

Central NSW Joint Organisation

Economic and Social Environmental Scan



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Introduction

As part of the development of the Central NSW Joint Organisation (CNSWJO) Statement of Strategic Regional Priority an environmental scan of current NSW Government Strategic planning documents as well as other government and private sector strategic documents was undertaken.

The aim of the review was to inform the risk, opportunities and challenges that that been identified by the State Government and have relevance to the Central West.



Methodology

An environmental scan is the process of gathering information and interpreting data to identify external opportunities and threats that could influence future decisions. This information is then used to help develop strategies and goals for an organisation's future.

One of the challenges with an environmental scan is knowing where to start and stop in terms of gathering information. There are a multitude of strategies from the federal, state and private sector that could have been reviewed for this environmental scan, but it was determined for the first stage of this review that the focus would be on NSW Government strategic plans that are most relevant to the CNSWJO area.

These include but are not limited to:

NSW GOVERNMENT STRATEGIC PLAN	LINK TO PLAN
A 20 year Vision for Regional NSW	VIEW THE PLAN
Draft Central West and Orana Regional Transport Plan	VIEW THE PLAN
Net Zero Plan Stage 1: 2020-2030	VIEW THE PLAN
Building Momentum State Infrastructure Strategy 2018-2038	VIEW THE PLAN
Draft Regional Water Strategy Lachlan	VIEW THE PLAN
Draft Regional Water Strategy – Macquarie-Castlereagh	VIEW THE PLAN
Future Ready Regions Supporting Drought Resilient Communities and Economies	VIEW THE PLAN
NSW Hydrogen Strategy	VIEW THE PLAN
Critical Minerals and High-Tech Metals Strategy NSW Government	VIEW THE PLAN
NSW Waste and Sustainable Materials Strategy 2041	VIEW THE PLAN
Renewable Energy Zones	VIEW THE PLAN
Recommendations of the Regional Housing Taskforce	VIEW THE PLAN
Draft Central West and Orana Regional Plan 2041	VIEW THE PLAN

Table1: NSW Government Strategic Plans

JOs have been designed to work primarily with State Government however, key priorities for the region are also informed by Federal and even international strategy and policy. Please find following areas of responsibility for each level of government which show the complexity of the strategic framework.

Review



Figure 1: Responsibility levels of government

Each of these State Government Plans have been summarised into actions under the current regional priorities for the CNSWJO being:

1. Inter-council cooperation
2. Regional prosperity
3. Regional Transport and Infrastructure
4. Regional Water Security



Figure 2: Central West Joint Organisation Regional Priorities

Appendix A tabulates these priorities in relation to the strategic plans reviewed.

Other strategic documents that were reviewed from both the Federal Government and the private sector have been listed in **Appendix B**.

As the CNSWJO moves forward in the planning process for a new Statement of Regional Priorities, these priorities may be challenged, and the plan may need to be adjusted to reflect future aspirations for the region.

Another tool that maybe considered as part of reviewing the CNSWJO's Statement of Regional Priorities is to map any actions that are development as part of the final come out of the Statement of Strategic Regional Priority to the UNIDO Sustainable Development Goals (SDGs).



Figure 3: United Nations Industrial Development Organisation (UNIDEO) Sustainable Development Goals (reference www.unido.org/unido-sdgs)

Disrupters and Opportunities

There is no denying that we are living in unprecedented times. In just the last five years the communities of Central Western NSW have suffered from droughts, floods, fires, water security issues, climate change, lack of domestic tourism, a mouse plague, a global pandemic as well geopolitical pressures.

These challenges are reflected in the various strategy documents that have been reviewed.

Many of these challenges can be described as impacting communities from both a social and economic viewpoint. However, it is pleasing to see for the most part that the government strategies reviewed as part of the environmental scan, look for opportunities and solutions. Unfortunately, in many cases, funding is missing and there still seems to be a push back towards Local Government to solve many of the challenges.

Climate Change

Climate change is with us and is physically playing out in the here and now. We are seeing a shift in attitude towards climate change from something that was denied, to an issue that has the ability to unite the world. Australia is one of 187 countries that have committed to keeping global temperature rises to well below 2°C under the Paris Agreement. Over 73 of these countries have set a goal of reaching net zero emissions by 2050.

NSW has developed a [Net Zero Plan Stage 1 2020-2030](#) Plan (the Plan). The aim of the Plan is to reduce emissions by 50% for 2030 compared to 2005. Funding will be available to financially support the Bilateral Memorandum of Understanding on the Energy and Emissions Reduction Policy between the Commonwealth and NSW Governments (Bilateral).

We will experience more and more devastating and frequent climate change events such as the recent flood in northern NSW and southern QLD. This will lead to not only increased damage to infrastructure, property and assets; but a need to claim on insurance policies more frequently.

The Insurance Council of Australia states that currently there is no region in Australia that is uninsurable but warns that some areas will become more difficult to insure in the future unless government invests in appropriate physical mitigation and adaption strategies. They suggest that stronger building codes, improved land-use planning and permanent physical mitigation measures, where necessary, will be key to ensuring an “Insurable Australia.” ([Insurance Council of Australia](#))

There are others who claim that whilst the Insurance Council claims that there are no “uninsurable: regions” – there are areas where it is unaffordable to insure.

Dr Karl Mallon, who owns a firm called Climate Risk, defines a property as effectively or potentially 'uninsurable' when climate risk is so high that either:

1. Insurers refuse to offer cover; or
2. The annual premium is priced at or above 1 per cent of the cost to replace the property — in effect, becoming so expensive as to be unaffordable and therefore effectively unavailable.

[\(The rise of red zone risk ABC online\)](#)

IAG is one of Australia's largest insurers. Its modellings suggests climate change will further widen the gap between the cost of insuring relatively safe properties and those at highest risk. The report highlights an example where the typical home might only see an \$85 increase in its average annual loss, but the 1 per cent of properties most at risk of flooding would see a \$2,600 increase.

Some areas have seen residential insurance jump more than 30%. [\(Insurers Brace for rising flood damage amid climate change ABC Online\)](#)

This is the kind of rise that will be priced into insurance policies, making the most vulnerable homes effectively uninsurable. The cost of insurance going forward will be an issue for Councils as well as their communities.



Aerial image of Forbes in Flood

We are also seeing a shift in the way that the private sector is investing. Businesses are now driven not only by profit but by Environment Social & Governance (ESG) principles and aim to deliver strategic development outcomes for shareholders. However, a PWC report states:

“While inroads have been made, there’s still room to improve as companies struggle to keep up with a growing demand for investor-grade ESG reports. There’s a significant opportunity for executives and boards to improve reporting for the non-financial metrics that ESG covers, closing the gaps, and providing greater confidence with stakeholders in delivering on strategy and ESG commitments.”

[*\(ESG – An opportunity for companies to build trust\)*](#)

The report also states that there will be five key trends to be aware of in regards to ESG in 2022:

1. Global move to align capital markets with sustainability goals through standards and regulation;
2. Biodiversity and natural capital becoming a greater focus with increasing recognition of risks and opportunities;
3. Focus on Scope 3 emissions in climate change related reporting;
4. Science based net-zero targets becoming the norm; and
5. Australian regulators set to look seriously at ESG credentials and exposure to ESG-related risks.

[*\(ESG Trends in 2022\)*](#)



Figure 4: ESG Environmental Social Governance Infographic; reference Tasha Vector, Shutterstock.com

The importance of ESG factors is also highlighted in DPE's [Growing NSW Primary Industries and Land Sector in a Low Carbon World](#) released in March 2022, it states that financial institutions globally are increasingly looking at ESG credentials as part of their investment strategies. It highlights that Australian banks are part of this trend:

- National Australia Bank, which achieved carbon neutrality in 2010 for its operations, will provide \$70 billion of financing to low carbon activities by 2025 and has committed to align its lending portfolio to a net zero economy by 2050.
- The Commonwealth Bank of Australia is committed to decreasing the emissions intensity of its business lending and reducing its own emissions. It has pledged to finance \$15 billion of low carbon projects by 2025.
- ANZ will fund and facilitate at least \$50 billion by 2025 to help its customers lower their carbon emissions.
- Westpac is committed to providing \$15 billion in lending to climate change solutions by 2030.

([Growing NSW primary industries and land sector in a low carbon world](#) pg 11)

“Consumers are increasingly aware of their personal carbon footprint including the food and fibre they purchase. A 2019 study found that 55% of Australians were making purchasing decisions based on ethics, fair trade and the environment”

([Growing NSW primary industries and land sector in a low carbon world](#) pg 6)

As we transition to what has been deemed industry 4.0 (a new phase in the Industrial Revolution that focuses heavily on interconnectivity, automation, machine learning, and real-time data) new skills and a high level of **community engagement** will be required to meet the Paris agreement objectives and offset the impacts of climate change. ([What is Industry 4.0 Forbes 2018](#))

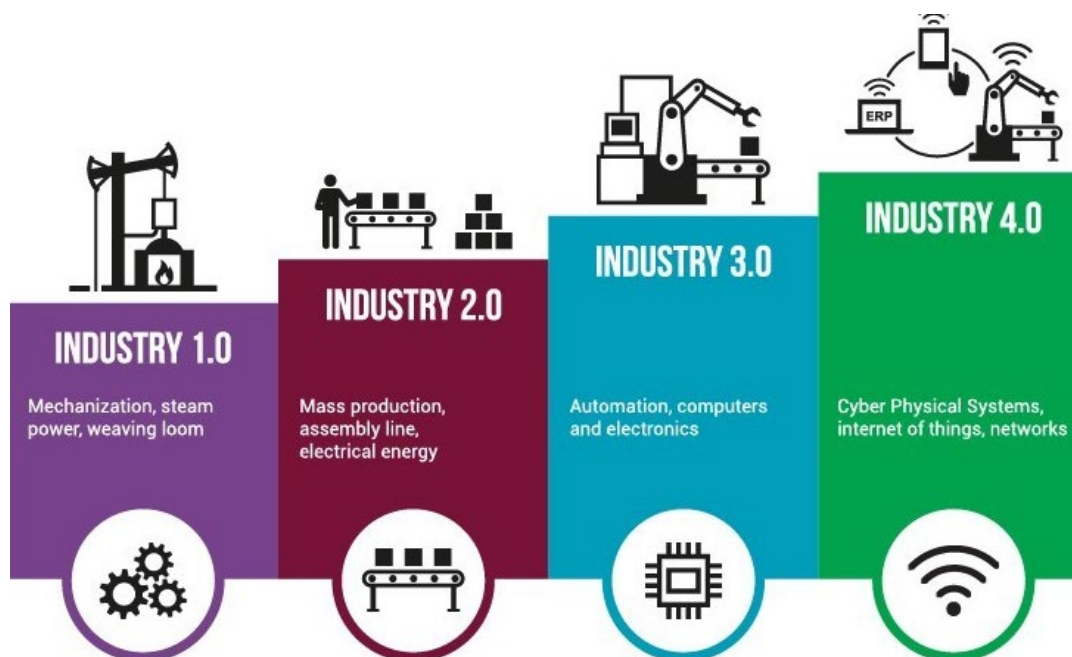


Figure 5: Fourth Industrial Revolution Industry 4.0

Many communities whose economies have traditionally relied on industries such as fossil fuels, heavy polluters and in some cases heavy water usage industries. They will understandably feel nervous and threatened by this transition. However, [the NSW Governments Net Zero Plan 2020-2030](#) States that:

“by delivering the Plan, New South Wales is expected to create almost 2400 jobs and attract over \$11.6 billion of investment over the next 10 years. Almost two-thirds of this investment will go to regional and rural New South Wales.”

(page 5 [Net Zero Stage 1: 2020- 2030](#))

Circular Economy

A circular economy represents a major shift in mind set it moves away from linear approach which encouraged us to simply dispose of waste to designing out waste and looking for the maximum reuse of materials and thinking of good as a service rather than simply owning them.

“Circular Economy is a systematic approach to economic development that benefits business, society and the environment. A circular economy is regenerative by design and aims to gradually decouple growth from the consumption of finite resources. It is an accelerator to a zero-carbon sustainable economic recovery.”

([The Circular economy opportunity](#) page 3)

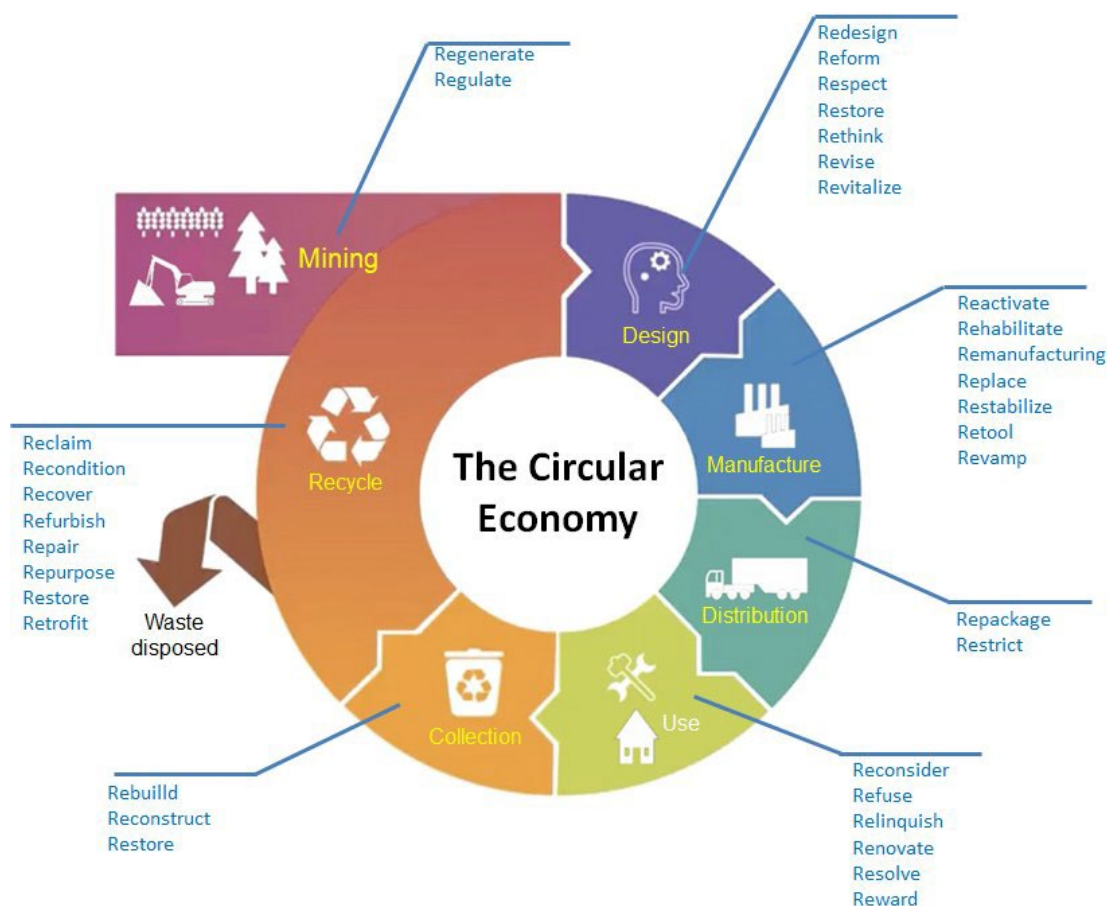


Figure 6: Circular Economy Principles

The NSW Circular's [The Circular economy opportunity](#) released in November 2020, details the case for change and why we should be looking to move to a circular economy in NSW. It states that NSW generates almost three times the average global CO2 emissions per capita, it points out that Australia has the 3rd lowest rate of material productivity and the lowest manufacturing self-sufficiency in the Organisation for Economic Co-operation and Development (OECD). We generate only US\$1.28 of economic output for every kilogram of materials consumed, under half the OECD benchmark of US\$2.90. ([The Circular economy opportunity](#) page 5).

The report warns that without moving to a circular economy:

- NSW will not meet its 2050 goal of net zero emissions (even with a transition to renewables);
- water security will remain under pressure from climate change and non-residential use;
- we could lose resources that could create new jobs and business and build sustainable supply chains; and
- the cost and quantity of waste will continue to rise.

However, the report also talks to the opportunities that are created by embracing circular economy. It states that circular economy initiatives in the Australian food, transport and built environment sectors alone, could add up to **\$210 billion** to the Australian GDP by 2048.

([The Circular economy opportunity](#) pg 6).

The report also quotes the think-tank 'Beyond Zero Emissions' Million Jobs Plan estimates that decarbonisation initiatives can add over **200,000** ongoing jobs to the Australian economy. Circular economy initiatives in the built environment, transport, manufacturing and recycling industries alone can create some 150,000 ongoing jobs across Australia by 2025.

([The Circular economy opportunity](#) pg 11)

"The circular economy opportunity in NSW is significant and critical to our future.

NSW has the capacity to lead Australia in:

- The innovation, processing and advanced manufacturing of valuable materials streams
- Circular economy planning in its substantial infrastructure development pipeline
- Demonstration projects in industrial and community circular economies
- Reducing greenhouse gas emissions with a comprehensive state-wide circular economy strategy
- Circular economy performance benchmarking and tracking."

[The Circular economy opportunity](#) pg 22

For NSW, based on its share of Australia's GDP, this suggests that these circular economy initiatives could create nearly **50,000** ongoing jobs.

The report also talks about the importance of embracing the concept in regional economic development strategy. The strategy points out that regional economies are well suited to closed loop systems, with remote and decentralised industry, energy and water systems underscoring the benefits of local loops in materials and other resources especially as local governments manage many of these services.

It goes on to point out that key regional industries, such as agricultural and mining communities, are under pressure to adapt to climate change, resources tipping points, and high production costs (e.g., purchasing and transportation, costs of energy, water and inputs, and waste removal and management). These industries need to adopt to ensure access to markets into the future especially as we see other countries putting net zero targets on the goods that they are importing.

