



# New energy New opportunities

Our pathway to net zero and  
smart, sustainable workplaces



# The time is now



As Australia continues its search for secure, affordable, environmentally conscious energy, Dexis is taking action to transition to a low carbon future.

Rapidly evolving energy markets, game-changing technologies and innovative work environments provide a unique opportunity to operate in a way that benefits our customers, cities and communities.

In doing so, we will create sustained value for all members of our supply chain, delivering on the expectations of our customers, investors and society to limit the climate change impacts of our properties in line with current climate science.



Renewable energy



Low carbon technologies



Workplaces of the future

New energy technology is rapidly evolving. Energy markets are transforming to unlock years of advancements that have not yet been leveraged. With better planning for the transition, significant opportunities for business are emerging.

Technology is reinventing the way we use power and driving the creation of smart buildings, transforming the way we use our assets and resources from wasteful to convenient and efficient.

We have an acute understanding of the effect of our operations on the environment and recognise that de-carbonising our portfolio makes good business sense. Some of these benefits can be realised immediately, while others support our long term strategic and environmental ambitions.

We are driving the next phase of energy efficiency through a targeted, future focused strategic building refurbishment program, identifying, trialling and deploying

innovative products into our lifecycle planning to deliver the best experience for our customers, optimise energy performance and reduce costs.

By using our scale to ensure that renewable energy opportunities are deployed within our assets and off-site, we can secure a reliable, responsible and cost effective energy supply for our customers.

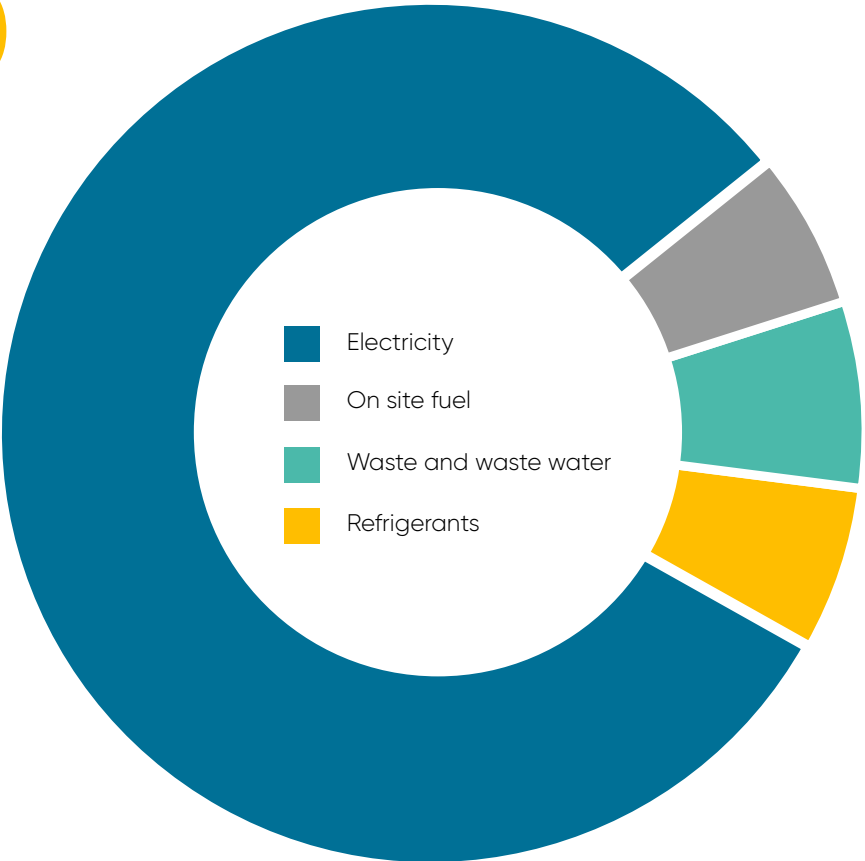
Our holistic approach to sustainability targets includes long term certainty in energy pricing from renewable energy sources, supplemented by access to traditional reliable grid energy during the transition.

