



NSW Industry Policy

A forward-looking agenda for a resilient and productive NSW economy

March 2025



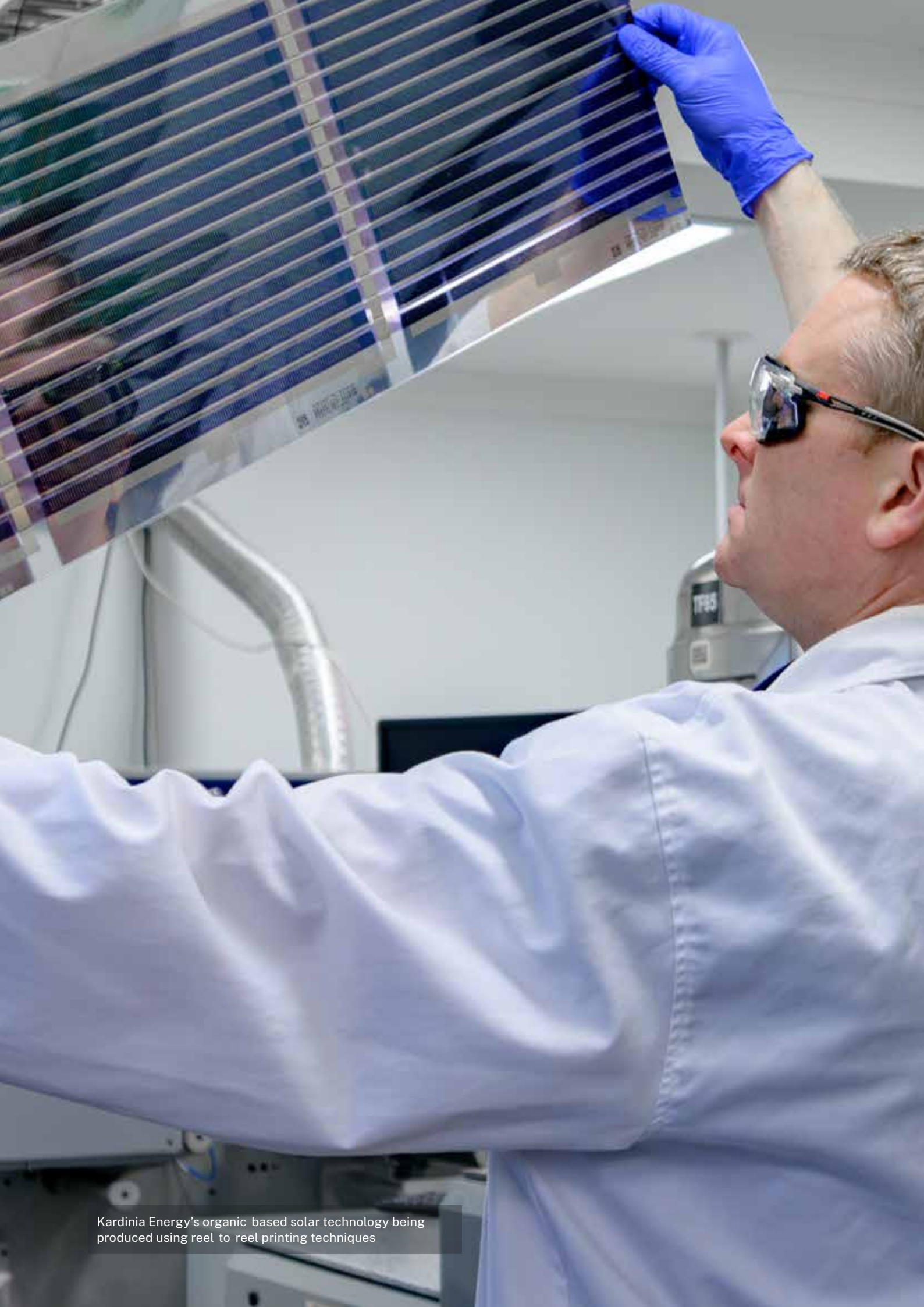
Acknowledgement of Country

Investment NSW acknowledges, respects and values Aboriginal peoples as the Traditional Custodians of the lands on which we walk, live and work. We pay our respects to Elders past and present.

We acknowledge the diversity of Aboriginal people and their ongoing connection to their country, waters and seas. We also acknowledge our Aboriginal and Torres Strait Islander employees who are an integral part of our diverse workforce.

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Kardinia Energy's organic based solar technology being produced using reel to reel printing techniques

Premier's foreword



A thriving NSW economy is key for our future – one that grows, creates more jobs, improves the way we make and do things, and drives the prosperity and wellbeing of NSW people. This NSW Industry Policy sets out our vision for the economic future of NSW and calls on all stakeholders to work together to further strengthen NSW's economy.

The NSW Government wants to see an economy fit for the future – one that is more productive and more resilient. Higher productivity means higher wages and a boost to living standards.

A more sustainable NSW economy will not only help us transition to net zero but also create new economic activity and jobs. NSW has strong advantages to become a global superpower in a world that is decarbonising. We have the opportunity to make NSW industry a winner in the global transition to a cleaner economy. We also need to make the NSW economy more resilient to adverse events, both global and domestic. A strong local manufacturing industry will improve the resilience of the NSW economy by diversifying our industry base.

We also believe industry policy can increase the supply of housing across NSW – one of the largest challenges NSW faces.

The NSW Industry Policy focuses on advancing the NSW Government's strategic priorities across Housing, Net Zero & Energy Transition, and Local Manufacturing. The NSW Industry Policy sets the stage to coordinate NSW Government and private sector actions, ensuring better outcomes can be delivered to the people of NSW.

I am looking forward to working together with industry and all stakeholders to build a strong and thriving NSW economy for the future. Our ambition is clear: building a better future for everyone by making NSW the most attractive place for people to work and live and businesses to operate and invest in.

A handwritten signature in black ink, reading "C. Minns". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

The Hon Chris Minns MP
Premier of NSW

Minister's foreword



In a period defined by economic shocks, climate change, geopolitical tensions and high and persistent inflation, industrial policy has become an important tool for government to employ to help shape and grow the economy.

Several countries have launched large and ambitious industrial policies to safeguard future economic success. Governments across the world aim – more than before – to shape the direction of their economic growth and design their economies. The NSW Government is committed to building a better NSW with a thriving economy. To achieve this we have developed a clear, coherent and stable policy approach to guide the private investment needed to increase jobs and productivity in NSW.

The NSW Industry Policy sets out the government's approach to proactively steer the NSW economy of the future. The NSW economy is at a crossroad and we need to act on finding a new position for NSW in the global economic landscape. The turbulent global environment, which features new drivers of change, is reshaping our industries and trade settings, creating both new challenges and opportunities. NSW has numerous strengths on offer: natural endowments, research and development capacity, a skilled workforce, innovation precincts, and connected supply chains, to name a few. The NSW Industry Policy builds on these proven strengths across many industries in NSW and aims to capitalise on new industry opportunities.

This NSW Industry Policy is built around 3 interrelated missions to address the challenges of Housing, Net Zero & Energy Transition, and Local Manufacturing. Housing affordability and availability has become one of the major challenges in NSW, with direct and profound implications for the economy. The transition to net zero makes it imperative for NSW to diversify its economy away from fossil fuels production. NSW is well-equipped to take advantage of the significant opportunities presented by global decarbonisation efforts and develop new value-adding activities and export markets.

Recent disruptions in global supply chains have highlighted the importance of a larger and stronger local manufacturing industry. Success in this sector will create sustainable, high-skilled jobs, spur research and development, support innovation, and diversify and improve the resilience of the NSW economy.

This NSW Industry Policy provides an overarching framework to inform and guide government and private sector initiatives and collaboration. The NSW Government has already commenced several initiatives consistent with the NSW Industry Policy. Looking ahead, the NSW Government will also launch the NSW Innovation Blueprint as well as the NSW Trade and Investment Strategy, which are key to the implementation of the NSW Industry Policy.

The NSW Government will play a facilitating role in realising these missions, but to realise opportunity out of challenge, concerted and coordinated action of government and private sector is key. Industry consultations have highlighted the significant opportunity for improvement and the value of a collaborative effort in addressing the challenges faced by NSW. The NSW Government is committed to working together with industry, research and training institutions, regional communities and other stakeholders across NSW to grow and strengthen the NSW economy.

A blue ink signature of Anoulack Chanthivong MP, written in a cursive style.

The Hon Anoulack Chanthivong MP
Minister for Better Regulation and Fair Trading
Minister for Industry and Trade
Minister for Innovation, Science and Technology
Minister for Building
Minister for Corrections



The Hysata electrolyser facility in Port Kembla, NSW, which is helping to transform green hydrogen production
Image credit: NSW Department of Climate Change, Energy, the Environment and Water

Executive summary

NSW is well positioned to respond to economic challenges and seize opportunities that demand a rapid transformation of its industry structure.

NSW's strong economy – along with its skilled workforce, established capital markets, world-class research institutions and natural resources – put its industries and businesses at a global advantage. At the same time, the state faces significant barriers to success including its current narrow export base, slow rates of innovation adoption and commercialisation, skills shortages in specific areas, and generally high costs.

In addition to trade uncertainty and geopolitical conflicts, the NSW economy is confronted with a range of global societal challenges such as climate change, health pandemics, the digital revolution and artificial intelligence. Mission-based industry policies are increasingly used to address societal challenges with a steering and facilitating role for government. Through long-term strategic investments, public policies and efficient regulation, governments can shape the direction of growth and design their economies.

The NSW Industry Policy is built around 3 interrelated missions which are strategic priorities for the NSW Government: Housing, Net Zero & Energy Transition, and Local Manufacturing (See Figure 1).

Housing affordability and availability is one of the state's most immediate challenges, having far-reaching implications for the rest of the economy. For example, there are long-term implications for the NSW economy if businesses struggle to attract and retain talent.

Progress towards Net Zero & Energy Transition is reshaping all industries as NSW seeks to reduce emissions from existing industries while leveraging the state's favourable endowments and resources to develop new industries and disruptive technologies. NSW has the potential to become a leading force in the global net zero economy by proactively managing the green industrial transformation.

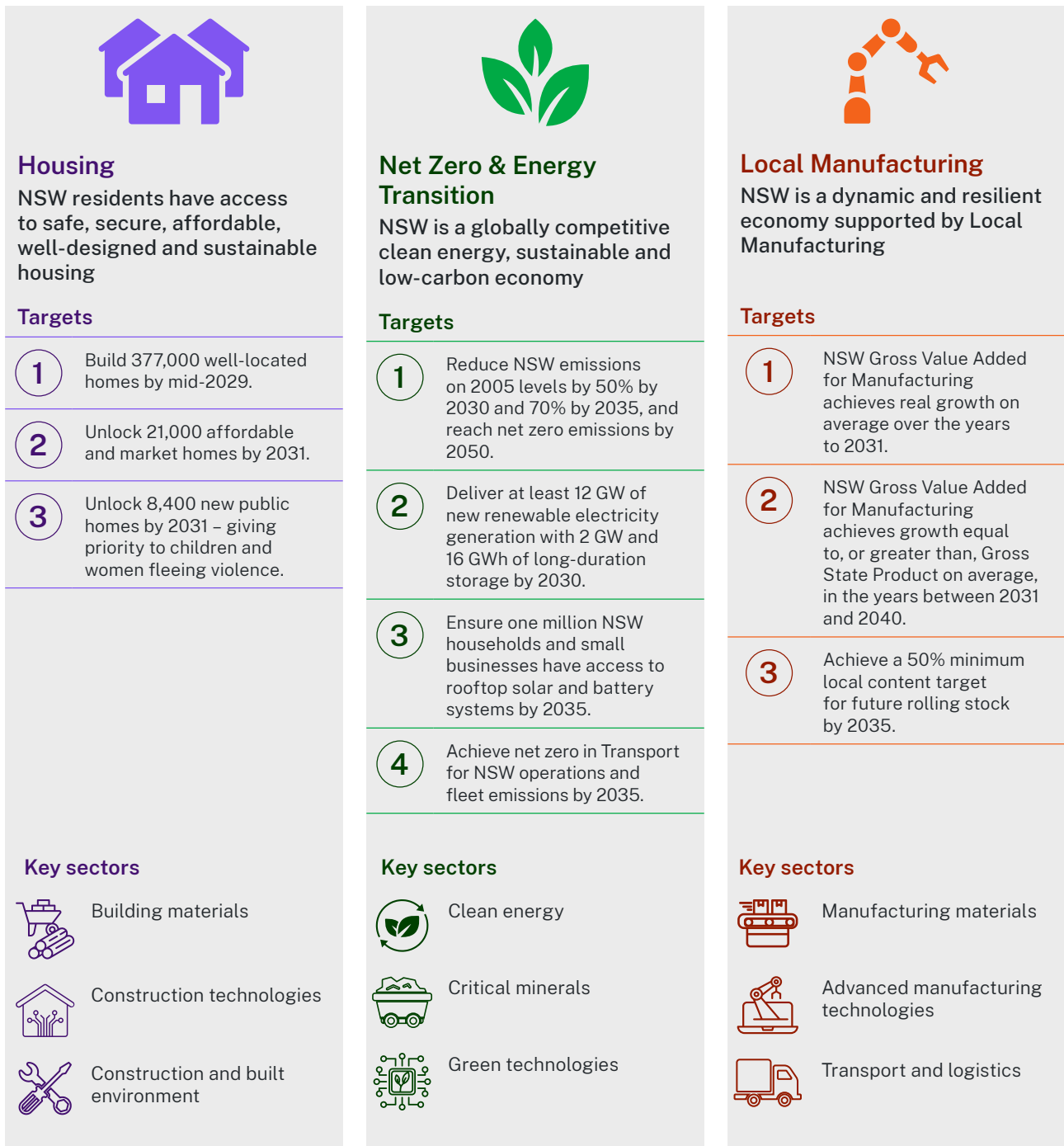
Finally, the significant impact on global supply chains felt during the global pandemic, the challenges and opportunities arising from global decarbonisation efforts, and the need to address housing across the state, has highlighted the importance of the local manufacturing industry to increase the resilience of the NSW economy. Growing the local manufacturing industry can support the NSW economy by offsetting the economic impacts of declining carbon-intensive industries and diversifying NSW's narrow industrial structure.