Regional circular economy planning can map resource inputs and outputs in the region to maximise synergies and establish local loops. The report goes on to suggest that Special Activation Precincts like Parkes (which will be Australia's first UNIDO Eco-Industrial Precinct embedding the principles of circular economy and sustainability) are ideal pilots for embedding circular economy in precinct planning. ([The Circular economy opportunity](#) p 14)

The report also identifies as key opportunities in resource recovery including

- Plastics
- Textiles
- Organics
- E-waste
- Lithium-ion batteries
- Solar PV systems

Manufacturing, Renewables and Alternative Energy

Critical Minerals

The NSW Government has released their Critical Minerals Strategy. As we transition to Industry 4.0 and the adoption of climate change policies become more prevalent; so will the demand for critical minerals. The United Nations forecasts that the world's population will increase by over three billion and that living standards will also increase, driving demand for minerals through increased consumer spending and urban development. This will increase demand for technology enabled consumer products like mobile phones, electric vehicles and sensors that rely on critical minerals in their supply chains.

“Over the next 40 years, global demand for metals and other key raw materials is expected to surge.”

([Critical Minerals Strategy p5](#))

The supply chains for critical minerals are often highly complex due to the fact that critical minerals are naturally occurring elements the production subject to a high degree of monopoly. Over the last two years we have seen the fragility of the market due to the pandemic disrupting supply chains and geopolitical factors such as Australia's strained relationship with China imposing trade restrictions. We have seen impact on the demand, supply and price of certain minerals.

Governments and industry need security in their supply chains through a diversified supply base. Investments in new supply of critical and high-tech metals in secure jurisdictions like NSW will become exceedingly important, given changes in the geopolitical environment, and increasing requirements for environmental, social and governance (ESG)-credentialled minerals. Supporting onshore value-adding and manufacturing, both within NSW and across Australia will be critical to securing supply chains within Australia and for our regional partners.”

([Critical Minerals Strategy p6](#))

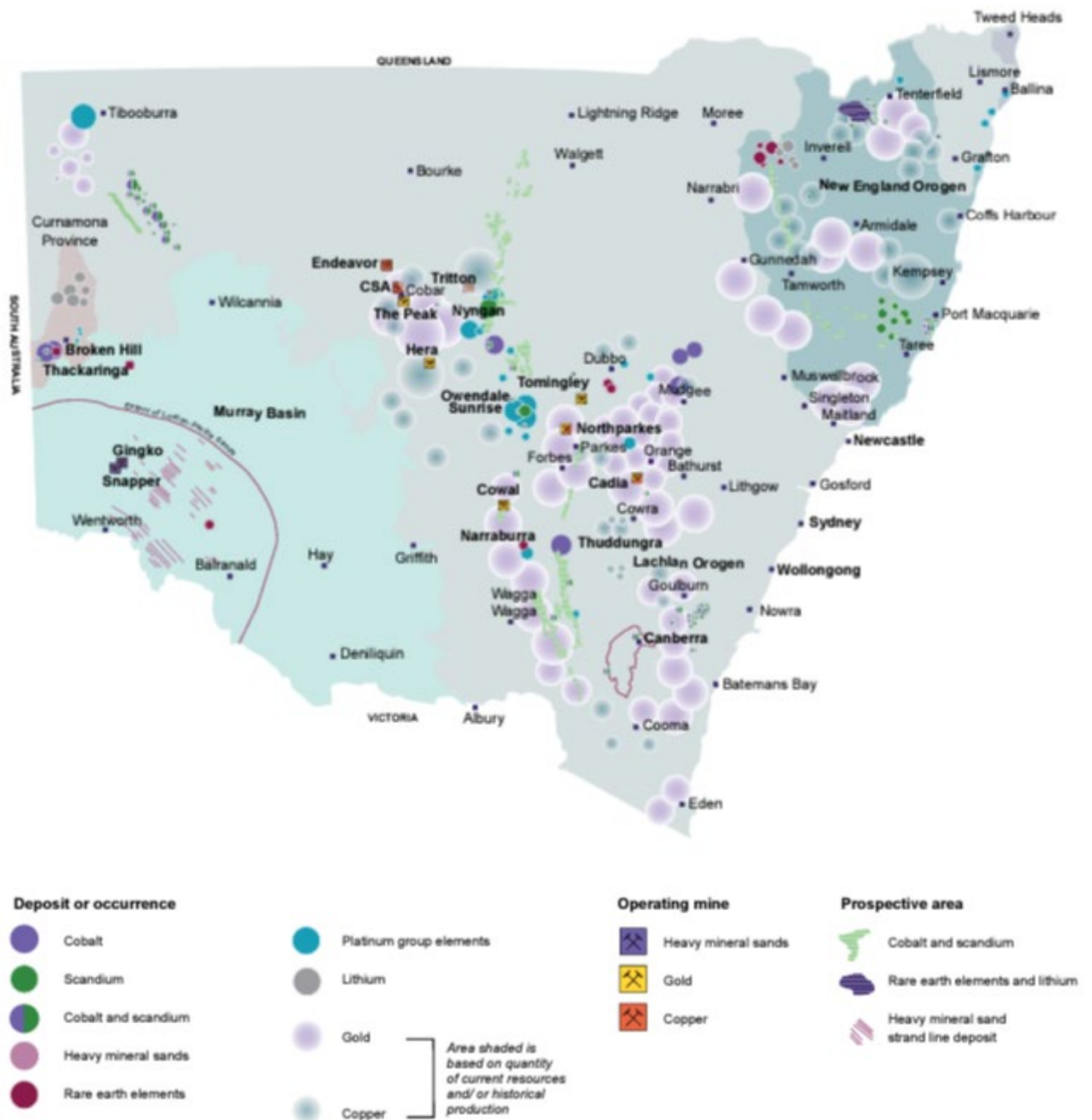


Figure 7: Map of critical mineral and high-tech metal deposits in NSW (Critical Minerals Strategy p11)

Central NSW has the opportunity to play a large role in the developing critical minerals market. It is located along the Macquarie Arch and significant exploration is already happening with the area.

To take full advantage of the opportunities that critical minerals present new markets need to be established and the general public needs education to understand the significant role mining will play in extracting the minerals required for a clean energy future. This will provide clarity when we talk about critical minerals, and answer the questions:

- How far do we go in terms of upstream and downstream processing and refining?
- Are there complementary industries that can be developed from the processes?
- Is the state/ federal government interested in underwriting investment?
- How can government streamline approval processes to help with investment?
- How do we change our traditional markets and secure new supply chains especially in a post pandemic world and whilst our traditional international markets are in flux and attract and house skilled workers?



Similar questions also need to also be asked to support emerging industries in the renewable and circular economies spaces. It is an exciting and sometimes challenge period for new industries with the development of innovative technologies, the industries are embracing ESG and the movement towards a net zero sustainable environment. Whilst the strategies like the Draft Central West and Orana Regional Plan touch on these topics, there needs to be more detail about how Government can set up policies to be more ambitious with the view of being flexible and agile as technologies and industries change and transform.

Hydrogen

Hydrogen is the most common chemical in the universe and the smallest molecule. Hydrogen has many uses as a fuel for transport or heating, it can be used to store electricity or as a raw material in industrial process. It also can be produced as a gas or liquid.

Hydrogen energy can be stored as a gas and even delivered through existing natural gas pipelines. When converted to a liquid or another suitable material, hydrogen can also be transported on trucks and in ships. This means hydrogen can also be exported overseas, effectively making it a tradable energy commodity.

Whilst Earth is rich in Hydrogen it does need to be extracted from water, fossil fuels or biomass.

There are [3 primary methods for producing hydrogen](#):

1. Electrolysis: where electricity is used to split hydrogen from water. When renewable electricity sources such as wind and solar are used in the electrolysis process the product is referred to as 'renewable hydrogen' or 'green hydrogen'.
2. Steam methane reforming: where hydrogen is produced through a chemical reaction with natural gas and water at a high temperature.
3. Coal gasification: where hydrogen is produced through a chemical reaction with coal and water at a high temperature.

According to [ARENA](#) Australian Renewable Energy Agency demand for hydrogen exported from Australia could be over 3 million tonnes each year by 2040, which could be worth up to \$10 billion each year to the economy by that time.

Figure 8 ; Hydrogen supply chain [NSW Hydrogen Strategy pg 17](#)

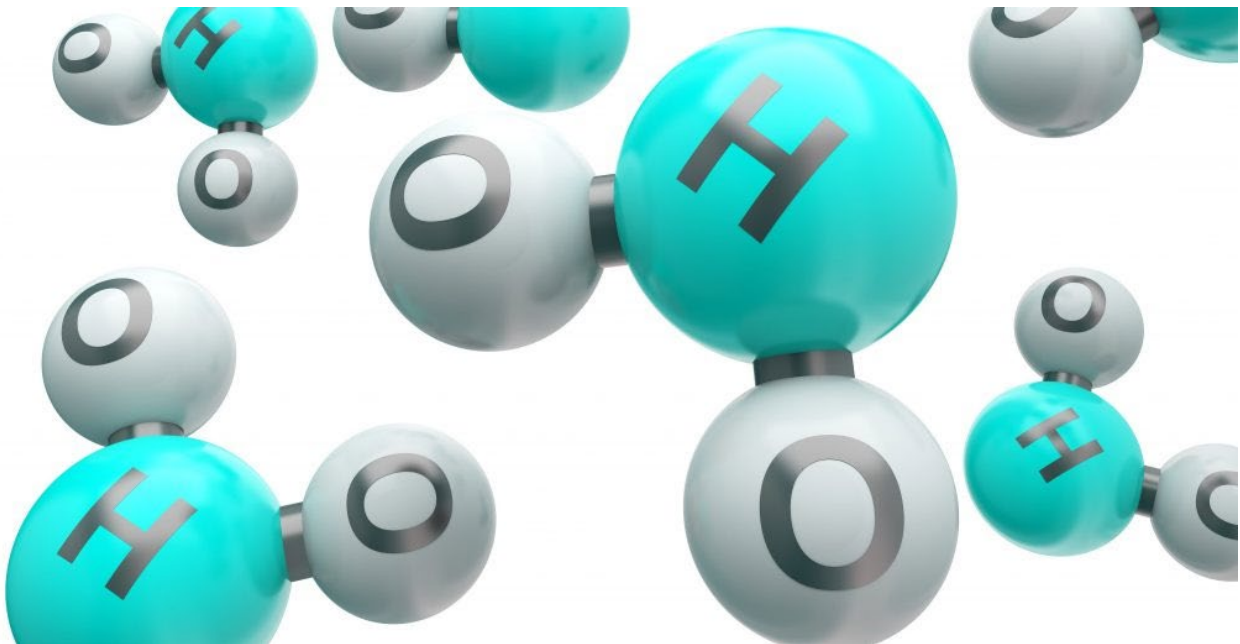


Figure 8 ; Hydrogen isolated molecules

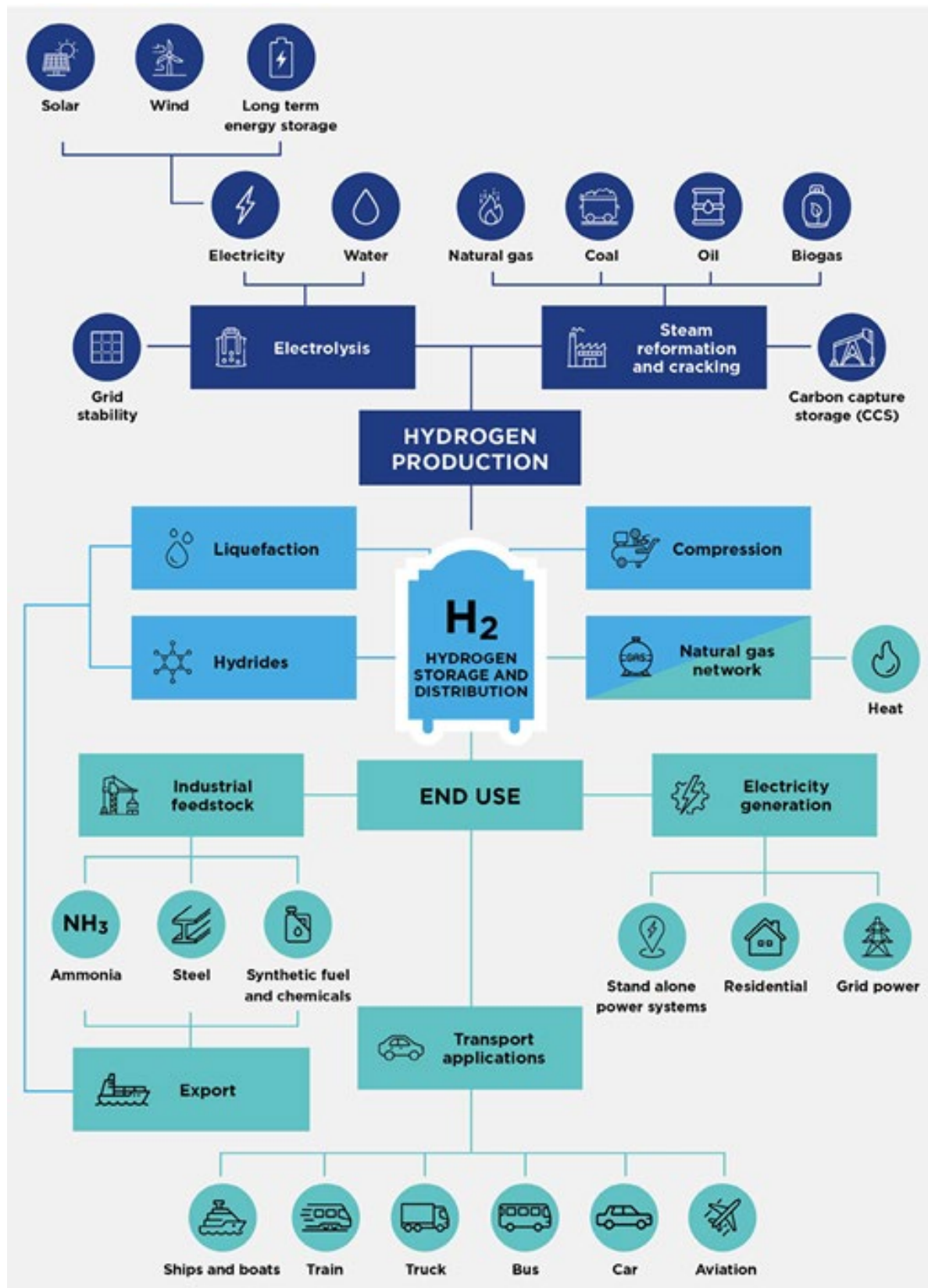


Figure 9; Hydrogen supply chain [NSW Hydrogen Strategy pg 17](#)

In response to the Federal Governments National Hydrogen Strategy the NSW Government has released their own hydrogen strategy. The aim of the strategy is to be producing by 2030:

110,000 tonnes of green hydrogen per annum from 700 MW of electrolyser capacity for under \$AU2.80 per kg. *(it is currently \$8.75)

[\(Critical Minerals Strategy p5\)](#)

The NSW State Government believes that by achieving these targets it will transform NSW into Australia's largest consumer of green hydrogen, create up to 10,000 new jobs and position the State to become a hydrogen export superpower. The NSW Government has also committed to provide up to \$3 billion of incentives to commercialise hydrogen supply chains and reduce the cost of green hydrogen.



Figure 10: NSW Government Hydrogen Strategy Targets

The strategy is designed to support industry to adopt green hydrogen, develop hydrogen hubs at major ports, build a hydrogen refuelling network for heavy vehicles along major highways, create a market led framework to drive demand for green hydrogen and waive a wide range of taxes and charges to dramatically reduce the cost of green hydrogen.

Access to cheap renewable electricity is a critical input for a successful green hydrogen industry. This is where the Renewable Energy Zones (REZ) will play a critical role. The strategy states that it will be providing hydrogen producers with exemptions to some of the costs associated with delivering the REZs. This will result in some of the cheapest green hydrogen in the world

There is definitely an interest in hydrogen from the private sector. Companies like Dr Andrew 'Twiggy' Forrest's Fortescue Future Industries (FFI) are heavily investing in green technologies such as hydrogen. FFI have committed to decarbonising their business by 2030 using green hydrogen, they have already announced \$1 billion to build a 2 gigawatt Green Energy Manufacturing facility in Queensland which will produce electrolyzers which will in turn be used to produce hydrogen and create a new export market. [\(ARF 11/10/21\)](#)

At a [National Press Club](#) address on October 14 2021 Dr Forrest stated that:

“green electricity, green ammonia and green hydrogen can cover 100% of the world's carbon emissions.....we will burn carbon as long as we have to... until we can get green energy into place it”

He went on to say that he wanted to work with the NSW State Government to make Sydney the ‘Green Emerald City’ through green hydrogen.

“Once we are firing our own green hydrogen power station into Sydney our plan is to continue increasing green hydrogen production. This will be through a multi-billion dollar investment to create a million tonnes of no longer imports but green hydrogen exports... (and) a new high employment future at Port Kembla in NSW. To help build and keep jobs in Australia we are planning additional manufacturing centres beyond Gladstone (QLD) for green industry components in Parkes NSW and in Port Kembla”.

Dr Andrew ‘Twiggy’ Forrest.

Dr Forrest isn’t the only private investor looking to turn the energy market on its head. Another example of this that is currently playing out in the market at the moment is the Mike Cannon-Brookes and Brookfield’s bid for AGL which has recently been rejected by for second time by AGL’s board.

Cannon-Brookes claims that:

“there will be many advantages from shutting down AGLs coal fired power stations by 2030 and has declared it “the world’s biggest decarbonisation project”

[\(AFR 7 March 2022\)](#)

The renewable energy space will definitely be an interesting space for Central NSW to watch over the next few years be it in the more traditional renewables such solar wind or hydropower or emerging industries such as hydrogen and energy from waste.



Waste Management

The NSW Government's DPE has released the [NSW Waste and Sustainable Materials Strategy 2041](#). Waste management will become increasingly important as we move towards embracing a circular economy.

Engagement with communities will be critical to help shift mind sets regarding waste from a problem that needs to be disposed of to an asset that needs to be harnessed. There will need to be community engagement strategies and education to help change the communities' behaviours to minimise waste and embrace new technologies.