Our goal

# Net zero emissions by 2030

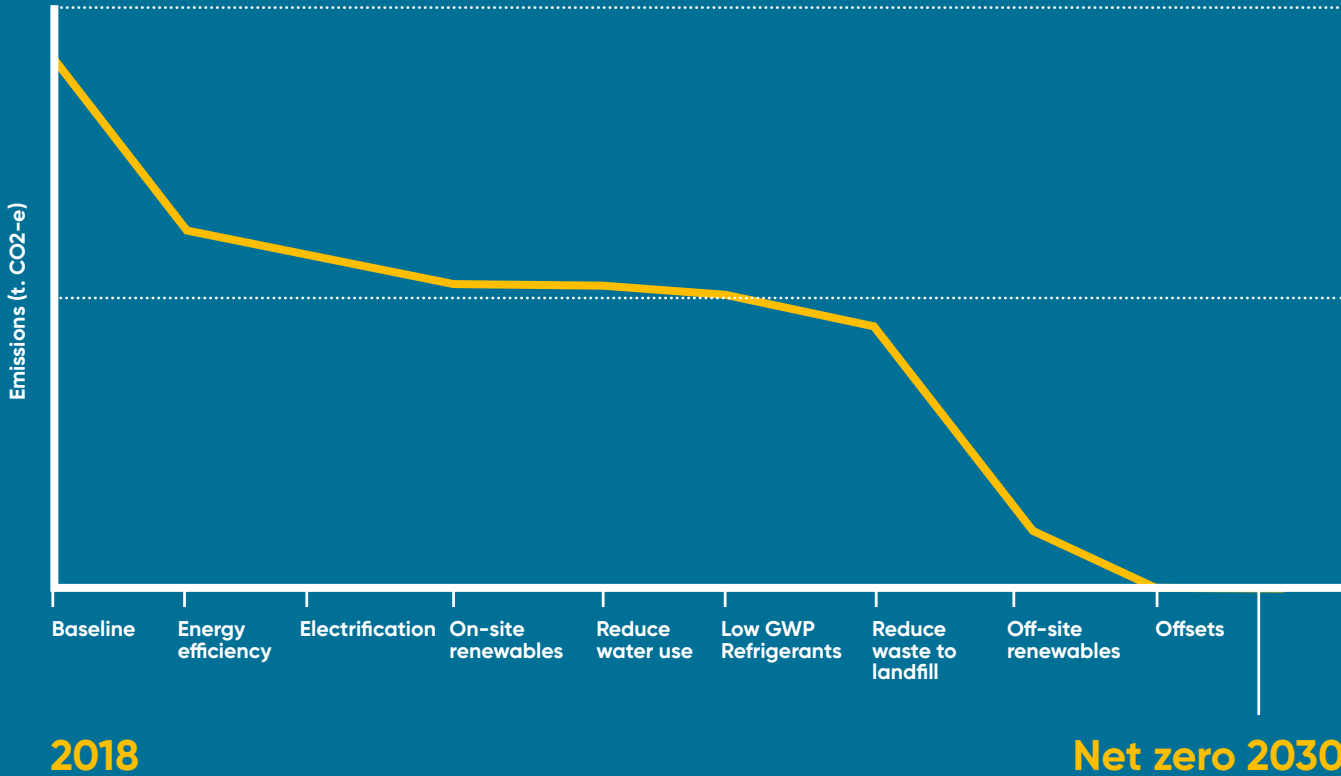
Our goal is to achieve a net zero position for all carbon emissions across Dexus's managed property portfolio by 2030.

This comprises all emissions sources within our operational control, including upstream and downstream emissions.



## The pathway to net zero

We will achieve net zero emissions by 2030 through a prioritised approach to avoid, reduce, re-source and offset our impacts. Our pathway to net zero emissions involves investing in energy and water efficiency, electrifying our buildings to operate from on-site and off-site renewables, and reducing emissions associated with waste from operations.