The NSW Industry Policy provides a long-term vision and commitment to give businesses the confidence to invest and grow in NSW. It foresees a proactive role for government but one that is underpinned by close cooperation and coordination with industry and other stakeholders. It will complement national policies and funding where possible and will seek to align with other states and territories as part of implementation.

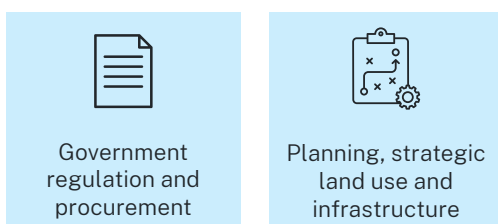
Each of the missions have ambitious targets and key sectors, which are central in developing solutions. The missions incentivise innovation and collaboration across different industries as well as different stakeholders such as government, business, research institutions and local communities. The missions are underpinned by various policies that work alongside the NSW Industry Policy, aimed at improving the business conditions across all industries and centred around skills, research and development, innovation, and trade and investment.

This NSW Industry Policy provides a framework to ensure greater levels of coordination across NSW Government policies and ongoing collaboration with stakeholders. The NSW Industry Policy promotes a business environment for industry growth while at the same time providing a mechanism for monitoring the effectiveness of interactions from a whole-of-government perspective.

Missions



State levers



Partnerships



Figure 1: NSW Industry Policy Framework



Employee at Beryl Solar Farm, Gulgong, NSW
Image credit: Transport for NSW

The NSW opportunity for success

NSW will draw upon strengths and endowments to leverage opportunities arising from global trends and meet current and future challenges.

Global trends and the context for NSW

The global economy is facing several challenges that impact national and regional economies to varying degrees. Countries are struggling with a range of diverse, yet interrelated, global societal challenges such as climate change, geopolitical shifts, declining productivity, the digital revolution (including artificial intelligence), inequality and health pandemics.¹ While economies continue to recover after the COVID-19 pandemic, global growth has slowed down in the face of high and persistent inflation and there has been a steady increase in interest rates. These challenges are complex and far reaching and do not have obvious solutions. As they are systemic in nature, they are expected to transform whole economies and societies, thereby creating new risks but also economic opportunities.

Overcoming societal challenges like climate change requires the coordinated and sustained action of different players but often lacks coordination and a two-way flow of information. There is a growing consensus that addressing these challenges cannot be left to market forces alone. So-called market failures – instances where markets do not work perfectly – can result in fragmented supply chains, the inefficient allocation of resources and lower societal welfare. In the presence of market failures,² governments typically have a larger role to play including through an efficient and effective industry policy. Market signals will be insufficient to promote and direct the necessary and large investments required, hence the need for governments to play a more active role.

It is in this global and uncertain setting that the NSW economy is operating. Barriers to growth, such as slow rates of research commercialisation and innovation adoption, skills shortages, a narrow export base and overall high costs, can delay the rapid and much-needed transformation of the NSW economy. However, the state's strong economy, skilled workforce, established capital markets, world-class research institutions and natural resources will help NSW to respond to economic challenges and seize opportunities.

How NSW responds to these global challenges and plans for the future will directly determine the outlook of the NSW economy over the following decades. Complementing NSW action, the Australian Government has signalled its intention to address national challenges in an industrial policy context which NSW can leverage to help increase local benefits.

This NSW Industry Policy sets out the priorities for the NSW economy, with a proactive role for government in combination with a close collaboration with business and other stakeholders. The long-term vision and commitment aim to encourage businesses to invest and grow in NSW. The overall objective of the NSW Industry Policy is to benefit as much as possible from new economic opportunities while minimising risks and adverse effects.

¹ See also the Seven global megatrends on the way to 2042 identified by the CSIRO (Naughtin et al., 2022).

² Because of externalities, information asymmetries, coordination failures and public goods.

A new way forward for industry policy: taking a mission-based approach to addressing societal challenges

Industry policy can be broadly defined as a set of government interactions that target the transformation of the structure of economic activity in pursuit of some public benefit.³

Traditionally, the goal of industry policy was to increase productivity and economic growth, and thus living standards, by addressing market failures in specific markets or industries.⁴

In recent years, industry policy has been increasingly used to address societal challenges. Through long-term strategic investments and public policies, governments increasingly try to shape the direction of growth and the design of their economies. In doing this, governments play a facilitating as well as steering role through well-defined missions in ways that ensure markets are supporting public objectives.⁵ The U.S. Inflation Reduction Act⁶ and the European Green Deal⁷ are major recent examples of governments taking a more proactive approach to addressing such issues.

The strength of mission-based industry policy lies in its ability to incentivise innovation and cross-sector collaboration to solve complex problems that matter to society. This approach sets the direction for productivity and economic growth without specifying how that growth should be pursued, allowing industry to determine and develop the most appropriate solutions for success.

In taking up a more proactive and coordinating role, the NSW Government aims to guide investments and innovation to address challenges and capitalise on opportunities as they arise. In doing so, the NSW Government will partner with the Australian Government, local government, academic institutions and research organisations, industry, communities, and other stakeholders, and leverage collective efforts.

A diverse range of policies and strategies across government will contribute to achieving the 3 missions identified in the NSW Industry Policy (see Figure 2). Some policies will directly impact all or multiple missions (cross-mission policies), whereas some policies will have a greater direct impact on a single mission (mission-specific policies).

This NSW Industry Policy will harness existing initiatives and send a collective signal of the priorities for the NSW economy.

As such, the new NSW Industry Policy provides a framework for the NSW Government to drive:

- collaboration and information sharing with industry and other stakeholders
- coordination and cohesion across NSW Government policies, programs and agencies
- oversight to monitor and evaluate the effectiveness of actions.

3 (Juhász, Lane, & Rodrik, 2024)

4 (Robinson & Mazzucato, 2019; Robinson & Mazzucato, 2019)

5 (Mazzucato & Kattel, 2023)

6 (U.S. Department of the Treasury, n.d.)

7 (European Commission, n.d.)

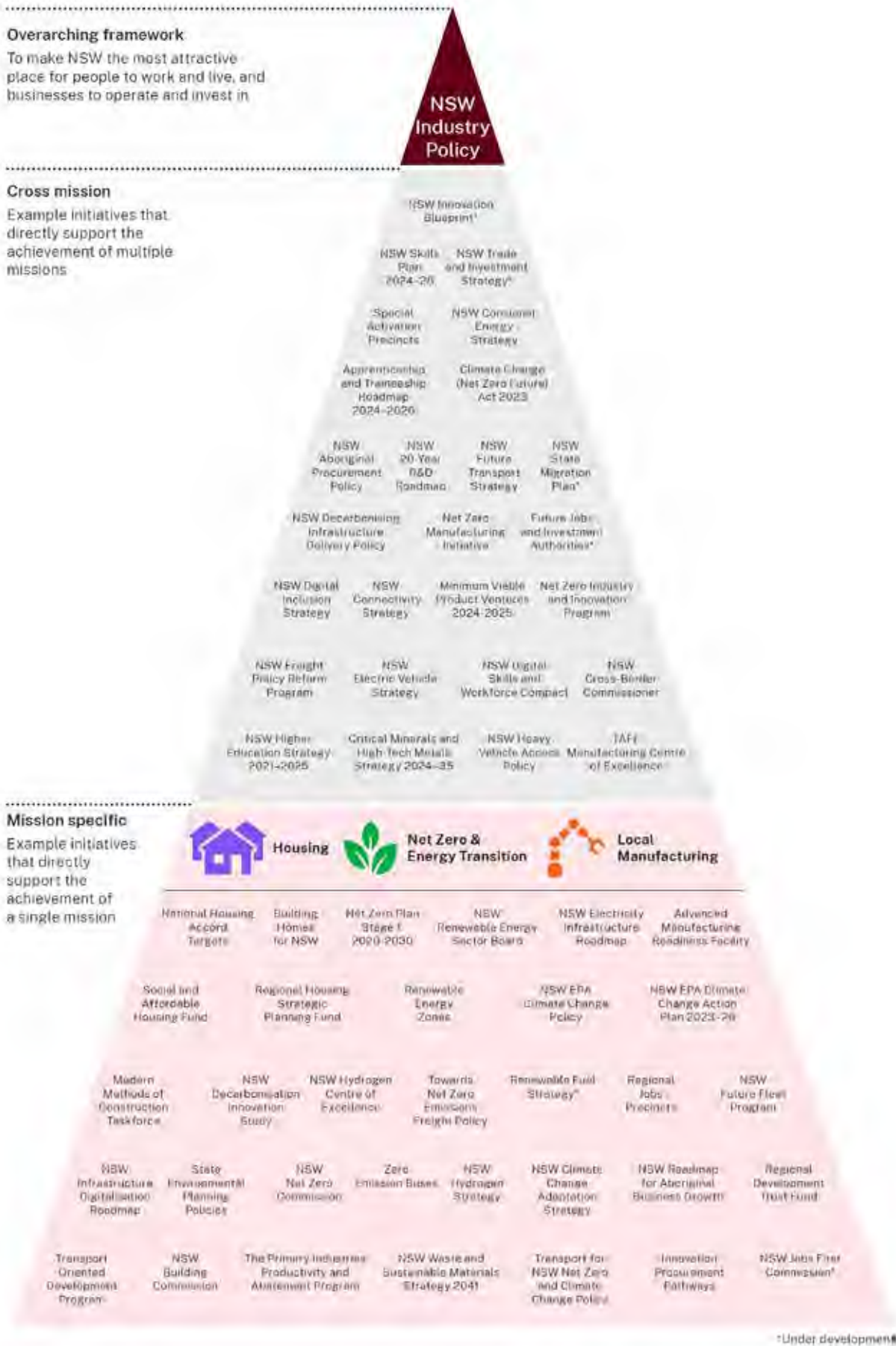


Figure 2: Government initiatives supporting the NSW Industry Policy missions⁸

⁸ Figure 2 is an example which demonstrates the complexity associated with achieving the missions. Whole-of-government coordination and a multifaceted approach will be required to ensure success. For a detailed list of initiatives, please refer to Appendix A.

What this means for NSW

The new NSW Industry Policy promotes a forward-looking agenda and sets the government's strategic priorities of Housing, Net Zero & Energy Transition, and Local Manufacturing as missions. Through these 3 missions, the NSW Government aims to steer resources to the parts of the economy where actions are most likely to yield the greatest public benefits, foster the cooperation needed to find effective solutions and coordinate action across different stakeholders.

To realise opportunity from the challenges facing the state, the NSW economy needs to be performing at its full potential. Emphasis will be placed on the roles of skills and education, innovation and technology, and trade and investment as contributors to productivity, economic growth, and resilience, including in regional areas.

NSW will leverage its comparative strengths to respond to challenges and seize opportunities which demand a rapid transformation of its industries. Providing clear industry policy direction will give certainty and confidence for investors, innovators and industry to act, and underpins a strong and robust economy to deliver higher living standards for the NSW community.



The Darlington Point Solar Farm in Darlington Point, NSW, contains almost one million solar panels

Missions for NSW

The NSW Industry Policy takes a mission-based approach to solving critical challenges faced by the state.

Developing missions

Three strategic priorities – Housing, Net Zero & Energy Transition, and Local Manufacturing – are at the forefront for NSW. Housing affordability and availability has become one of the state’s most immediate challenges, with access to housing having far-reaching implications for the rest of the economy and the wellbeing of NSW residents. Progress towards the Net Zero & Energy Transition Mission is reshaping all industries. NSW is seeking to successfully adapt and reduce emissions from existing industries while leveraging the state’s favourable endowments and resources to develop new industries and disruptive technologies. Finally, the significant impact of the COVID-19 pandemic on global supply chains has highlighted the importance of the local manufacturing industry for more diversity and stronger resilience in the NSW economy. Greater capability in the local manufacturing industry will also help NSW address challenges and opportunities arising from decarbonisation efforts, and the need to address housing across the state.

The missions are interrelated and mutually reinforcing as the progress of one mission will contribute to the success of the other missions. For example, the success of the Net Zero & Energy Transition and Housing missions will be supported by growing and strengthening Local Manufacturing in NSW.

Identifying key sectors

Although a mission-based industry policy applies an economy-wide approach, some sectors can be expected to be more central to the realisation of the missions than others. Focusing on sectors most critical to achieving the missions will guide the investment of available resources in activities most likely to deliver the desired public benefits.

While key sectors have been identified for each mission, all industries in NSW – existing and emerging, across both metropolitan and regional areas – will be critical to the success of the missions and the wider state economy. Industries outside of the key sectors – such as food and agriculture, defence and aerospace, life sciences and healthcare, and the visitor economy – are important to providing employment opportunities and benefits to communities, strengthening the NSW economy, and will also contribute significantly to achieving the missions.

The key sectors have been identified as being broad enough to capture critical inputs across all activities related to the missions, providing flexibility over time as technologies evolve and having the most direct impact on mission success. The key sectors are relevant to the current strategic priorities and economic conditions and may change over the policy lifetime as new opportunities emerge.

Setting targets

The NSW Industry Policy includes ambitious targets for each of the missions to spur collective action. The targets will require a sustained commitment of resources and corresponding action across government and industry to ensure their achievement.

Consistency of the targets with mission objectives has been ensured and will bring together action within missions in a coordinated way. The targets draw upon existing action and commitments across NSW where possible to ensure alignment and collective progress, and new targets have been formed for the missions where there are no existing commitments. Setting measurable, time-bound and specific targets will track progress towards each of the missions as measures of success. Tracking, evaluation and review coupled with continued coordination and communication with the private sector, will ensure the targets identified in the NSW Industry Policy remain fit-for-purpose with revisions applied where necessary.

The NSW Industry Policy targets are common objectives for government and industry to collectively work towards. These are economy-wide targets that require support and action from all sectors of the economy. Neither government nor industry will be able to achieve these targets alone.

For example, the government can contribute towards achieving the housing targets by streamlining planning approvals and identifying surplus land, while housing developers contribute through delivery of new housing on those sites.