Key reforms included in the strategy are:

- phasing out problematic single-use plastic items;
- financial incentives for manufacturers and producers to design out problematic plastics;
- having government agencies prefer recycled content;
- mandating the separation of food and garden organics for households and selected businesses; and
- incentivising biogas generation from waste materials.

Targets include:

- reduce total waste generated by 10% per person by 2030;
- have an 80% average recovery rate from all waste streams by 2030;
- significantly increase the use of recycled content by governments and industry;
- phase out problematic and unnecessary plastics by 2025;
- halve the amount of organic waste sent to landfill by 2030;
- reduce litter by 60% by 2030 and plastics litter by 30% by 2025; and
- triple the plastics recycling rate by 2030.

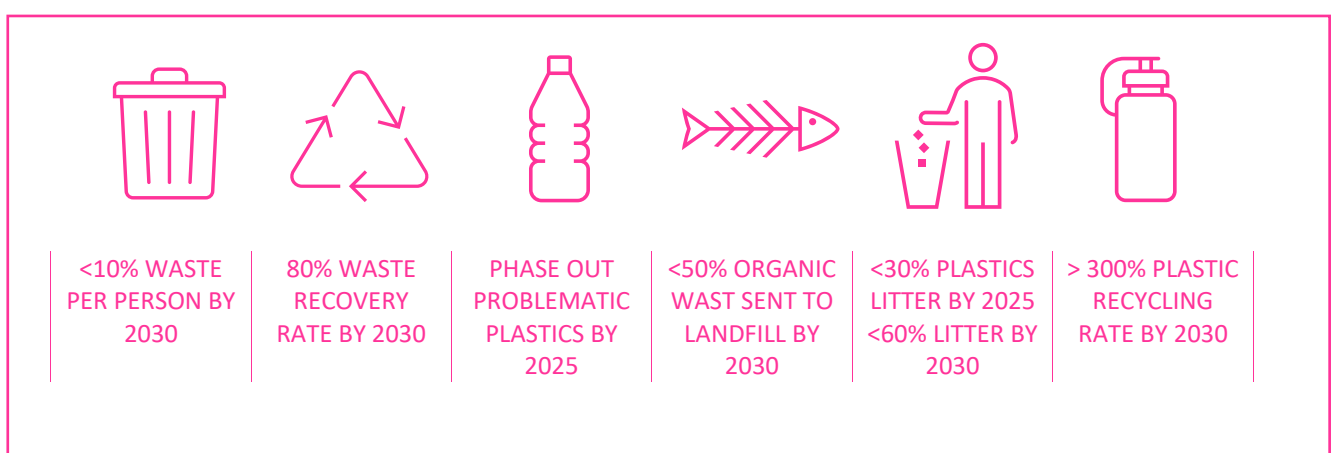


Figure 11: NSW Government Waste & Sustainable Material Targets 2041

The report also talks about how Councils can work together to look at joint procurement opportunities for waste and stated:

“The NSW Government will continue to support councils’ litter reduction and illegal dumping prevention activities with more than \$10 million in grants. We will continue to support collaboration for regional organisations of councils (ROCs), council groups, joint organisations and voluntary regional waste groups through \$15.6 million in funding. We will provide further support through our \$16 million investment in a new joint procurement facilitation service”.

([NSW Waste and Sustainable Materials Strategy 2041](#) pg 37).

The strategy also talks to the opportunities that Waste can create in particular in regional NSW including:

- The Parkes Special Activation Precinct (SAP);
- Energy from waste facilities (Parkes and Lithgow in the CNSWJO footprint have both been identified as potential sites);
- Anaerobic digestion and biogas captured via land fill and;
- Continuing to work with the EPA to open up new opportunities and technology in the resource recovery sector.



Aligned Economic Enables

The Draft Central West Orana Regional Plan states

“there is unprecedented opportunity presented by major investments in the Inland Rail, Parkes Special Activation Precinct and the Central-West Orana Renewable Energy Zone (REZ).”

Within Central NSW three major economic disrupters have been identified in numerous studies as not only economic opportunities but ways to help transition to net zero. Whilst these investments are aligned with numerous studies – there are several others that will be discussed later in the documents that are not as aligned to many government strategies that will play an important role such as the transport challenge, patterns of settlement and manufacturing.



Central West and Orana Renewable Energy Zone (REZ)

REZs are areas that have been put aside by the State Government to encourage the investment and development of renewable energy. These areas were identified in the NSW State Governments Electricity Strategy and Electricity Roadmap. REZs will play a vital role as traditional power stations reach the end of their life. The REZs will combine renewable energy generation, storage, and high-voltage poles and wires to deliver energy to the homes, businesses and industries – they will act like a modern-day power station.

The aim is to create an economy of scale to produce and supply cheap, reliable and clean energy to homes and industry in NSW, by connecting multiple generators and storage facilities in the same location.

The NSW Government expects that REZs will deliver multiple benefits to NSW, including:

- **more reliable energy** from significant amounts of new energy supply
- **energy bill savings** from reduced wholesale electricity costs
- **emissions reduction** from a cleaner energy sector
- **community partnership** from strategic planning, best practice engagement and benefit sharing

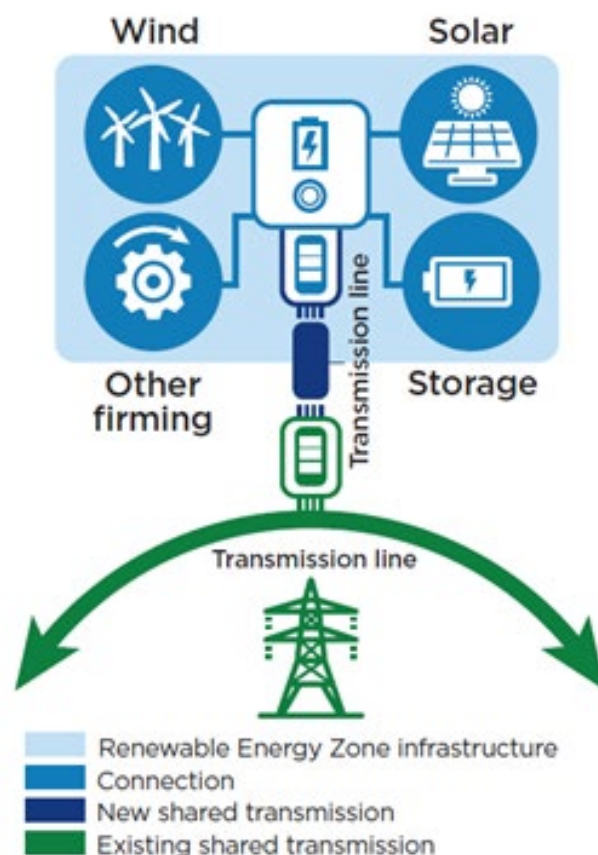


Figure 12: An image of how a REZ works as a modern-day power station

There are 5 REZ planned for NSW:

- Central-West Orana
- New England
- South-West
- Hunter-Central Coast and
- Illawarra regions

The first one will be developed in the Central West Orana region around Dubbo and Wellington. It is expected to bring \$5.2 billion worth of private investment to the region and at peak construction it is expected to create 3900 jobs. The REZ will unlock 3 gigawatts of new network capacity by the mid-2020s, enough to power 1.4 million homes. (Source [REZ](#))



Figure 13: Locality Central West Orana region

Whilst the REZ sits just outside of the CNSWJO footprint it presents a major opportunity for the region. Businesses should be able to access reliable, cost efficient, green energy – this in turn may encourage businesses to relocate to Central NSW to take advantage of this.

With nearly 4000 construction jobs being created, new opportunities for businesses and skill development will open up within the renewable industries such as hydrogen.

Parkes Special Activation Precinct

The NSW Government announced the establishment of Special Activation Precincts as part of its 20-Year Economic Vision for Regional NSW. The Precincts will be funded as part of the NSW Government's \$4.2 billion Snowy Hydro Legacy Fund, following the sale of the Snowy Hydro Scheme to the Commonwealth.

SAPs are a new way of planning and delivering industrial and commercial infrastructure projects in dedicated areas in region NSW, by bringing together planning and investment support services.



The aim is that businesses will be able to establish and grow with certainty and confidence knowing that the right planning framework is in place to enable more local jobs and drive economic outcomes in regional NSW.

The Parkes Special Activation Precinct was the first one to be announced and \$185 million in funding was pledged by former NSW Government Deputy Premier John Barilaro on Wednesday 22 July 2020. The funding is for vital infrastructure to enable development of the Parkes Special Activation Precinct.

The Parkes Special Activation Precinct will create jobs and prosperity not only for Parkes but the whole region. The Precinct will focus on sustainability and circular economy and will be Australia's first United Nations Industrial Development Organisation (UNIDO) Eco Industrial Zone.

The development will allow for agriculture value adding, open up opportunities for recycling and renewables, encourage a resurgence in manufacturing and provide a competitive network in terms of transport and logistics by leveraging Inland Rail and Parkes' strategic location at the cross roads of the Nation.

The Parkes Precinct covers 4,800 hectares of land and is expected to attract over a \$1 billion worth of private investment and create 3,000 jobs.

Inland Rail

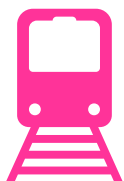
In one of the biggest investments ever seen in regional Australia, the Government will fund the Melbourne to Brisbane Inland Rail project with \$8.4 billion in equity to be provided to the Australian Rail Track Corporation. Construction on this 1,700 kilometre project has commenced with the first \$300m section from Parkes to Narromine being completed.

The Inland Rail will connect our region to a global market via the major ports of Australia, placing the Central West region into an economically advantageous position once the project comes into fruition.

The Parkes SAP will take advantage of its location at the only junction of Australia's two rail spines, the Inland Rail and the Trans-Australia Railway, it is estimated that Inland Rail will reduce the rail costs for inter-capital freight travelling between Melbourne and Brisbane.

As we are currently experiencing fuel prices of over \$2 a litre, new modelling from the [CSIRO](#) predicting the Inland Rail could cut some agriculture commodity transport costs by almost \$100 a tonne and cut freight transport costs by up to \$213 million a year including:

- horticulture saving up to \$99.21 per tonne;
- crops saving up to \$48.87 a tonne, and
 - processed food transportation would be reduced by \$57.82 a tonne.



The report also predicted a \$62 per tonne (31 per cent) reduction for regional intermodal freight to and from major metropolitan centres and ports.

It is estimated Inland Rail would take 200,000 trucks off the roads each year, or 150 B-doubles for each train between Melbourne and Brisbane. ([Parkes Champion Post 16/3/22](#))

According to the [Australasian Rail Association](#) (ARA) Rail freight generates 16 times less carbon pollution than road freight per tonne kilometre travelled, while road accident costs are 20 times higher than rail.

Inland Rail could cut freight costs per year by up to

\$213M

and take **200,000 trucks** off the road each year

Moving to the Future

Whilst there are many game-changing opportunities and initiatives detailed in many of the NSW Government strategies such as the Hydrogen, Critical Minerals and Waste Strategies, what they fail to detail are tangible, measurable and accountable actions to make sure that Regional NSW is setting itself up for success. Documents like the Draft Central West Orana Regional Plan are unsuccessful in addressing the challenges and opportunities that these investments and transitions to net zero policies will present to communities in which they are located.

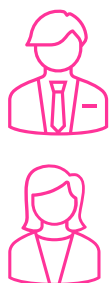
Councils impacted by these investments will need the State Government to be working with them proactively to ensure that planning and funding requirements for lead infrastructure such as water, sewer, telecommunications, education, health care and housing are in place. This will ensure that communities can leverage from this investment and that they grow at a sustainable pace.

Population Projections

The challenge of sustainable growth is further exacerbated by the use of Treasury's Common Planning assumption data. Regional communities like Parkes whose data information pack assumptions predicts an increase in employment of 2,146 in [Parkes](#) by 2041, BUT a population decrease of 350 people (the Parkes SAP alone is predicted to generate 3,000 jobs according to a DPIE commissioned report by [SGS Economics](#)). Based on the number of known developments currently within the Central West there are according to WRI (Western Research Institute) Region Shapers analysis approximately 64,000 new jobs earmarked for the area.

These Common Planning assumptions also fail to take into account the pattern of settlement such as Bathurst's proximity to Sydney driving population growth on Oberon and Blayney or the proximity of Lithgow, Bathurst and Orange.

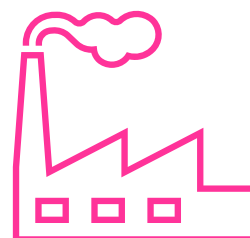
The NSW State Government needs to be very careful that in predicting a decrease in population that it does not become a self-fulfilling prophecy, with the Government using these figures to reduce services like health and education reducing business investment and in turn the withdrawal of services like banking and key retail providers and making regional living less attractive and skilled labour more difficult to secure.



WRI Region Shapers

63,593

New job will be generated in the
Orana and Central West



Liveability

Currently in regional NSW the reality is that we are on the cusp of an exciting new era. The post pandemic world means that people are more able to live where they want to live rather than where they need to live for work.

We are seeing a rise of the gig economy and a casualisation of the workforce in Australia, with an increasingly uncertain global outlook, new working style has emerged where several jobs are undertaken at the same time – the portfolio career. (Quay Consulting – [The Portfolio Career in the Era of Uncertain Work](#)).



The [20 year Vision for Regional NSW](#) identifies several 'Megatrends' one of which is Megatrend 2; Rapid Urbanisation

"People are increasingly moving to NSW urban centres other than Sydney. Regional NSW offers a diversity of choice in terms of lifestyle options, affordability, family and careers. An increased acceptance of working from home, accelerated by COVID-19, is creating additional opportunities and incentives for people to move to regional areas to access the enviable lifestyles on offer".

([20 year Vision for Regional NSW](#) page 30)

This is a huge opportunity for Central NSW to attract new people which would in turn should strengthen essential services such as health care and educations and bring new skills to the region. But there are also challenges with keeping up with services.

“Work where you want to Live” and “Live where you Love”

The Regional Australia Institute



Housing

Housing prices in the Central West has recently seen the biggest surge in median housing prices in 16 years [Domain, powered by APM \(Dec 2021\)](#)

MEDIAN HOUSING PRICES Dec 2021		
Bathurst:	\$601,500	up YoY 29.4%
Orange:	\$651,000	up YoY 31.5%
Dubbo:	\$460,500	up YoY 24.5%%
Parkes:	\$376,250	up YoY 11.6%
Forbes:	\$334,500	up YoY 3.9%)
Cowra:	\$365,000	up YoY 29.2%
Lithgow	\$435,000	up YoY 22.5%




Figure 14: Median House Prices Central West NSW

In addition, according to [ABS: Building Approvals by LGA, July 2020- September 2021](#) – there were:

- over **970** new dwellings approved in the Central West
- at a value of over **\$600 million**.

An example of this growth is Cabonne Shire Council where there have been 88 more development applications approved in the past financial year compared to 2019-20. There were 318 DAs approved in 2020-21 totalled \$47.4 million compared to 230 totalling \$28.7 million in the previous financial year.

Whilst it is great to see an increase in the number of residential houses being approved there is also an issue of housing affordability and rental squeeze. This is not necessarily new a new issue, but it has been exacerbated over the past year in regional NSW with prices surging faster than metropolitan areas.



“Safe, secure and affordable housing is critical to the wellbeing of individuals and local communities, and to the broader prosperity of New South Wales”.

Recommendations of regional Housing Task Force

To investigate the issue and develop a response to the issue the NSW State Government set up a [Regional Housing Taskforce](#). The report made five recommendations and established eight principles to develop a “roadmap for the NSW Government to best respond to housing challenges” (summarised in appendix A)

One of the strongest recommendations of the report is for more up-front strategic planning to be undertaken. This planning should look to resolve issues for greenfield sites such as issues environmental and biodiversity issues, cost of technical studies, cost of connecting, accessing and installing critical infrastructure and challenges with financing.

The report also talks about the importance of having a variety of housing in particular looking at infill housing and social and affordable housing. It discussed the challenges to this type of planning such as lack of funding, planning controls, development feasibility and market factors.

The report refers to the fact that regional housing markets can be impacted by seasonal or temporary workers especially in the agriculture, mining, and construction sectors, or by tourism. The report goes on to recommend exploring alternative types of housing to manage temporary fluctuations which may have alternative use such as accommodation following natural disaster. As part of its role on the Department of Education, Skills and Employment taskforce CNSWJO has commenced exploring the possibility of a space capacity in housing study. The report states:

“Given the complexities of delivering diverse housing in the regions, including social, affordable, and other forms of rental housing, there is a role for Government in taking a more active part in housing delivery in regional NSW, including through the expanded use of government and partnerships with the housing sector.”

([Regional Housing Taskforce](#) Pg8)



Water Security

Planning for long term strategic water security is vital for the growth and survival of Regional Communities.

The CNSWJO and its member Councils continue to work with the state government on the development of the Regional Water Strategies for the Lachlan and Macquarie-Castlereagh catchments. A priority has been the integration of town water into the state government's strategic water planning framework. Negotiations with the State on a collaborative structure to enable delivery of the RWSs continues. The implementation plan and governance structure to enable the delivery of the Regional Water Strategy options remains critical. It is worth noting here that the two RWS represent two very different valleys that both have different challenges and opportunities. It is worth noting that Oberon, Bathurst, Orange and Cabonne are in the unregulated section of the Macquarie river.

The [Draft Regional Water Strategy Lachlan](#) and [Draft Regional Water Strategy Macquarie-Castlereagh](#) were both released by the State Government in September 2020. The strategies were two of 13 water strategies across the State that the Department of Planning, Industry and Environment (DPIE) developed in partnership with water service providers and local councils.

