from the Green Bond.

5. Impact assessment.

5.1 Renewable energy.

As at 31 March 2021, \$418m of Green Bond Proceeds have been allocated to 5,248 renewable electricity generation assets and solar installations. Together, these renewable energy projects and assets reduce the overall GHG emissions generated by the sector and the emissions intensity of the national electricity grid.

During the Green Bond Reporting Period, the impact of Green Bond Proceeds allocation to these renewable energy projects and assets included:

- Generating 2,020 gigawatt hours (**GWh**) of renewable electricity, which is sufficient to meet the electricity needs of 164,877 New Zealand households over the Green Bond Reporting Period.¹⁷
- Avoiding 197,192 tonnes of carbon dioxide equivalents (**tCO₂-e**).

			Green Bond Reporting Period (1 July 2019 – 31 March 2021)			
Generation type	Number of assets/ installations	Total electricity capacity (MW)	Total electricity generation (GWh)	Westpac's proportion: ¹⁸ Electricity generation (GWh)	Total GHG emissions avoided (tCO ₂ -e)	Westpac's proportion: GHG emissions avoided (tCO ₂ -e)
Hydropower	38	4,271	35,132	1,727	3,513,241	172,685
Wind	6	416	2,517	91	251,700	9,098
Low emission geothermal ¹⁹	4	381	5,095	171	346,517	11,659
Solar installations ²⁰	5,200	15	31	31	3,750	3,750
Total	5,248	5,083	42,775	2,020	4,115,208	197,192

New Zealand benefits from a large proportion of its electricity (82%) being generated from renewable sources.²¹ It is expected that New Zealand will need as much new electricity generation in the next 15 years, as it has delivered over the last 40 years.²² Financing the growth of clean, renewable electricity is therefore considered essential to support New Zealand's decarbonisation ambitions as critical sectors of the economy are being electrified (i.e. transportation and industrial heat processes).²³ Westpac New Zealand expects to continue to have a strong focus on financing the renewable energy sector.

¹⁷ The [Electricity Authority Report](#): Electricity in New Zealand 2018, states that a New Zealand household on average uses 7,000 kWh of electricity per annum (or 12,225 kWh over the Green Bond Reporting Period).

¹⁸ As outlined in the Methodology section of this Report, the impact metrics have been estimated based on the proportion of a customer's total borrowing (bank loans and bonds) that Westpac New Zealand provides.

¹⁹ Westpac New Zealand has only included within the Green Bond Asset Pool low emissions geothermal assets – being assets with a GHG emissions intensity below that of the national electricity grid.

²⁰ Solar installation is defined as solar energy system that is installed on a property in New Zealand. The information reported in this table row (for solar installations) was provided directly from solarZero and has not been verified by Westpac New Zealand.

²¹ Ministry of Business, Innovation and Employment Report: [Energy in New Zealand 2020](#).

²² Transpower Report: [Whakamana i Te Mauri Hiko - Empowering our Energy Future](#). Refers to the 15-year period from 2020-2035.

²³ Interim Climate Change Commission Report: [Accelerated electrification](#)

5.2 Renewable energy case study:²⁴ solarZero.

SOLAR ZERO

solarZero, the first solar energy company in New Zealand to achieve Toitū carbonzero certification,²⁵ develops and installs solar energy systems comprising solar panels and smart batteries for homes and businesses across New Zealand.

Through solarZero's energy service, customers can access solar energy under a convenient fixed monthly service fee arrangement, providing customers with long term pricing benefits and certainty, but without the usual solar installation upfront costs. This innovative solarZero service model makes solar energy an affordable option for New Zealanders. solarZero's fleet of smart batteries helps to mitigate the country's energy demand during peak hours, offers users the ability to export excess power to the grid, and supports users in the event of power disruption.

Currently solarZero has systems installed on 5,200 New Zealand properties which, as a fleet, have generated 30.5GWh of clean, renewable solar energy over the past 21 months, reducing New Zealand's carbon emissions by 3,750 tonnes. The solarZero service is providing customers with up to 30% saving on their power bills on average, fixing up to two thirds of their energy bills, and providing up to 80% of their homes' energy needs.

