

# Net-Zero 2030 Targets

Our methodology and approach

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Simpler, stronger bank

 **estpac** GROUP

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This paper outlines how we have established our net-zero targets as part of our commitment to the Net-Zero Banking Alliance (NZBA). This first version deals with the targets for four emissions-intensive sectors in our lending portfolio. We will update this paper as we develop new targets and pathways for additional sectors, and as target setting approaches evolve.

## Joining the Net-Zero Banking Alliance

Regulatory changes, technology development, and stakeholder and investor demand for action on climate change is increasing. The path to a net-zero emissions economy needs to be well planned and occur in an orderly fashion to reduce transition risks. We are supporting and participating in international, national and industry-based initiatives to progress collective action on climate change.

This is why we have joined the NZBA, an industry-led initiative, convened by the United Nations Environment Programme Finance Initiative (UNEP FI). It brings together banks from around the world that are committed to aligning their lending and investment portfolios with net-zero emissions by 2050. Success in achieving the transition of the economy to net-zero will also depend on customers and other stakeholders playing their part, and on governments following through on their commitments to support transition and meet the objectives of the Paris Agreement.

# Background

Westpac has a long history of action on climate change, including becoming the first Australian bank to release a Climate Change Position Statement (CCPS) in 2008. In our latest CCPS, released in 2020, we committed to managing our business in alignment with the Paris Agreement and the need to transition to a net-zero emissions economy by 2050. The increasing urgency to limit global warming led us to elevate climate change to a key strategic priority in 2021, and to further increase our resources and focus in this important area.

## Our net-zero commitment

In July 2022, we joined the NZBA and continued our work on aligning our lending portfolios with net-zero emissions by 2050, consistent with a maximum temperature rise of 1.5°C above pre-industrial levels by 2100.

In accordance with our NZBA commitment, we have set interim 2030 sector targets for our lending portfolios<sup>1</sup> in four of our high carbon-intensive sectors: upstream oil and gas, thermal coal mining, power generation<sup>2</sup> and cement production. These targets supersede our previously stated targets and policies for those sectors<sup>3</sup>. Our targets cover Westpac Group but exclude those businesses in our Specialist Businesses segment as these have either been sold (but the transaction is not yet complete) or we are planning their exit. In our target setting process we have focused on the financed emissions<sup>4</sup> in our lending portfolios, given those represent our most material financed emissions based on current data and methodologies.

Signing up to NZBA requires us to disclose our approach to developing our 2030 sector targets, outlining the methodology used to select and develop decarbonisation pathways and define target metrics for each sector.

We acknowledge customers will follow different transition pathways depending on the nature of their sector and the characteristics of their business. In developing our 2030 interim targets, we have considered the intersecting requirements of emissions reduction, the feasibility of emerging technologies, as well as energy affordability, security and reliability.

Decarbonisation of our portfolio is unlikely to be linear and will reflect, for example, the development of net-zero enabling technologies and transition opportunities deployed by customers, improvements in data quality and further evolution of methodologies. Our lending to customers, such as increasing finance to support their transition, may mean that our financed emissions go up for a period, but decline over time as customers decarbonise.

## Complexities to setting targets

Setting targets involves significant complexity and challenges, including data quality and availability, as well as the need to ensure decarbonisation pathways consider an orderly and inclusive transition. While we aim to set our targets with regard to the best science currently available (as described below), our targets and pathways are likely to change as new information, methodologies, technologies and science emerge. Our approach will also evolve as we improve our gathering, analysing and reporting of data. We will continue to be transparent in our approach, including outlining the complexities and challenges we encounter along the way.

We have developed our targets with support from third party expert consultants. Disclosure of our targets and progress will be subject to internal verification, and our ongoing progress reporting will also be subject to external third party assurance. In line with NZBA requirements, we expect to report our baseline emissions data, progress against targets and the emissions calculation methodology as part of our annual reporting.





1 For further information on how we have applied target setting to our lending portfolios, refer to section '2- Lending exposure to represent the support we provide customers' below.

2 In our previous targets, 'power generation' was referred to as 'electricity generation'.

3 To the extent there is any inconsistency between this document and other documents we have published or publish covering these targets, the information in this document prevails unless stated otherwise.