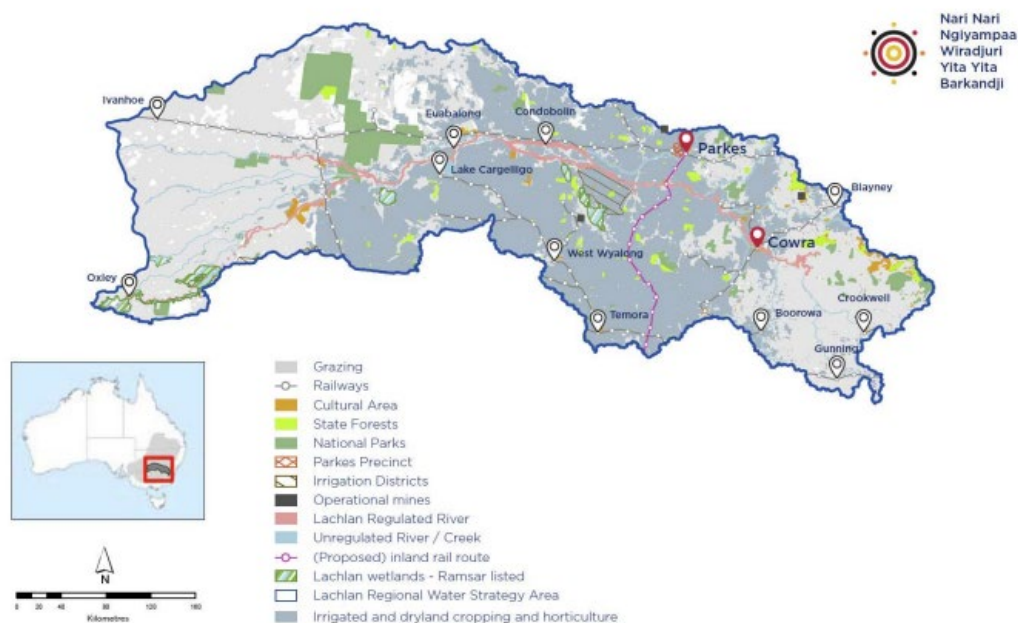


Figure 15: Map of the Lachlan region

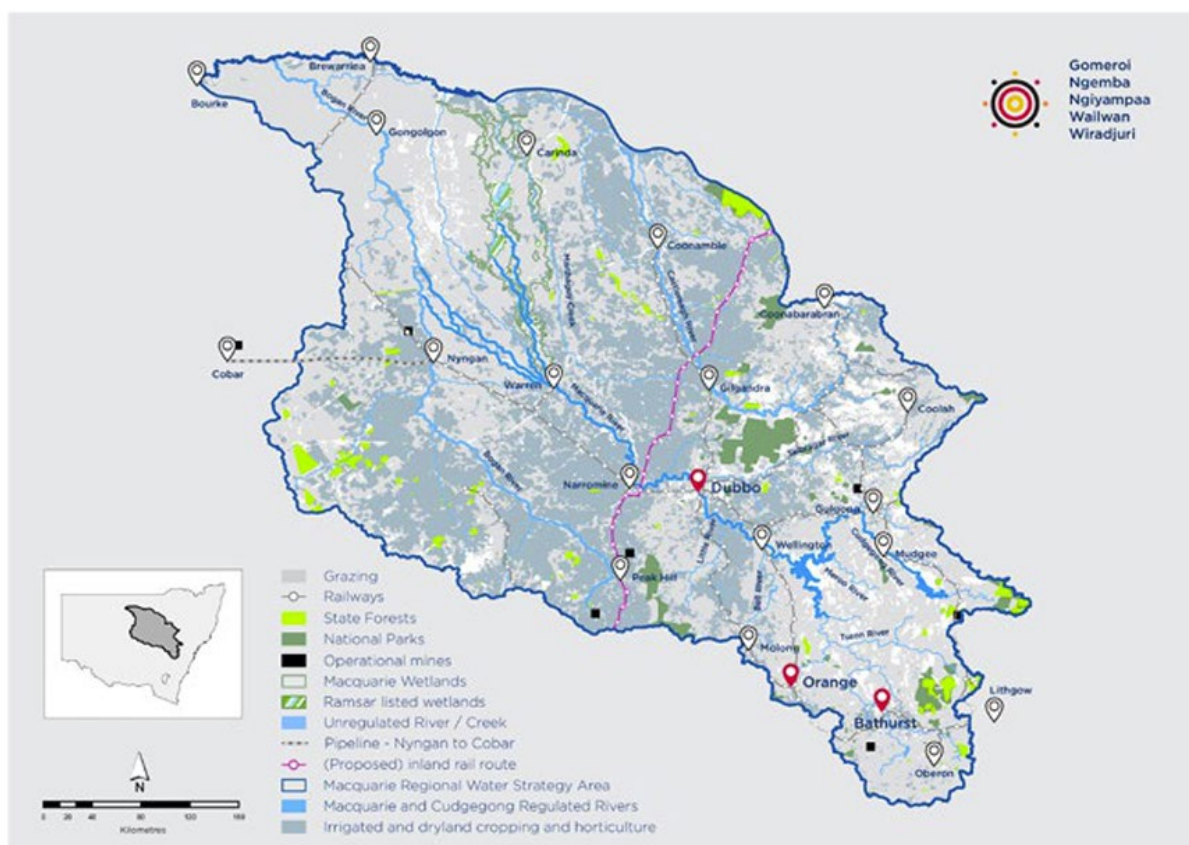


Figure 16: Map of the Macquarie-Castlereagh region

The strategies both have a strong focus on working closely with communities to deliver healthy, reliable and resilient water resources that:

- deliver and manage water for local communities;
- enable economic prosperity;
- recognise and protect Aboriginal water rights, interests and cultural values;
- protect and enhance the environment; and
- are affordable.

Both strategies set out a long list of options for consideration as part of the strategy (pls see appendix A for a summary), the strategies note that that the options are just options and that more community consultation will need to take place.

Key Focus Areas	
1	maintaining and diversifying water supplies
2	protecting and enhancing natural systems
3	supporting water use efficiency and conservation
4	strengthening community preparedness for climate extremes
5	recognising Aboriginal people's water rights, interests and access to water.

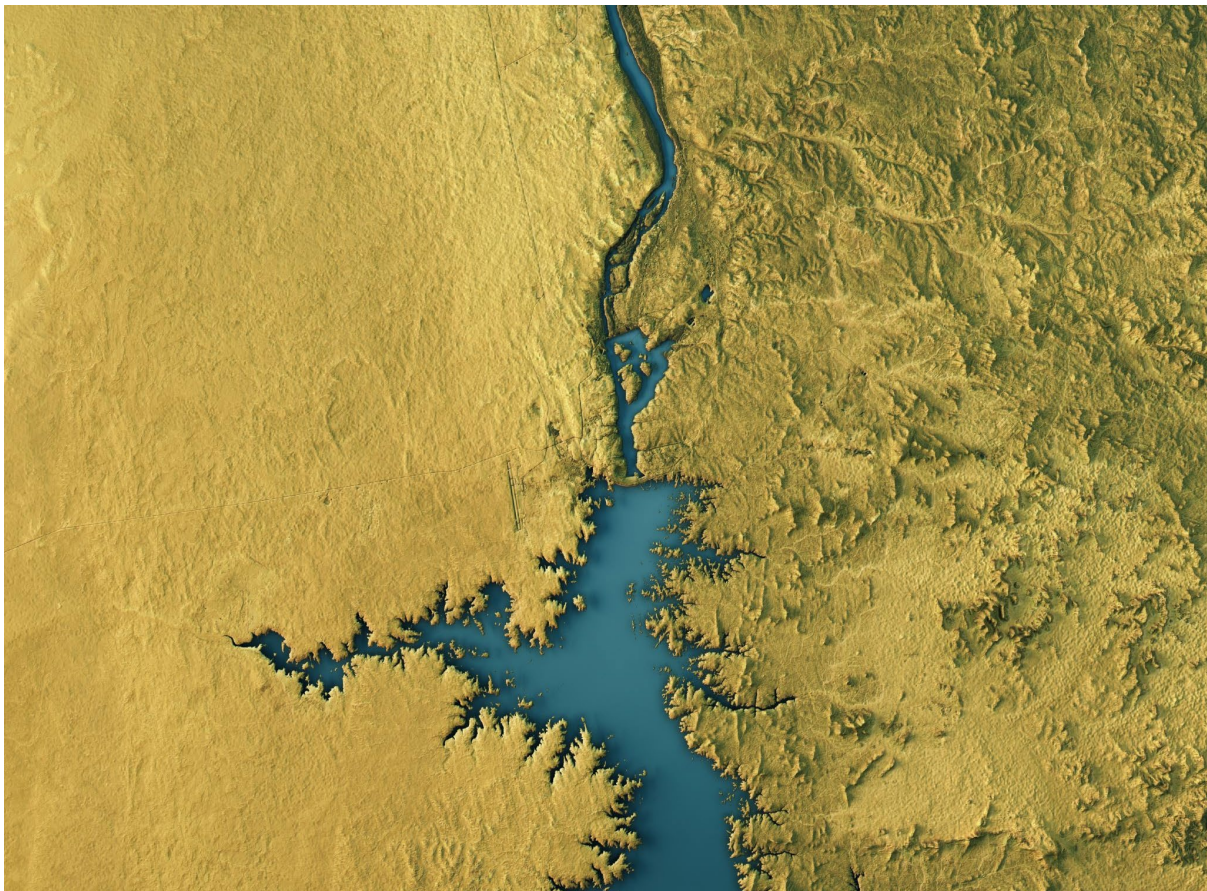
Table 2: Lachlan & Macquarie-Castlereagh Regional Water Strategies – Key Focus Areas

As we have recently observed with the March 2022 floods across NSW, climate change means that we are experience less frequent but more intense rain events. One of the ways of mitigating floods and

capturing more water for drought is to investigate more dams or the raising of the walls of existing dams. One of the options put forward in the Draft Regional Water Strategy Lachlan is the raising of Wyangala Dam, as a bold and ambitious project which looks to develop long term water security. The raising of the Dam creates an opportunity to explore how to increase the value of agricultural products being produced the in the region in a sustainable way.

The rising of Wyangala Dam may enable us to challenge the way we have always done things and to think about how we may be able to learn from countries such as the Netherlands and create additional value from the water in the Lachlan Valley whilst implementing sustainable water management policies. It is also worth noting that no surface water from the Lachlan is counted in the water trade between states as part of the Murray Darling Basin scheme. As the Lachlan basin is essentially a closed system it presents an opportunity of to explore the Dutch model. [Farmers in the Netherlands are growing more food using less resources | Pioneers for Our Planet](#)

This could be the catalyst for a range of high-value industries, environmental sustainability, creating jobs and wealth in the Lachlan region. Alternatively, if the improved security created by the raising of the wall is a portion to existing users, there would only be a modicum of change and we would lose the opportunity for change. However, documents like the Draft Central West and Orana Regional Plan fail to discuss the planning strategies that need to be put in place to ensure that the strategic planning is in place to leverage the new infrastructure.



Regional Health

Noting feedback from the CNSWJO Board, health and the delivery of health-related service is a priority across the JO region currently. Over the last few years, the region has seen a reduction in services in many communities as well as new health infrastructure being delivered that either does not meet the needs of the community or is being underutilised due to lack of staff. This is not a new problem and one that has been raised at all levels of government constantly by communities and has been further highlighted by the current pandemic.

The drought threatened not only the lively hood of many regional primary producers but also local business and communities. The drought shone a light on the disparity in between regional health care systems and those in metropolitan areas. Mental health was a major issue effecting many and the lack of care in many cases lead to tragic consequences.

While the Central West and Orana Regional Plan makes mention of Orange “becoming a hub of medical, health, and education and research expertise with the development of the Orange Health and Innovation Precinct” no specific actions are identified that would support its progression despite the significant private investment in the area and the potential of the research capability of the Department of Primary Industries’ footprint. [Draft Central West and Orana Regional Plan 2041 \(nsw.gov.au\)](#) pg 70



New private hospital, Orange

The NSW Government in September 2020 launch a public inquiry into ‘health outcomes and access to health and hospital services in rural, regional and remote NSW’, they have received over 700 submissions many of which were very damning of the system. Hon Bronnie Taylor MLC has been

appointed as the State's new Minister for Regional Health and has said that she will appoint an expert taskforce to advise her on the State's regional hospital crisis. A final report is due at the end of April 2022.

Telehealth has started to relieve some of the issues regarding seeing a local GP but should not be seen as a replacement for having local GPs seeing people face to face. Having access to health care is vital to ensuring vibrant communities, without it, it becomes very difficult to attract new people to live and work in regional areas.

The Western NSW Local Health District has released a [Strategic Plan 2020- 2025 Healthier rural people, thriving communities](#) – in it they identify the below challenges & opportunities:



<p>OUR CHALLENGES</p> 	<ul style="list-style-type: none"> • The burden of potentially avoidable deaths and hospitalisations caused by chronic diseases such as cardiovascular disease, diabetes, chronic obstructive pulmonary disease and cancer • High rates of developmental vulnerability among children • Financial and workforce limitations to respond to the service demands of the community • A population spread across a vast geographic area with uneven population growth • Vulnerable communities who may sometimes need to travel to access health care but may not have the infrastructure or social or financial resources to easily do so • Ageing population with complex health needs • Projected future demand for health services • Aboriginal life expectancy gap and high rate of chronic conditions • A changing environment and environmental disasters such as drought and bushfire
<p>OUR OPPORTUNITIES</p> 	<ul style="list-style-type: none"> • Using virtual health care and technology to improve access to services, and deliver better patient outcomes • Renew our focus on and commitment to improving the health of Aboriginal people • Providing more out-of-hospital care and integrated care • Using innovation in service delivery and adapting new models of care to meet the needs of our communities • Developing a regional approach to health and wellbeing, and supporting high performing primary care by building stronger partnerships with the community, GPs, the Primary Health Network, Aboriginal Community Controlled Health Services and other service providers

Table 3: Western NSW Local Health District Strategic Plan 2020-2025 Challenges and Opportunities

Figure 17: NSW Health, Western NSW Local Health District, Strategic Plan 2020 -2025



Education and Skills development

Report after report highlight those educational standards in regional and remote communities are behind those of metropolitan areas, for example the number of students successfully completing year 12 in major cities is 78% compared to remote areas where it is sitting at 43%.

REGIONAL + REMOTE AREAS



MAJOR CITIES 78%



Figure 18: High School Completion rates – remote vs metropolitan

The NSW Government has released a [Rural and remote Education Strategy](#) (2031-2024) which focuses on four key themes:

- Key area 1 – **People**: Supply students in rural and remote communities with more high-quality educators who are aware of localised needs.
- Key area 2 – **Practice**: Better equip and develop rural and remote teachers to deliver a broader curriculum, contextualised to the needs of the community, to offer engaging learning opportunities for students.
- Key area 3 – **Participation**: Ensure staff and students in rural and remote schools are more empowered to address wellbeing needs through stronger connections to their communities.
- Key area 4 – **Partnerships**: Leverage more productive partnerships with higher education providers, vocational education providers and local industry to increase rural and remote student achievement, ambition and access to post-school opportunities.



Figure 19: NSW Government Rural Remote Education Strategy Key Focus Areas

A skilled and trained workforce will be paramount to attracting new businesses to regional NSW. Governments of all levels need to work together to map and plan for the skills need for the major projects that have already been identified within the region such as the REZ, Inland Rail and the SAP but also the associated industries that will be created as a consequence.

Governments need to consider how to plan for additional schools, TAFEs and RTO facilities as well as innovative education facilities such as Country University Centres. Detailed consideration also needs to go into the importance of the infrastructure needed to support these facilities and trained workforces such as the importance of fast and reliable internet and communications infrastructure, health care facilities and housing to attract a skilled worker.

Whilst there are many strategies that talk to the importance of a skilled workforce currently there does not seem to be a cooperative approach to how to tackle the issue through a comprehensive lifelong learning approach.



Agriculture

NSW agriculture exports in 2020 are worth \$6 billion and the NSW Governments has set ambition targets to double that in the next 10 years The Central NSW agricultural region is extremely rich in agricultural product. Our agricultural products are seen as **CLEAN, SAFE AND GREEN**.

However, there is currently limited value-adding to agricultural produce in the region. A report by Regional Development Australia (RDA) Central West - [Value Adding to Agriculture in Central West NSW](#) stated that **64% of agricultural product in the Central West leaves without being value added.**

Report after report, such as the [Australian Government Agricultural Competitiveness White Paper](#) discusses the opportunities for Australian agricultural businesses. The reports states that, for an industry of the future they need to build infrastructure for the 21st century.

Farming needs to be smarter; it needs to access premium market needs to build on our strength and we need reduce our risks, such as the impact that drought has on the industry.

The White Paper states that:

"Australian producers have a premium product to offer. With the right supply chain and product differentiation, a premium product gets a premium price. We may never be the food bowl for all of Asia but we do have the opportunity to be its favourite delicatessen".

The Federal Governments [2022 Regional Strengths and Infrastructure gaps](#) (p94) analysis points out the agriculture contributes over a \$1 billion of regional value. It also comments on the fact that further growth will require investments in agricultural technology and value-adding manufacturing



The Draft **Orana and Central West Regional Plan 2041** identifies agriculture as an opportunity it talks about building freight networks and making sure that we have a secure water supply.