Aerial view of Liverpool precinct
Image credit: Transport for NSW



Housing near Marrickville Station, NSW, which is part of the Transport Oriented Development planning reforms
Image credit: Department of Planning, Housing and Infrastructure

Housing

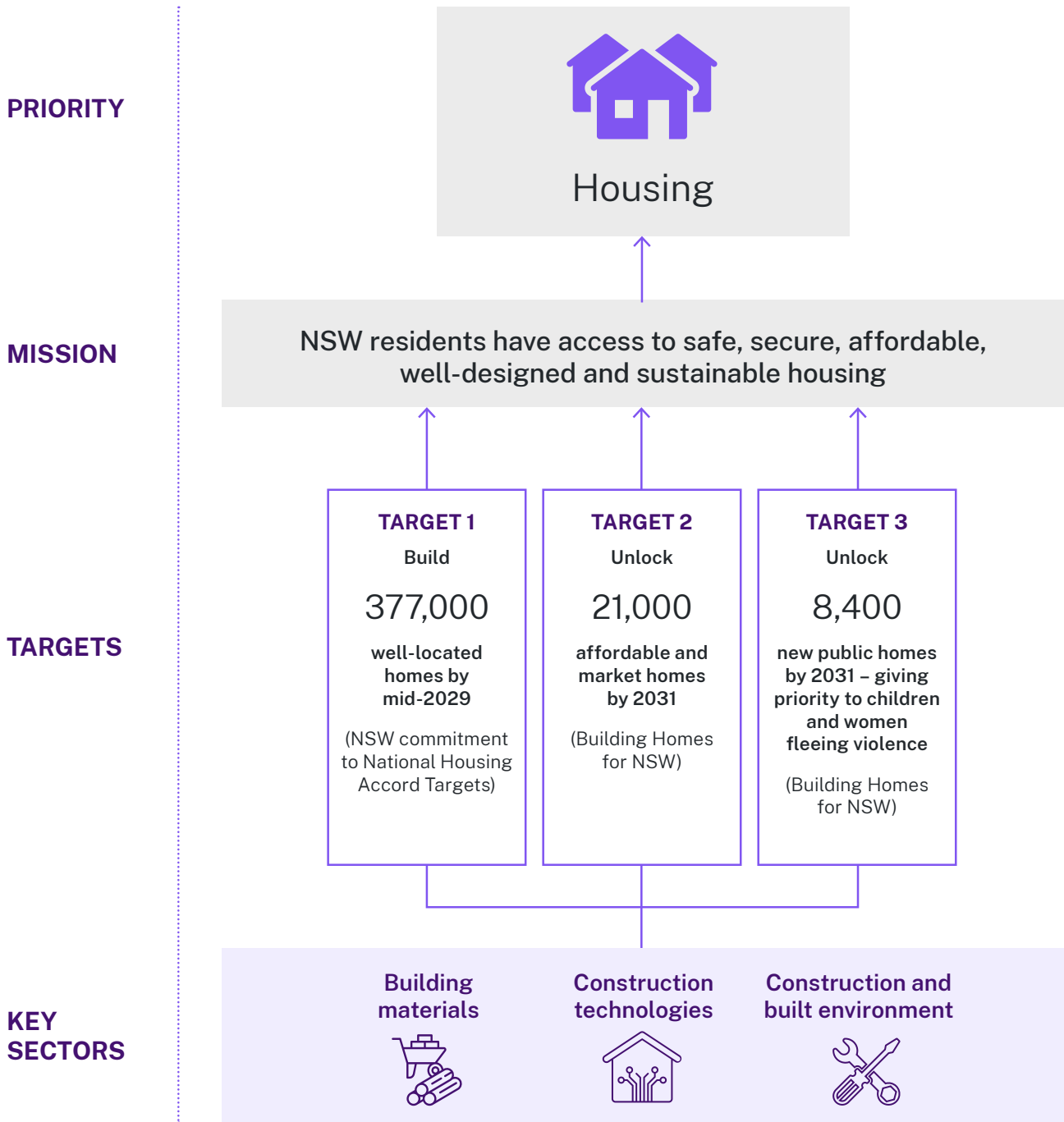


Figure 3: Housing Mission Overview

NSW residents have access to safe, secure, affordable, well-designed and sustainable housing

The Housing Mission focuses on addressing NSW's housing needs by promoting the construction of new, safe, sustainable and affordable housing. The cost of and access to housing has become one of NSW's biggest challenges and is the largest single cost-of-living issue facing its residents.⁹ The NSW Department of Planning, Housing and Infrastructure estimates NSW will require approximately 900,000 additional dwellings by 2041 to meet housing demands as the population grows.¹⁰

In addition to its social, family and health impacts, the housing shortage limits NSW's economic potential. High housing costs weigh on household budgets, may indirectly lower productivity, can threaten environmental sustainability and erode local amenity.¹¹ A lack of good and affordable housing also makes NSW less attractive for people to live and work, directly impacting the size and quality of the future labour force. Businesses will struggle to attract skills and retain talent, with potential long-term implications for the NSW economy.

Both supply and demand factors drive the current housing crisis. The NSW Government has an ambitious housing agenda that has seen significant improvements to the planning system, investment in social housing and legislative reform to support renters and people living in strata. By addressing regulatory barriers and skills shortages while also promoting new technologies and business models, NSW will support increased residential construction activity to deliver various types of housing. This includes social, affordable,¹² private owner-occupied and rental housing, and crisis accommodation.

Targets for success in Housing

Boosting the supply of homes will require significant efforts from governments and the private sector in NSW to deliver effective solutions. Achieving the Housing Mission targets will involve solutions that include the greater use of new materials and innovative production methods, resulting in efficiency and productivity gains for industry. When more houses are built in the right places and with regard to climate change, businesses across all sectors of the economy will benefit from access to a larger, more productive labour pool.

Target 1: Build 377,000 well-located homes by mid-2029

NSW commitment to National Housing Accord Targets

A substantial pipeline of new dwelling construction is a significant contributor to housing availability and supply. Consideration of the location and affordability of homes ensures the suitability of these homes for NSW residents. It is anticipated that industry will build the majority of these homes. The NSW Government is taking a multifaceted approach to facilitating the supply of housing, which will rely on tackling issues such as labour and skills shortages, planning and the availability of fit-for-purpose construction materials. The NSW Government has committed \$252 million for local government apprentices, which will play a crucial role in reducing development approval timeframes and accelerate the delivery of housing supply, ensuring these benefits are realised quickly and efficiently.

9 (NSW Government; Department of Planning, Housing and Infrastructure, 2023)

10 (NSW Government; Department of Planning, Housing, and Infrastructure, 2022)

11 (NSW Productivity Commission, 2023)

12 In this context, social housing refers to government-subsidised long-term rental housing, whereas affordable housing is defined as rental housing managed like a private rental property, but for very low- to moderate-income households (NSW Department of Communities and Justice, 2024).

Target 2: Unlock 21,000 affordable and market homes by 2031

Building Homes for NSW

To address housing affordability, the NSW Government will work with industry to deliver 21,000 affordable and market homes.¹³ The NSW Government is identifying surplus sites that will be made available to both government and private sector developers to accelerate the delivery of housing. Measures may include streamlined planning processes, conditional contracts of sale or project delivery agreements. Achieving this target will require strong partnerships between government and industry across the key sectors for the Housing Mission and leveraging skills, innovation and investment in the housing industry. Proceeds from identified sites will be reinvested into new public housing construction, further supporting the Housing Mission.

Target 3: Unlock 8,400 new public homes by 2031 – giving priority to children and women fleeing violence

Building Homes for NSW

The NSW Government has committed to build 8,400 new public homes across the state by 2031.¹⁴ Around 6,200 will be new homes and 2,200 will be replacement homes. Half of the new homes built will be allocated to women and children fleeing family and domestic violence.

The key sectors that will drive success in Housing

Building materials – Industries that produce building materials for the housing industry

Expanding the capacity and capabilities of the local building materials sector will be essential to increasing the supply of housing. Advancements and innovations in this sector have flow-on benefits on the cost, construction time, sustainability and liveability of new homes. Similarly, innovation in the production and use of building materials will support industries across all 3 missions. For example, timber plays a crucial role as a low-carbon building material, while advanced wood products like cross-laminated timber are increasingly used in housing construction. The COVID-19 pandemic exposed the vulnerabilities of the sector as supply disruptions caused the prices of many building materials to increase sharply or become unavailable, resulting in higher construction costs as well as delays in housing completions.

The NSW Government is investing in sustainable building materials through the Low Carbon Product Manufacturing construction-ready stream of the Net Zero Manufacturing Initiative. The fund will invest in new or expanded commercial scale facilities in NSW, including manufacturing low-carbon building materials. Manufacturing traditional steel, concrete and aluminium produces high levels of carbon dioxide. Cutting these emissions is a priority in the NSW Government's plan to reach net zero emissions by 2050 while greater use of low-emission building materials will contribute to the sustainability of the housing stock in NSW. Development and use of these products needs to occur in such a way as to not further increase construction costs.

¹³ Market homes are sold on the market, whereas the government retains ownership of social homes.

¹⁴ (NSW Government, 2024b)

Construction technologies – Industries which encompass a range of technologies and innovations that improve construction productivity and sustainability

The uptake and increased use of advanced technologies will increase productivity, improve sustainability and help lower construction costs. Key technologies and innovations include modular construction, building information modelling, automation and robotics, sustainable materials, energy-efficient building systems, and advanced analytics and artificial intelligence. Over the past several decades, productivity growth in construction has declined. This is partly due to firms not adopting the latest technologies and solutions when delivering projects. By promoting the increased use of advanced technology, productivity can improve, contributing to an increase in housing supply.

Modular housing provides a cost effective and faster method to constructing traditional buildings, which means homes can be built more quickly. It is estimated that modular homes can be delivered 20% faster than traditional methods, with time savings expected to increase over time.¹⁵ This can assist with increasing the speed of home supply, helping to make housing more affordable sooner, while also providing opportunities for the local manufacturing industry in NSW.

Construction and built environment – Industries involved in the design, construction, renovation, and maintenance of buildings and infrastructure, and civil engineering projects

The construction and built environment sector captures a broad collection of industries such as architecture and design, civil engineering, urban planning and development, facilities management, construction, and sustainability-related industries. This key sector encapsulates industries critical to designing, building, and supporting a built environment that is sustainable, responsive to climate change, and meets the housing challenges¹⁶ faced by NSW communities.

To help shape Sydney's built environment and improve access to jobs and services, the NSW Government announced the Transport Oriented Development (TOD) program in December 2023 to create more well-located homes close to transport. As part of the TOD program, the NSW Government identified 8 Sydney transport hubs (tier one precincts) for state-led accelerated rezoning to deliver up to 47,800 new, well located, high- and mid-rise homes over the next 15 years.

The design of buildings and infrastructure must be fit for purpose and meet NSW's needs across all types of housing. At the same time, buildings and infrastructure must be delivered efficiently, optimising resource use. This will require innovations in both processes and materials used, and improvements in construction productivity.

Modern Methods of Construction Taskforce

In 2023, the NSW Government formed the Modern Methods of Construction Taskforce to advise on the barriers to using modular housing and the ways it can be harnessed to speed up the delivery of homes.

As modular housing has not previously been used at scale in NSW, feedback from the taskforce highlighted several regulatory barriers to the rollout of modular housing, which the NSW Government is working through. This work includes setting uniform standards for manufactured homes constructed offsite.

While the NSW Government works through these challenges, it has invested \$10 million to trial the use of modular housing to deliver social homes for the people of NSW.

¹⁵ (NSW Government, 2024c)

¹⁶ In August 2024, the NSW Productivity and Equality Commission released a review of housing supply challenges in NSW. The report addresses the ways policies impacting the construction industry can be designed to address capacity and price issues inhibiting the supply of housing. It also provides guidance on ways to coordinate and set different policy levers so government does not inadvertently make the housing market worse. (NSW Productivity and Equality Commission, 2024).