4 Financed emissions are Westpac Group's Scope 3 emissions attributable to its lending portfolios.

## Our 2030 sector targets

SECTOR	2030 <sup>5</sup> EMISSIONS REDUCTION TARGET
 <b>Extractives – Upstream oil and gas</b>	<p>23% reduction in Scope 1, 2 and 3 absolute financed emissions by 2030 (relative to 2021 baseline).</p> <p>We will only consider directly financing greenfield oil and gas projects that are in accordance with the International Energy Agency Net Zero by 2050 (IEA NZE)<sup>6</sup> scenario<sup>7</sup> or where necessary for national energy security<sup>8</sup>.</p> <p>We will continue to provide corporate lending where the customer has a credible transition plan<sup>9</sup> in place by 2025, and will work with customers to support their development of credible transition plans prior to 2025.</p>
 <b>Extractives – Thermal coal mining</b>	<p>Zero lending exposure to companies with &gt;5% of their revenue coming directly from thermal coal mining by 2030.</p> <p>We updated our thermal coal mining definition to align with the NZBA guidelines<sup>10</sup> on the required scope of target setting for thermal coal mining.</p>
 <b>Power generation</b>	<p>Emissions intensity target of 0.10 tCO<sub>2</sub>e/MWh for Scope 1 and 2 by 2030.</p>
 <b>Industrials – Cement production</b>	<p>Emissions intensity target of 0.57 tCO<sub>2</sub>e/tonne of cement for Scope 1 and 2 by 2030.</p>

<sup>5</sup> 2030 target refers to Westpac Group's financial year, i.e. targets to be achieved by 30 September 2030.

<sup>6</sup> International Energy Agency's Net Zero by 2050: A Roadmap for the Global Energy Sector report, 2021.

<sup>7</sup> The IEA NZE scenario specifies that no new (greenfield) oil and gas fields are needed beyond those projects that have already been committed (i.e. approved for development) as of 18 May 2021.

<sup>8</sup> National energy security refers to circumstances where the Australian or New Zealand Government or regulator determines (or takes a formal public position) that supply from the asset being financed is necessary for national energy security.

<sup>9</sup> A credible transition plan should be developed by reference to the best available science and should include Scope 1, 2 and 3 emissions and actions the company will take to achieve greenhouse gas reductions aligned with pathways to net-zero by 2050, or sooner, consistent with a maximum temperature rise of 1.5°C above pre-industrial levels by 2100.

<sup>10</sup> The NZBA guidelines require that any client with more than 5% of their revenue coming directly from thermal coal mining shall be included in the scope of targets. Accordingly, our targets cover the production and sale of thermal coal, with adjacent sectors (including mining service providers) to be covered in other targets as appropriate. Transactional banking and rehabilitation bonds are excluded from our target.

# Our approach to target setting

Our target setting approach is guided by science and prioritises some of the most carbon intensive sectors in our lending portfolio. Four general principles have guided our overall approach across all sectors:

## 1 Using industry guidelines

We have followed the UNEP FI Guidelines for Climate Target Setting for Banks (the NZBA guidelines)<sup>11</sup> for setting our targets. We opted for industry-specific approaches when selecting emissions reduction reference pathways, such as those developed by the IEA. We also considered global standards and tools such as those from the Science Based Targets initiative (SBTi) where relevant. For the calculation of our financed emissions, we incorporated principles from the Partnership for Carbon Accounting Financials (PCAF)<sup>12</sup> where appropriate.

As needed, we explain where, and the reasons why, our approach differs from relevant guidance. Our approach to applying industry-accepted scenarios, tools, methodologies and principles is tailored for each sector. Details of our approach to each sector is provided in the sector target sections below.

## 2 Lending exposure to represent the support we provide customers

We assessed and set our net-zero lending targets using our Total Committed Exposure (TCE) unless otherwise noted. TCE represents the maximum amount of credit exposure that Westpac has committed to provide to a customer, both on- and off-balance sheet, including those that arise from transactional banking. For the purposes of setting net-zero targets, this TCE definition excludes secondary market trading or underwriting committed credit exposures.

In this respect, we differ from current PCAF guidance on the measurement and disclosure of financed emissions, which only covers financial products that are on the balance sheet. Using PCAF's method would mean that financed emissions from products are only considered if there is outstanding finance on the financial institution's balance sheet at financial year-end.