Westpac New Zealand took a unique funding approach to enable solarZero to set up this service model²⁶ and continues to support solarZero to grow its business and expand its offering. Westpac New Zealand also recently worked with New Zealand Green Investment Finance²⁷ on their investment into solarZero, demonstrating collaboration in public and private sector investment. Lending to solarZero is included as an Eligible Asset within the Green Bond Asset Pool.



²⁴ The information presented in this case study was provided directly from solarZero and has not been verified by Westpac New Zealand.

²⁵ Toitū carbonzero [certification](#) provides proof an organisation is positively contributing to our environment through measuring, reducing and offsetting their carbon footprint.

²⁶ INFNZ [Award for Institutional Banking Innovation](#).

²⁷ [New Zealand Green Investment Finance](#) is a green investment bank established by the New Zealand government with the purpose of accelerating investment to reduce greenhouse gas emissions in New Zealand and enable New Zealand's low carbon future.

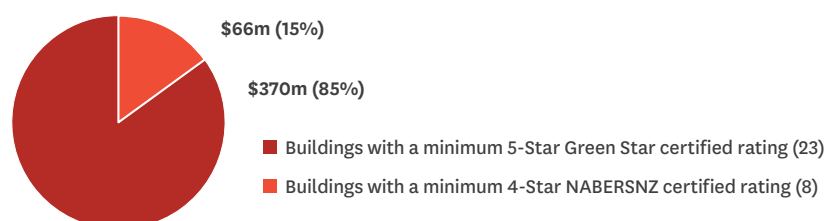
5.3 Green buildings.

The built environment is responsible for 20% of New Zealand's GHG emissions,²⁸ making it a critical sector to decarbonise, to transition to a low carbon economy. \$436m of Green Bond Proceeds have been allocated to 31 commercial and office buildings (**Green Buildings**) in Auckland, Wellington, and Christchurch. These Green Buildings are selected as they are designed, constructed and/or retrofitted to minimise their environmental impact.

For inclusion as an Eligible Asset, Westpac New Zealand requires a high-level certified rating to be achieved in either of the following Green Building standards that are administered by the New Zealand Green Building Council (**NZGBC**), as outlined in the table below.

Green building certification	Description	Westpac New Zealand criteria
Green Star²⁹	Green Star assesses the design, construction, and operation of buildings across nine areas of environmental impact, including energy, water, materials, emissions, and land use.	Westpac New Zealand indicated in the Framework (published in 2019), that it would accept buildings awarded with a 4-Star Green Star rating or above. However, as market best practice has developed, we have voluntarily decided to exclude buildings awarded with only a 4-Star Green Star rating. Green Buildings must achieve a 5-Star Green Star rating or above to be included in the Green Bond Asset Pool.
NABERSNZ³⁰	NABERSNZ assesses the operational energy efficiency and performance of an office building and is renewed annually.	Green Buildings must achieve a 4-Star NABERSNZ rating or above to be included in the Green Bond Asset Pool. An active Base Building or Whole Building Rating (as defined by NABERSNZ) must in place as at 31 March 2021.

Green building certifications achieved (NZ\$m).



In New Zealand, it is not common practice for building owners to disclose the GHG emissions data in relation to their Green Star certified buildings, as the certification focusses on the design and construction (vs ongoing operational performance). Therefore, we are unable to consistently report on the actual environmental impact of the Green Star rated buildings, so that impact is not included in the Report. Green Star rated buildings comprise 85% of our Green Building portfolio.

However, in relation to the NABERSNZ certified rated building which comprise 15% of our Green Building portfolio, there is sufficient data to enable energy and GHG emissions calculations. The table below reflects the performance of NABERSNZ rated buildings.³¹

		Green Bond Reporting Period (1 July 2019 – 31 March 2021)				Average annual GHG emissions intensity (kgCO ₂ -e/m ²)
NABERSNZ rating	Number of buildings	Total energy savings ³² (kWh)	Westpac's proportion: Energy savings (kWh)	Total GHG emissions avoided (tCO ₂ -e)	Westpac's proportion: GHG emissions avoided (tCO ₂ -e)	
4.5 star buildings	3	4,058,664	656,560	1,449	235	8.92
5 star buildings	3	1,165,876	426,582	459	184	7.00
5.5 star buildings	2	3,615,115	678,987	980	183	4.43
Total	8	8,839,655	1,762,129	2,888	602	-
Weighted average	-	-	-	-	-	8.23

²⁸ Thinkstep Report: <https://www.thinkstep.com/content/hidden-building-pollution-exposed-new-report>

²⁹ See [link](#) for further information on the Green Star standard.