Mixed density housing in Mount Druitt, NSW



Wind turbines at the White Rock Wind Farm near Glen Innes, NSW

Net Zero & Energy Transition

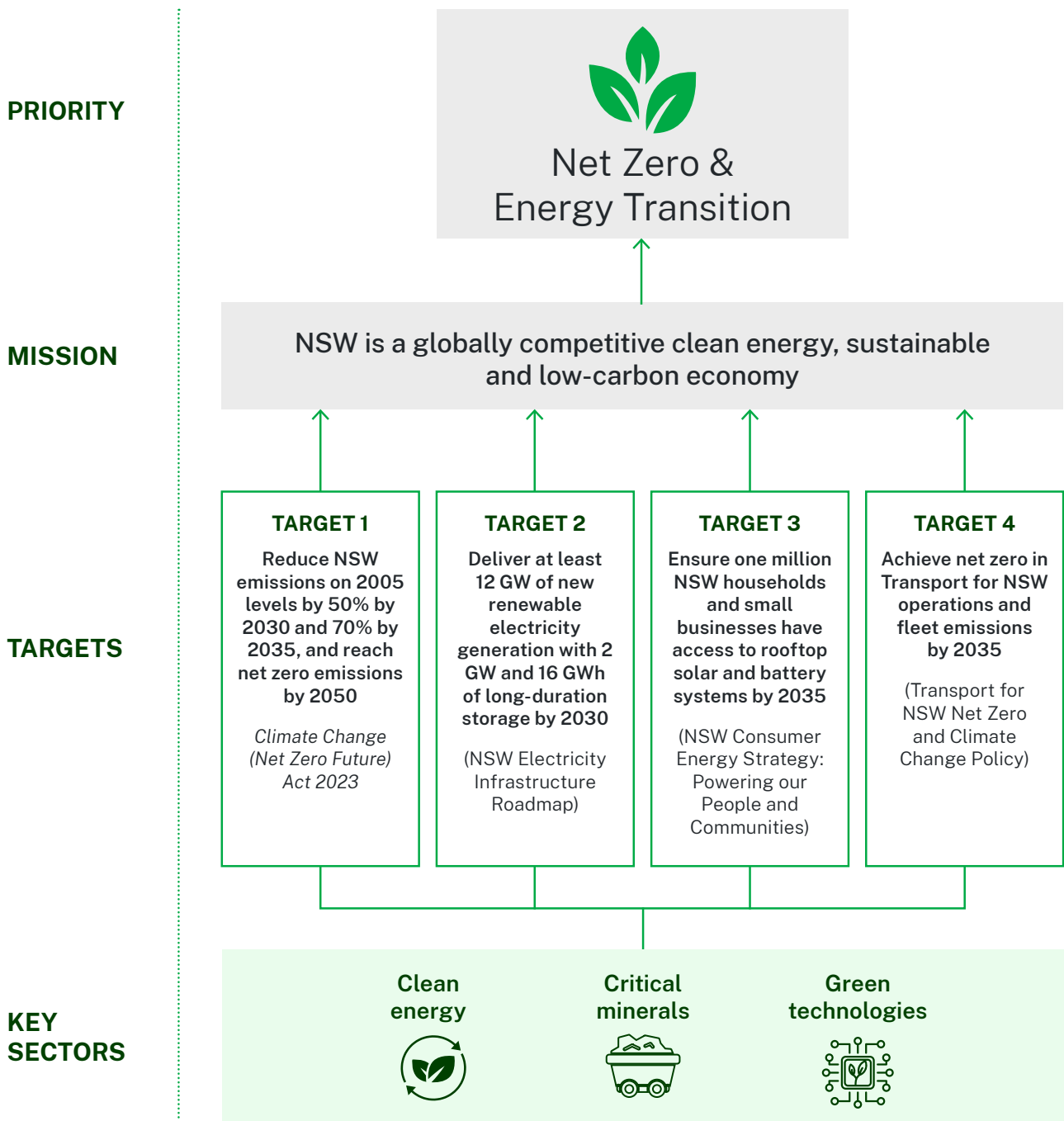


Figure 4: Net Zero & Energy Transition Mission Overview

NSW is a globally competitive clean energy, sustainable and low-carbon economy

NSW has the potential to become a leading force in the global net zero economy by proactively managing the green industrial transformation. There are significant opportunities for the state to leverage its abundant endowments – critical mineral deposits, a skilled workforce and an advanced research and development sector – and its capacity to generate low-cost renewable energy from sunlight and wind. Managing and adapting to the different challenges of net zero will require widespread changes to the economy with new activities being developed and existing industries reshaped. Industry policy also has an important role in facilitating a least-cost climate adaptation and to minimise ‘productivity headwinds’ from a warming climate.

Developing new export markets and boosting the Local Manufacturing Mission will be critical to growing and diversifying the NSW economy, thereby offsetting the economic impacts of declining carbon-intensive industries such as coal and gas extraction. Embracing the transition towards a low-carbon economy is an opportunity for NSW to develop solutions for industries to decarbonise while creating economic growth and jobs. The rapid development and deployment of new climate technologies, both in Australia and overseas, provide opportunities for NSW to capitalise on its competitive advantages and experience in climate technology research,¹⁷ development and commercialisation.¹⁸ Achieving decarbonisation of our existing industrial base requires long-term planning, coordination and collaboration across entire sectors. The NSW Government has worked with industry, experts and regional partners to understand the viable pathways and necessary actions to decarbonise the manufacturing and mining industries in the Hunter and Illawarra regions, while enhancing their competitiveness.

Like decarbonisation, the shift towards a circular economy will contribute to a sustainable economy. The traditional ‘take-make-waste’ linear economy is heavily extractive, resource intensive and contributes to roughly 45% of global greenhouse emissions.¹⁹ Under a circular economy, products will be increasingly reused, repaired and refurbished whenever possible. Waste is also avoided through superior design of materials, products, systems and business models. As a result, circular economy initiatives can help reduce global greenhouse gas emissions by 40% by 2050 when applied to 4 key industrial materials (cement, steel, plastic and aluminium).²⁰

The circular economy represents considerable economic value to NSW. Recent estimates suggest that circular economy initiatives in key sectors such as food, transport and the built environment could be worth \$7.6 billion to NSW’s Gross State Product and 50,000 jobs by 2025 and up to \$69 billion by 2048.²¹

Renewable Energy Zones (REZ)

Regional NSW is well positioned to leverage the new opportunities of net zero. REZs in regional NSW will bring wind and solar power generation into the wider electricity network, where it can be efficiently generated, stored and transmitted across the state.

As the state moves towards net zero, the development and operations of these zones will result in greater energy generation diversity while helping to meet the needs of energy-intensive industries.

17 The biennial NSW Decarbonisation Innovation Study aims to support this by identifying the technological opportunities to reduce emissions while growing the economy, and is integral to the NSW Net Zero Plan Stage 1: 2020-2030. The first study was released in 2020 and led to the establishment of the NSW Decarbonisation Innovation Hub which aims to connect industry, researchers and government to develop and deploy the technologies needed.

18 Managing and adapting to these challenges successfully will require widespread changes to the economy as well as addressing 2 key market failures. The first arises because the damage caused by carbon emissions (negative externality) is not fully priced by the market. The second is that some of the benefits (positive externality) for firms innovating in green technologies will flow to their competitors without due compensation – creating a disincentive to innovate and invest.

19 (Hoyer, 2019)

20 (Ellen MacArthur Foundation, 2021)

21 (NSW Circular, 2020)

The net zero transition will generate different impacts across NSW as the phasing out of coal-based power will have a disproportionate impact on coal-producing regions of NSW. Some of the losses in economic activity, jobs and income in these regions will be offset by progress of the Local Manufacturing Mission, which will spur new economic activities. These regions will also be supported by additional economic and social policies as coordinated by the Future Jobs and Investment Authorities. A long-term complementary aim of supporting renewable energy generation is to put downward pressure on energy costs. This is critical for supporting sustainable growth and development in important industries such as local manufacturing.

Targets for success in Net Zero & Energy Transition

The NSW Government's ambitious targets, focused on emissions reduction and increased supply of renewable energy, provide direction and certainty for the private sector to invest and innovate in NSW. New, innovative solutions based on the research and technologies developed by NSW businesses will drive the reduction in emissions, instead of largely importing the solutions from abroad. Investments in renewable energy are the precondition for NSW to become a renewable energy superpower. This will allow the state to unlock the economic potential that a net zero economy can bring to businesses, through tapping into a more dynamic domestic market and better accessing international markets.²²

Target 1: Reduce NSW emissions on 2005 levels by 50% by 2030 and 70% by 2035, and reach net zero emissions by 2050

Climate Change (Net Zero Future) Act 2023

NSW has legislated a whole-of-government approach to deliver emissions reductions and commitment to effective action on climate change. This requires a 50% emissions reduction on 2005 levels by 2030, a 70% emissions reduction on 2005 levels by 2035 and net zero in emissions by 2050. All NSW communities will benefit from reducing the impacts of climate change, which has led to the higher frequency and severity of extreme weather events such as droughts, floods and bushfires. These events, along with a warmer climate, impact on all industries in the NSW economy including housing, local manufacturing, transport and logistics. Reaching our emissions reduction targets is the first step in realising our net zero goals and unlocking the economic opportunities of this transition.

Target 2: Deliver at least 12 gigawatts (GW) of new renewable electricity generation with 2 GW and 16 gigawatt hours (GWh) of long-duration storage by 2030²³

NSW Electricity Infrastructure Roadmap

The implementation of the NSW Electricity Infrastructure Roadmap (the Roadmap),²⁴ including REZs, will support the generation, storage and transmission of renewable electricity in NSW. Prospective sources of generation include abundant wind and solar resources, and long-duration storage through pumped hydro and batteries. Through these sources, the Roadmap identifies a minimum objective to deliver 12 GW of additional generation capacity with 2 GW and 16 GWh of long-duration storage for energy system security and reliability. This is critical as the state needs to replace 3 out of 4 coal-fired generation plants within the next 10 years.²⁵

22 There is a need for incremental progress towards achieving these targets. Government will help facilitate progress by, for example, publishing an annual scorecard to track achievement against targets.

23 GW refers to the moment-in-time capacity of energy storage, also known as the rate at which a storage system can deliver power. GWh refers to the total energy storage capacity over time, also known as the amount of power that can be delivered by a storage system over a period of time.

24 (NSW Treasury; Office of Energy and Climate Change, 2022)

25 (NSW Government; EnergyCo, n.d.)

The NSW economy and communities must also be positioned to capture the huge opportunities arising from the global growth in low-carbon industries. Modernising our electricity system now is key to setting the economy up to be globally competitive and prosperous over the coming decades.

Target 3: Ensure one million NSW households and small businesses have access to rooftop solar and battery systems by 2035

NSW Consumer Energy Strategy: Powering our People and Communities

Reducing reliance on the electricity grid by increasing the number of households and small businesses with access to rooftop solar and batteries – as well as promoting a more equitable distribution across renters, apartments and rural areas – is critical to a successful energy transition. This target will provide the platform for 3,400 megawatts (MW) of virtual power plant²⁶ participation from NSW households and businesses to actively engage in the energy system. A further goal for this target is that 1.5 million NSW households and small businesses have access to rooftop solar and battery systems providing the platform for 10,000 MW of virtual power plant participation by 2050. The NSW Government has also committed to setting additional household and small business targets to support the uptake of energy efficiency improvements and electrification by 2035 and 2050.

Target 4: Achieve net zero in Transport for NSW operational and fleet emissions by 2035

Transport for NSW Net Zero and Climate Change Policy

Transport emissions are currently the second largest component of NSW greenhouse gas emissions.²⁷ A collaborative effort between government and industry is required to reduce emissions and minimise the impact of the transition away from fossil fuels.

The NSW Government will lead the way by procuring 100% renewable energy for all electricity used to power Transport for NSW public transport and fleet used for Transport for NSW department operations. This will allow for innovations that will improve energy efficiency and reduce energy demands over the next decade.

Zero Emission Buses is a multi-billion-dollar program to transition the state's 8,000 plus diesel and natural gas public transport buses to zero emissions technology. Under the Zero Emission Buses Transition Plan, the transition will be complete in Greater Sydney by 2035, in outer metropolitan regions by 2040 and in regional NSW by 2047.

²⁶ Virtual power plants are networks of energy saving technologies that can include solar, batteries and other devices that can be remotely controlled to use or release power at certain times. They bring together small amounts of energy generated across individual solar or battery systems to create large pools which can then be used to provide power for others when demand is high.

²⁷ (NSW Environment Protection Authority, 2021)



Worker measuring the temperature near solar panels
Image credit: NSW Department of Planning and Environment

The key sectors that will drive success in Net Zero & Energy Transition

Clean energy – Industries which are involved in the production, storage and distribution of clean energy

A reliable and affordable clean energy sector is crucial to transitioning the energy system and progressing NSW to net zero. The clean energy sector contributes towards the 4 targets by increasing renewable energy production, uptake and usage. Renewable energy generation has begun to transform the energy system, with a tripling of the share of wind and solar in NSW's electricity generation pool over the past 5 years.²⁸ Clean energy is a fundamental building block in managing decarbonisation of the NSW economy and building a competitive economic future that incorporates emerging industries.

The NSW Electricity Infrastructure Roadmap is delivering the infrastructure required to move away from fossil fuel usage and tap into NSW's abundant renewable energy resources, supporting the achievement of the Net Zero & Energy Transition Mission. Many of the opportunities and supporting industries arising from this sector – such as renewable and low-carbon fuels²⁹ and green hydrogen – are in regional NSW.

Renewable fuels represent an opportunity for NSW to reduce emissions in hard-to-abate industries, such as in freight, contribute to fuel security and grow regional NSW economies. NSW is developing a commercial green hydrogen³⁰ industry that will produce low-emissions products and fuels for domestic and trade purposes.

Critical minerals – Industries involved in the extraction, processing, manufacturing and distribution of critical minerals

Critical minerals are essential components of clean energy and low-carbon technologies such as wind turbines, solar panels and electric vehicles. NSW is well-positioned with 21 of the 31 nationally identified critical minerals³¹ to meet this growing demand. Critical minerals and high-tech metals are key to NSW's role in the global energy transition and key to developing the local manufacturing industry. High-tech metals are also essential for downstream uses not just in the energy transition but defence and aerospace industries.

Critical Minerals and High-Tech Metals Strategy 2024–35

To provide the industry with clear strategic direction and support growth along the critical minerals and high-tech metals supply chain, the NSW Government has released a Critical Minerals and High-Tech Metals Strategy 2024–35.

This strategy outlines NSW's long-term vision to lead in critical minerals and high-tech metals, driving economic prosperity through exploration, mining, processing, recycling and advanced manufacturing. It will position the government to leverage opportunities from global decarbonisation, helping the industry meet demand, secure a low-emissions future and achieve the Net Zero & Energy Transition and Local Manufacturing missions.

As part of the Critical Minerals Strategy, the NSW Government will defer royalties for 5 years for critical minerals projects that commence production from 1 July 2025 to 30 June 2030. This will place NSW in the best position to attract investment as the market navigates challenges, and the demand for critical minerals and high-tech metals grows.

28 (NSW Government; NSW Climate and Energy Action, n.d.)

29 Low-carbon fuels will be critical for the freight industry to ensure the sector moves towards net zero while also continuing to support all 3 missions.

30 Green hydrogen is hydrogen produced using renewable energy sources.

31 (NSW Government, 2024a)

The International Energy Agency estimates that over the next 20 years, the world will need 6 times the amount of critical minerals currently mined to reach global net zero carbon emissions.³² The market for key energy transition minerals has doubled over the past 5 years, reaching approximately US\$325 billion (AUD\$488 billion) in 2023.³³ This reflects the importance of this sector as inputs for transitioning the energy system and achieving net zero.

Green technologies – Industries which encompass a range of technologies and innovations that use digital systems and data to support decarbonisation efforts across the economy

Advancements and adoption of green technologies help reduce carbon emissions of carbon-intensive activities and processes. Examples of green technologies are:

- smart grids that help monitor, and ultimately decrease, energy consumption³⁴
- Internet of Things (IoT) devices such as sensors to monitor crops and track livestock on farms³⁵
- artificial intelligence that helps businesses derive insights from large, complex data stemming from IoT initiatives.

Achieving net zero will require innovative and long-term solutions that minimise the impact to the environment from manufacturing and operating these technologies. Green technologies have replaced higher carbon-emitting activities or help reduce emissions for ongoing carbon-emitting activities. As such, this sector contributes to improving energy efficiency by promoting new digital products and decarbonisation pathways and facilitating the adoption of renewable energy sources.