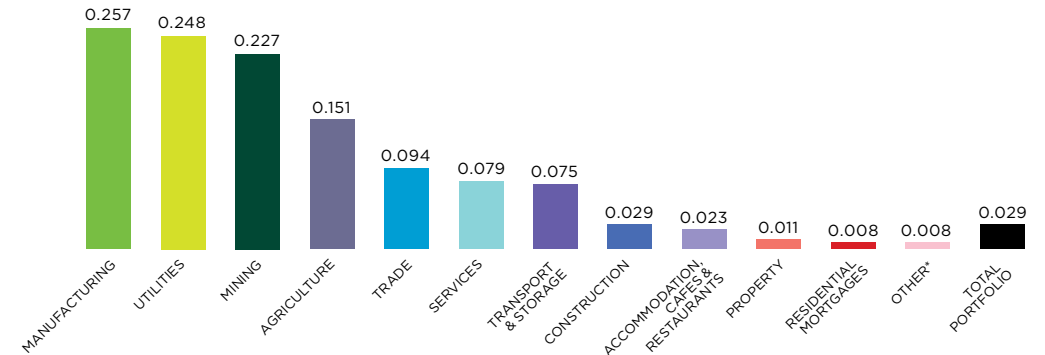
Using TCE for our targets is considered a more comprehensive approach, reflecting our decisions to extend credit to customers. It also allows better long-term management of our targets as it avoids potential volatility due to customers' use of their facilities. Westpac calculates its financed emissions by attributing customers' emissions using our TCE to the customer.

Our targets do not cover our debt capital markets activity (i.e. facilitated emissions) as there are currently no agreed methodologies for measuring emissions associated with these activities or approaches for net-zero-aligned target setting. We will reconsider our approach on facilitated emissions as guidance and methodologies mature.

## 3 A sector-specific approach

Aligned with the NZBA guidelines, we are setting sector-level targets given each sector has its own, often unique, potential decarbonisation trajectories. In 2021, we estimated<sup>13</sup> the emissions attributable to customer loans (financed emissions)<sup>14</sup>. Mining, utilities and manufacturing emerged as our highest emissions-intensive sectors per dollar lent.

**2021 ESTIMATION OF AUSTRALIAN BUSINESS, INSTITUTIONAL AND RESIDENTIAL MORTGAGES FINANCED EMISSIONS INTENSITY (KGC0<sub>2</sub>-e PER \$ LENT)**



\* "Other" includes business auto finance, finance and insurance, property services and business services.

<sup>11</sup> UN Environment Programme Finance Initiative's Guidelines for Climate Target Setting for Banks, April 2021.

<sup>12</sup> PCAF (2020). The Global GHG Accounting and Reporting Standard for the Financial Industry. First edition. 18 November 2020.

<sup>13</sup> This analysis was part of our FY21 financed emissions estimate reporting process. This analysis focused on our Australian business, institutional and residential mortgage portfolios. Although this analysis excluded Westpac New Zealand (WNZL) portfolios, our first series of 2030 targets includes both Australian and WNZL lending activities.

<sup>14</sup> For details, please see [https://www.westpac.com.au/content/dam/public/wbc/documents/pdf/aw/sustainability/2021\\_Financed-Emissions-Methodology.pdf](https://www.westpac.com.au/content/dam/public/wbc/documents/pdf/aw/sustainability/2021_Financed-Emissions-Methodology.pdf)

We have further segmented these sectors to focus on sub-sectors that account for material financed emissions, where sufficient data is available to set reliable targets and where credible decarbonisation pathways exist. Our first targets cover upstream oil and gas and thermal coal in the mining sector, power generation in the utilities sector and cement production in the manufacturing sector.

We have engaged, and continue to engage, with impacted customers as part of our target setting to gain a better understanding of their existing emissions profiles and transition plans. This allows us to better support and work with these customers as they develop and implement their transition plans.

## 4 Science-based decarbonisation scenarios

In setting our targets, we first defined the decarbonisation pathway that a particular sector will need to follow to achieve net-zero by 2050. We used scenarios modelled by well-recognised industry and scientific organisations as benchmarks for developing these pathways.

In addition to the NZBA guidelines, we considered the following principles to select the reference scenario for each sector:

- Available – the scenario provides sufficient detail to calculate a target for the specific sector.
- Appropriate – the scenario reflects a pathway that is appropriate to the physical location of exposures. This includes global, national or regional scenarios as appropriate.
- Ambitious – the selected scenario enables us to set targets that would be ambitious and recognised as such by key stakeholders.
- Actionable – the scenario’s pathway can be achieved with feasible actions.