³⁰ NABERSNZ is an adaptation of the National Australian Built Environment Rating System (NABERS) for NZ. See [link](#) for further information.

³¹ The supporting data in the table has been provided directly from the NZGBC and has not been verified by Westpac New Zealand.

³² As outlined in the Methodology section of this Report, the energy savings and GHG emissions avoided are estimated by comparing actual building performance against estimated performance of an 'average commercial office building' in New Zealand.

NABERSNZ rated buildings.



\$66m of Green Bond Proceeds have been allocated to eight buildings with NABERSNZ certified ratings. Together, these buildings achieved a weighted-average NABERSNZ rating of 4.79 Stars, which exceeds the average NABERSNZ rating achieved across all certified buildings in New Zealand of 4.08 Stars. It is expected that an average existing commercial building in New Zealand would perform at the level of ~2.75 Stars,³³ which reinforces the quality of the NABERSNZ certified buildings included in Westpac New Zealand's Green Bond Asset Pool.

During the Green Bond Reporting Period, the environmental impacts of Green Bond Proceeds allocation to the eight NABERSNZ rated buildings included:

- Energy savings of 1.76 million kWh;
- A weighted average³⁴ energy intensity (kWh/m²) that was 44% lower than the average commercial office space in New Zealand; and
- Avoiding 602 tonnes of CO₂-e. Given New Zealand's electricity is predominantly sourced from renewable energy, the emissions avoided is not as significant when compared to other countries.



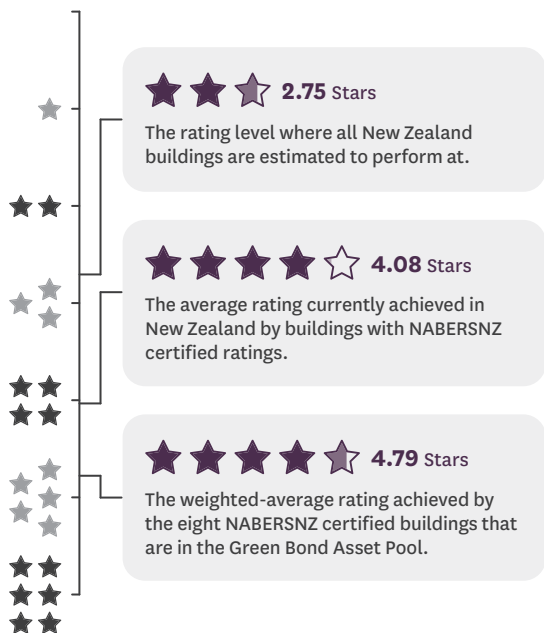
Energy savings
1.76
million kWh



Energy intensity
44%
lower



Avoid
602
tonnes of CO₂-e



Green Star rated buildings.



\$370m of Green Bond Proceeds have been allocated to 23 buildings with Green Star certified ratings. Together, these buildings achieved a weighted-average Green Star rating of 5.04 Stars, which exceeds the average Green Star rating achieved across all certified buildings in New Zealand of 4.7 Stars.

While Westpac New Zealand is unable to report on the actual environmental impacts achieved the Green Star rated buildings, analysis reported by the Green Building Council of Australia³⁵ highlights that the following environmental benefits may be achieved by Green Star rated buildings when compared to buildings constructed to minimum standards:

- 66% less electricity use;
- 51% less water use;
- 96% of waste recycled; and
- A significant volume of greenhouse gas emissions avoided.