NSW currently employs decarbonisation strategies and other initiatives to support the research, development and uptake of green technologies. For example, Clean Technology Innovation is a key program under the \$275 million Net Zero Manufacturing Initiative, which is providing support to accelerate the research, development and commercialisation of emerging clean technologies.

32 (International Energy Agency, 2021)

33 (International Energy Agency, 2024)

34 (IBM, n.d.)

35 (IBM, 2023)



The CSR Cemintel Manufacturing Facility at Wetherill Park, NSW
Image credit: NSW Department of Climate Change, Energy, the Environment and Water

Local Manufacturing

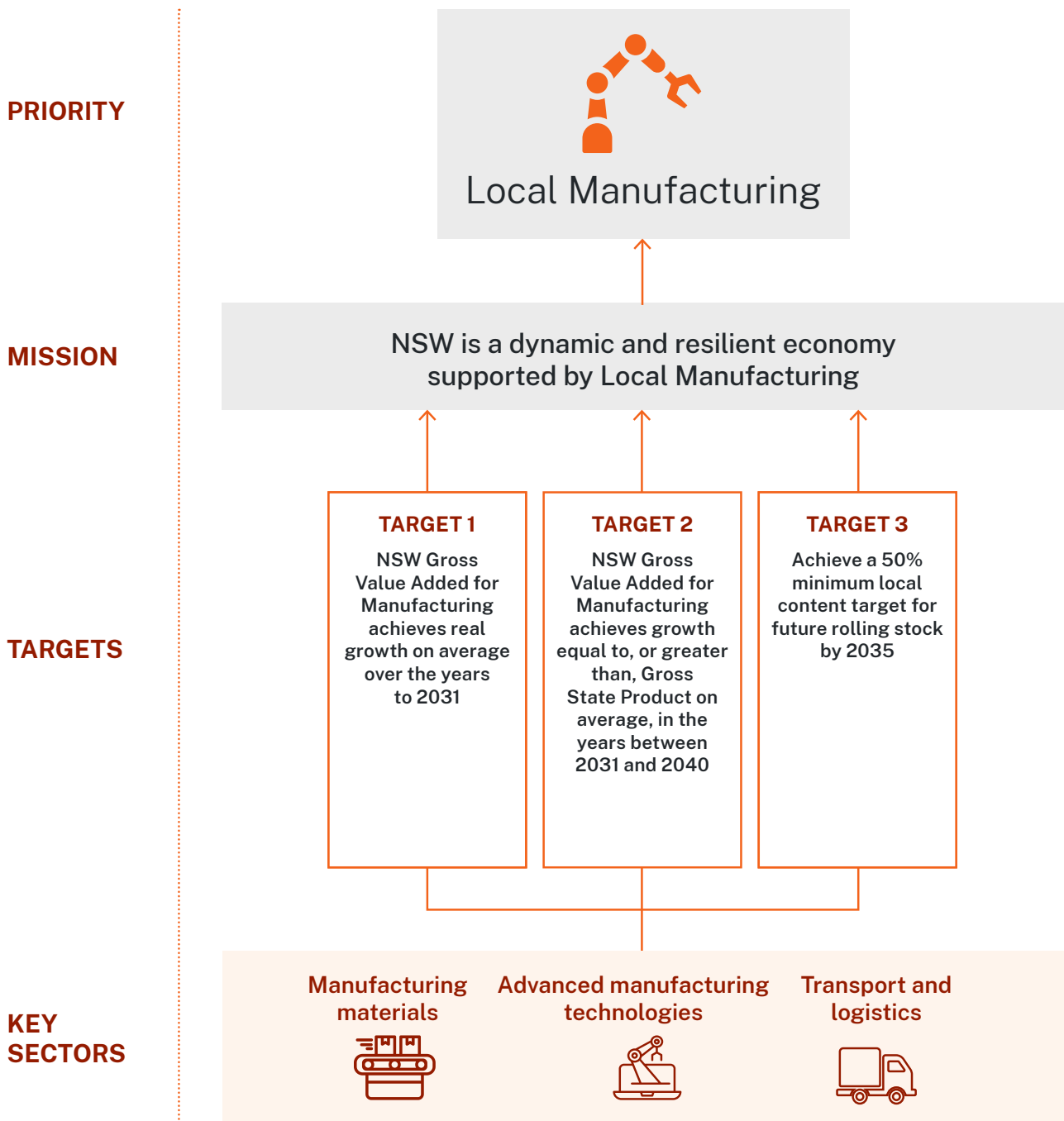


Figure 5: Local Manufacturing Mission Overview

NSW is a dynamic and resilient economy supported by Local Manufacturing

The Local Manufacturing Mission promotes a dynamic, complex, sustainable and diversified economy, that is driven by innovation, productivity, robust supply chains and sovereign capability. A revival of local manufacturing is on the policy agenda in a number of countries due to its role in increasing economic resilience.

NSW, just like Australia, has a narrow industrial structure as evidenced in economic complexity rankings.³⁶ A stronger local manufacturing industry will contribute to greater diversification of the NSW economy and help compensate for the anticipated decline in fossil fuel exports.

In recent decades, manufacturing in NSW has declined as a share of Gross State Product.³⁷ Extensive industry consultation has demonstrated that NSW manufacturers face significant challenges in the form of a small domestic market, high labour costs, high input and energy costs, and increasing global competition. Decarbonising our existing manufacturing base requires long-term planning, coordination and collaboration. In light of these challenges, growing the local manufacturing industry will require NSW to leverage its comparative advantages including its skilled workforce, infrastructure and abundant resources.

Why is manufacturing important to the NSW economy?

Manufacturing in NSW employs around 288,000 people and generates approximately \$135.6 billion in value added annually.³⁸ The local manufacturing industry is of strategic importance to the NSW economy because of its contribution to:

- **Innovation and productivity:** Innovation typically leads to higher productivity, spillover benefits to other industries and contributes to economic growth. Productivity is the most important determinant of economic prosperity in the long term. Manufacturing invests heavily in research and development and remains the most innovation-intensive industry of the economy. Around 5% of manufacturing output is reinvested to support innovation, which is higher than any other industry and 4 times the economy wide average.³⁹
- **Exports:** Industries with greater access to global markets tend to invest more in technology and capital, which increases the productivity of workers and contributes to higher wages.⁴⁰ Growing exports from the local manufacturing industry will be critical to offsetting the expected reduction in future coal exports, while growing higher-value industries with higher paying jobs.
- **Local supply chains:** A robust local manufacturing industry influences the broader economy by strengthening local supply chains through efficiencies and economies of scale.
- **Sovereign capability:** A robust local manufacturing industry supports economic resilience by improving sovereign capability. Growing the local manufacturing industry can contribute to self-sufficiency by reducing the state's reliance on imported goods and reducing exposure to global supply chain disruptions, which occurred during the COVID-19 pandemic.

Success in the Local Manufacturing Mission will be achieved by focusing on innovative and high-value-adding activities that use new technologies and business models which will also be vital to the success of the Housing and Net Zero & Energy Transition missions. This includes activities such as renewable and low-carbon manufacturing, which is being supported through the Net Zero Manufacturing Initiative. The skilled workforce, infrastructure and abundant resources in regional NSW, make NSW a prime location for a robust local manufacturing industry.

36 NSW was ranked 54th in 2021 for economic complexity, which assesses countries' productive knowledge through an economic complexity index (Gamble, 2023).

37 The gross value add of manufacturing to the NSW economy is around 5% (Australian Bureau of Statistics, 2023a) (Australian Bureau of Statistics, 2023b).

38 (Investment NSW, 2024)

39 (Stanford, 2016)

40 (Riker, 2010)

Targets for success in Local Manufacturing

Manufacturing businesses in NSW are expected to benefit from the ambitious targets set in all 3 supply chains, new industries and new markets for NSW businesses.

Target 1: NSW Gross Value Added for Manufacturing achieves real growth on average over the years to 2031⁴¹

NSW manufacturing output is lower today than it was 25 years ago. In the decade between 2010–11 and 2019–20, manufacturing declined in 8 out of 10 years.⁴² Accompanying this decline has been thousands of jobs losses in the industry, including many well-paying jobs. Although manufacturing has experienced intermittent growth in recent years, given the strategic importance of the industry to the local economy, it is critical to reinforce this trend through growth in emerging industries and decarbonisation of existing industries. This will set a strong foundation for a dynamic, sustainable, and diversified economy.

Target 2: NSW Gross Value Added for Manufacturing achieves growth equal to, or greater than, Gross State Product on average, in the years between 2031 and 2040

A stronger, more resilient local manufacturing industry will be key to offsetting the economic impacts of declining carbon-intensive industries, responding to economic challenges and capitalising on the opportunities arising from global trends. The opportunity for NSW to become a superpower in a decarbonised world is based on areas of potential comparative advantage, such as the abundance of cheap and clean energy. Increasing the use of renewable energy sources of solar and wind will not only contribute to the Net Zero & Energy Transition Mission but is also a necessary condition for a stronger local manufacturing industry. NSW's competitiveness in manufacturing rests on the wide availability of affordable, clean and reliable energy combined with NSW's mineral deposits.

Target 3: Achieve a 50% minimum local content target for future rolling stock by 2035

Local content targets can provide the local manufacturing industry with a sustainable pipeline of investment when applied to targeted industries to minimise market distortions. This will help drive local demand and support the establishment of manufacturing facilities, increasing local employment. It also presents opportunities for developing new capabilities in advanced manufacturing methods and enhancing productivity across the whole supply chain. Growing and diversifying the local manufacturing industry can lead to benefits spilling over to other parts of the economy, including activities along the value chain.

The NSW Government has committed to commence procuring the replacement of the Tangara fleet of suburban passenger trains by March 2027, with a 50% minimum local content target to be included in the procurement contract.

The replacement fleet will be the first in a long-term pipeline of locally built trains that extends out to the 2050s. Through the long-term fleet pipeline, the NSW Government will leave a strong community legacy of secure and skilled rail manufacturing jobs and apprenticeships in a revitalised NSW and Australian rail manufacturing industry.

41 The target is measured in 'real terms', meaning the value is adjusted for inflation and purchasing power, and reflects how the economy grows or contracts over time.

42 (Australian Bureau of Statistics, 2023b)

The key sectors that will drive success in Local Manufacturing

Manufacturing materials – Green metal industries of emerging comparative advantage

In a net zero world, a robust local manufacturing industry is a green manufacturing industry, where goods are produced by low-emission technologies, made up of green inputs (such as green steel) and powered by low-cost renewable energy. This sector comprises the building blocks of manufactured goods, including those in the renewable energy supply chain.

The NSW local manufacturing industry can benefit significantly from the global transition to net zero. This is due to NSW's significant endowments in natural resources, including critical minerals and abundant renewable energy sources (such as solar and wind). In this respect, the Local Manufacturing and the Net Zero & Energy Transition missions are synergetic, allowing for the integration of economic resilience, diversification and the energy transition.

With the green industrial transformation taking place across the world, industries that are needed for addressing climate change will emerge and quickly scale up. Domestic and global demand for goods such as batteries, solar panels and wind turbines is expected to increase exponentially as well as demand for input products like green steel and clean aluminium.

The market for green metals is new and uncertain as new technologies emerge. While the economic opportunities for NSW are potentially large, they will not be immediate. NSW will coordinate with the Australian Government and work with industry to take advantage of these opportunities.

Advanced manufacturing technologies – Industries which encompass technologies that assist in manufacturing processes and improve productivity

Advanced manufacturing technologies provide new opportunities for NSW to be globally competitive in complex and high-value products. New digital technologies such as big data, artificial intelligence, virtual reality and robotics are dramatically changing manufacturing processes from design and prototyping to the actual fabrication of products. Likewise, other cutting-edge technologies through advanced and smart materials are also transforming the outlook of manufacturing globally.

Adoption of existing and emerging technologies can transform how NSW manufacturers add-value through more innovative products and processes in more traditional manufacturing industries as well as new emerging industries. For example, the state's manufacturing facilities, such as the Advanced Manufacturing Readiness Facility (AMRF),⁴³ offers capabilities in composites, additive manufacturing, automation and digitisation, and semiconductor technologies. This sector offers improvements to the productivity and capabilities of NSW manufacturers, reduces production costs, and enables more efficient attainment of economies of scale, contributing to the achievement of each of the targets in the Local Manufacturing Mission.

By leveraging its strong research and development industry, NSW can develop new technologies domestically, improve supply chain resilience and diversify NSW's economic base. For example, the University of Wollongong's Advanced Manufacturing Technologies carries out research to improve manufactured products and processes.⁴⁴

NSW has an advanced, interconnected ecosystem supporting the development of next generation therapeutics. This includes gene and cell therapies, RNA therapies, immunotherapies, bacteriophage therapies and plasmid-based therapies.

⁴³ AMRF can play a role in supporting wider advanced manufacturing opportunities across the state, including translating early-stage development into production.

⁴⁴ (University of Wollongong Australia, n.d.)



Artist's impression of a new RNA research and manufacturing facility under construction at Macquarie University in Macquarie Park, NSW

Transport and logistics – The movement, storage, and distribution of goods, people, and services across various networks

Transport and (freight) logistic chains are critical components of the business environment and the local manufacturing industry of the future. Supporting the mission will require accessible, reliable, connected transport systems and well-developed logistics capabilities in addition to access to industrial land for freight use. Transport networks connect labour, suppliers and markets, while logistics provides the foundation for planning and moving products across the manufacturing supply chain. Strong transport networks and efficient freight logistics processes are important inputs to manufacturing activity by lowering the cost of doing business while increasing productivity.

Infrastructure networks and outputs of this sector are critical for local manufacturers to be globally competitive and expand their export potential. This helps to improve the state's economic complexity, connecting and boosting regional economies and cultivating progress to achieving the Local Manufacturing Mission. Spillovers from improving efficiency, productivity and providing infrastructure in this sector, will provide benefits for the Housing and Net Zero & Energy Transition missions, by ensuring efficient movement of goods needed for construction and production processes.