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Then, if we start looking at megatrends around the world, we can see an opportunity for Australian products and innovation. CSIRO's report entitled [Our Future World Global Megatrends](#), talks about six main areas of change:

1. **More from Less** - increasing amounts without limited resources
2. **Going, going...gone** - protection of our biodiversity and global climate
3. **The silk highway** - rapid growth
4. **Forever young** - an ageing population and changing patterns
5. **Virtually here** - digital technology
6. **Great expectations** - imperative for innovation

NSW Farmers have also released their blueprint for agricultural and regional NSW success for 2030 and in a post pandemic world called [Growing our Food and Fibre Future](#)

They identify eight key areas where there is potential to expand the sector's productivity and unlock growth opportunities for agriculture and regional NSW. See the table below:

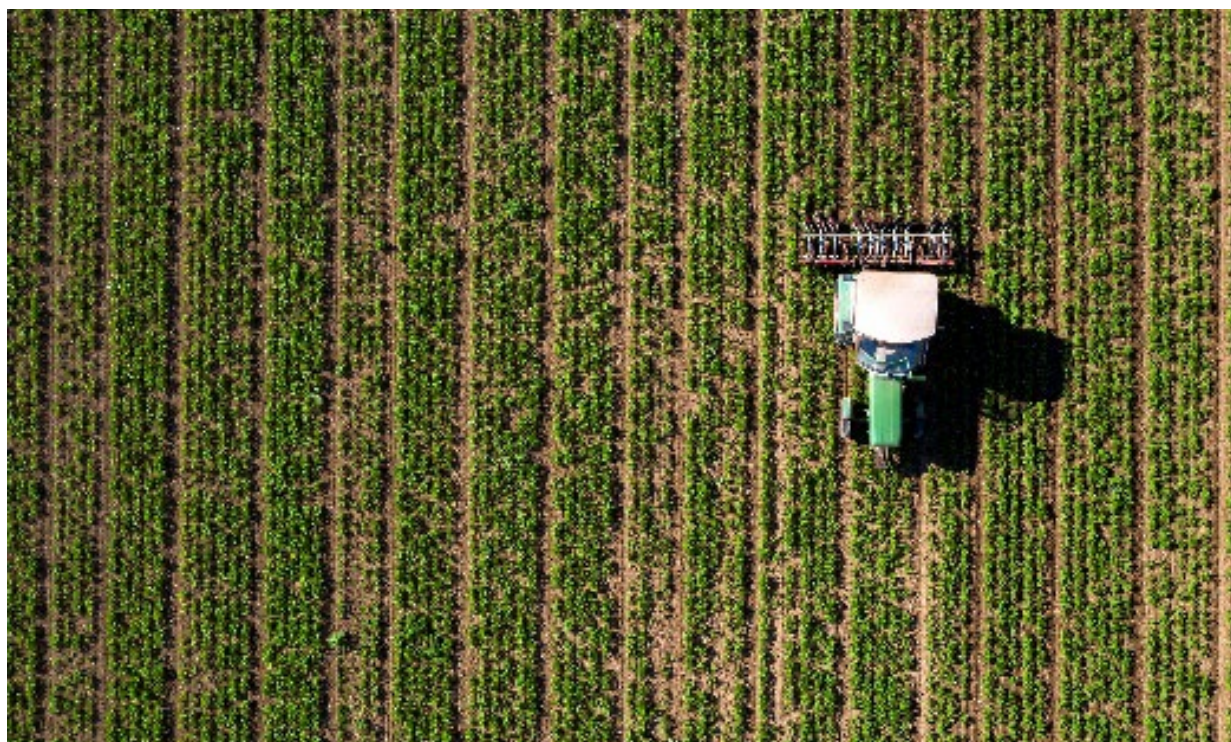
Productivity & growth opportunities for agriculture and regional NSW	
	Strengthening supply chains and infrastructure
	Growing our farming businesses
	Securing a Right to Farm
	Creating fair and competitive supply chains
	Driving premium products and value adding
	Improving and expanding our market opportunities
	Building vibrant regions
	Achieving water and environmental reforms

Table 4: NSW Farmers Association – Growing our Food and Fibre Future Blueprint

All of these things mean that we have to look differently at the way we manage our natural assets such as water and how we use technology monitor their use. We need to look at international best practice such as in the **Netherlands** who almost two decades ago, set themselves an ambitious target of 'twice as much food, half the resources'. ([KPMG Think Big, think fresh](#))

Since then, they have reduced their dependence on water on key crops by 90%, nearly eliminated the use of chemicals on glasshouse crops and cut their use of antibiotics by 60%. They are currently the world's second largest food export by value behind the US, which is 270 times bigger in terms of land mass than the Netherlands.

The Dutch example shows what is possible to achieve when all levels of government, the private sector, good science, technology and the community work together to achieve sustainable long-term solutions to some of the challenges that the world is facing.



Towards net zero and agriculture

A report from the Grattan Institute – [Towards net zero Practical policies to reduce agricultural emissions](#) highlights the fact that the nation cannot reach a net zero target without the agricultural sector (agriculture currently generates about 15 per cent of Australia's greenhouse emissions) and warns that without reaching this target import tariffs will be imposed on the Australian agriculture sector.

The report also highlights initiatives such as carbon farming schemes, can actually increase primary producers' bottom lines.

The report states that even though there are challenges with meeting net zero and the cost of transition to operations, *'overall Australian farmers stand to benefit considerably from actions that reduce emissions and limit climate change.'*

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A net zero commitment of at least by 2050 creates five key opportunities for agriculture, which **exports 70 per cent of its produce**; these include:

- selling carbon credits;
- growing low-emissions produce for a premium to climate-conscious consumers;
- improve the efficiency of their farming;
- shielding exporters from tariffs on food and fibre that comes from countries without any carbon restrictions; and
- contribute to reducing global warming that is smashing farm profits.

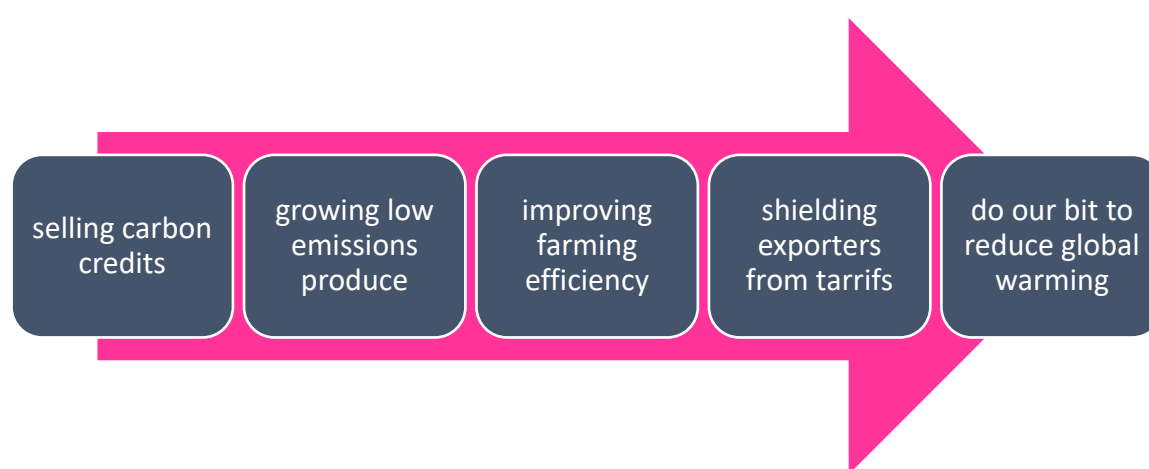


Figure 19: key opportunities for agriculture to achieve net zero commitment by 2050

The National Farmers' Federation [has set a target for net zero](#) emissions by 2050. [Meat and Livestock Australia](#) have committed to net zero by 2030 and the Grain Growers association supports net zero by 2050 and has stated that research, education and innovation will be key to achieving this goal ([Seeking clarity on net zero goal](#)).

Industry / Association	Net Zero Emissions Target Supported
National Farmers' Federation	By 2050
Meat and Livestock Australia	By 2030
Grain Growers	By 2050

Table 5: Peak Industry Net Zero Emissions Targets

The Grattan Institute report also highlights that many farmers are small businesses owners, they are busy working in their business, therefore for many it would make it difficult to find the time and the money to invest in the new technologies and practices needed to reach net zero. The report suggests that this is where Governments need to take the lead to help manage the transition. ([SMH – Framers essential for Australia’s net Zero 2050 push: report](#))

A new report from the NSW State Government’s DPE entitled [Growing NSW primary industries and land sector in a low carbon world](#) states that as the world decarbonises, the primary industries and land sector is facing a unique combination of factors:

- increasing concern about environmental, social and governance (ESG) performance across the supply chain, by the investment community and from consumers;
- significant appetite from within the sector to act on climate change and benefit from abatement opportunities; and
- growing interest from the finance sector to pursue nature-positive, low emissions practices that improve returns and reduce risk.

The report points out that the agricultural industry is well positioned to embrace the changes in market demand and transition to the opportunities presented through innovations and a movement towards a low carbon economy in farming.

The NSW Government has also announced that it will invest \$125m to support land management transition. They have announced three new programs:

- 1. Developing market and industry foundations** – \$52 million to develop trusted and transparent data, metrics and frameworks to underpin strong market activity.
- 2. Building critical mass and capacity** – \$72 million to incentivise land managers to take early action on high priority areas and build carbon management and emissions abatement capacity and expertise
- 3. Accelerating finance for natural capital and low carbon farming** – \$1 million to initiate work with the financial sector to help finance nature-positive and low emissions practices by farmers and land managers



Decarbonisation ambitions of major agricultural trading partners

The United States

- 50-52% emissions reduction by 2030
- Net zero emissions by 2050

Japan

- 46% emissions reduction by 2030
- Net zero emissions by 2050

The European Union

- 55% emissions reduction by 2030
- Net zero emissions by 2050

China

- Emissions peak in 2030
- Net zero emissions by 2060

The United Kingdom

- 78% emissions reduction by 2035
- Net zero emissions by 2050

New Zealand

- 50% emissions reduction by 2030
- Net zero emissions (excluding biogenic methane) by 2050

Indonesia

- Net zero emissions by 2060
- 41% emissions reduction by 2030 (conditional target meaning external support is required)

South Korea

- 40% emissions reduction by 2030
- Net zero emissions by 2050.



Decarbonisation ambitions of major food companies

Nestle

- 50% emissions reduction by 2030
- Net zero emissions by 2050 across its supply chains

General Mills

- 30% emissions reduction across its value chain by 2030
- Net zero emissions by 2050

Unilever

- Net zero emissions from products up to point-of-sale by 2039

McDonalds

- 31% reduction in emissions intensity across its supply chain by 2030
- Net zero emissions by 2050

Fonterra

- No net increase in emissions from dairy farming between 2015 and 2030

Coles

- 75% reduction in direct emissions by 2030
- Net zero by 2050

Woolworths

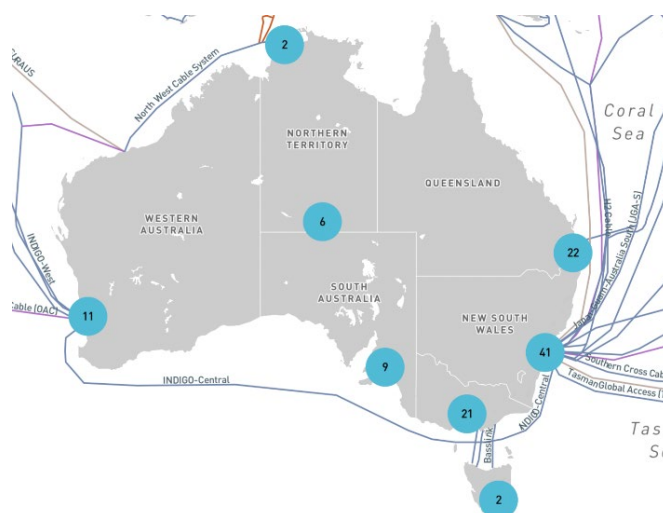
- 19% reduction in supply chain and waste emissions by 2030
- Net zero by 2050.

Figure 20 Government and business committing to net zero
[Growing NSW primary industries and land sector in a low carbon world](#) pg 10

Telecommunications and emerging Industries

As we are emerging from the current pandemic, we are extremely grateful for the role that technology has played in our daily lives - it has allowed us to continue working, educating our children and enabled us to keep in touch with loved ones, whether they are across the street, the country or around the world.

During this period, we have seen people rethink how they live and work and many people are opting for 'tree changes' as the possibility of choosing of living where we want to live rather than where we need to live for work opens new doors and possibilities. For regional communities this decentralisation of people (not just businesses) can be seen as a boon and we need to be ready to attract new residents. People are looking for "liveable communities" and technology. Access to it plays a significant role in people's decision about what makes a 'liveable community.'



The tyranny of distance rhetoric is often spoken about as being a disadvantage to people living and working in regional NSW. But technology has the power to address this issue and open up the regional areas of NSW and Australia to people to live, visit, work and invest but for this to be achieved technology and communications systems have to be fast, affordable and reliable.

In February this year the Federal Government released its [2021 Regional Telecommunications Review – A step change in demand](#) - in it, it acknowledges that:

“there are still connectivity shortfalls in regional, rural and remote Australia which need to be addressed if the opportunities in these areas are to be realised”

The report also found that there needed to be an increased coordination and investment between the Australian, state and territory governments to address a 'patchwork quilt' approach to connectivity in the regions. Local councils and other regional stakeholders are increasingly expected to facilitate telecommunications service delivery, but are not appropriately resourced to identify connectivity needs and support the deployment of suitable solutions. Supply side issues, including backbone fibre and spectrum access, are barriers to competition and innovation in regional telecommunications markets.

The NSW Government has committed \$100million to the Gig State for the program (part of the snowy Hydro Legacy money). The Gig State program has recently changed focus and will be redirected into new priority areas including:

- Wireless upgrades for rural and regional communities on satellite internet services;
- Improving current internet service offerings in remote communities with a small population base and challenging topography; and

- Pilot of emerging technologies such as low-earth orbit satellites in communities located in hard to service geographic areas.

*Investment in telecommunications infrastructure should **enable opportunities to create specific regional technology hubs** (edge services) that are specifically targeted to the requirements of local industry and enable innovation and research **in the region**.*



Transport

The NSW Government has recently released its [Draft Central West and Orana Regional Transport Plan](#).

Below are the six main objectives of the plan:







Connected 	a transport network that facilitates seamless, multi-modal connectivity between where people live, work and play
Safe 	a transport network that delivers a safer future for the Central West and Orana
Liveable 	a transport network that supports vibrant places while enabling the successful movement of people to access jobs, services and social opportunities regardless of age, ability and income
Adaptive & Sustainable 	a transport network that both contributes to, and supports a seamless transition to a low emissions future
Productive 	a transport network that supports the efficient, safe and sustainable movement of freight through the principle of 'moving more with less'
Resilient 	a transport network that is resilient to major disruptions associated with natural disasters, climate change and planned and unplanned events

Table 6: Central West and Orana Regional Transport Plan Objectives

One disappointment about the report was the focus on the Common Planning Assumptions that we already know are absolutely incorrect. Unfortunately for the communities of NSW using population data that has historically proved wrong and in the current socio-economic climate has serious implications for government investment in region.

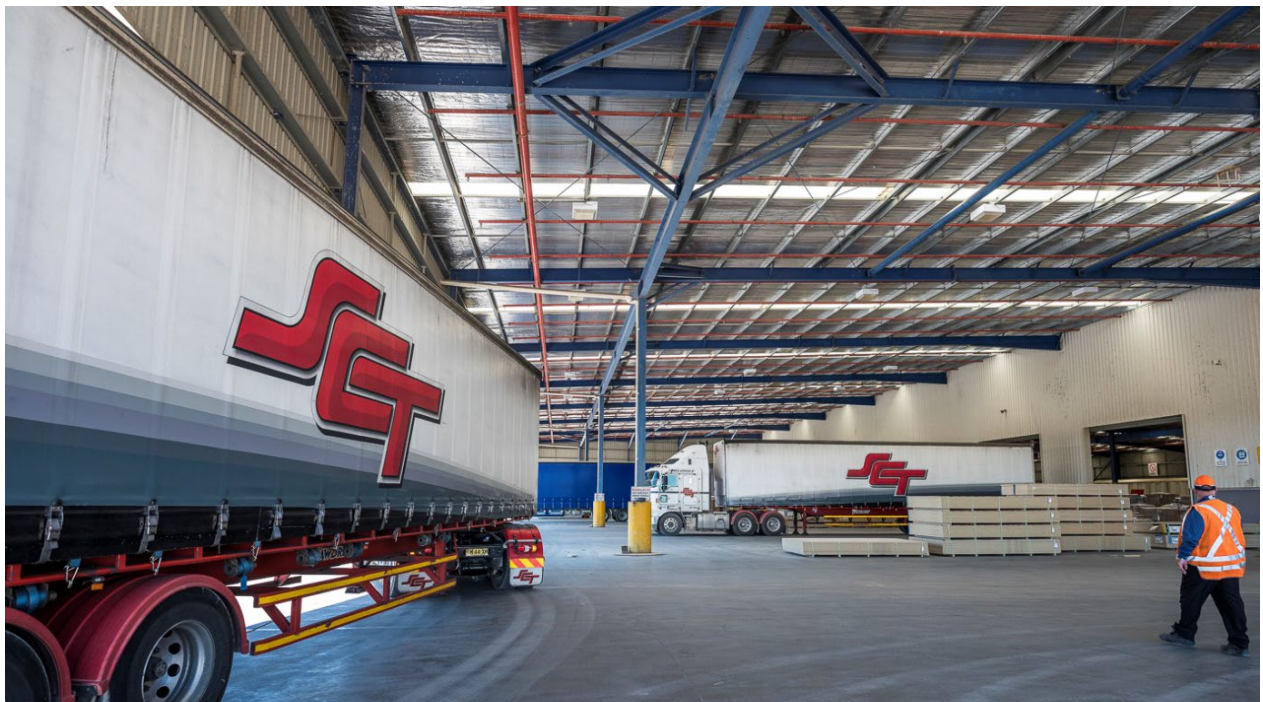
The plan talks to the importance of transport links for the economic and social viability of communities. It discussed hub and spoke approach to regional transportation and issues in particular for providing day return public transport from smaller regional areas to larger regional centres. The report failed to properly identify communities of like and therefore appropriate solutions for transportation.



The Draft Central West and Orana Plan focuses on historically incorrect population data which will have serious implications for government investment in the region. It also fails to properly identify hub and spoke communities and therefore appropriate solutions for transportation.

The report also talks to the importance of meeting the growing freight task. This will become even more vital with the Government focus of onshoring manufacturing.

Ensuring that the right mode for the right load is available at a competitive price into an appropriate port will be paramount to the long-term viability of agriculture and manufacturing in Central NSW. Connections into Sydney continue to be an issue whether it is via rail, road or air.



Conclusion - Future ready

There is a plethora of strategic plans developed by governments of all levels and the private sector trying to chart a course through the current challenges that the world is facing. It is evident that the landscape has changed considerably over the last five years. We are now facing a **national emergency** in the terms of climate change and water security. These two challenges need to be considered in context of other regional enabling social infrastructure such as transport links, liveability initiatives, health care, education, housing and technology.