In line with the NZBA guidelines, the scenarios selected are “no-overshoot” or “low-overshoot”<sup>15</sup> scenarios, which rely conservatively on negative emissions technologies<sup>16</sup>. We selected the following reference scenarios for our target setting:

**1) IEA NZE:** In 2021, the IEA published its model for the global energy system’s pathway to reaching net-zero emissions by 2050, in line with limiting global warming to 1.5°C above pre-industrial levels by 2100.

**2) Commonwealth Scientific and Industrial Research Organisation (CSIRO)/ClimateWorks Australia Hydrogen Superpower<sup>17</sup>:** The Hydrogen Superpower is one of four multi-sectoral scenarios included in CSIRO/ClimateWorks Australia’s 2021 modelling report. This scenario maps out emissions reductions in the Australian economy to 2050 in line with a 1.5°C global warming. The scenario modelling provides sector-level emissions trajectories that represent energy efficiencies, electrification and fuel switching required for Australia to achieve net-zero by 2050 or sooner. The Hydrogen Superpower scenario reflects strong decarbonisation resulting from breakthroughs in the cost of hydrogen production, and a substantial growth of both domestic and export industries.

**3) SBTi Cement Target Setting Guidance<sup>18</sup>:** In 2022, the SBTi published draft guidance on target setting in the cement sector and developed an accompanying target calculation tool. SBTi’s tool is based on a 1.5°C-aligned decarbonisation pathway for the sector. The SBTi guidance leverages IEA NZE as the reference scenario. In consultation with IEA, SBTi also developed a Scope 2 emissions reduction pathway specific to the cement sector.

Details of how we leveraged these reference scenarios to develop our sector portfolio pathways and targets, including key scenario assumptions and any areas of divergence, are provided in the sector target sections of this document.

SECTOR	REFERENCE SCENARIO FOR TARGET SETTING
Extractives - Upstream oil and gas	IEA NZE, complemented with CSIRO/ClimateWorks Australia Hydrogen Superpower Scenario
Extractives - Thermal coal mining	Our commitment has been informed by the NZBA guidelines
Power generation	CSIRO/ClimateWorks Australia Hydrogen Superpower Scenario
Industrials - Cement production	SBTi Cement Target Setting Guidance – Sectoral Decarbonisation Approach (SDA)

<sup>15</sup> The Intergovernmental Panel on Climate Change, (IPCC) classifies scenarios as “no or limited temperature overshoot” if temperatures exceed 1.5°C by less than 0.1°C but return to less than 1.5°C in 2100.

<sup>16</sup> The IPCC (2018): “Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty” notes that practices or technologies that remove CO<sub>2</sub> from the atmosphere are often described as achieving ‘negative emissions’, i.e. negative emissions technologies. The scenarios we selected for our target setting assume limited deployment of these technologies.

<sup>17</sup> Reedman, L.J., Chew, M.S., Gordon, J., Sue, W., Brinsmead, T.S., Hayward, J.A. and Havas, L. 2021. Multi-sector energy modelling, CSIRO, Australia.

<sup>18</sup> Cement Science Based Target Setting Guidance | Draft for public consultation, Science-based Targets initiative, March 2022.

## Other considerations

Our methodologies for setting these first targets do not currently include use of carbon offsets for our financed emissions, but we appreciate that carbon offsets and other evolving technologies and practices are likely to play a role to supplement decarbonisation in line with climate science. We will review the use of carbon offsets for these and future targets as appropriate and as guidance on the role of carbon offsets evolves.

While we have sought to set our targets with regards to the best available data, we acknowledge that limitations remain, such as availability of public emissions reporting at a detailed customer level. We have therefore made assumptions and estimated, where required, to allow us to develop decarbonisation pathways that best reflect the composition of our portfolios and the challenges and opportunities faced by customers. We will continue to work with customers and industry stakeholders to address these data limitations and enhance our understanding of available information.

Our targets and approach have undergone internal review and approval, including by the Board and the ESG and Reputation (ESGR) Committee, which is an executive level committee and is chaired by our CEO. As best available science and industry standards evolve and data quality improves, we will update our methodology and target setting approach to continue to align targets and commitments with a 1.5°C pathway. We will continue to monitor, review and revise our targets as required, or at least every five years, in accordance with the NZBA guidelines.

## Upstream oil and gas

**Target:** Reduce absolute financed emissions by 23% for upstream oil and gas<sup>19</sup> by 2030 from 2021. This includes Scope 1, 2 and 3 emissions.