NSW's ports are critical components in the state's logistics networks for trade and manufacturing activity. Port Botany and Port Kembla currently contribute approximately \$10.7 billion⁴⁵ and \$2.9 billion⁴⁶ to NSW's Gross State Product respectively. The Port of Newcastle contributes \$1.5 billion to the state's economy⁴⁷ and will continue developing an intermodal container handling facility while laying the foundations for a future deepwater container terminal.⁴⁸ Port access and capacity will be critical as manufacturers look to expand their exports and grow the local manufacturing industry.

45 (NSW Ports, n.d.-a)

46 (NSW Ports, n.d.-b)

47 (Kemp & Chen, 2020)

48 (Port of Newcastle, 2019)

Western Sydney International (Nancy-Bird Walton) Airport (WSI) will play an important role in supporting manufacturing activity and is strategically located near Sydney’s major transport routes, logistics centres and markets. To increase supply chain efficiencies, the cargo precinct at WSI has been designed to facilitate the movement of around 220,000 tonnes of cargo in the first stage alone.⁴⁹

The NSW Freight Policy Reform Program is also building on the state’s existing endowments to deliver safe, sustainable and productive movement of freight with seamless connections across rail and road networks, including better connectivity between port, rail and heavy vehicles.⁵⁰



Tugboats guiding a ship through the Port of Newcastle
Image credit: Transport for NSW

49 (Western Sydney Airport, 2021)

50 (NSW Government; Transport for NSW, 2024)

Pathways to success: Direct state levers and partnerships

Direct state levers

Direct state levers represent the tools through which the NSW Government can directly affect change to meet mission targets and deliver public benefits.

The NSW Government will utilise these levers in the areas of **government regulation and procurement** and **planning, strategic land use and infrastructure** to directly effect change to meet missions.

Government regulation and procurement

Strategic and responsible public procurement spending can be an effective tool to support the missions. Public procurement can stimulate demand for specific goods or services, supporting the establishment or scaling up of emerging markets. In the 2023–24 financial year, the NSW Government spent approximately \$42.5 billion on procuring goods, services and infrastructure development. By implementing changes to its procurement policies – such as ‘If Not, Why Not’⁵¹ – the NSW Government is committed to leveraging procurement dollars to support local industries, small businesses and the missions. For example, the NSW Jobs First Commission will oversee the implementation and enforcement of the government’s election commitment to apply a minimum 30% weighting to NSW Government tenders to capture local content, job creation, small business and ethical supply chains.

Infrastructure-related procurement forms a significant share of government procurement. There is an opportunity to support decarbonisation by promoting locally manufactured low-carbon materials. The NSW Government’s Decarbonising Infrastructure Delivery Policy sets the mandate to pursue decarbonisation on infrastructure projects, including through government procurement.

The NSW Renewable Energy Sector Board’s Plan

The NSW Renewable Energy Sector Board’s Plan sets out recommendations and guidance to maximise use of local content in generation, storage and network infrastructure projects under the NSW Electricity Infrastructure Roadmap, supporting the achievement of the Net Zero & Energy Transition and Local Manufacturing missions.

The plan recommends actions to enhance the growth and competitiveness of local industries in the renewable energy industry, focusing on long-term planning, supply chain development, and skills training, with benefits for workers and communities.

⁵¹ NSW Government agencies must embed upfront local market testing in procurement plans for projects or contracts with a budget of \$7.5 million or more.

The NSW Government is also utilising procurement to invest in upgrading the Tangara rail fleet. This \$447 million investment in the existing fleet is an important first step to revitalising the NSW rolling stock manufacturing industry and provides a foundation for action in the Local Manufacturing Mission through the transport and logistics key sector.⁵² A strategic and targeted approach to procurement of the Tangara rail fleet will provide the certainty for NSW manufacturers and supporting industries to invest and scale up to meet demand in this area efficiently. Other examples of strategic public procurement include switching current government fleet passenger vehicles with electric vehicles, the Zero Emission Buses program and the Net Zero Manufacturing Initiative.

Sound, harmonised regulation⁵³ is critical for economic dynamism and competition. Over-regulation can cause market distortions, increase business costs, deter investment and stifle productivity. The NSW Government will strike the right balance between regulation that supports the missions but also limit over-regulation which can be counterproductive.

Planning, strategic land use and infrastructure

Infrastructure investment not only has a strong impact on economic growth but will be essential to achieving the missions. Urban placemaking and transport infrastructure (such as roads, railways and ports), alongside renewable and social infrastructure (such as electricity grids and schools), will significantly contribute to achieving net zero, boosting housing supply and growing the local manufacturing industry.⁵⁴

Having an integrated and collaborative whole-of-government approach, and ensuring appropriate planning resources are available at state and local government levels, can help increase the supply of housing and address land use conflict. Research suggests that existing local planning and zoning regulations have restricted housing supply.⁵⁵ Examples of such restrictions include minimum lot sizes, maximum building heights and planning approval processes. Activating strategic locations such as Special Activation Precincts (SAPs) are an example of planning and investment coming together to deliver industrial and commercial infrastructure in 6 dedicated areas of regional NSW. The services allow local businesses to establish and grow, supporting the local economy and jobs. This co-location will enhance benefits from shared services and resources, including labour, water and energy infrastructure, transport, freight and supply chains. SAPs also limit impacts from, and enable efficient management of, negative externalities that may arise for the concentration of industrial activity, such as noise and congestion.

NSW Transport Oriented Development (TOD) Program

The NSW Government has mandated new planning and zoning guidelines under the TOD program, including active transportation infrastructure. The increase in housing should contribute towards affordability, labour mobility and productivity, as essential workers can live closer to their workplace and major infrastructure.

Improvements to communication infrastructure further contribute to productivity improvements, especially for regional communities and businesses with lower levels of connectivity.

52 (NSW Government, 2024d)

53 Harmonisation of standards will be an important part of harmonised regulation.

54 Under the Net Zero Plan, the NSW Government will accelerate the delivery of its REZs among other renewable infrastructure such as electric vehicle infrastructure. Regarding housing, the NSW Government's Housing Acceleration Fund, as well as various other programs, focus on delivering critical infrastructure (e.g. water, drainage, electricity, technology and community infrastructure) to bring forward housing development.

55 (NSW Productivity and Equality Commission, 2024).

Partnerships

Partnerships cover a portfolio of possible activities where all levels of government, industry, universities, specialists and communities can mobilise to solve challenges, seize opportunities and meet mission targets.

The NSW Government will partner with other levels of government, industry, universities, specialists and communities to deliver on **skills and education, innovation and technology, and trade and investment** to support the missions. The NSW Government has several policy levers to promote investment and coordinate action across different stakeholders.

Skills and education

Skills and education partnerships support the missions by seeking to develop a highly skilled and adaptable workforce that is responsive to the needs of industry. Currently, there is a skills shortage across NSW, particularly in industries such as construction, health, education, information technology and agriculture. A tight labour market, the growing importance of disruptive technologies requiring reskilling and upskilling, the transition to renewables and an ageing population, have contributed to this skills shortage.

The NSW Skills Plan 2024–28 sets out the NSW Government’s strategy for broadening and improving the state’s skills base. The plan will be built around outcomes-driven funding, a performant Vocational Education and Training (VET) system with a central place for TAFE, and region-based skills planning. The NSW Skills Plan 2024–28 will support the missions by addressing skills shortages in industries such as digital, renewable energy, housing and advanced manufacturing. It will also minimise the impact of competition for overlapping skills.

In addition, skills and education partnerships will foster close collaboration between government, industry, and education and training institutions, from early childhood education and care (ECEC)⁵⁶ to higher education programs. Partnerships in this area will work to improve the skills base across NSW and strengthen the connection between industries and education and training institutions, to better match skills supply with demand. An example is the NSW Higher Education Strategy 2021-2025 which represents a commitment of intent between the NSW Government and the university sector to strengthen collaboration and the impact of higher education in NSW. Initiatives such as the NSW Hydrogen Centre of Excellence aim to provide the skills and training to support the energy transition, while the NSW Digital Skills and Workforce Compact brings a collaborative, integrated approach to address the expected shortage of 85,000 digital workers by 2030 that will contribute to the success of the missions.

TAFE NSW

The NSW Government is investing a record \$2.5 billion into TAFE NSW. The investment includes attracting and retaining TAFE NSW teachers, upgrading facilities and equipment, and extending subsidised apprenticeships and traineeships.

The large investment is expected to improve the quality of education, while also increasing the number of apprentices and trainees. This will utilise TAFE (including the Manufacturing Centres of Excellence) and vocational education pathways to support skills training in the skills needed to meet the demands of key sectors.

⁵⁶ The NSW Government is investing in ECEC and is committed to boosting access to ECEC for every child in NSW. Working families across NSW will benefit from better access, including longer hours, weekend operating hours and additional places. This will support increased workforce participation for parents, especially women, in the mission industries.

Specific actions in regional NSW focus on helping regional businesses gain access to skilled workers while also helping individuals access VET courses. The Apprenticeship and Traineeship Roadmap 2024-2026 exemplifies this through a future-focused, agile approach to apprenticeships and traineeships that better respond to the differing needs of industry, employers and learners. The NSW Government has also implemented various changes around its skilled migration program to address the regional skills shortage and better align with federal migration policy standards. Alongside all states and territories, NSW is developing a jurisdictional migration plan to bolster domestic workforce and skill needs in priority industries.

Innovation and technology

Innovation and technology partnerships seek to establish an environment that promotes innovation alongside the adoption of cutting-edge technology and business processes. This will require better collaboration between industry, investors and entrepreneurs to drive innovation in order to deliver mission success.

This partnership will play a critical role in supporting the success of the missions by fostering innovative solutions while also lifting productivity growth. The Australian Government's Productivity Commission has estimated that only one to two per cent of firms are involved in 'new-to-the-world' innovation.⁵⁷ More critically, most Australian firms are well behind the global technology frontier and are now taking longer to adopt new technologies and business practices.⁵⁸

The NSW 20-Year R&D Roadmap provides a way forward for government, industry and research organisations to support research and development investment and activities.⁵⁹ An additional initiative is the Tech Central precinct which serves as Australia's largest technology and innovation hub, the global headquarters of several major Australian technology businesses, and a central point for startups and scaleups focused on innovation. Accompanied by programs such as the Minimum Viable Product Ventures Program, the NSW Government aims to boost innovation in support of the missions.

The NSW Government is developing the NSW Innovation Blueprint which aims to make NSW a global leader in innovation and talent – fostering economic and social opportunities and addressing the state's key challenges. The Blueprint builds on NSW's history of supporting innovation. It provides a long-term vision and identifies programs and services, supporting innovative businesses to commercialise cutting-edge products and services, and create more high-value jobs.

Minimum Viable Product (MVP) Ventures Program

The MVP Ventures Program supports startups and innovative Small and Medium Enterprises (SMEs) in the product lifecycle between early-stage research and mature investment opportunities, through grants to drive the commercialisation of highly innovative and new products.

The objective of the program is to:

- support businesses throughout the pre-market development and commercialisation pathway of their innovative products in NSW
- attract and retain commercialisation activities in NSW
- target new products within Technology Readiness Level (TRL) 3 to 9 to help them move along the TRL scale and enable them to attract large-scale private investment.

57 (Australian Government; Productivity Commission, 2022)

58 (Australian Government; Productivity Commission, 2023)

59 The roadmap identifies similar overarching opportunities and challenges for the NSW economy as the NSW Industry Policy. These include the Net Zero & Energy Transition and Local Manufacturing missions, and emphasise the importance of innovation and investment in meeting these challenges.

Trade and investment

The trade and investment partnerships seek to attract investment, facilitate trade, and support export diversification across markets and products to support the missions and improve the state's economic complexity, resilience, and productivity.

Currently, the state's exports are highly concentrated in a relatively small number of products and markets. Increasing the diversity of products and markets improves economic complexity and resilience. Building greater export capability further expands the possibility of growth, especially for local SMEs. This is achieved through providing exposure to new markets and new ideas, which is key to driving productivity.

Australian exporters generate 63% more value-add than non-exporting companies, pay 43% higher wages than non-exporting companies and support 1 in 5 jobs in Australia (and 1 in 4 jobs regionally). Close to 98% of all business in NSW are SMEs but larger enterprises typically account for the majority of exports (over 90% in Australia). A significant opportunity exists for the NSW Government to support SMEs to take advantage of export opportunities, create jobs, increase wages and generate greater value to the NSW economy.

NSW is well-positioned to take advantage of growing demand across the globe, particularly in the Indo-Pacific region. Further benefits for all of NSW, including regional communities, can be realised through improving the trade and investment environment to attract investment in existing and emerging industries. The NSW Government promotes trade by helping businesses access export markets and providing various types of support, from market intelligence briefings to logistical support for potential investors. The NSW Government is developing a NSW Trade and Investment Strategy which will focus on expanding investment and trade by leveraging the state's comparative advantages and seizing emerging opportunities to maximise economic growth and productivity in NSW.

Regional Development Trust and Future Jobs and Investment Authorities

The Regional Development Trust is investing in economic development and strategic industries that are important to regional areas.

Additionally, the NSW Government has committed to establishing the Future Jobs and Investment Authorities to help deliver investment in new industries and support job creation in coal-reliant regions. This will help ensure the best possible outcomes for these communities.



Gantry cranes loading containers onto a ship at Port Botany
Image credit: Transport for NSW



Aerial view of Wellington, NSW
Image credit: NSW Department of Climate
Change, Energy, the Environment and Water

Implementing the NSW Industry Policy

A successful and durable NSW Industry Policy requires ongoing collaboration across governments and the private sector with a focus on developing an environment that will encourage businesses to invest, innovate and thrive.

It requires adhering to principles that promote a disciplined approach to policy development and committing to robust evaluation to both track the progress and impact of relevant programs and inform the development of new policies and programs.

There are inherent risks associated with developing and implementing industry policies, as resources are reallocated within the economy in response to government signals and incentives. It is critical to ensure that the policy is implemented in such a way that resources are efficiently allocated to supporting the achievement of the missions.

The recognised risks associated with industry policies can include rent-seeking behaviour and market distortions that crowd out private investment. Strong institutional capacity in NSW, including transparent governance, will be essential for a successful and effective NSW Industry Policy with broad public support.