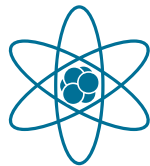




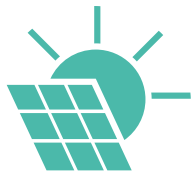
# Reducing emissions from electricity

Electricity is the main source of energy used to operate central services within our buildings and therefore produces the most emissions.

There are two ways we will reduce emissions:



Improving energy efficiency



Increasing renewables

# Improving energy efficiency

Improving energy efficiency is critical to the delivery of our targets. Our aim is to achieve up to 50% in savings by 2030, reduce occupancy costs and create a unique customer experience.



Operational excellence with agile, engaged, professional teams focused on ensuring optimal performance, the best customer experience, and the highest energy productivity.



The way we control energy use is consistently refined and becoming more adaptive with the assistance of new technologies. Further savings will be targeted through the evolution of analytics platforms with more predictive and adaptive features.



Across our portfolio, building retrofits will incorporate the best technology available and consider optimisations with each upgrade. Advancements in motor technology, air treatment and heat transfer, will continue to improve with the launch of more efficient products.



Buildings will ultimately have the ability to respond more acutely to occupants' behaviour, preferences, personal styles and ambient conditions, with tailored services providing comfort and convenience to our customers.



Artificial intelligence, voice activation and robotics will transform the customer experience, remove energy wastage and improve efficiency.



Buildings with a 6-star NABERS Energy rating will become the new benchmark for highly sustainable buildings while significant breakthroughs in technologies will take efficiency to new levels.

## Towards 6 star NABERS



2018

2030

NABERS is the National Australian Built Environment Rating System, which measures a building's energy efficiency and carbon emissions.





# Increasing renewables

› **Off-site renewables**  
Transformation of the national electricity market opens up opportunities for large scale renewable sources to become a viable option within the national energy grid.

By leveraging procurement advantages from our group buying platform, we will partner with energy providers to implement new energy supply models, removing barriers that currently exist, and work collaboratively to deliver a long term, viable and cost-effective solutions.

We will integrate flexible ‘supply-linked’ renewable sources into electricity contracts, providing our customers with transparency on where their buildings source electricity.

Moving beyond typical short term procurement cycles, we are targeting long term price certainty to insulate our customers from market volatility.

Energy storage technologies, including batteries and thermal technologies, will assist the reliability of supply, and support the broader electricity grid during peak consumption periods. We will leverage partnerships for storage and optimise energy flow by deploying agile, mutually beneficial solutions to direct building energy loads from or to the grid in response to cost or reliability signals.

We expect that future opportunities like smart grids and virtual net metering will facilitate peer to peer sharing within our own network.



Procurement



Smart grids





## On-site renewables

We will harness existing and emerging business models to deploy solar panels across our portfolio.



Solar generation



Battery technology

Unlocking the value of roof space through 'own and operate' rental models and partnerships will enable us to generate emission-free electricity. We will have the flexibility to use electricity generated by on-site solar technology to offset base building use, benefit customers through embedded networks and flexible leasing, or participate in the broader market.

Detailed modelling of interval data will enable us to make an informed and considered view on the most effective system sizes, orientations and technologies that should be deployed. We will adopt a holistic approach that considers

broader price and energy security impacts on existing grid-sourced supply agreements and network connectivity arrangements.

Advancements in battery technology, light-weight solar panels and building integrated solar photovoltaic materials will actively contribute to future planning and enhancement of energy systems over time.





# Reducing emissions from waste, water and refrigerants

Looking beyond energy, we seek to reduce or eliminate emissions from operational waste and waste water generated within our buildings, and reduce the emissions impact of refrigerants from air conditioning equipment.

## Refrigerants

Refrigerants, or synthetic gases used in air conditioning equipment, contribute to global warming if released into the atmosphere. Our refrigerant emissions are a small, yet important contributor to our overall emissions reduction target and we will carefully manage these gases.

Reducing these emissions requires a long term approach. We will continue to avoid leaks through maintenance practices, and leverage developments in new refrigerant gases to swap out legacy gases with those of a lower carbon impact.