Whilst all of the documents reviewed to some extent identify challenges and opportunities, what was lacking from most is a clear governance structure.

A governance structure should identify the

What – clearly identify what is being delivered or action &

Why – the action is being delivered – what is the benefit

Who – will deliver the action?

How – will the action going to be delivered - including funding options

When –will it be delivered, very clear time frame

Measured – success be transparent and measured with tangible outcomes.

Most of the documents reviewed for this environmental scan failed to hold any individual or department accountable in terms of delivering outcomes. Many pushed responsibility back onto local government to deliver outcome further once again cost shifting between the levels of Government.

A strong Governance structure is essential for the delivery of Strategic Plans. A structure that may assist would be to establish a “Monitoring Committee” chaired by the department responsible for delivering the plans with membership from other stakeholders such as local government, Joint Organisations, DPIE, Department of Regional NSW, TfNSW and NSW Health. This would at least give transparency and accountability.

Whilst we need to be mindful and engagement fatigue, stakeholder engagement is paramount in the development and the delivery of all-strategic plans. Better consultation, leads to a better plan and better implementation which will ensure that the benefits reach those who the strategies are aimed at.

Too often the Central West is swept into the “rest of the west” and the potential for leveraging the opportunity of the Central West’s strategic location and unique characteristics is missed. Aspects such as pattern of settlement, transport linkages, productivity, proximity to ports, Sydney and Canberra need to be taken into consideration and seems to be over looked in many strategies.

What was concerning was that many of the regional strategic plans were using population data that has historically proved wrong and in the current socio-economic climate is wildly wrong, this has serious implications for government investment in region. For example, investment in infrastructure such as schools and hospitals will not be fit for purpose for the actual population growth. This leads to a consistent, serious and substantial waste of public money. Uneconomical, inefficient or ineffective use of resources, resulting in a serious and substantial loss of public funds also leads to a loss of public confidence with its corollary political fall-out. The current population data just simply does not add up. At the very least scenario planning for alternative population numbers should be considered. This should be informed by lived experience in region including the huge number of construction projects

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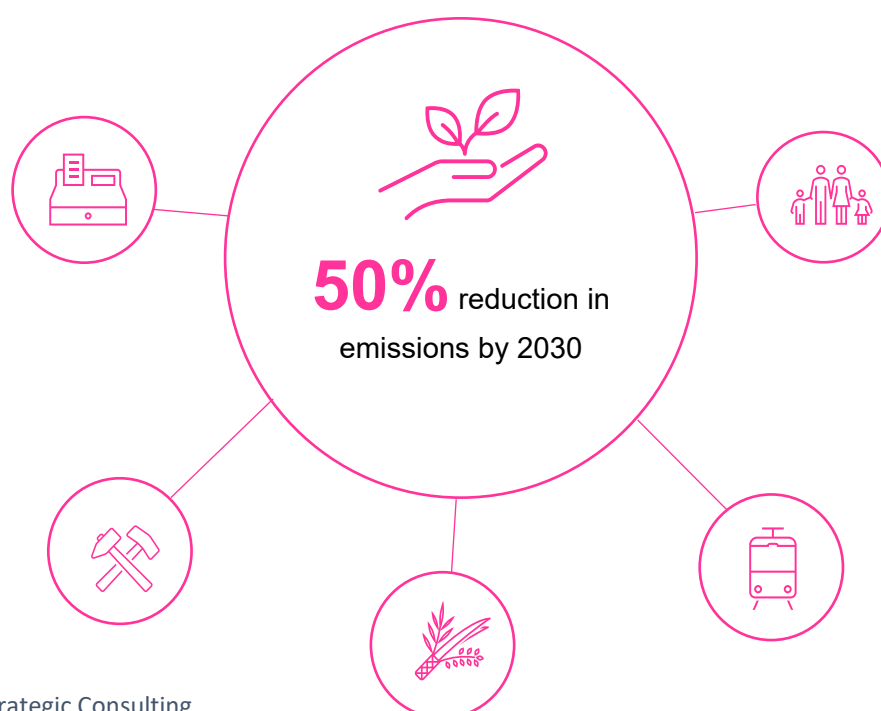
in the pipeline in the central west at the moment, new mining projects, the Parkes SAP, the Renewable Energy Zone and the migration from cities to regional Australia.

What also stood out as part of the Environmental Scan was that some economic drivers were aligned in strategies whilst others were simply glossed over. There was a focus on three main economic drivers for the Central West being Inland Rail, the Parkes Special Activation Precinct and the Orana and Central West Regional Energy Zone. Most plans had a focus on the west of the region to the detriment of the eastern half of Central NSW.

We know that there are huge economic drivers happening all over the region. This includes water security projects such as the raising of Wyangla Dam which will deliver economic prosperity via construction jobs and agricultural and industry benefits. There are also mining with opportunities in the Critical Minerals space. Operational mines such as Northparkes Mines and Cadia are looking to expand their operations. There are new approved mines in the region looking to establish such as Sunrise energy metals (formally Clean Teq) at Fifield a \$2 billion nickel and cobalt mine which will employ 1000 people during construction and approximately 300 on going and to in the east with McPhillamys open cut gold mine at Kings Plains which will generate 700 construction jobs and ongoing between 260-320 new FTE. There are also billions of dollars of work on transport projects being undertaken in the region such as the Great Western Highway Upgrade in the east and the Newell Highway bypass at Parkes. The public sector is expanding especially in health care in Orange and education in Bathurst. Finally, despite the pandemic we are seeing the domestic tourism market booming across the region with record breaking visitor numbers across the region.

Whilst there is no denying that we are living in a challenging environment there are many reasons for optimism for the future. To realise our potential, we will have to embrace change. This isn't always easy and, in many cases, confronting, requiring strong leadership from all levels of government and industry.

If we are going to meet Australia's obligations under the Paris Agreement and NSW Government's plan to reduce emission by 50% for 2030 [NSW set to halve 35% by 2030 | NSW Environment, Energy and Science](#) and to zero by 2050 all communities will have to make changes now. The Central West of NSW is in a fortunate position where its key industries – mining, agriculture and the public sector are in the driver's seat to take advantage of the changes that are needed



Summary Opportunities and Challenges

Based on the environmental scan of the State, Federal and private sector strategic plans the following challenges and opportunities have been identified.

Challenges	
Climate Change	Leading to extreme weather emergency events such as storms, droughts, floods, fires. Flow on impact on agriculture, water security, asset management, insurance costs and social dislocation
Population projections	Due to inaccurate population projections, there is a lack of planning for social infrastructure such as housing, education and healthcare
Inflation	Currently we are seeing the cost of living rising higher the wages. This is reflected in transport costs, consumer good – including fruit and vegetables which have been impacted by climate change and rising input costs.
Transport Linkages	Between regional centres and cities and smaller communities as well as access into capital cities. The growing freight task and access into ports as well as the rising cost of freight will be a challenge into the future.
Telecommunications	Access, speed and costs for both mobile and internet services. Additionally, IOT networks for agriculture
New technology and Innovation	There seems to be a lack of appropriate Government policy to support new technology and industry. New technology has been hindered by things such as procurement guidelines for Government and the fact that Government Departments such as EPA are often looking for “proven” technology which is difficult when it is a new technology.
Community & Stakeholder Engagement	Transition to new technologies and a net zero economy will need careful, respectful and considerate community engagement especially as different industries and communities will be impacted disproportionately. Consultation also needs to be included in the development of strategic plans
Funding	Funding needs to be identified to deliver the objectives of many of the Strategic plans. Local Governments are taking on the responsibility of delivering many of the objective but they are doing it from a capped rate base making their financial sustainability more precarious.
Water Security	Water security is linked to climate change but also population growth. As more and more people moving to regional area and establish of new industries, we will need secure water supplies to ensure economic and social growth. There is a lack of focus on Water Security in most strategies.
Skills, housing, education & health	Currently there is very low unemployment in the Central West. Coupled with the pandemic suspending immigration there is a lack of skills in regional NSW. This is further impacted with the lack of housing options to entice skilled labour to regional areas. With the cost of housing going up the Central west is also suffering from an affordable housing crisis. The Central West is also suffering from a skills shortage in the healthcare sector especially outside of Bathurst and Orange and educational outcomes are still in some case substantially subpar metropolitan areas
Geopolitical Environment	There is no doubt that the geopolitical landscape looks vastly different to it did five years ago. Traditional trading partners such as China have introduced tariffs against Australia. The current war in the Ukraine and the sanctions against Russia are pushing up commodity prices such as grain and oil. Many Countries have also put net zero targets in place for their trading partners, which they will need to achieve to continue exporting. The pandemic has also highlighted fragility within our supply chains.

Opportunities


Net Zero	Reduce the impact of Climate change. Ensure international trade is maintained. Creation of new jobs and industries. There are also opportunities for local governments to develop their own net zero policies.
Renewable Energy	Green power generated in regional areas will entice new industry to locate to regional areas and ticks many of the ESG requirements that industry is looking for. It will also help the transition from traditional coal fired power stations and create new jobs and skills.
Circular Economy	The concept of the circular economy enables regions to think differently about products and waste. From designing waste out, to repurposing products to recycling and resource recovery there are many opportunities that the circular economy will present to Central NSW.
Agriculture	With better water security, new technologies and the opportunity to develop additional income streams through net zero initiatives such as carbon trading and soil sequestration – the future of agriculture in Central NSW is positive.
Better water management and security	We have to look differently at the way we manage our natural assets such as water and how we use technology monitor their use. We need to look at international best practice such as in the Netherlands who almost two decades ago, set themselves an ambitious target of ‘twice as much food, half the resources. Better water security supports not only agriculture but population growth and industry development
Liveability	More and more people are choosing to live where they want to work. This is a huge opportunity for regional areas to attract skills and investment into regional areas.
ESG initiatives	Financial institutions globally are increasingly looking at ESG credentials as part of their investment strategies. Consumers are increasing making purchasing decision based on EGS credentials.
Mining and Critical Minerals	Central NSW has the opportunity to play a large role in the developing critical minerals market. It is located along the Macquarie Arch and significant exploration is already happening with the area.

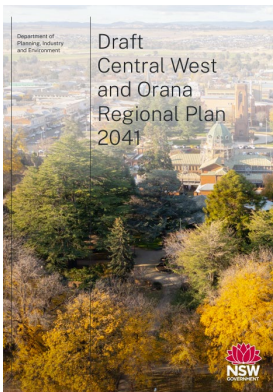
Appendix A – priority assessment against NSW Government Plans relevant to CENJO



Plan	Plan Objectives	Inter-council co-operation	Regional prosperity	Regional transport and infrastructure	Regional Water
<p>A 20 year Vision for Regional NSW</p> 	<p>Principle 1 Affordable, reliable and fast mobile and internet connectivity to support people and businesses.</p> <p>Principle 2 Improved travel between regional centres and from regional centres and international gateways.</p> <p>Principle 3 Freight networks that will increase the competitiveness of key regional sectors</p> <p>Principle 4 Reliable accessible water and energy.</p> <p>Principle 5 A skilled labour force for current and future needs of the regions.</p> <p>Principle 6 Recognising each region's strengths and underlying endowments.</p> <p>Principle 7 Regulation and planning to promote commercial opportunities.</p> <p>Principle 8 Sustainable economies and communities are better able to recover from shocks.</p>	<p>20-Year Economic Vision for Regional NSW – sets out multiple different funding and grant models including Snowy Hydro legacy money, Restart money, Resources for Regions and COVID stimulus packages</p> <p>Megatrend 2: Rapid Urbanisation (30) “people are increasingly moving to NSW urban centres other than Sydney. Regional NSW offers a diversity of choice in terms of lifestyle options, affordability, family and careers. An increased acceptance of working from home, accelerated by COVID-19, is creating additional opportunities and incentives for people to move to regional areas to access the enviable lifestyles on offer”.</p> <p>Megatrend 3: Demographic and social change (30) Changes in fertility rates, migrations and how people work and lifestyle</p> <p>Megatrend 5: Rising uncertainty (31) COVID, Climate Change, supply change disruptions – need for the development of resilience in communities – socially and economically.</p> <p>Principle 8 Sustainable economies and communities are better able to recover from shocks.(52) Improving natural disaster preparedness through: improved communications (mobile internet), upgrading strategic and vulnerable transport infrastructure, supporting communities in building their social & economic resilience (by supporting Aboriginal economic participation, education and skill development), investigating climate-resilient water</p>	<p>Megatrend 1 The rise of Asia (30) “Regional NSW is strategically positioned to service these growing economies, it will be important to be adaptive and flexible in responding to any shifts in Asia's economic power dynamics as economic change is likely to be rapid. Overall, for regional NSW the diffusion of economic activity across Asia is beneficial, mitigating the risk of trade being too closely tied to any single nation”.</p> <p>Principle 5 A skilled labour force for current and future needs of the regions. (45) prioritising growth industries in regional areas, targeted skills and work experience approaches for groups that are under-represented in regional economic participation, including Aboriginal people, advocating the benefits and attractions of relocating to regional NSW, Investigate specialised vocational and technical high schools, innovative training delivery models. Boost regional NSW's knowledge economy and excellence in innovation, particularly in agricultural technology, aged care, energy, aerospace, logistics, advanced manufacturing and other areas linked to the future of regions.</p> <p>Principle 6 Recognising each region's strengths and underlying endowments. (47) infrastructure and transport to support tourism to wine and produce regions – esp. if exported internationally, and NSW's brand is recognised overseas, increasing the efficiency of east–west transport connectivity including across the Blue Mountains, options to activate tourism potential based on regional endowments and cultural heritage,</p>	<p>Megatrend 4: Digital disruption (30) Changes to how regional Aust -can work, study, shop and access medical services. NSW Govt wants to invest in strategic in digital networks, transport infrastructure and skills that enable flexibility in the choice of residential location.</p> <p>Principle 1 Affordable, reliable and fast mobile and internet connectivity to support people and businesses. (40) Opportunities for GIG state, improved digital connectivity, technology to improve public transport, technology for delivery of services such as health and education, options for uninterrupted mobile and internet coverage along major roads, IOT advances in ag, planning for smart cities</p> <p>Principle 2 Improved travel between regional centres and from regional centres and international gateways. (41) more (& improved) day-return services to, from and between regional centres & metropolitan areas and regional centres to access work opportunities, rail and road upgrades on lines between regional centres (including high speed rail), seamless digital ticketing</p> <p>Principle 3 Freight networks that will increase the competitiveness of key regional sectors (42) inland intermodals near the production of agricultural products, more efficient transport between inland intermodals and global gateways, optimising or increasing container flows through ports, more efficient east–west</p>	<p>Principle 4 Reliable accessible water and energy. (43) the potential for energy zones and transmission requirements, research and development investment in energy and water security and resilience, dam projects, focused energy projects relevant to engine industries, ongoing infrastructure to provide safe and secure water to regional communities.</p>

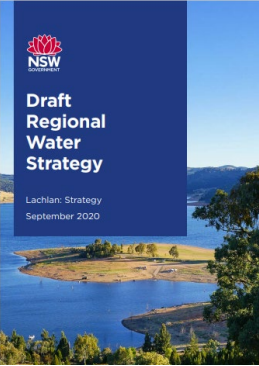
		<p>infrastructure options, help farmers, businesses and their communities to better prepare for, withstand and recover quickly from drought etc, develop efficiency and redundancy across freight networks.</p>	<p>opportunities for underutilised public land and infrastructure e.g. rail trails, the potential to sustain a new global gateway in what is currently regional NSW (air or sea) for both people and goods.</p> <p>Principle 7 Regulation and planning to promote commercial opportunities. (49) improve. streamline planning processes for business investment, initiatives to attract skilled labour to regions, increase participation of women and older people in the regional labour force, encourage greater in-country value-adding in agriculture and manufacturing, supporting engine industries through international trade advocacy, maintaining favourable trade relationships, cooperative business investment models with key trading partners. Grow vibrant places to live, work and study to encourage business and population growth.</p>	<p>transport connections, air freight potential in regional areas.</p>	
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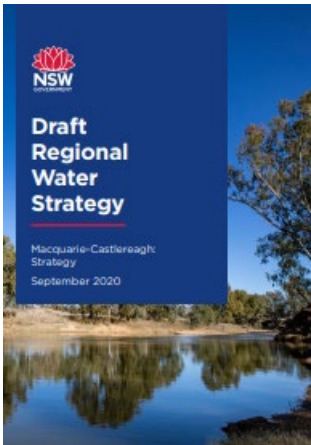
Plan	Plan Objectives	Inter-council co-operation	Regional prosperity	Regional transport and infrastructure	Regional Water
Building Momentum State Infrastructure Strategy 2018-2038 	<p>Integrating land use and infrastructure planning</p> <p>Infrastructure planning, prioritisation and deliver</p> <p>Asset Management – assurance and utilisation</p> <p>Resilience</p> <p>Digital connectivity and technology</p> <p>Innovative service delivery models</p>	<p>9. INSW recommends (p40) NSW Govt continues the implementation of the reforms to Crown land to assist in meeting open space or employment objectives outlined in Regional Plans. (Policy: 0-5 years)</p> <p>10. INSW recommends (p41) that the DPIE establish by 2020 a housing and employment supply pipeline that: • includes a five-year housing and employment supply forecast with a 20-year qualitative outlook (Policy: 0-5 years)</p>	<p>79. INSW recommends (p155) the NSW Govt focus existing mechanisms, such as the Regional Economic Growth program, on supporting skills development and jobs for industries affected by the energy transition. (Policy: 0-5 years)</p> <p>97. INSW recommends (p186) NSW Health continue to deliver the NSW eHealth Strategy 2016-2026, including full delivery of eHealth Integrated Digital Patient Records and the eHealth whole-of-system digital platform. (Policy: 0-5 years)</p> <p>111. INSW recommends (p199) TAFE NSW prepare a 20-year TAFE NSW Infrastructure Strategy by the first quarter of 2019</p> <p>121. INSW recommends (215) that the NSW Govt continue the Regional Growth, Environment and Tourism Fund for a further 10 years once the current Rebuilding NSW reservation is exhausted around 2023. (Investment 5-10 years)</p>	<p>7. INSW recommends (p38) DPIE introduce planning rules to integrate telecommunications infrastructure into new developments by the end of 2018. (Policy: 0-5 years)</p> <p>23. INSW recommends (p78) that the Connecting Country Communities program be used to improve connectivity in regional NSW and support access to uncontended 25Mbps download and 5Mbps upload capacity by 2020 and 50Mbps download and 10Mbps upload by 2025. (Policy: 5-10 years)</p> <p>30. INSW recommends (p81) that the NSW Govt develop a Smart Cities Strategy and program business case during 2018 to identify opportunities to deliver better services through collaboration and embracing the benefits of technology for infrastructure and public services. (Planning: 0-5 years)</p> <p>31. INSW recommends (p82) that the Department of Finance, Services and Innovation lead the development of a whole-of-Govt policy framework to guide investment in the Internet of Things (IoT) and connected infrastructure to maximise the benefits and manage the potential risks of connected infrastructure. (Policy: 0-5 years)</p> <p>40. INSW recommends (p123) the Corridor Strategies and guidelines for submissions to the Regional Road Freight Corridor Fund, Fixing Country Roads and Bridges for the Bush programs adopt an increased focus on achieving goals related to road safety and network resilience. (Policy: 0-5 years)</p> <p>41- 43. INSW recommends (p123-125) the NSW Govt continue the Regional Road Freight Corridor Fund, Fixing Country Roads and Bridges for the Bush programs, Fixing Country Rail for a further 10 years once the current Rebuilding NSW reservation is exhausted around 2025 (Investment: 10-20 years)</p>	<p>17. INSW recommends (p65) the NSW Govt invest in initiatives to improve the collection of natural hazard information and complete the NSW Flood Data Access Program by 2020. (Policy: 0-5 years)</p> <p>84. INSW recommends (p161) the NSW Govt commence the development of regional water strategies for all catchments by early 2019 to underpin the proposed NSW Water Statement. (Policy: 0-5 years)</p>