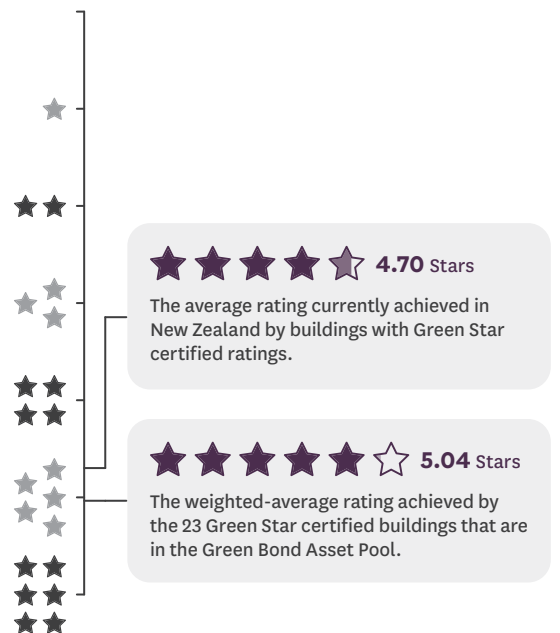
Use
66%
less electricity



Use
51%
less water



Recycle
96%
of waste



³³ This figure was reported by the NZGBC based off an original NABERSNZ benchmarking report (confidential).

³⁴ Weighted average is based on the proportion of overall lending to the certified buildings.

³⁵ Green Star: A year in focus (FY 2019 report) <https://gbca-web.s3.amazonaws.com/media/documents/green-star-annual-report-2019-fa.pdf>

5.4 Green buildings case study:³⁶ Precinct Properties – Mason Brothers.



Originally built as a warehouse in the 1920s, the Mason Brothers building was redeveloped by Precinct Properties in 2016 to provide 4,700m² of sustainable, commercial office space in Wynyard Quarter, Auckland, a new waterfront commercial hub for innovative companies, working collaboratively in specially designed workplaces.

The Mason Brothers building has been awarded a 6 Star Green Star rating by the NZGBC, classifying it as 'world leading'. The building also achieved a 5.5 Star NABERSNZ certified rating – the highest rating in Auckland – for ongoing operational energy performance.

The sustainable design of the Mason Brothers building started at the early stages of construction, with 90% of demolition waste recycled throughout the building's construction. Compared to an equivalent benchmark building, the Mason Brothers building uses 70% less water, 35% less energy and over its lifespan will reduce greenhouse gas emissions by over 3,000 tonnes. In addition, commercial tenants have experienced improvements in both personal productivity and reduced absenteeism.

Through Westpac New Zealand's lending to Precinct Properties, the Mason Brothers building is included as an Eligible Asset within the Green Bond Asset Pool.



³⁶ The information in the case study has been provided directly from Precinct Properties and has not been verified by Westpac New Zealand.

5.5 Pollution prevention and control.

\$41m of Green Bond Proceeds have been allocated to Eligible Assets within the category of Pollution Prevention and Control. While this only represents 4.5% of the total Green Bond Proceeds, it reflects Westpac New Zealand's focus of applying the Green Bond Proceeds to finance a more diverse selection of sectors, and environmental projects.

	Description	Environmental impacts
Asset 1	Asset finance lending for 559 food waste processing units, which use an aerobic digestion process to digest food waste into effluent that safely discharges into the sanitary sewer system.	<ul style="list-style-type: none">– Diversion of up to 73,923 tonnes of food waste from landfill per year, which would otherwise emit approximately 22,103 tonnes of CO₂-e in landfill.³⁷
Asset 2: Azwood (see below)	Corporate lending for Azwood.	<ul style="list-style-type: none">– Removal and processing of residual forestry waste into wood energy products, that generated over 100,000 MWh of renewable energy.– Avoidance of GHG emissions.

5.6 Pollution prevention and control case study:³⁸ Azwood.



Based in Nelson, Azwood Group (**Azwood**) has been operating in the wood biomass sector for nearly 40 years. Through the processing and repurposing of forestry residues into wood energy products, Azwood produces a low carbon energy source that displaces fossil fuel use.

In 2020, Azwood processed over one million cubic meters of wood energy products, which is estimated to generate over 100,000 MWh of renewable energy. Decarbonising process heat is considered one of the biggest opportunities for New Zealand to achieve its emissions reduction targets, and biomass plays a vital role in this transition. Azwood's operations achieve a range of positive environmental outcomes, including:

- **Forestry residue waste:** By removing the forestry residue, Azwood provides an environmental clean-up of wood waste, which helps to prevent erosion, remove fuels for fires and protect waterways during extreme weather events. In 2020, Azwood processed tens of thousands of metric tonnes of forestry waste.
- **Circular economy model:** Azwood strives to operate a closed-loop circular economy model. Beyond the collection, processing and use of wood energy, the ash generated from the processing phase is further utilised to produce compost and other organic growing matter.
- **Particulate emissions:** The use of wood pellets over coal produces 58% lower particulate emissions, which has positive impacts on air quality and health for New Zealanders.