We have updated our upstream oil and gas position to support this target. Our position provides:

- we will only consider directly financing greenfield oil and gas projects that are in accordance with the IEA NZE scenario<sup>20</sup> or where necessary for national energy security<sup>21</sup>;
- we will continue to provide corporate lending where the customer has a credible transition plan<sup>22</sup> in place by 2025; and
- we will work with customers to support their development of credible transition plans prior to 2025.

Our direct lending position reflects the IEA NZE scenario's position on new oil and gas fields, with provision for our social obligation to support lending where necessary for national energy security. The IEA NZE position on no new oil and gas fields is more difficult to apply to a general corporate lending context, where funding is not tied to use of proceeds for a particular project. We have taken a balanced approach to this challenge and to other important issues, such as supporting an orderly and inclusive transition, by requiring all upstream oil and gas corporate borrowers to have credible transition plans in place by 2025.

Absolute emissions reductions targets are most appropriate when assuming a decrease in fossil fuel demand and incentivise reallocation of exposure which in turn supports an orderly and inclusive transition.

## Boundary definition

For the oil and gas sector, we focused on emissions from customers in the upstream part of the sector's value chain. This includes exploration, extraction and drilling companies. We also include integrated oil and gas companies (that have upstream activities), and Liquefied Natural Gas (LNG) producers. This includes Scope 1, 2 and 3<sup>23</sup> emissions.

The scope of the target does not include midstream (e.g. processing, storing and transportation of crude oil) and downstream (e.g. refining and distribution) companies.

Our boundary definition covers a significant portion of emissions across the sector in our lending portfolio. Focusing on the areas with the most material carbon impacts will be key to supporting transition in the sector.

<sup>19</sup> Upstream oil and gas includes exploration, extraction and drilling companies, integrated oil and gas companies as it relates to upstream activities, and LNG producers. The scope of the target does not include midstream (e.g. processing, storing and transportation of crude oil) and downstream (e.g. refining and distribution) companies.

<sup>20</sup> The IEA NZE scenario specifies that no new (greenfield) oil and gas fields are needed beyond those projects that have already been committed (i.e. approved for development) as of 18 May 2021.

<sup>21</sup> National energy security refers to circumstances where the Australian or New Zealand Government or regulator determines (or takes a formal public position) that supply from the asset being financed is necessary for national energy security.

<sup>22</sup> A credible transition plan should be developed by reference to the best available science and should include Scope 1, 2 and 3 emissions and actions the company will take to achieve greenhouse gas reductions aligned with pathways to net-zero by 2050, or sooner, consistent with a maximum temperature rise of 1.5°C above pre-industrial levels by 2100.

<sup>23</sup> Includes emissions from combustion of sold goods. As we refine the methodologies used to set targets and account for our financed emissions, we will revise definitions accordingly.



## Scenario selection and assumptions

Our emissions reduction target has been developed by reference to the IEA NZE and CSIRO/ClimateWorks Australia 1.5°C-aligned reference scenarios.

Key assumptions of the IEA NZE and CSIRO/ClimateWorks Australia Hydrogen Superpower reference scenarios include:

- The decarbonisation trajectory of oil demand in the IEA NZE means no exploration for new resources is required and, other than fields already committed as at 18 May 2021, no new oil fields are needed.
- No new natural gas fields are needed in the IEA NZE beyond those already committed as at 18 May 2021.
- Once fields under development start production, all upstream investment in the IEA NZE is to support operations in existing fields.
- Innovation is key to developing new clean energy technologies and advancing existing ones. Almost 50% of the emissions reductions needed in 2050 in the IEA NZE depend on technologies that are at the prototype or demonstration stage, i.e. are not yet available on the market.
- In the CSIRO/ClimateWorks Australia Hydrogen Superpower scenario, a weaker push to electrify heavy industry leads to higher demand for natural gas into the 2030s, at which point a large amount of gas use begins to switch to hydrogen.
- In the CSIRO/ClimateWorks Australia Hydrogen Superpower scenario, electrification of road transport (and to a lesser extent rail and aviation) accelerates the decline in the overall level of fuel use. This acceleration occurs in the mid-2030s as electric vehicles dominate new vehicle sales.
- Carbon pricing is introduced across all regions.

