



# New South Wales



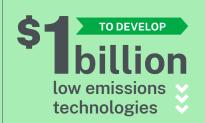
# Australia's Net Zero and Clean Economy capital



The global 'Race to Zero' is on and there is no better time to grow your business or invest in New South Wales (NSW) Net Zero 2030 goals and commitments







\$37° on one of the state of the

of private investment to deliver regional energy infrastructure and a low carbon economy



\$ Sillion in commercial incentives

emissions reduction by 2030
NET ZERO BY 2050

\$14 billion
>>> critical transmission infrastructure fast-tracked

\$130 million
and create jobs in critical
minerals mining + processing

We acknowledge the Traditional Custodians of the land and pay respects to Elders past and present. We also acknowledge all Aboriginal and Torres Strait Islander staff working within the NSW Government at this time.

# We have the programs and mechanisms needed to create commercial opportunities





# Investment NSW provides tailored support to businesses seeking to invest in NSW through:



Market intelligence and investment opportunities



Advice on government programs and approvals



Support for business case development



Access to relevant government, industry and academic figures



Identifying investment partners and locations



Information on incentives and funding



Familiarisation visits



Global network to assist international businesses to enter NSW

## NSW's unique renewable energy and clean technology offering





#### Large, stable economy

- Australia's largest economy, worth half-a-trillion dollars, similar to Singapore and Hong Kong
- A stable, secure economic and political landscape with a reliable regulatory and legal system
- A growing, highly skilled workforce
- A trusted environment and regulatory framework for integration of Environment, Social and Governance (ESG) principles
- Accounts for more than half of Australia's economic growth

# Abundant, low-cost clean energy

- More than a quarter of electricity generated in NSW, 19,000GWh, already comes from renewable sources
- Australia's leader in rooftop solar photovoltaic installations
- A legislated minimum of 12 gigawatts of new renewable energy generation and two gigawatts of long duration storage by 2030, with scope for expansion
- High-voltage transmission network capacity

#### Strong export capabilities

- Four major exporting ports supporting emerging technologies, including hydrogen and offshore wind generation
- Close to growing Asia Pacific markets
- A large heavy transport network and market

- Ambition to double 2021 exports to \$200 billion by 2031
- Australia's largest open access intermodal terminals precinct, boosting supply chain and freight efficiencies
- Highly linked transportation network with state-wide rail, road, ports and air access, and Sydney's first 24/7 international airport, open from 2026 in Western Sydney



## NSW's unique renewable energy and clean technology offering



#### A strong heavy industrial sector

- Australia's largest heavy industrial workforce
- Australia's largest manufacturing sector
- Established ammonia, aluminium and steel production

#### A wealth of natural resources

- Untapped opportunity to develop sources of critical minerals needed for clean technologies
- Abundance of sun all year
- Wind energy sites with consistently high average wind speeds
- Significant water resources and suitable sites for large-scale pumped hydro

#### A thriving innovation ecosystem

- Six of the world's top-200 universities
- Home to the world-renowned UNSW School of Photovoltaics & Renewable Energy Engineering
- \$6.4 billion annual business expenditure on R&D
- Competitive strengths in Power to X, energy storage and renewable energy generation
- A range of technology innovation clusters combining different skill sets
- Academia and industry collaborating on new decarbonisation technologies



#### Supportive government

- Investment opportunities arising from our Net Zero Plan (2020-2030)
- Coordinated investment to transform NSW's electricity system
- Long term agreements to underwrite generation, long-duration storage and firming projects revenue
- \$3 billion to rapidly scale green hydrogen industry
- \$1 billion to accelerate clean technology development





# **Electricity innovation and Renewable Energy Zones**





NSW has the best combination of solar and wind conditions in Australia to deliver renewable energy 24/7.

We are rapidly transforming our electricity system to provide affordable, reliable and clean energy, building on our active pipeline of wind, solar and storage projects.

The Electricity Infrastructure
Roadmap, the biggest renewable
energy policy legislated in Australian
history with cross-party support,
lays out our 20-year plan.