Building refurbishments and new developments will have a holistic approach to mechanical master planning, seeking to introduce low or zero impact refrigerants, while reducing overall gas volumes through optimised design against building demand.

## Waste to landfill

Through our collaboration with customers, suppliers and industry, we will avoid waste emissions by reusing materials, reducing the amount of waste that is created, and recycling materials. Avoiding waste creation is the first, most essential step. Collaborating with our customers to evolve behaviours is an ongoing priority for us.

We expect emerging technologies to play an important role in maximising future recycling rates towards 100% through better stream separation and processing that delivers high quality by-products for continued use.

## Water and waste water

Our buildings and their occupants consume water and generate waste water as a by-product, resulting in emissions associated with upstream delivery and downstream treatment by water utilities.

We will continue to target water efficiency improvements and rainwater harvesting opportunities to preserve a precious natural resource and reduce utility costs.

Key priorities include cooling tower management and lifecycle upgrades, advanced monitoring and leak management, high efficiency bathroom fixtures and drought-tolerant landscaping. We will also actively reduce waste water through on-site reclamation including fire test water.

New developments will incorporate water efficient design across operations and landscape master planning, supported by best practice efficiency targets. On-site water treatment and recycling technologies will be adopted where practical.



# Electrification of buildings



› Our long term ambition is to transition to all-electric buildings powered by new energy and the complete removal of fossil fuels.

To meet our 2030 net zero goal, we will steadily phase out the use of natural gas and diesel on-site, by replacing gas appliances with electric equivalents.

The efficiency of electric options is similar to that of gas, and provide excellent amenity for our customers, as well as facilitating improved monitoring and control, and integration with other mechanical systems.

Future new developments and planned lifecycle building refurbishment programs will prioritise electrification. Existing gas boilers will be replaced with current and emerging electric heat pump and solar thermal technologies where practical.

# Emissions accounting

› Our strategy adopts 'market-based' emissions accounting.

Our facility boundary comprises those properties which fall under Dexu's operational control as defined within the National Greenhouse and Energy Reporting Act (NGER).

Taking into account our direct (Scope 1) and indirect (Scopes 2 and 3) operational emission sources, we will continue to use published factors, including NGER and Australia's National Greenhouse Accounts to determine our ongoing emissions footprint, in accordance with the GHG Protocol<sup>1</sup>.

We will take into account purchases of renewable energy through direct Power Purchase Agreements or through Greenpower<sup>2</sup>, in accordance with the market-based approach to Scope 2 accounting per the GHG Protocol<sup>1</sup> Scope 2 Guidance.

Our goal incorporates Scope 3 emission sources where Dexu controls the emissions outcome, including upstream energy-related emissions and emissions resulting from waste from operations and water/waste water use.

On our road to net zero, we will only use certified carbon offsets where all efforts to avoid, reduce and re-source our emissions related activities have been exhausted, or should the need to accelerate the transition across all emissions sources arise.

Our primary objective remains to drive business and environmental benefits through increasing energy efficiency and renewables.

We will report annually on our progress within our independently assured environmental disclosure.

<sup>1</sup>GHG Protocol: World Resources Institute/World Business Council for Sustainable Development (ghgprotocol.org).

<sup>2</sup>GreenPower: Emission-free electricity sourced via a certified GreenPower Product ("http://www.greenpower.gov.au" www.greenpower.gov.au)



# Lower emissions, bigger business opportunities

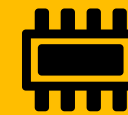
› The path to achieving net zero is both exciting and complex. Through extensive collaboration across our business and with customers and strategic partners, we will embed our net zero emission goals within daily operations and deploy new products and technologies throughout our asset life cycles.

Setting targets has been key to our success as it creates actions that improve business outcomes.

We are well advanced on existing near term commitments which have been set for 2020 and will continue to develop new commitments in support of our longer term ambition.



Advancing our  
vision for the  
workplace



Adopting new  
technologies  
and products



Bringing  
customers on  
the journey





For further information contact us  
at [sustainability@dexus.com](mailto:sustainability@dexus.com)

dexus