## Setting our target

To arrive at the target we assessed the absolute emissions reductions required for our portfolio to align with a net-zero by 2050 pathway. Customer Scope 1, 2 and 3 emissions were projected to 2030 using emissions drivers representative of our sector-level portfolio emissions profile. Calculations were based on the IEA NZE Australian LNG exports and supply in the Organisation for Economic Co-operation and Development (OECD) economies. This was subsequently augmented overlaying data from the CSIRO/ClimateWorks Australia Hydrogen Superpower scenario to calculate total Australian oil and gas demand.

### EMISSIONS DRIVERS IN OUR OIL AND GAS PORTFOLIO

	SCOPE 1 EMISSIONS	SCOPE 2 EMISSIONS	SCOPE 3 EMISSIONS
Australia LNG exports	Carbon intensity of LNG terminals using a global average	Australia electricity generation intensity	Australia LNG exports use of sold products
Australia oil and gas demand	Carbon intensity of oil and gas extraction using a global average	Australia electricity generation intensity	Australian oil and gas production use of sold products
OECD oil and gas supply	OECD carbon intensity of oil and gas extraction	OECD electricity generation intensity	OECD oil and gas production use of sold products

Our target was finally calculated as the average emissions reduction across the emissions drivers, weighted on financed emissions composition of our sector portfolio. To calculate the absolute financed emissions for the sector, each customer's emissions are attributed to Westpac using our TCE to the customer relative to the enterprise value of the customer.

## Thermal coal mining

**Target:** Zero lending exposure to companies with >5% of their revenue coming directly from thermal coal mining by 2030. We updated our thermal coal mining definition to align with the NZBA guidelines<sup>24</sup> on the required scope of target setting for thermal coal mining.

Our boundary definition for the thermal coal mining target covers a significant portion of emissions across the sector. Transactional banking and rehabilitation bonds are excluded from our target. Focusing on the areas with the most material carbon impacts will be key to driving transition in the sector. In accordance with our NZBA commitment, in future years we will look to review other areas of our portfolio, including adjacent sectors, prioritising emissions-intensive areas, where data and methodologies allow.

In our 2020 CCPS, we committed to supporting thermal coal mining customers<sup>25</sup> transition in line with a commitment to reduce our exposure to zero by 2030. Consistent with the NZBA guidelines, we have updated our position to define thermal coal mining customers as companies with more than 5% of their revenue coming directly from thermal coal mining. We will assess company revenues on a three-year rolling average.

We will seek to continue to work with customers affected by this revised revenue threshold to meet our new 2030 target.

<sup>24</sup> The NZBA guidelines require that any client with more than 5% of their revenue coming directly from thermal coal mining shall be included in the scope of targets. Accordingly, our targets cover the production and sale of thermal coal, with adjacent sectors (including mining service providers) to be covered in other targets as appropriate. Transactional banking and rehabilitation bonds are excluded from our target.

<sup>25</sup> Our 2020 commitment on thermal coal lending covered subsidiaries of existing customers, with thermal coal mining customers defined as those generating more than 25% of revenues from thermal coal, or in the case of a stand-alone mine, more than 35% of volumes from thermal coal mining. This definition of thermal coal customers has been updated to reflect consistency with the NZBA guidelines.

# Power generation

**Target:** Emissions intensity target of 0.10 tCO<sub>2</sub>e/MWh for Scope 1 and 2 by 2030.

The latest Intergovernmental Panel on Climate Change report on mitigation of climate change<sup>26</sup> notes energy systems in a net-zero by 2050 scenario will rely on widespread electrification of the energy system including end uses for transport, industry and buildings. This also means electricity generation will need to achieve net-zero emissions.

We have a track record in supporting renewable energy projects and we have actively managed the emissions intensity of our exposure to the electricity generation sector. In 2020, we set a target of reducing the emissions intensity of our electricity generation exposure to 0.23 tCO<sub>2</sub>e/MWh by 2025 and 0.18 tCO<sub>2</sub>e/MWh by 2030. We have replaced these targets with our new power generation target of 0.10 tCO<sub>2</sub>e/MWh by 2030 consistent with our increased ambition on climate action and reflecting advancements in renewable energy technologies.

## Boundary definition

Our sector portfolio is diverse, with customers active across several aspects of the electricity value chain. The target includes the Scope 1 and 2 emissions of electricity generators<sup>27</sup>. The target excludes electricity transmission/distribution companies and Scope 3 emissions of electricity generators. The target covers a majority of value chain emissions and is consistent with current industry practice.

## Scenario selection and assumptions

The emissions attributable to our power generation portfolio are heavily weighted towards Australian customers. The CSIRO/ClimateWorks Australia Hydrogen Superpower scenario, which is specific to the Australian context, was selected as the reference scenario.