Plan	Plan Objectives	Inter-council co-operation	Regional prosperity	Regional transport and infrastructure	Regional Water
<p>Draft Central West and Orana Regional Plan</p> 	<ol style="list-style-type: none"> 1. A sustainable and resilient place 2. People, housing and communities 3. Prosperity, productivity and innovation 4. Location specific responses 	<p>Governance structure CNSWJO and Council's members of Monitoring Committee</p> <p>Objective 1 (pg19) Collaborative Activity 1 Collaborate with DPIE and Council's re biodiversity mapping and sharing of mapping data</p> <p>Objective 2 (pg 22) Collaborative Activity 2 DPIE to work with Council's and State orgs to identify recreation, tourism and opportunities for pedestrian and cycling networks</p> <p>Objective 3: (pg26) Plan for resilient places and communities</p> <p>Strategy3.3 regarding Waste opportunities for Council to work together to achieve net zero Opportunity for CNSWJO to advocate for net zero initiatives for CW</p> <p>Collaborative Activity 7 NSW Govt through Asbestos Coordination Committee to work with interested Council's to identify opps to address derelict housing containing asbestos</p> <p>Strategy 11.2 pg 66 Integrate smart technology and IOT into strategic planning, including how it can improve community engagement and info sharing in the planning process</p> <p>Objective 15: Implement a precinct-based approach to planning for higher education and health facilities pg 70</p>	<p>Urban Design strategies (pg 38) Revitalise main streets and town centres</p> <p>Part 2 People, housing and communities (pg 40) Populations forecast and housing projections are conservative</p> <p>Collaborative Activity 4 (pg43) DPIE to work with Council's and State orgs – identify new economic activity for smaller centres and leverage their locational advantages and physical attributes</p> <p>Objective 12: Leverage existing industries and employment areas and support new and innovative economic enterprises pg 58 Strategy 12.1 & 12.2 ID employment lands & future lands, id local and subregional specialisations, collocate appropriate businesses</p> <p>Strategy 12.3 pg59 Facilitate a renewable energy industry to take a regional view for housing, skills and community benefit. Encourage a diversification of local businesses into the renewable industry</p> <p>Objective 13: Protect agricultural production values & promote agriculture innovation, sustainability and value-add opportunities pg 60</p>	<p>Strategy 3.6 Regional approach to EV charges roll out</p> <p>Collaborative Activity 5 (44) Work with TFNSW & Bathurst, Orange and Dubbo Council's on place-based transport plans for regional cities that use the Movement & Plane framework (option to include other regional centres)</p> <p>The regional Housing Taskforce Action 4 (46) Develop strategies to inform the subregional consideration of housing supply need, priority areas – Bathurst, Dubbo & Orange and large employment areas SAAP and REZ –</p> <p>Collaborative Activity 8 pg50 calls for innovative approaches to affordable housing solutions and collaborative efforts</p> <p>Provide accommodation options for temporary workers Action 6 pg 53 Investigate options to ensure new public and private infrastructure for major projects reflect lifecycle of the project</p> <p>Coordinate smart & resilient utility infrastructure Strategy 1.1 pg 54 consider resilience in infrastructure planning at a local, intra-regional and cross border scale</p> <p>Objective 14: Protect & leverage the existing & future road, rail and air transport networks and infrastructure pg 63 Collaborative Activity 9 pg 65 Work with TFNSW and Councils on planning for improved connection between CW and east Coast</p> <p>Collaborative Activity 11 pg 67 DPIE, TfNSW, ARTC and Council's to identify and plan for Inland Rail land use requirements</p>	<p>Objective 2 (pg 24) Western NSW rivers Action 2 (pg25) Opportunity to work together to develop a framework for the management of Western rivers</p> <p>Objective 4 Secure and resilient Regional water resources (pg 31) State & Regional Water strategies (pg 32)– the CWORP will collaborate with key agencies and LG to support regional water strategies</p> <p>Collaboration activity 3 (pg 35) DPIE to work with Council's, State agencies and landowners to protect the Lachlan River wetlands</p>

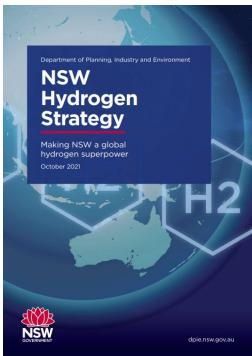
		<p>Objective 19: Strengthen Bathurst, Dubbo and Orange as innovative and progressive regional cities pg 78</p> <p>Objective 20: Leverage the CW Orana REZ to provide economic benefit to communities</p> <p>Objective 21: Leverage the Parkes SAP and plan for associated growth pr 86 Action 8 pg 86 DPIE will establish a subregional working grp with Parkes, Forbes, Lachlan, Orange City, Cabonne, Narromine, Dubbo Regional, Cowra and Weddin Councils to respond to potential housing and economic impacts and opportunities for Parkes SAP</p>	<p>Strategy 16.3 pg 72 Identify future mine closure dates, understand changes to water, economic skills profiles and demographics and consider land use changes and post mining opportunities</p> <p>Objective 17: Support a diverse visitor economy pg 74</p> <p>Objective 18 Strengthen the economic self-determination of Aboriginal communities</p> <p>Collaborative Activity 13 DPIE will work with LALCs and Councils to better reflect LALC aspirations in plans</p>		
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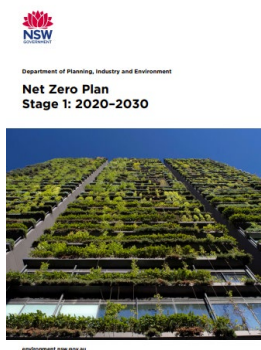
Plan	Plan Objectives	Inter-council co-operation	Regional prosperity	Regional transport and infrastructure	Regional Water
<p><u>Draft Central West and Orana Regional Transport Plan</u></p> 	<p>Connected – a transport network that facilitates seamless, multi-modal connectivity between where people live, work and play</p> <p>Safe – a transport network that delivers a safer future for the Central West and Orana</p> <p>Liveable – a transport network that supports vibrant places while enabling the successful movement of people to access jobs, services and social opportunities regardless of age, ability and income</p> <p>Adaptive & Sustainable – a transport network that both contributes to, and supports, a seamless transition to a low emissions future</p> <p>Productive – a transport network that supports the efficient, safe and sustainable movement of freight through the principle of 'moving more with less'</p> <p>Resilient – a transport network that is resilient to major disruptions associated with natural disasters, climate change and planned and unplanned events</p>	<p>Objective 2- Improves multi-modal connectivity within the region (30) Improved safety and reliability of existing road and rail corridors, enhanced day return services, investigate more frequent public transport services between key regional cities and centres (esp from smaller towns and villages)</p> <p>Objective 3 – Improves multi-modal connectivity (34) Advocate for greater connection, via road rail and air especially to east coast. Look at ways to leverage Inland Rail. Opportunities for the Fast Rail Network.</p> <p>Objective 10 – Embrace technology to reduce the need to travel (49) Technology is changing the way people, live, work and travel – TfNSW will look for ways for the transport network to embrace technology</p> <p>Objective 12 – Facilitate the fleet transition to emissions-free technology (53) Will require collaboration of new infrastructure, embracing new technology (hydrogen and EVs) fleet management, marketing and leadership</p>	<p>Objective 1 – Improves multi-modal connectivity with centres (29) Better Public Transport and active transport plans to deliver significant health, environmental and economic – adds to liveability</p> <p>Objective 7 – A transport network that both supports and enables vibrant places (44) TfNSW will look at using the Movement and Place framework to develop Place-based Transport Plans for the regional cities in collaboration with Local Govt and relevant State Agencies</p> <p>Objective 15 – Strengthen connection to major freight destinations beyond the region (60) Improving access to Sydney and Newcastle including upgrades Great Western Highway. Opportunities to access Western Sydney International and Canberra Airport. TfNSW also exploring opportunities for a fuel pipeline from Port of Newcastle</p> <p>Objective 16 – First and last mile barriers and land use conflicts are resolved to support successful places (62) TfNSW will work with DPIE and LG to ensure that existing and future significant places are supported with first and last mile solutions and are protected from incompatible land uses</p>	<p>Objective 11 – Increased the number of trips made by walking, cycling and public transport across the CW and Orana (50) Aim is to increase number trips made by active transport – TfNSW states that this will be need to be a collaborative project between State, industry and the community and will include improved infrastructure and education programs (opportunities for liveability and tourism)</p> <p>Objective 13 – Enable appropriate freight connections to Inland Rail (IR), SAP and major freight hubs (57) TfNSW will investigate road, rail connections to IR and SAP. Opportunity to work with TfNSW to address known road and rail freight constraints within and beyond CW.</p> <p>Objective 14 – Expand the High Productivity Vehicle (HPV) Network across the CW and Orana (59) Opportunity to work with TfNSW to develop Freight Blueprint for the region. Including opportunities to expand HPV and address conflict between heavy vehicles and local communities.</p>	<p>Objective 17 – Deliver a resilient transport network that effectively responds to the unique challenges of the region (64) Critical that transport infrastructure and services are able to withstand and respond to future extreme weather events.</p>


Plan	Plan Objectives	Inter-council co-operation	Regional prosperity	Regional transport and infrastructure	Regional Water
Draft Regional Water Strategy Lachlan 	<p>In line with the objectives, we have set for all regional water strategies, the Lachlan strategy has a strong focus on working closely with communities to deliver healthy, reliable and resilient water resources that:</p> <ul style="list-style-type: none"> • deliver and manage water for local communities • enable economic prosperity • recognise and protect Aboriginal water rights, interests and cultural values • protect and enhance the environment • are affordable. <p>Our vision for the strategy</p> <p><i>Our vision for the strategy is to have healthy and resilient water resources for a liveable and prosperous Lachlan region. To achieve this, we need to position the region so there is the right amount of water of the right quality, delivered in the right way for Aboriginal people, towns and communities, industries and the environment.</i></p>	<p>Options for consideration (p97-103):</p> <p>6. Inter-regional connections project investigation</p> <p>8. Managed aquifer recharge investigation and policy</p> <p>12. Environmental restoration works</p> <p>17. Floodplain management works</p> <p>19. Option to establish an Aboriginal River Ranger Program</p> <p>21. Improved understanding of groundwater processes</p> <p>28. Review of water trade in the Lachlan region</p> <p>29. Water pricing pilot study</p> <p>30. Urban water restriction policy</p> <p>32. Efficiency for drought security program</p> <p>33. Drought operation rules</p> <p>34. Review of water accounting and allocation process</p>	<p>Options for consideration (p97-103):</p> <p>24. Water efficiency projects (towns and industries)</p> <p>26. Mid-Lachlan efficiency measures</p> <p>35. Investigation of licence conversions (GS to HS licences)</p> <p>38. Investigation to maintain amenity for regional towns during drought</p>	<p>Options for Consideration (p97-103):</p> <p>1. Water transfer pipeline between Lake Rowlands and Carcoar Dam</p> <p>2. Wyangala Dam raising project</p> <p>3. Lake Rowlands augmentation</p> <p>4. Expansion to the piped town water supply system - <i>Three pipeline connections: a) Bogan Gate to Condobolin b) Gooloogong-Forbes-Parkes c) Young to Cowra.</i></p> <p>5. Replacement and upgrade of existing pipelines - <i>Two pipeline projects: Parkes Shire boundary to Tottenham, Bogan Gate and Tullamore, and Cowra to Central Tablelands</i></p>	<p>Options for consideration (p97-103):</p> <p>22. Sustainable access to groundwater</p> <p>27. Improvements to the storage effectiveness of Lake Cargelligo</p> <p>36. Improved data collection and storage</p> <p>39. In-stream storage for the Lower Lachlan</p> <p>41. Culturally appropriate water knowledge program</p> <p>43. Shared benefit project (environment and cultural outcomes)</p> <p>44. Aboriginal cultural water access licence review</p> <p>47. Regional Aboriginal Water Advisory Committee</p> <p>48. Regional Cultural Water Officer employment program</p>


Plan	Plan Objectives	Inter-council co-operation	Regional prosperity	Regional transport and infrastructure	Regional Water
<p>Draft Regional Water Strategy: Macquarie-Castlereagh (nsw.gov.au)</p> 	<p>The draft long list of options and government commitments focus on:</p> <ul style="list-style-type: none"> maintaining and diversifying water supplies protecting and enhancing natural systems supporting water use efficiency and conservation strengthening community preparedness for climate extremes improving the recognition of Aboriginal people's water rights, interests and access to water. <p>Our vision for the strategy</p> <p><i>"Our vision for the Macquarie-Castlereagh Regional Water Strategy is to support the delivery of healthy, reliable and resilient water resources for a liveable and prosperous region. To achieve this, we need to position the region so there is the right amount of water of the right quality delivered in the right way for people, Aboriginal communities, towns, industries and the environment".</i></p>	<p>Options for consideration (p105-112):</p> <ul style="list-style-type: none"> 4. Improving town water security in the upper Macquarie unregulated river system 5. Drought protocols for Bathurst and Oberon town water supply 6. Inter-regional connections project investigation 19. Formalise channel sharing arrangements 31. Connectivity with downstream systems 49. Regional Cultural Water Officer employment program 	<p>Options for consideration (p105-112):</p> <ul style="list-style-type: none"> 2. Access water from Burrendong Dam's deep storage 9. Pipeline from the proposed new midsystem weir near Gin Gin to Nyngan 33. Enterprise water use efficiency programs 35. Investigation of licence conversions 40. Investigation to maintain amenity for regional towns during drought 41. Land use change impact on water resources 	<p>Options for consideration (p105-112):</p> <ul style="list-style-type: none"> 1. A new mid system re-regulating weir on the Macquarie River 7. Reuse, recycling and stormwater projects 8. Burrendong Dam to Nyngan pipeline 10. Gunningbar Creek pipeline 	<p>Options for consideration (p105-112):</p> <ul style="list-style-type: none"> 2. Managed aquifer recharge investigations and policy 11. Increase Burrendong Dam's Full Supply Level 12. Increase outlet valve capacity at Burrendong Dam 13. Reliable access to groundwater by towns 23. Modification and/ or removal of existing floodwork structures causing adverse impacts 25. Improved understanding of groundwater processes 26. Sustainable access to groundwater 27. Improved clarity in managing groundwater resources sustainably 36. New drought operational rules (Macquarie River)

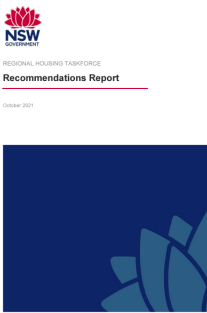
Plan	Plan Objectives	Inter-council co-operation	Regional prosperity	Regional transport and infrastructure	Regional Water
<p>Future Ready Regions Supporting drought resilient communities and economies</p> 	<p>In line with the priorities identified in the refreshed 20-Year Economic Vision for Regional NSW released in February 2021, Future Ready Regions focuses on three key areas:</p> <ul style="list-style-type: none"> sustainable, secure and healthy water resources stronger primary industries prepared for drought, and stronger communities and diverse regional economies. 	<p>12. Undertake a comprehensive evaluation of drought support programs. We will assess learnings from government investments through the drought phases and provide an update on key findings.</p> <p>13. Support communities and industry to plan for future droughts, including, Future Ready Community plans in pilot locations. We will also apply key insights from our evaluation and research programs to support evidence-based, local resilience planning by communities and councils, and strategies that improve economic diversification.</p> <p>14. Develop a Drought Signals Framework. This framework will help to provide certainty on government decision making and services during drought.</p>	<p>7. Upgrade the Enhanced Drought Information System (EDIS) to provide farms with world-leading weather and climate data so they can make better business decisions.</p> <p>8. Invest in an expanded Farms of the Future program to accelerate the adoption of 'ag-tech' enabled production methods which make farms more efficient, profitable and resilient.</p> <p>9. Deliver a new 'Farm Business Resilience Planning' pilot to provide training opportunities for farm businesses to become more resilient and self-sufficient.</p> <p>10. Help farm businesses and other landholders diversify their income through carbon farming and biodiversity offset programs.</p> <p>11. Streamline planning requirements to make it easier for primary producers to diversify into agritourism and carry out agricultural operations.</p>		<p>1. Fast track investigations into new groundwater supplies in western NSW. NSW Govt will survey new groundwater and underground water-storage opportunities to relieve pressure on existing sources.</p> <p>2. Better integrate land-use planning and water-management decisions. NSW Govt will investigate integrating water-use considerations into planning assessments, including state-significant development.</p> <p>3. Implement a state-wide water-efficiency framework and program for regional towns and cities. NSW Govt will work with all levels of government, water utilities, the private sector and the community to improve efficiency across the water cycle.</p> <p>4. Improve water-use decision-making for the resources sector. work with the resources sector to pilot standardised water-use reporting.</p> <p>5. Establish a Water in Mining Advisory Committee. government, regulator and industry advice on water-related risks to the mining industry.</p> <p>6. Investigate standardised town water restrictions, with a focus on greater certainty during severe drought</p>