#### We will boost:

Reliability

with a 700MW super battery, the southern hemisphere's largest standby network battery.

Local manufacturing
 with \$550 million for renewable
 energy system components and
 new low carbon industries.

# The Net Zero Plan, together with the Electricity Infrastructure Roadmap will:

#### Attract

\$37bn

in private investment to build critical energy infrastructure



#### **Deliver**

Five <u>renewable energy zones</u> adding at least 12 gigawatts of new generation capacity and 2 gigawatts of long duration storage by 2030 – with scope to expand

#### **Create investor certainty**

Auctions for long-term option contracts available for large scale renewable generation and long-term storage projects



#### **Allocate**

\$74m

for early-stage feasibility studies for pumped hydro

#### **Finance**

\$14<sub>bn</sub>

to fast-track critical energy infrastructure



# Green hydrogen



NSW is in a prime position to capitalise on growing global demand for green hydrogen.

We have the resources, infrastructure and ambition to build an integrated green hydrogen economy.

Our capacity spans diverse, domestic applications – including transport, industry and agriculture – and rapidly growing export capabilities, targeting an export opportunity exceeding \$900 billion.



#### One of the lowest green hydrogen production costs in the world.

The strategy will help drive down costs to under \$2.80/kg and towards \$2/kg.

#### Industry support for hydrogen includes:

#### **Hydrogen Hubs**

starting with the Hunter and Illawarra regions

#### **Exemptions**

Government and electricity network charges exemptions





Funding infrastructure assessments for large-scale production

#### A tri-state collaboration between

New South Wales, Victoria and Queensland to establish east coast hydrogen refuelling network





A Powerfuels Network between universities, industry and government through the <u>Decarbonisation Innovation Hub</u>



#### **Renewable Fuel Scheme**

green hydrogen production financial incentives

### Critical minerals and battery ecosystem

With its abundant resources. long history of mining industry success and strong environmental, social and governance (ESG) credentials. NSW provides globally competitive opportunities for critical mineral projects.

Favourable geological conditions supported by pre-competitive data indicate holdings of cobalt, scandium, copper, titanium, zirconium, antimony and rare earth elements.

NSW is highly prospective for globally significant deposits of critical minerals. As little as 5% of drilling for minerals in NSW has been at depths greater than 150 metres, meaning 80% of the state is essentially unexplored.

We are also well positioned to host a comprehensive battery ecosystem covering the value chain from extraction, to processing, battery production and recycling.

#### Industry support includes:

#### Strategic pathways

A Critical Minerals and High-Tech Metals Strategy highlighting pathways for explorers, producers and investors





#### **Australia's first Critical Minerals Hub**

Advancing processing and downstream technologies

#### **Financial support for**

early-stage explorers (\$) to offset expenses



#### **Project support for**

planning and regulatory approvals, reducing red / green tape



#### Five year investment

to create jobs and drive investment in critical minerals mining and processing



The Parkes Special Activation Precinct (SAP) in regional NSW makes investment in NSW's critical minerals ecosystem more inviting.

The SAP is located near Western NSW's growing minerals industry. It is close to world-class gold and copper mines and more than 15 critical minerals projects. The SAP connects mineral extraction projects with local manufacturing and processing capabilities.

NSW Government is investing \$126 million in enabling infrastructure to bring the SAP to life. The precinct is adjacent to the Central-West Orana Renewable Energy Zone with access to abundant renewable energy industry, is uniquely proximate to major regional cities, and is within 24 hours' rail access to four major exporting ports.

Investors will have access to the skilled mining, resources and metallurgical workforce supporting the existing minerals industry.

# Critical mineral and high-tech metal deposits in NSW





# Sustainable transport





TO EMISSION H2

TO EMISSION H2

TYPOROGEN



We are investing \$633 million to accelerate up-take of electric vehicles (EVs) including widespread EV charging coverage across the state. Transport for NSW has committed to

Net Zero transport operations by 2035, including procuring 100% renewable energy for all electricity and electrifying buses, ferries, corporate vehicles and non-passenger vehicle fleets.