The scenario determines the most efficient manner of achieving the economy-wide decarbonisation required to meet a 1.5°C carbon budget. This means that instead of focusing on setting a pathway for power generation alone, the reference scenario also considers the sector's role in supporting decarbonisation of the wider economy, for example with electric transport, thus phasing transition of power generation accordingly.

Key assumptions of the CSIRO/ClimateWorks Australia Hydrogen Superpower reference scenario include:

- To 2030, there will be a high uptake of electrification and energy efficiency improvements, with a rapid increase in the capacity of renewable energy technologies.
- Coal power capacity is expected to be reduced significantly by 2030 and phased out from the energy system by 2035.
- From 2030, low-cost and abundant renewable energy strengthens Australia's green hydrogen production, enabling it to capture export opportunities.
- Accelerated growth in renewable energy capacity will be required to enable transition of energy sources away from fossil fuels.

## Setting our target

The emissions intensity of the Australian National Electricity Market (NEM) in the CSIRO/ClimateWorks Australia Hydrogen Superpower scenario was selected as the 2030 target. This target was derived from the reference scenario as the total CO<sub>2</sub>e of electricity grid emissions per MWh of power generation for the NEM. This results in a calculated emissions intensity for the power generation sector as 0.10 tCO<sub>2</sub>e/MWh by 2030.

In line with industry practice for setting targets in the power generation sector, we selected an emissions intensity target (i.e. emissions relative to power generated) because it provides flexibility for low and zero emissions technology deployment by customers. This is important given this sector will unlock decarbonisation opportunities for other sectors. Our portfolio power generation intensity will be calculated as the weighted average emissions intensity for power generation customers, weighted using the relative TCE for each of these customers.

<sup>26</sup> IPCC Climate Change 2022 Mitigation of Climate Change, Summary for Policy makers.

<sup>27</sup> Includes customers with material revenue coming from power generation or >5% revenues from thermal coal electricity generation. In Australia, this applies to customers with National Greenhouse and Energy Reporting Scheme designated generation facilities and have material revenue coming from power generation.

# Cement production

**Target:** Emissions intensity target of 0.57 tCO<sub>2</sub>e/tonne of cement for Scope 1 and 2 by 2030.

## Boundary definition

The cement production sector is a large energy user and carbon emitter. One of the major components of cement is clinker. Clinker production is also the most emissions-intensive step in cement production. The majority of clinker-related emissions are generated through a chemical reaction (i.e. calcination) that occurs as part of clinker production. Given their nature, clinker production emissions are harder to abate as they cannot be reduced by changing fuel or increasing energy efficiency. According to the Cement Industry Federation<sup>28</sup>, in Australia, 60% of total emissions are process-related emissions from the production of clinker.

Our target covers customers that produce clinker in-house. The target has been set for customers' Scope 1 and 2 emissions in relation to the production of cement. It covers emissions generated from calcination in clinker production as well as fuel combustion and electricity consumption associated with the cement production process.

The value chain boundary for the cement target spans from receipt of clinker feedstocks (limestone and clay) by the production facility, through to storage of the finished cement. We included the preparation of components for processing, the clinker production and subsequent milling and blending into cement. We excluded emissions from the production of purchased clinker. Our target boundary also excludes transportation and delivery of the materials to the production facility and the distribution and use of produced cement in manufacturing of other building materials (e.g. concrete).

In line with the NZBA guidelines, we will review our cement production target to include customers' Scope 3 emissions from 2024 where methodologies and data allow. Scope 3 emissions include emissions from the production of purchased clinker.

## Scenario selection and assumptions

In March 2022, SBTi published its draft guidance on target setting in the cement sector, where they worked with the IEA to refine the emissions profile of the cement industry, specifically on the Scope 2 emissions reduction requirements for cement production.

Key assumptions of the SBTi reference scenario include:

- To 2030, emissions reductions for the IEA NZE cement sector pathway are within conventional technologies. The key decarbonisation levers are substitution of clinker for alternative lower emissions materials, energy efficiency gains and fuel switching.
- Emissions reduction in the built environment will be achieved through building material efficiency improvements, e.g. through recycling concrete or designing buildings to require less concrete. This in turn restricts growth in cement demand.
- The IEA NZE assumes that by 2030, 9% of global cement production is equipped with innovative technologies, such as carbon capture usage and storage.
- It is assumed that the general trend in electricity consumption for cement manufacturing is in line with electricity consumption for all heavy industries. However, the Scope 2 emissions global pathway for cement is adjusted to reflect comparatively slower growth of cement demand.