³⁷ See Methodology section for the calculation of these impacts.

³⁸ The information in the case study has been provided directly from Azwood and has not been verified by Westpac New Zealand.

5.7 Clean transportation.

\$3m of Green Bond Proceeds have been allocated to seven corporate customers, to purchase and operate 109 Electric Vehicles (EVs) within their fleet, as outlined in the table below.

Eligible asset type	Number of electric vehicles	Total committed exposure (NZ\$m) as at 31 March 2021	Total GHG emissions avoided (tCO ₂ -e), ³⁹ over Green Bond reporting period
Electric vehicles – Corporate fleet	109	\$3.13	859

New Zealand is uniquely suited to benefit from the electrification of transport, as the country can utilise its large proportion of renewable electricity, instead of using fossil fuels as a direct fuel source for transportation. The financing of EVs can have a strong impact on reducing GHG emissions in New Zealand and EVs are estimated to emit 80%⁴⁰ less emissions than internal combustion engine vehicles and lead to reduced particulate emissions and noise levels.

Westpac New Zealand is focussed on scaling up the finance for EVs and has been innovative in the structuring of asset finance lending to support this.

6. Further information.

Enquiries related to this Report or Westpac New Zealand's Green Bond can be directed to:
nzfunding@westpac.com.au

Westpac New Zealand's Green Bond supports our target of lending NZD 5 billion to climate change solutions by FY2025. This target commits Westpac New Zealand to help its customers move towards more sustainable business models, funding assets and outcomes to help build a better future for New Zealand. For more information about our 2025 Sustainability Strategy, please see:
<https://www.westpac.co.nz/about-us/sustainability-community/>

For our 2020 Sustainability report, please see:
<https://westpacsustainability.co.nz/>

For more information about how Westpac New Zealand is helping New Zealand take action on climate change, please see:
<https://westpacsustainability.co.nz/climate-change>

For more information about Westpac Securities NZ Limited, please see:
<https://www.westpac.com.au/about-westpac/investor-centre/fixed-income-investors/westpac-securities-nz-ltd/>

For further information on sustainable finance at Westpac New Zealand, please contact:
sustainablefinance@westpac.co.nz

³⁹ See Methodology section for the calculation of these impacts.

⁴⁰ Energy Efficiency and Conservation Authority: [Life Cycle Assessment of Electric Vehicles](#).

7. Methodology.

Total committed exposure.

The total Green Bond Asset Pool is calculated based on the Total Committed Exposure (TCE) as of 31 March 2021, which represents the lending commitment to fund the projects/assets. TCE includes drawn and undrawn facilities and excludes pre-settlement risk on derivative products.

To preserve confidentiality, Westpac New Zealand is not required to publicly disclose the underlying assets included in the Green Bond Asset Pool.

Direct and indirect exposure.

The TCE reported in section 4.2 takes into consideration whether the lending directly or indirectly funds the Eligible Assets. The majority of the Green Bond Asset Pool consists of indirect corporate lending to the Green Building and Renewable Energy sector. As outlined in the Framework, the following proportions of indirect lending are attributed towards Eligible Assets.

- **Green buildings:** The proportion of the total portfolio's market value, that is made up of current, certified Green Buildings that meet the Eligibility Criteria.
- **Renewable energy:** The proportion of the total energy generated (GWh) that is derived from renewable energy sources that meet the Eligibility Criteria.

Impact methodology.

Westpac New Zealand has endeavoured to report on the impact metrics that were realised during the Green Bond Reporting Period (from 1 July 2019⁴¹ to 31 March 2021), except for Pollution, Prevention and Control.

To ensure maximum integrity, Westpac New Zealand has chosen to calculate the impact metrics based only on the proportion of our lending⁴² for the Eligible Assets (we do not solely claim the gross or total environmental impact of the Eligible Asset). Where relevant, the full impact has also been reported to provide additional context.

Calculation methodology – Renewable energy.

Calculation of renewable electricity generation.