#### Sustainable transport support includes:

\$3,000 rebates\*

on new EV purchases in addition rebates\* to removing stamp duty\*\*

**Incentivising fleet vehicle owners to purchase**battery + hydrogen fuel cell powered EV fleets





8300 NSW buses

>>> transitioning to zero emissions





<u>The Western Sydney Aerotropolis</u>, Australia's first Net Zero and hydrogen-ready city, will pilot new approaches to decarbonising cities and next generation modes of transport

<sup>\*</sup> For the first 25,000 new battery electric and hydrogen fuel cell vehicles with a dutiable value of less than \$68,750.

<sup>\*\*</sup> On eligible new and used EVs purchased up to \$78,000 (dutiable value) in NSW.

#### Sustainable finance



#### We are Australia's economic and financial centre.

Sydney is home to the ASX, a top 10 global securities exchange and is Australia's professional services hub. It is also Asia's largest interest rate derivatives market.

More than 80% of banks with an Australian presence are headquartered in Sydney, including the federal green bank Clean Energy Finance Corporation (CEFC), and we are forging ahead as a leading sustainable finance hub in the Asia-Pacific.

Our soon to be released *Sustainable Finance Framework* will outline our consistent approach to aligning environmental and social priorities

across our financial activities and interaction with the broader financial system. The framework will help enable the flow of public and private capital towards sustainable outcomes and encourage investment in transitioning to a Net Zero economy.

TCorp, the State's investment manager, has introduced a low carbon strategy for international equities. It is partnering with NSW's State Super on achieving a Net Zero Emissions Portfolio by 2050 and integrating climate risk management across its real assets (unlisted property and infrastructure).

#### Our commitment to financing decarbonisation also includes:

#### **Sustainability Bonds**

\$7.8bn

of green and sustainability bonds issued to date through Australia's first semi-government initiative



#### Supporting sustainable finance

standards development to assist investment decisions



#### **Addressing investment barriers**

to emerging low carbon and sustainability asset classes over the longer term



## **Advanced manufacturing**



# A third of Australia's total manufactured products are made in NSW.

Our heavy industry electricity prices are forecast to be in the OECD's lowest 10% by 2030 and our legislated energy transformation will ensure an abundance of clean energy for the manufacturing sector.

Additionally, our <u>Special Activation</u>
<u>Precincts</u> provide manufacturers with land and infrastructure to support new advanced manufacturing industries

related to agri-manufacturing, food processing, resource recovery, critical minerals and clean energy.

To support this sector, we have also committed \$262 million towards a new Advanced Manufacturing
Research Facility in Western Sydney and further support to drive growth in emerging high-value industries, including the clean economy.

These advantages prime us as a leader in developing cleaner equipment, technology and processes.

#### \$1 billion allocated to drive a clean industrial revolution through:

#### **Clean technologies**

\$195 to enable greater uptake

#### Plant & equipment upgrades

\$380 for high emitting industries \$330 m

#### **Clean manufacturing**

\$475 to establish a dedicated base

#### Developing low-emission **∨ ∨** ∨

standards + methodologies to build market confidence in low emission projects







## Circular economy









NSW is building a circular economy, boosting innovation while reducing waste and emissions.

We have ambitious 2030 waste and recycling targets, including reducing total waste per person by 10%, halving organic waste sent to landfill and tripling the plastics recycling rate.

We are providing \$356 million to achieve these targets and stimulate investment in new technologies and capacity.

Our Special Activation Precincts are committed to world-leading circular economy practices that enhance resource efficiency, business productivity and environmental outcomes.

#### This funding includes:

#### **Carbon recycling and abatement**

\$37m

to manage waste and materials more efficiently

#### Landfill emissions funding

\$10m

to reduce solar panels and battery systems in landfill

#### Waste and circular economy

\$24 \( \frac{\pm}{m} \) strategic infrastructure investment

#### Recycled materials research

\$13 m gr



Development of recycled material markets through government procurement



### **Built environment**





# We are creating opportunities as the built environment transitions to Net Zero

The NSW Government is committed to the development of sustainable and resilient homes and buildings. We're encouraging the design and delivery of more sustainable buildings across NSW by increasing standards for energy and water use and thermal performance,

introducing measurement and reporting of embodied emissions of construction materials used to build homes, and updating the Building Sustainability Index (BASIX) standards to improve the performance of homes.