## Setting our target

The SBTi recommends a Sectoral Decarbonisation Approach (SDA) for setting targets in the cement sector. This approach compares a base year physical intensity metric with the IEA NZE cement sector pathway. The target is calculated using a convergence approach, where the physical intensity pathway converges with the sector average intensity by 2050.

Using the SBTi calculator and the most recent available industry data for the baseline emissions intensity, 0.77 tCO<sub>2</sub>e/tonne cement<sup>29</sup>, the given pathway reaches a 2030 emissions intensity target of 0.57 tCO<sub>2</sub>e/tonne cement. Our portfolio cement production intensity will be calculated as the weighted average production intensity of customers, weighted based on the attribution of Westpac's absolute financed emissions of each customer.

<sup>28</sup> Cement Industry Federation, Australian Cement Report 2020.

<sup>29</sup> 0.77 tCO<sub>2</sub>e/tonne cement was the average emissions intensity of Australian cement produced from clinker on site in 2018-19. Cement Industry Federation, Australian Cement Report, August 2020.

## Looking ahead

In line with NZBA guidelines, we continue work to operationalise our targets and to finalise their integration into our internal processes. We will disclose our transition plan within 12 months of setting our targets. We will track the absolute financed emissions and emissions intensity, as appropriate, of our sector portfolios and disclose our progress against our 2030 targets as part of our regular reporting process.

Consistent with the NZBA guidelines, and where data and methodologies allow, we also aim to develop targets for other sectors in our financing activities that have high emissions or emissions intensity, expanding the coverage of our targets.

## Disclaimer

The information in this document is in summary form and is therefore not necessarily complete. It is not intended that it be relied upon as advice to investors or potential investors, who should be seeking independent professional advice depending on their specific investment objectives, financial situation or particular needs. The material contained in this document may include information, including, without limitation, methodologies, modelling, scenarios, reports, benchmarks, tools and data, derived from publicly available or government or industry sources that have not been independently verified. No representation or warranty is made as to the accuracy, completeness or reliability of the information.

This document contains statements that constitute “forward-looking statements” within the meaning of Section 21E of the US Securities Exchange Act of 1934. Forward-looking statements are statements about matters that are not historical facts. Forward-looking statements appear in a number of places in this document and include statements regarding our intent, belief or current expectations with respect to our business and operations, macro and micro economic and market conditions, results of operations and financial condition, including without limitation, forecasted economic indicators and performance metric outcomes, financial support to certain borrowers, indicative drivers, estimated emissions and other proxy data.

We use words such as ‘will’, ‘may’, ‘expect’, ‘indicative’, ‘intend’, ‘seek’, ‘would’, ‘should’, ‘could’, ‘continue’, ‘anticipate’, ‘believe’, ‘probability’, ‘risk’, ‘aim’, ‘target’, ‘plan’, ‘estimate’, ‘outlook’, ‘forecast’, ‘assumption’, ‘projection’, 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 known and unknown risks and uncertainties and assumptions and other factors which are, in many instances, beyond the control of Westpac, its officers, employees, agents and advisors, and have been made based upon management’s expectations or beliefs concerning future developments and their potential effect upon us. There can be no assurance that future developments or performance will be in accordance with our expectations or that the effect of future developments on us will be those anticipated. Actual results could differ materially from those we expect or are expressed or implied in such statements, depending on various factors. There are usually differences between forecast and actual results because events and actual circumstances frequently do not occur as forecast and their differences may be material. Factors that may impact on the forward-looking statements made include, but are not limited to, those described in this document and in the section titled ‘Risk factors’ in Westpac’s 2022 Interim Financial Results (incorporating the requirements of Appendix 4D) for the six months ended 31 March 2022 available at [www.westpac.com.au](http://www.westpac.com.au). Investors should not place undue reliance on forward-looking statements and statements of expectation, including targets, particularly in light of the current economic climate and the significant global volatility. These statements are not guarantees or predictions of future performance and Westpac gives no representation, warranty or assurance, nor guarantee that the occurrence of the events expressed or implied in any forward-looking statement will occur. 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. Except as required by law, we assume no obligation to update any forward-looking statements contained in this document, whether as a result of new information, future events or otherwise, after the date of this document.