Interactions with other industries in NSW

The key sectors identified are those anticipated to be most critical to achieving the NSW Industry Policy Missions. They are expected to have important linkages and effects on other NSW industries' stakeholders undertaking activity within the missions. For example, several green technologies may potentially be used in other industries, helping them in their transition to net zero.

However, the underlying premise of the NSW Industry Policy is that all industries can and need to contribute to the missions. The NSW Industry Policy – and associated policies – aims to promote the business conditions for all NSW industries in all locations, metropolitan as well as regional, to grow and take advantage of global megatrends.

In addition, several industries that account for a significant part of the economic activity and jobs in NSW are not included in the list of key sectors. These industries – such as food and agriculture, defence and aerospace, life sciences and healthcare, and the visitor economy – are important to the NSW economy, especially regionally, and facilitate diverse economic activity across the state. Activities from these industries will support growth across the economy while progressing the achievement of the missions.

For instance, advancements in defence and aerospace manufacturing will significantly contribute to the local manufacturing industry, spilling productivity benefits over to other industries. As a significant contributor to greenhouse gas emissions and as the largest manager of natural resources in the state, the food and agriculture industry will play a key role in the Net Zero & Energy Transition Mission. It is also the primary source of food, fibre, carbon sequestration and feedstock to produce low-carbon liquid fuel, other bio-energies and biochar, while also providing outputs for the Local Manufacturing Mission. These industries will continue to be vital to the success of the NSW economy and supported by NSW Government.



Improving economic outcomes for the Aboriginal community will be fundamental to NSW Industry Policy

NSW Industry Policy will support the achievement of Priority Reform 5 (economic prosperity, business growth and employment) and Socio-Economic Outcome 8 (strong economic participation and development of people and their communities) under the Closing the Gap Agreement by addressing key societal challenges while achieving economic prosperity for NSW. Development of key sectors will be important to achieving all 3 missions and present opportunities for Aboriginal businesses and communities.

Continued growth in the Aboriginal business environment will be key to achieving long-term economic prosperity for Aboriginal communities while generating direct economic benefits to business owners, as well as spillover benefits from business activities to local communities and NSW more broadly.⁶⁰ NSW is home to approximately 40% of all self-identified Aboriginal sole traders and over 50% of self-identified partnerships, the highest concentration of self-identified Aboriginal sole traders and partnerships in Australia.⁶¹

Growth in the Aboriginal business environment will generate further opportunity to increase skills and economic participation within NSW Aboriginal communities. This is supported by government action under Closing the Gap Priority Reform 5 and increased opportunities from the NSW Aboriginal Procurement Policy.

60 (Evans et al., 2024, p.10)

61 (Evans et al., 2024, p. 12)

Transparent governance

Transparent governance promotes public confidence in government and its policies through greater oversight, accountability and publicly reporting expenditure. Key principles underpinning this policy and policies supporting the achievement of the missions are:

- clear and specific policy objectives
- evidence of market failures or other public benefit rationale for government action
- effective policy design and administration to support implementation
- evidence of intervention benefits outweighing costs for efficient allocation of scarce resources.

Policy alignment

Industry policy intersects with a range of economic, environmental and social policies. Ongoing coordination across all levels of government is important in ensuring alignment with other NSW Government policies and related Australian Government initiatives to avoid unintended consequences or duplication.

The NSW Industry Policy has been developed to align with the most relevant wellbeing themes identified in the *NSW Performance and Wellbeing Framework – Skilled, Prosperous, Housed, Secure, Connected and Sustainable*.⁶² The NSW Industry Policy is strongly aligned to priorities outlined in national policies and funding such as the National Reconstruction Fund (NRF) and the Australian Government’s Future Made in Australia (FMIA) plan. The NRF provides financing for projects that transform and diversify the economy, while FMIA encourages and facilitates private sector investment to make structural shifts in the economy towards priority industries. FMIA also targets opportunities intersecting industry, energy, resources and skills.

FMIA recognises that the global transition to net zero and the changing geostrategic landscape present a significant opportunity for Australia. FMIA is significant for NSW as it provides opportunity to leverage Australian Government support, allowing more investment to be made in NSW to support mission success. The Australian Government will invest \$22.7 billion nationally in activities aligned with NSW Industry Policy missions, key sectors, levers and partnerships. To maximise impact, NSW Industry Policy and other supporting activity will complement Australian Government support where possible.

Other Australian states have also launched ambitious industry policies⁶³ and coordination is necessary to leverage each state’s unique advantages to prevent inefficient, welfare lowering policy competition. Collaborative actions can increase the efficiency and scale of industry policy interventions while reducing complexity and duplication. In particular, the 650,000 NSW residents living, working and studying near state borders will benefit from a better policy alignment between states. This will help reduce barriers to accessing cross-border opportunities, such as access to education. NSW has Memorandums of Understanding in place with the ACT and Queensland governments focused on skills and education, and is working with the Victorian Government to form further agreements. Increasing policy and program alignment across jurisdictions increases workforce availability for businesses and skills and educational opportunities.

62 The NSW Performance and Wellbeing Framework is currently being developed and will be introduced in the 2025-26 Budget.

63 Victoria: Made in Victoria 2030 - Manufacturing Statement: Driving jobs and growth; South Australia: South Australian Economic Statement: smart, sustainable and inclusive; Queensland: Queensland new-industry development strategy: A strategy for new industry in a decarbonising global economy.

Monitoring and evaluation

Achieving the missions adopted in the NSW Industry Policy requires sustained commitment from across the NSW Government to monitor and evaluate progress to ensure actions are having the intended impact. Monitoring and evaluation will help identify emerging risks and opportunities, enabling the NSW Government to be more agile in rapidly changing circumstances. Information and feedback collected through regular interaction with industry stakeholders forms an essential input for evaluation. An important part of this process is to learn from successful initiatives and to cease or adjust less effective initiatives.

Given the complexity of industry policy and the long-term nature of structural change, it is difficult to trace all the spillover effects across industries or even attribute such changes to industry policy. Reflecting on these challenges, the NSW Industry Policy governance will include monitoring of progress towards mission targets.

Policy level monitoring

At the industry policy level, there will be monitoring of progress towards mission targets and of the programs operating under the industry policy umbrella. Coordinating monitoring and reporting will support better informed discussion of policy options and policy decisions to ensure the best use of resources. The NSW Government will publish an annual scorecard for progress against the mission targets.

Program level evaluation

The NSW Industry Policy sets an overarching, whole-of-government framework for NSW Government agencies to develop and prioritise programs which contribute to the achievement of the missions. Evaluation of individual industry policy programs will continue to be the responsibility of each agency in line with the *NSW Treasury Evaluation Policy and Guidelines*. Results of evaluations will inform the NSW Industry Policy level monitoring and future initiatives.

References

- Australian Bureau of Statistics. (2023a). *Australian National Accounts: State Accounts; Table 1*. Retrieved from Australian Bureau of Statistics: <https://www.abs.gov.au/statistics/economy/national-accounts/australian-national-accounts-state-accounts/latest-release#new-south-wales>
- Australian Bureau of Statistics. (2023b). *Australian National Accounts: State Accounts; Table 2*. Retrieved from Australian Bureau of Statistics: <https://www.abs.gov.au/statistics/economy/national-accounts/australian-national-accounts-state-accounts/latest-release>
- Australian Government; Productivity Commission. (2022). *5-year Productivity Inquiry: The Key to Prosperity*. Retrieved from <https://www.pc.gov.au/inquiries/completed/productivity/interim1-key-to-prosperity/productivity-interim1-key-to-prosperity.pdf>
- Australian Government; Productivity Commission. (2023). *5-year Productivity Inquiry: Innovation for the 98%. Inquiry report – volume 5*. Retrieved from <https://www.pc.gov.au/inquiries/completed/productivity/report/productivity-volume5-innovation-diffusion.pdf>
- Ellen MacArthur Foundation. (2021). *Completing the Picture*. Retrieved from <https://emf.thirdlight.com/file/24/cDm30tVcDDexwg2cD1ZEczjU51g/Completing%20the%20Picture%20-%20How%20the%20circular%20economy%20tackles%20climate%20change.pdf>
- European Commission. (n.d.). *The European Green Deal*. Retrieved from European Commission: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en
- Evans, M., Polidano, C., Sarah, D., Y, K., Ruiz, M., Moschion, J., & Blackman, M. (2024). *Indigenous Business and Corporation Snapshot Study 3.0*. Retrieved from <https://findanexpert.unimelb.edu.au/scholarlywork/1899963-indigenous-business-and-corporation-snapshot-study-3.0>
- Federal Reserve Bank of St. Louis. (n.d.). *Manufacturing Sector: Labor Productivity (Output per Hour) for All Workers*. Retrieved from Federal Reserve Economic Data: <https://fred.stlouisfed.org/series/OPHMFG>
- Gamble, H. (2023). *Economic Complexity of Australian States*. Retrieved from Australian Industrial Transformation Institute: <https://blogs.flinders.edu.au/aiti/wp-content/uploads/sites/21/2023/10/Economic-Complexity-of-Australian-States-002.pdf>
- Hoyer, W. (2019, September). *Circular Economy*. Retrieved from European Circular Economy Stakeholder Platform: https://circulareconomy.europa.eu/platform/sites/default/files/emf_completing_the_picture.pdf
- IBM. (2023). *What is Smart Farming?* Retrieved from <https://www.ibm.com/topics/smart-farming>
- IBM. (n.d.). *What are Smart Meters?* Retrieved from <https://www.ibm.com/topics/smart-meter>
- International Energy Agency. (2021). *The Role of Critical Minerals in Clean Energy Transitions*. Retrieved from <https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions>
- International Energy Agency. (2024). *Global Critical Minerals Outlook 2024*. Retrieved from <https://www.iea.org/reports/global-critical-minerals-outlook-2024>
- Investment NSW. (2024). *Manufacturing in NSW: driving our economy*. Retrieved from Investment NSW: <https://www.investment.nsw.gov.au/focus-sectors/manufacturing/>
- Juhász, R., Lane, N., & Rodrik, D. (2024). The New Economics of Industrial Policy. *Annual Review of Economics*, 213-242.

- Kemp, A., & Chen, T. (2020). *Economic contribution of the Port of Newcastle*. Retrieved from <https://www.portofnewcastle.com.au/wp-content/uploads/2020/08/PoN-economic-impact-HoustonKemp-2020.pdf>
- Kendall, R., & Tulip, P. (2018). *The Effect of Zoning on Housing Prices*. Retrieved from Reserve Bank of Australia: <https://www.rba.gov.au/publications/rdp/2018/pdf/rdp2018-03.pdf>
- Mazzucato, M., & Kattel, R. (2023). *Mission-Oriented Industrial Strategy*. Retrieved from United Nations Industrial Development Organization: <https://www.unido.org/sites/default/files/unido-publications/2023-04/IID%20Policy%20Brief%202%20-%20Mission-oriented%20industrial%20strategy%20-%20Final.pdf>
- NSW Circular. (2020). *The circular economy opportunity in NSW*. Retrieved from Circular Australia: <https://circularaustralia.com.au/wp-content/uploads/2020/11/the-circular-economy-opportunity-in-NSW.pdf>
- NSW Department of Communities and Justice. (2024). *About affordable rental housing*. Retrieved from <https://www.facs.nsw.gov.au/providers/housing/affordable/about/chapters/how-is-affordable-housing-different-to-social-housing>
- NSW Environment Protection Authority. (2021). *Transport 2021*. Retrieved from <https://www.soe.epa.nsw.gov.au/all-themes/human-settlement/transport-2021>
- NSW Government. (2024a). *Media Release; Critical minerals exploration gets a boost with largest open survey data ever released in NSW*. Retrieved from NSW Government: <https://www.nsw.gov.au/media-releases/critical-minerals-exploration-gets-a-boost-largest-open-survey-data-ever-released-nsw>
- NSW Government. (2024b). *Building Homes for NSW*. Retrieved from NSW Government: <https://www.nsw.gov.au/departments-and-agencies/homes-nsw/building-homes-for-nsw>
- NSW Government. (2024c). *Media Release; Modular homes to deliver more social housing, sooner*. Retrieved from <https://www.nsw.gov.au/media-releases/modular-homes-to-deliver-more-social-housing-sooner>
- NSW Government. (2024d). *Media Release; Funding puts wheels in motion for local train manufacturing*. Retrieved from <https://www.nsw.gov.au/media-releases/local-train-manufacturing>
- NSW Government; Department of Planning, Housing and Infrastructure. (2023). *Media Release; A Shared Responsibility; The plan to begin addressing the housing crisis in NSW*. Retrieved from <https://www.nsw.gov.au/media-releases/addressing-housing-crisis-nsw>
- NSW Government; Department of Planning, Housing, and Infrastructure. (2022). *Demand for Housing in NSW*. Retrieved from <https://www.planning.nsw.gov.au/policy-and-legislation/housing/housing-supply-insights/quarterly-insights-monitor-q1/demand-for-housing-in-nsw>
- NSW Government; Department of Primary Industries. (n.d.). *Biomass for Bioenergy Project*. Retrieved September 2024, from Department of Primary Industries: <https://www.dpi.nsw.gov.au/forestry/science/forest-carbon/biomass-for-bioenergy>
- NSW Government; EnergyCo. (n.d.). *The Electricity Infrastructure Roadmap*. Retrieved September 2024, from EnergyCo: <https://www.energyco.nsw.gov.au/about-energyco/electricity-infrastructure-roadmap>
- NSW Government; NSW Climate and Energy Action. (n.d.). *Renewable Energy in NSW*. Retrieved from <https://www.energy.nsw.gov.au/nsw-plans-and-progress/major-state-projects/shift-renewables/renewable-energy-nsw>
- NSW Government; Transport for NSW. (2024). *Freight Policy*. Retrieved from <https://www.transport.nsw.gov.au/system/files/media/documents/2024/Freight-Policy-Reform-Consultation-Paper-April-2024.pdf>
- NSW Ports. (n.d.-a). *Port Botany*. Retrieved from <https://www.nswports.com.au/port-botany>