#### The Net Zero Buildings initiative is:

Building a framework to measure and certify embodied carbon for new buildings





Creating an industry alliance to develop the low emissions construction materials market through the Materials and Embodied Carbon Leaders' Alliance (MECLA)

Enabling capital flows that support carbon emissions reductions in NSW buildings



Offering incentives to developments committed to high energy performance



# Agriculture and natural capital



# Primary industries contribute more than \$18 billion to NSW's economy every year.

These industries are the main driver of economic prosperity in regional NSW. The NSW Government will also increase investment in blue carbon markets and natural capital by playing a leading role in helping the public and private sector to identify new opportunities for investment.



#### These measures include:

#### Investing



to drive <u>sustainable land</u>

management, boost productivity
and help farmers reduce emissions



#### Investing



#### **Building investor confidence**

in biomass-sourced generation †

#### **Developing an investment framework**

for clean energy and local energy solutions across regional communities



#### **Driving development and deployment**

of new technologies and systems with a Land and Primary Industries Network



#### **Accrediting farmers with**



for farmers who improve biodiversity and reduce carbon emissions while enhancing productivity



Steering NSW towards a nature positive economy by unlocking and accelerating natural capital markets and opportunities

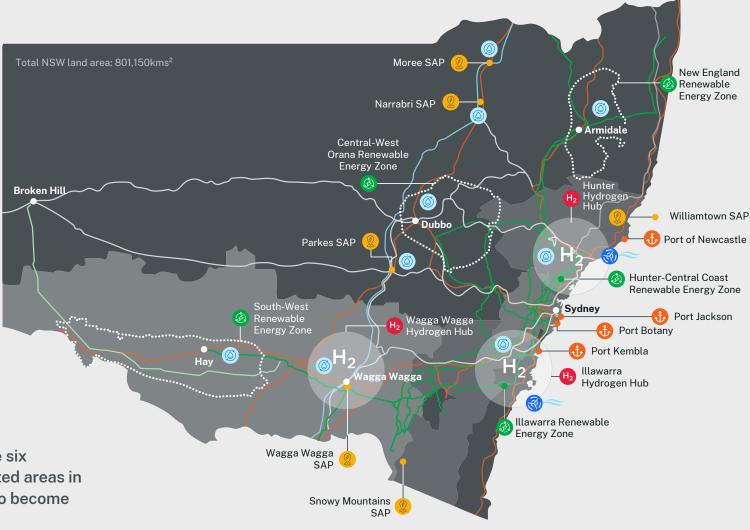
# NSW's clean energy and clean technology landscape



#### Map legend

- H<sub>2</sub> Hydrogen Hub
- Renewable Energy Zone
- Port
- Special Activation Precinct
- (C) Licensed waste water treatment
- Offshore wind potential
- Strategic road freight corridors for hydrogen refuelling network
- Key rail freight routes
- Inland Rail
- High voltage transmission network
- 220kv transmission line

Over 18,000 ha in total size across the six Special Activation Precincts – dedicated areas in regional locations primed and ready to become thriving business hubs.



# Special Activation Precincts

Focus industries and sectors

#### Wagga Wagga

Agri-manufacturing and forestry, freight and logistics, renewable energy.

#### Parkes

Freight and logistics, agri-business, advanced manufacturing, recycling and renewable energy industries.

#### Moree

Value-add manufacturing and high-yield intensive horticulture.

#### **Snowy Mountains**

Year-round business and tourism industries.

#### Williamtown

Defence and aerospace industries, non-defence aerospace industries, aerospace innovation.

#### Narrabri

Energy intensive manufacturing, value-add agricultural production, recycling, and freight and logistics.



Renewable energy and clean tech opportunities in New South Wales





Contact us today to find out more about investment opportunities in New South Wales

investment.nsw.gov.au/contact-us/ +61 2 4908 4800