The reporting for renewable electricity generation is based on the actual figures for electricity generation quantities that were dispatched to the national electricity grid over the Green Bond Reporting Period. This information was sourced from public reports from the Electricity Authority's EMI website, the Ministry of Business, Innovation & Employment's Energy in New Zealand electricity data, publicly disclosed operational reports or directly provided by the relevant business.

Calculation of avoided emissions.

Renewable electricity assets funded in part by Green Bond Proceeds help to displace electricity otherwise consumed at the emissions intensity of the national grid. The calculation of avoided emissions includes:

- The emissions intensity of the national grid which is calculated based on the 2018 electricity generation emission factor (0.1 ktCO₂-e/GWh), from Ministry of Business, Innovation and Employment's Energy Statistics.
- The actual emissions generated for each renewable energy asset over the Green Bond Reporting Period is calculated using the Electricity Authority's Analysis of Historical Electricity Industry Costs, actual generation data (see above), as well as emissions data from individual power stations.

Calculation of New Zealand households supplied with renewable electricity.

The [Electricity Authority Report: Electricity in New Zealand 2018](#), estimates that a New Zealand household on average consumes 7,000 kWh per annum (or 12,225 kWh over the Green Bond Reporting Period).

This impact metric was calculated by dividing the total electricity generated by the renewable energy assets included in the Green Bond Asset Pool, by the average household electricity use in New Zealand. This was adjusted for the Green Bond Reporting Period and Westpac New Zealand's proportion of lending.

Calculation methodology – Green buildings.

Calculation of energy savings and avoided emissions.

For the eight NABERSNZ rated buildings included in the Green Bond Asset Pool, the energy savings and GHG emissions avoided calculations were estimated by comparing actual building performance, against the estimated performance of an 'average commercial office building' in New Zealand.

As NABERSNZ assesses the operational energy performance of office buildings, the data on actual energy use, GHG emissions and Net Lettable Area was provided by NABERSNZ or sourced from public information. An original NABERSNZ development report estimated that the 'average commercial office building' in New Zealand performs at the level of 2.75 stars.

The energy savings and GHG emissions avoided for each building was estimated by comparing the average energy and GHG emissions intensity (per sqm) of 2.75 star buildings, against the actual energy and GHG emissions intensity (per sqm) of each NABERSNZ rated building, and multiplying that by the building size. This was then aggregated to return a cumulative figure for all the NABERSNZ rated buildings in the Green Bond Asset Pool, and Westpac New Zealand's attributed impact was adjusted based on Westpac New Zealand's proportion of lending.

Calculation of weighted-average intensity.

The weighted-average intensity calculation for energy consumption and GHG emissions was calculated by applying a weighting proportionate to the TCE for each building.

Calculation methodology – Low carbon transport.

Calculation of avoided emissions.

The following calculation is used to determine the GHG emissions avoided from the financing and operation of electric vehicles as an alternative to standard internal combustion engine vehicles:

$$((\text{Emissions factor of a petrol vehicle} - \text{Emissions factor of an EV}) * \text{Total annual permitted km per vehicle}) * (\text{adjustment for Green Bond Reporting Period})$$

The emissions factors applied for electric and petrol vehicles were 0.025 and 0.265 kg CO₂-e per km travelled respectively, as sourced from the Ministry for the Environment document; *Measuring Emissions: A Guide for Organisations (2019 Summary of Emission Factors)*.

Calculation methodology – Pollution prevention and control.

Calculation of waste diverted from landfill.

For each of the 559 food waste processing units, the supplier estimates that a unit can divert 65.7 to 438 tonnes of food waste from landfill per annum, depending on the specific model size. The impact calculation applies a conservative estimate that the units only operating for half a day.

Due to data limitations, the impact metric does not reflect the full Green Bond Reporting Period but instead reflects the expected annual impact from the units funded as at 31 March 2021.

Calculation of avoided emissions from waste diverted from landfill.

An emissions factor of 0.299 (kg CO₂-e per kg of food waste) is applied, as sourced from the Ministry for the Environment document; *Measuring Emissions: A Guide for Organisations (2019 Summary of Emission Factors)*.

Case studies.

For all case studies (Precinct Properties, solarZero and Azwood), the information was provided directly from the company and was not verified by Westpac New Zealand.

⁴¹ 25 June 2019 was the issuance date but for impact reporting purposes, Westpac New Zealand has commenced the reporting period at 1 July 2020.