- NSW Ports. (n.d.-b). *Port Kembla*. Retrieved from <https://www.nswports.com.au/port-kembla>
- NSW Productivity and Equality Commission. (2024). *Review of housing supply challenges and policy options for New South Wales*. Retrieved from https://www.productivity.nsw.gov.au/sites/default/files/2024-09/20240911_NSW-PEC-report-Review-of-housing-supply-challenges-and-policy-options-for-New-South-Wales.pdf
- NSW Productivity Commission. (2023). *Building more homes where people want to live*. Retrieved from https://www.productivity.nsw.gov.au/sites/default/files/2023-06/202305_01-building-more-homes-where-people-want-to-live.pdf
- NSW Treasury; Office of Energy and Climate Change. (2022). *NSW Renewable Energy Sector Board's Plan*. Retrieved from <https://www.energy.nsw.gov.au/sites/default/files/2022-09/nsw-renewable-energy-sector-board-plan.pdf>
- Port of Newcastle. (2019). *Newcastle Multi-Purpose Deepwater Terminal*. Retrieved from <https://www.portofnewcastle.com.au/wp-content/uploads/2019/10/Newcastle-Container-Terminal-brochure-low-res.pdf>
- Riker, D. (2010). *Do Jobs In Export Industries Still Pay More? And Why?* Office of the Competition and Economic Analysis of the International Trade Administration's Manufacturing and Services Unit.
- Robinson, D. K., & Mazzucato, M. (2019). The evolution of mission-oriented policies: Exploring changing market creating policies in the US and European space sector. *Research Policy*, 936-948.
- Stanford, J. (2016). *Manufacturing (Still) Matters: Why the Decline of Australian Manufacturing is NOT Inevitable, and What Government Can Do About It*. Retrieved from The Australia Institute: <https://australiainstitute.org.au/wp-content/uploads/2020/12/Manufacturing-Briefing-Paper-FINAL.pdf>
- U.S. Department of the Treasury. (n.d.). *Inflation Reduction Act*. Retrieved from U.S. Department of the Treasury: <https://home.treasury.gov/policy-issues/inflation-reduction-act>
- University of Wollongong Australia. (n.d.). *Advanced Manufacturing Technologies (AMT)*. Retrieved from <https://www.uow.edu.au/engineering-information-sciences/research/manufacturing/>
- Western Sydney Airport. (2021). *Australia's New Cargo Hub*. Retrieved from https://westernsydney.com.au/sites/default/files/2021-05/WSI%20Cargo%20Precinct%20-%20Australia%27s%20new%20cargo%20hub_1.pdf

Appendix A

A list of initiatives related to the missions is provided in Table 1, with the table key provided here:

Key



Housing














Net Zero & Energy Transition











Local Manufacturing

Table 1: Policies and programs

Initiatives	Mission	Descriptions
Apprenticeship and Traineeship Roadmap 2024-2026		A roadmap to inform strategic direction of apprenticeship and traineeship delivery. The roadmap aims to improve learning outcomes, boost completion rates and ensure NSW training systems meet industry need.
Climate Change (Net Zero Future) Act 2023		<p>The <i>Climate Change (Net Zero Future) Act 2023</i> legislates the state's ambitious approach to addressing climate change. It enshrines whole-of-government climate action to deliver net zero by 2050. The Act legislates:</p> <ul style="list-style-type: none"> • guiding principles for action to address climate change that consider the impacts, opportunities and need for action in NSW • emissions reduction targets for NSW • an objective for NSW to be more resilient to a changing climate • establishing an independent, expert Net Zero Commission to monitor, review, report and advise on progress towards these targets.
Minimum Viable Product Ventures 2024-2025		A program that supports startups and innovative SME enterprises in the product lifecycle between early-stage research and mature investment opportunities.
NSW 20-Year R&D Roadmap		A long-term plan to guide research and development priorities in NSW, fostering innovation and economic growth.
NSW Aboriginal Procurement Policy		The policy will help drive employment opportunities for Aboriginal and Torres Strait Islander peoples and supports sustainable growth of Aboriginal businesses by driving demand through government procurement of goods, services and construction.
NSW Connectivity Strategy		A strategy to align and optimise state-wide programs and opportunities to ensure modern, high speed, digital networks are available to all.




Initiatives	Mission	Descriptions
NSW Cross-Border Commissioner		An initiative to negotiate with neighbouring governments, their agencies and regional stakeholders regarding collaborative agreements and resolving strategic issues facing NSW border communities.
NSW Digital Inclusion Strategy		A strategy to address the digital divide in NSW. The strategy aims to develop a framework and will ensure all NSW residents can access, afford and engage with digital technologies, services and online resources.
NSW Digital Skills and Workforce Compact		A partnership between the NSW Government, the digital industry, and education and training industries to collaborate on projected digital workforce shortages.
NSW Freight Policy Reform Program		A program to develop a comprehensive strategic reform agenda and action plan to optimise freight transport in NSW.
NSW Future Transport Strategy		An overarching strategy to support safe, healthy, sustainable, accessible and integrated passenger and freight journeys in NSW.
NSW Heavy Vehicle Access Policy		A roadmap focused on safe, sustainable and productive heavy vehicles as well as increasing data and technology to support supply chain efficiencies.
NSW Higher Education Strategy 2021-2025		The NSW Higher Education Strategy 2021-2025 represents a commitment of intent between the NSW Government and the university sector to collaborate in strengthening the impact of higher education in NSW.
NSW Innovation Blueprint (under development)		The NSW Innovation Blueprint is the government's vision for the state's innovation system. This will target outcomes that directly connect innovation system performance to the missions.
NSW Skills Plan 2024-28		A strategic, action-led plan for skills that presents a reform agenda for the NSW VET sector. It identifies Critical Skills Areas that require targeted approaches to address industry specific skills and workforce needs.
NSW State Migration Plan (under development)		The NSW State Migration Plan will help inform the Australian Government's multi-year planning model for the Permanent Migration Plan and includes priorities aimed at improving the use of migration policy levers to address workforce supply issues across priority industries for NSW.
NSW Trade and Investment Strategy (under development)		The proposed NSW Trade and Investment Strategy will present the government's 10-year vision for trade and investment to improve the state's economic complexity and diversification, and competitively position NSW globally in alignment with the government's strategic priorities and NSW's advantages.

Initiatives	Mission	Descriptions
Building Sustainability Index (BASIX)		BASIX mandates sustainability standards to achieve reductions in water and energy consumption and greenhouse gas emissions. BASIX applies to new houses and apartments, and alterations and additions to residential developments with a construction cost of \$50,000 or more.
NSW Consumer Energy Strategy		A strategy designed to ensure reliable, affordable and sustainable energy for consumers in NSW through policy reforms and energy market innovations.
NSW Decarbonising Infrastructure Delivery Policy		A policy aimed at integrating sustainable practices into infrastructure projects across NSW, promoting low-carbon solutions that reduce the emissions associated with infrastructure construction.
Critical Minerals and High-Tech Metals Strategy 2024–35		A policy framework designed to enhance the sustainable extraction and processing of critical minerals and high-tech metals in NSW, supporting the transition to a low-carbon economy and boosting local industries such as manufacturing and technology.
Future Jobs and Investment Authorities (under development)		A commitment aimed at fostering economic growth and job creation by facilitating strategic investments in key industries for future development to offset impacts from the coal industry in the Hunter, Central West, Illawarra and North West regions.
Net Zero Industry and Innovation Program		A program transforming NSW into an innovative, thriving, low-carbon economy. The program is focused on clean technology innovation, enabling new low-carbon industries and assisting high-emitting industries to reduce their emissions.
Net Zero Manufacturing Initiative		A program designed to support NSW's manufacturing industry in transitioning to low-emission technologies and processes while boosting innovation and competitiveness.
NSW Electric Vehicle Strategy		A strategy designed to increase the adoption of electric vehicles and support the transition to cleaner transportation in NSW.
Special Activation Precincts		An initiative to bring together planning and investment support services to deliver industrial and commercial infrastructure in 6 dedicated areas of regional NSW. These build on the competitive and industrial strengths of each region to create jobs and drive economic development.
TAFE Manufacturing Centre of Excellence		TAFE centres that will deliver education and training in manufacturing across engineering, transport and renewable energy industries.

Initiatives	Mission	Descriptions
Building Homes for NSW		A package to invest in social housing and homelessness. The package will fund social housing, maintenance of public housing and homelessness support services.
Modern Methods of Construction Taskforce		A taskforce focused on rapidly delivering affordable, sustainable modular housing using prefabricated construction methods to address housing shortages and crisis accommodation needs in NSW.
National Housing Accord Targets		A nationwide commitment to boost housing supply by setting targets for affordable housing development, supported by collaboration between all levels of government, developers and the construction industry.
NSW Building Commission		An initiative that focuses on building regulations and ensuring the quality of residential buildings. The Commission oversees the construction industry and focuses on proactive regulation and data-driven improvements to reduce costs and increase value.
NSW Infrastructure Digitalisation Roadmap		A roadmap to tackle construction industry productivity challenges through increasing digital technology, processes and systems.
Regional Housing Strategic Planning Fund		A grants program that aims to enable and accelerate the delivery of strategic planning projects, technical studies and policies that support increased housing supply, affordability, diversity and resilience in regional NSW.
Social and Affordable Housing Fund		A long-term program that supports the development of social and affordable housing by providing sustainable funding for housing providers to develop new homes.
State Environmental Planning Policies		A framework that guides housing development in NSW, including policies that streamline the approval of affordable housing, medium-density housing and new urban development areas.
Transport Oriented Development Program		A program designed to encourage the development of more well-located homes around major transport hubs with existing infrastructure capacity, to provide more residential development close to transport and jobs.
Net Zero Plan Stage 1: 2020-2030		A strategy to reduce NSW's greenhouse gas emissions to net zero by 2050, promoting renewable energy, clean technology and sustainable practices.
NSW Climate Change Adaptation Strategy		A strategy that outlines an approach to climate change adaptation. The strategy provides a framework that will strengthen and expand action to adapt to climate change now and over the long term.

Initiatives	Mission	Descriptions
NSW Decarbonisation Innovation Study		A biennial review that aims to identify the opportunities for reducing emissions while growing the economy with a strong focus on existing and emerging technologies, and services.
NSW Electricity Infrastructure Roadmap		A long-term plan to transition NSW's electricity industry to renewable energy, ensuring reliable, affordable and sustainable power through infrastructure investment and policy support.
NSW EPA Climate Change Action Plan 2023–26		An action plan outlining specific EPA actions and regulatory responses to climate change over a 3-year period. Alongside the EPA Climate Change Policy, it forms a comprehensive regulatory approach and set of actions for the causes and consequences of climate change in NSW.
NSW EPA Climate Change Policy		A policy outlining the EPA's Strategic Plan 2024-29 commitments. Alongside the EPA Climate Change Action Plan, it forms a comprehensive regulatory approach and set of actions for the causes and consequences of climate change in NSW.
NSW Hydrogen Centre of Excellence		A hub established to advance hydrogen technologies and innovation, promoting sustainable energy solutions in NSW. It will provide skills and training in plumbing and gas fitting to support the green hydrogen industry.
NSW Hydrogen Strategy		An initiative aimed at fostering the development of a sustainable hydrogen industry in NSW to support economic growth, reduce emissions and create clean energy jobs.
NSW Net Zero Commission		An independent NSW agency responsible for providing independent expert advice. The Commission's role is to monitor, report, advise, recommend and educate on net zero matters.
NSW Renewable Energy Sector Board		A Board established by the <i>Electricity Infrastructure Investment Act 2020</i> (NSW) which prepares and provides a plan for the NSW Renewable Energy industry. It has representatives from unions; the steel, electricity and manufacturing industries; the renewable energy industry; and electricity customers.
NSW Waste and Sustainable Materials Strategy 2041		A plan to reduce waste, increase recycling and promote the use of sustainable materials to create a circular economy in NSW by 2041.
Renewable Energy Zones		Designated areas in NSW where large-scale renewable energy projects are prioritised, facilitating investment in infrastructure and supporting regional development.

Initiatives	Mission	Descriptions
Renewable Fuel Strategy (under development)		A policy aimed at increasing the use of renewable fuels, such as biofuels, to reduce reliance on fossil fuels and lower emissions in the industrial and transportation industries.
The Primary Industries Productivity and Abatement Program		A program aimed at enhancing productivity and reducing emissions in primary industries across NSW.
Towards Net Zero Emissions Freight Policy		A policy which sets the strategic direction and action to support emissions reduction across the road and rail freight transport sector.
Transport for NSW Net Zero and Climate Change Policy		A policy that outlines Transport for NSW's net zero and climate change targets, provides support for the transport industry's transition to net zero, and details plans to create a transport network that is resilient, responsive and adapted to climate change.
Zero Emission Buses		Zero Emission Buses is a multi-billion dollar program to transition the state's 8,000 plus diesel and natural gas public transport buses to zero emissions technology. Under the Zero Emission Buses Transition Plan, the transition will be complete in Greater Sydney by 2035, in outer metropolitan regions by 2040 and in regional NSW by 2047.
Advanced Manufacturing Readiness Facility		A facility to provide access to technology, expertise, training and networks. The program's goal is to support manufacturing business growth, reduce risks, and unite government, industry, and training providers.
Innovation Procurement Pathways		A policy that encourages government agencies to procure innovative solutions from local businesses, providing a pathway for manufacturers with cutting-edge technologies to participate in public projects and promote industry growth.
NSW Future Fleet Program		A program to replace the Tangara fleet of suburban passenger trains with a new, Future Fleet, and develop plans for supporting infrastructure to enable operations. The program includes a 50% local content target for future rolling stock contracts by March 2027.
NSW Jobs First Commission (under development)		The Commission will monitor and enforce compliance with the NSW Local Content Policy and the Future Skills Guarantee. It will promote the use of local content, foster opportunities for local businesses, apprentices, and trainees, and support the employment of local workers.

Initiatives	Mission	Descriptions
NSW Roadmap for Aboriginal Business Growth		A comprehensive plan to support and expand Aboriginal-owned businesses in NSW, promoting economic empowerment and sustainable growth.
Regional Development Trust Fund		A funding initiative aimed at supporting economic development and infrastructure in regional areas of NSW.
Regional Jobs Precincts		An initiative to assist regional councils, businesses and communities to help develop tailored technical and planning support.

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