⁴² This is estimated based on the proportion of a customer's total borrowings (bank loans and bonds) that Westpac New Zealand provides.

8. Alignment of the Green Bond with the Sustainable Development Goals.

The 17 United Nations Sustainable Development Goals (SDGs), with their underlying targets, lay an ambitious and transformational vision for a sustainable future, balancing the economic, social and ecological dimensions of sustainable development. The SDGs are a universal call to action to end extreme poverty, protect the environment and improve the lives of everyone on the planet by 2030. Westpac New Zealand is committed to helping New Zealand deliver on its commitment to the SDGs.

With less than 9 years left to achieve the SDGs, and with COVID-19 spreading human suffering, destabilising the global economy and upending the lives of billions of people around the globe, the SDGs are even more vital to drive and shape a recovery that leads to greener and more resilient societies and economies.

The impact of the Green Bond as reported above aligns to several of the SDGs and Targets:

Eligible Asset	SDG Goal	SDG Target
Renewable energy	 3 GOOD HEALTH AND WELL-BEING Goal 3. Ensure healthy lives and promote well-being for all at all ages	3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
	 7 AFFORDABLE AND CLEAN ENERGY Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all	7.2: By 2030, increase substantially the share of renewable energy in the global energy mix
	 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
Green buildings	 7 AFFORDABLE AND CLEAN ENERGY Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all	7.3: By 2030, double the global rate of improvement in energy efficiency
	 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
Pollution prevention and control	 3 GOOD HEALTH AND WELL-BEING Goal 3. Ensure healthy lives and promote well-being for all at all ages	3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
	 12 RESPONSIBLE CONSUMPTION AND PRODUCTION Goal 12. Ensure sustainable consumption and production patterns	12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse
Clean transportation	 11 SUSTAINABLE CITIES AND COMMUNITIES Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

9. Term sheet details.

Issuer	Westpac Securities NZ Limited (acting through its London Branch)
Guarantor	Westpac New Zealand Limited
Issue rating	A1 / AA- (Moody's / Fitch)
Format	Fixed-rate green bond
Pricing	18 June 2019
Settlement	25 June 2019
Maturity	25 June 2024
Currency	EUR
Amount	€500,000,000
Coupon	0.300% annual
Re-offer spread	MS + 55bps
Re-offer yield	0.316%
Re-offer price	99.921%

10. Disclaimer.

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All amounts are in New Zealand dollars unless otherwise stipulated.

Financial data in this report is at 31 March 2021 unless otherwise indicated.

Information contained in or otherwise accessible through the websites mentioned in this report does not form part of the report unless specifically stated that the information is incorporated by reference thereby forming part of the report. All references in this report to websites are inactive textual references and are for information only.

Disclosure regarding forward-looking statements.

This report contains statements that constitute "forward-looking statements" within the meaning of Section 27A of the US Securities Act of 1933, as amended, and Section 21E of the US Securities Exchange Act of 1934, as amended. Forward-looking statements appear in a number of places in this report and include statements regarding our intent, belief or current expectations with respect to our business and operations, market conditions, results of operations and financial condition, including, without limitation, future loan loss provisions, financial support to certain borrowers, indicative drivers, forecasted economic indicators and performance metric outcomes.

We use words such as 'will', 'may', 'expect', 'indicative', 'intend', 'seek', 'would', 'should', 'could', 'continue', 'plan', 'aim', 'probability', 'risk', 'forecast', 'likely', 'estimate', 'anticipate', 'believe', or other similar words to identify forward-looking statements. These forward-looking statements reflect our current views with respect to future events and are subject to change, certain risks, uncertainties and assumptions which are, in many instances, beyond our control and have been made based upon management's expectations and beliefs concerning future developments and their potential effect upon us. There can be no assurance that future developments on us will be those anticipated. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results could differ materially from the expectations described in this report. Factors that may impact on the forward looking statements made include, but are not limited to, those described in the section entitled 'Risk factors' in WSNZL's Interim Financial Results for the half year ended 31 March 2021. When relying on forward-looking statements to make decisions with respect to us, investors and others should carefully consider such factors and other uncertainties and events. We are under no obligation, and do not intend, to update any forward-looking statements contained in this report, whether as a result of new information, future events or otherwise, after the date of this report.