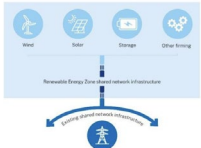
Plan	Plan Objectives	Inter-council co-operation	Regional prosperity	Regional transport and infrastructure	Regional Water
NSW Hydrogen Strategy 	<p>2030 Targets</p> <ul style="list-style-type: none"> • 110,000 tonnes pa of green hydrogen produced • 700mw electrolyser capacity • 10,000 Hydrogen vehicles • 10% Gas network blending • 12GW renewable energy capacity • Hydrogen price under \$AU 2.80 per kg • 100 refuelling stations • 20% of SWN Govt heavy vehicle fleet hydrogen <p>\$3billion in incentives Three Pillar strategy 1 – Enable industry development 2. – lay industry foundations 3 – Drive rapid scale</p>	<p>NSW Government hydrogen fleet target and trials—setting a target of 20% hydrogen vehicles by 2030 in the NSW Government heavy vehicle fleet which aims to put approximately 1,800 hydrogen heavy vehicles on the road by 2030, creating demand for 10,000 tonnes of hydrogen per annum or around 70 MW of electrolyser capacity. (11) (could be extended to LG)</p>	<p>Hydrogen Skills development (9)</p> <ul style="list-style-type: none"> • Developing hydrogen hubs—investing \$70 million to establish hydrogen hubs, starting with the Hunter and Illawarra. (10) <p>Opportunity with REZ and SAP</p> <p>In addition to the Hunter and Illawarra, the SAPs are promising locations for new hydrogen hubs, as they will bring together planning and investment support services to enable industrial and commercial infrastructure projects. (34)</p>	<p>State-wide strategic hydrogen infrastructure masterplan (p9)</p> <ul style="list-style-type: none"> • Upfront strategic planning and port infrastructure assessments (9) • Rolling out a hydrogen refuelling network (10) 	<p>Water consumption for hydrogen production will be relatively small in comparison to other sectors. Under the National Hydrogen Strategy's uptake scenarios, water usage for hydrogen in NSW could range between 1,400-2,200 ML per annum by 2030 and 18,000-23,000 ML per annum by 2050.⁵⁴ Under these scenarios, the likely maximum water used by a commercial hydrogen industry in 2050 to produce 2.5 million tonnes of hydrogen would be equivalent to only 0.14% of NSW's current water use. By comparison to other industries in NSW, water use for hydrogen production in NSW would be equal to, at most, 24% of water used in manufacturing, 16% used in mining and 0.7% used in agriculture. (p36)</p>

Plan	Plan Objectives	Inter-council co-operation	Regional prosperity	Regional transport and infrastructure	Regional Water
<p>Net Zero Plan Stage 1: 2020=2030</p>  <p>Department of Planning, Industry and Environment Net Zero Plan Stage 1: 2020-2030</p>	<p>The purpose of the Plan is to give NSW families and communities confidence that the challenges posed by climate change can be solved by improving – not eroding – their prosperity. It will also send a clear message to local and international investors that New South Wales is open for business when it comes to delivering on our economic, social and environmental ambitions.</p> <p>The Plan is set out in four parts:</p> <ol style="list-style-type: none"> 1. A global challenge with local opportunities – the trends and opportunities arising from global climate change action 2. Progress and projections – progress within New South Wales to date to reduce emissions and future projections 3. The net zero priorities – the NSW Government's net zero priorities 4. Keeping track – the Government's approach to keeping track of its progress. 	<p>Opportunities for LG and community groups to work together to reach net zero emissions by 2050.</p> <p>The NSW Government will support amendments to the National Construction Code and NSW Building Sustainability Index (BASIX) to ensure new buildings are electric vehicle-ready. This could involve requiring new buildings to provide electrical conduits and wiring to make it easy to install electric vehicle charging equipment (18)</p> <ul style="list-style-type: none"> • Encourage fleet purchases to purchase electric cars <p>The NSW Government will set a target of net zero emissions from organic waste by 2030. To deliver on this goal, the NSW it will: • support local councils to provide communities with best-practice food and garden waste management infrastructure</p>	<p>By delivering the Plan, New South Wales is expected to create almost 2400 jobs and attract over \$11.6 billion of investment over the next 10 years. Almost two-thirds of this investment will go to regional and rural New South Wales. The Plan is expected to save households \$40 a year on their electricity bills</p> <p>net zero emissions by 2050 will require more than action from the State and Commonwealth Governments. It will require action from local government, business, communities and individuals. (5)</p> <p>The NSW Government will develop a Primary Industries Productivity and Abatement Program that supports primary producers and landowners to commercialise low emissions technologies and maximise their revenue from carbon offset programs. (20)</p>	<p>The NSW Government is developing an Electric Vehicle Infrastructure and Model Availability Program to fast-track the growth of the electric vehicle market in New South Wales. (17)</p>	

Plan	Plan Objectives	Inter-council co-operation	Regional prosperity	Regional transport and infrastructure	Regional Water
<p>Critical Minerals and High-Tech metals strategy NSW Government</p> 	<ol style="list-style-type: none"> 1. Establish Australia's first Critical Minerals Hub in the Central West 2. Promote exploration for critical minerals resources 3. Activate the industry through proactive development of supply chains 4. Attract investment for critical minerals resources, downstream processing and recycling 	<p>Commonwealth and state govt, research and industry are partnering to develop new concepts to promote exploration concept the \$220m</p> <p>Opportunities via \$100 m Regional Job Creation fund (15)</p> <p>25% of METs are headquartered in NSW – thus there is a good skill base</p> <p>Opportunity for green energy from the REZ to support manufacturing</p> <p>Opportunities with Green Hydrogen production including "green" copper production (16)</p> <p>NSW Govt is looking to reduce red tape and assessment times through the Planning Reform Action Plan</p> <p>NSW Mining Concierge service (17)</p> <p>Central West Critical Minerals Hub to assist critical mineral mining and processing include:</p> <ul style="list-style-type: none"> • creating pathways for end-of-life e-waste in order to recover and reprocess critical minerals • securing e-waste input from domestic and neighbouring regions for recycling and reprocessing • establishing green chemical production and storage suitable for minerals processing or agricultural production and shortening the supply chain • planning for future innovation, including setting aside infrastructure and space for trialling processes of tailings to make downstream processing of 'problem' wastes more economically viable. 	<p>Increased demand for technology enabled products, mobile phones, electric vehicles that rely on critical minerals p5</p> <p>It is expected that the supply of critical minerals will not be able to support the accelerated deployment of solar panels, wind turbines and electric vehicles that would be needed to reach the Paris agreement (p6) – opportunity the CW is rich in critical minerals esp as ESG becomes more important as we move to halve emissions by 2030 and reach net zero by 2050 (\$750k).</p> <p>NSW is highly prospective for minerals such as copper, zirconium, titanium, REEs, cobalt, antimony and scandium</p> <p>Given this position within potential critical mineral supply chains, the Central West Critical Minerals Hub supports the development of downstream industries such as circular economy and reprocessing, renewable energy, and downstream critical minerals and high-tech metals processing. The Hub will leverage existing investments at Parkes, as well as the \$3 billion investment in the Central West Orana Renewable Energy Zone. (18)</p> <p>To support activation of the Central West Critical Minerals Hub, the NSW Government will: (19)</p> <ul style="list-style-type: none"> • provide dedicated investment attraction support by the Office of Regional Economic Development, Investment NSW, and specialist advice from Mining, Exploration and Geoscience • facilitate engagement between investors, mining projects and downstream processors to identify commercially viable partnerships and capital raising opportunities • facilitate programs to increase opportunities for local education, training, and skill development and to ensure local economic benefits and ensure future skills needs are met in partnership with the METS sector 	<p>Supporting onshoring of supply chains, value adding and manufacturing to minimise the risk from geopolitical tensions and disputers such as the recent pandemic.</p> <p>\$250 Jobs Plus Program – infrastructure rebates, assistance with NSW Planning, payroll tax relief and subsidised packages rebates". (15)</p> <p>To support activation of the Central West Critical Minerals Hub, the NSW Government will: (19)</p> <ul style="list-style-type: none"> • progress strategic studies to identify land use constraints and support optimisation of exploration and mining projects • progress strategic studies to identify infrastructure and services required for integrated and mutually beneficial supply chains ensuring integration with the national circular economy 	

Plan	Plan Objectives	Inter-council co-operation	Regional prosperity	Regional transport and infrastructure	Regional Water
<p>NSW Waste and Sustainable Materials Strategy 2041</p> 	<p>Some of our key reforms include:</p> <ul style="list-style-type: none"> phasing out problematic single-use plastic items financial incentives for manufacturers and producers to design out problematic plastics having government agencies prefer recycled content mandating the separation of food and garden organics for households and selected businesses incentivising biogas generation from waste materials <p>Our targets are:</p> <ul style="list-style-type: none"> reduce total waste generated by 10% per person by 2030 have an 80% average recovery rate from all waste streams by 2030 significantly increase the use of recycled content by governments and industry phase out problematic and unnecessary plastics by 2025 halve the amount of organic waste sent to landfill by 2030 reduce litter by 60% by 2030 and plastics litter by 30% by 2025 triple the plastics recycling rate by 2030 	<p>Facilitating joint procurement of household waste services (p24) NSW govt will fund joint procurement including access to expert commercial, legal and policy advice.</p> <p>Mandating food and garden organics collection for all NSW households and select businesses (pg25) Opportunity to work together to transition to FOGO/ three collection</p> <p>The role of the waste levy (pg35) Opportunity for Council's to work together to ensure that the levy is fair and reasonable in regional areas and that it encourages proper disposal and not illegal dumping</p> <p>Support for local communities (p37) "The NSW Government will continue to support councils' litter reduction and illegal dumping prevention activities with more than \$10 million in grants. We will continue to support collaboration for regional organisations of councils (ROCs), council groups, joint organisations and voluntary regional waste groups through \$15.6 million in funding. We will provide further support through our \$16 million investment in a new joint procurement facilitation service"</p>	<p>The role of energy from waste (p22) Opportunities in regional areas such as the Parkes SAP due to transport network</p> <p>Leading the way to stimulate circular investment and innovation (pg28) Opportunities to transition to circular economy principals and meet net zero targets</p> <p>Recovery of energy from waste through biogas production (pg 29) Opportunity for anaerobic digestion and biogas captured via land fill</p> <p>Supporting recycling innovation (p36) Continue to work with State Govt and EPA to open up new opportunities and technology in the resource recovery sector</p>	<p>Supporting circular design to reduce carbon-intensive materials and increase recycling (p26) Opportunity to look at lifecycle costs and environmental benefits of material. Opportunity to keep a digital record at material used in building and infrastructure</p>	

Plan	Plan Objectives	Inter-council co-operation	Regional prosperity	Regional transport and infrastructure	Regional Water
Regional Housing Taskforce – Recommendations Report 	<p>The five key recommendations are:</p> <ol style="list-style-type: none"> 1. Support measures that bring forward a supply of “development ready” land. 2. Increase the availability of affordable and diverse housing across regional NSW. 3. Provide more certainty about where, when and what types of homes will be built. 4. Investigate planning levers to facilitate the delivery of housing that meets short term needs. 5. Improve monitoring of housing and policy outcomes and demand indicators 	<p>Principle 1. Invest in upfront, place-based strategic planning to improve decision-making, provide certainty and enable more efficient assessments.</p> <p>Principle 3. Strengthen collaboration by the NSW Government with the Federal Government, local governments, and industry to improve the identification, funding, and delivery of infrastructure to support priority housing.</p> <p>Principle 4. Ensure new housing is appropriately located, well designed, fit for purpose, and better provides for the diversity of housing needs, including strengthening planning and approval pathways for innovative typologies and tenures.</p>	<p>Principle 5. Consider social and affordable housing as essential social and economic infrastructure.</p> <p>Principle 6. Facilitate the delivery of diverse housing that meets demonstrated need through targeted use of government land.</p> <p>Principle 7. Build the capacity of local government and local industries to plan and deliver housing in the regions.</p> <p>Principle 8. Enhance monitoring and evaluation of policy and housing outcomes.</p>	<p>Principle 2. Provide a more transparent and certain supply pipeline and activate latent supply by addressing infrastructure requirements and resolving site constraints.</p>	

Plan	Plan Objectives	Inter-council co-operation	Regional prosperity	Regional transport and infrastructure	Regional Water
<p>Renewable Energy Zones</p>  <p>The diagram illustrates the concept of Renewable Energy Zones (REZs). It shows four main energy sources: Wind, Solar, Storage, and Other Energy, each represented by a circular icon. These sources are connected to a central 'Renewable Energy Zone-based network infrastructure' box. Below this box, a circular arrow indicates the flow of electricity to a 'Load' icon. A legend at the bottom identifies the components: Renewable Energy Zone infrastructure, Network, Renewable Energy Zone-based network infrastructure, and Existing shared network infrastructure.</p>	<p>The NSW Government expects that REZs will deliver multiple benefits to NSW, including:</p> <p>more reliable energy from significant amounts of new energy supply</p> <p>energy bill savings from reduced wholesale electricity costs</p> <p>emissions reduction from a cleaner energy sector</p> <p>community partnership from strategic planning and best practice engagement and benefit sharing.</p>		<p>The REZ will unlock 3 gigawatts of new network capacity by the mid-2020s, enough to power 1.4 million homes. New transmission infrastructure will enable generators (such as solar and wind farms) participating in the REZ to export electricity to the rest of the network. It is expected to bring up to \$5.2 billion in private investment to the Central-West Orana region by 2030. At its peak, this REZ is expected to support around 3900 construction jobs in the region.</p>		

Appendix B – other plans considered in the review



NSW State Government Plans	
<p>Premiers Priorities</p> <p>https://www.nsw.gov.au/premiers-priorities</p>	<ul style="list-style-type: none"> • a strong economy • highest quality education • well connected communities with quality local environments • putting customer at the centre of everything we do • breaking the cycle of disadvantage
<p>Snowy Hydro Legacy Fund</p> <p>https://www.nsw.gov.au/snowy-hydro-legacy-fund</p>	<ul style="list-style-type: none"> • Providing water security in priority catchments. • Improving digital connectivity across regional NSW • Activating regional locations for increased business investment • Improving freight linkages: • Improving rail and road passenger transport connections
<p>Common Planning Assumptions</p> <p>https://www.treasury.nsw.gov.au/information-public-entities/nsw-common-planning-assumptions</p>	<p>Common planning assumption datasets, reports and other tools, are provided below, broken into the following categories:</p> <ul style="list-style-type: none"> • Fiscal and economic • Populations and housing • Climate and natural resources • Regional and district land use assumptions and housing targets • Transport, freight, workforce and employment • New infrastructure in planning or development phase
<p>DPIE</p> <p>Growing NSW's primary industries and land sector in a low carbon world</p> <p>Growing NSW's primary industries and land sector in a low carbon world</p>	<p>The program has 3 focus areas:</p> <p>Developing market and industry foundations – \$52 million to develop trusted and transparent data, metrics and frameworks to underpin strong market activity</p> <p>Building critical mass and capacity – \$72 million to incentivise land managers to take early action on high priority areas and build carbon management and emissions abatement capacity and expertise</p> <p>Accelerating finance for natural capital and low carbon farming – \$1 million to initiate work with the financial sector to help finance nature-positive and low emissions practices by farmers and land managers</p>
<p>Housing Strategy</p> <p>https://www.planning.nsw.gov.au/-/media/Files/DPE/Reports/Policy-and-legislation/NSW-Housing-Strategy-Report-2021-Mayv2.pdf</p>	<ul style="list-style-type: none"> • Supply • Diversity • Affordability • Resilience <p>Regional housing taskforce</p>
<p>NSW Minerals Strategy</p> <p>https://www.regional.nsw.gov.au/meg/exploring-and-mining/titles-management-system/nsw-minerals-strategy</p>	<p>This strategy focuses on metals with high technology applications including:</p> <ul style="list-style-type: none"> • copper, silver and gold • rare earth elements, including scandium • platinum group elements • cobalt, lithium, titanium and zirconium. <p>This strategy focuses on metal minerals rather than fossil fuels.</p>

<p>Western Area Health – Strategic Plan 2020-2025</p> <p>WNSWLHD Strategic Plan.pdf</p>	<ul style="list-style-type: none"> • Improved health and wellbeing of rural people • Meaningful gains in Aboriginal Health • World class rural health care • One health service across many places
<p>Rural and Remote Education Strategy (2021-2024)</p> <p>https://education.nsw.gov.au/about-us/strategies-and-reports/rural-and-remote-education-strategy-2021-24/about-the-strategy</p>	<p>Four key themes emerged and formed the basis of the strategy. These are:</p> <ul style="list-style-type: none"> • Key area 1 – People: Supply students in rural and remote communities with more high-quality educators who are aware of localised needs. • Key area 2 – Practice: Better equip and develop rural and remote teachers to deliver a broader curriculum, contextualised to the needs of the community, to offer engaging learning opportunities for students. • Key area 3 – Participation: Ensure staff and students in rural and remote schools are more empowered to address wellbeing needs through stronger connections to their communities. • Key area 4 – Partnerships: Leverage more productive partnerships with higher education providers, vocational education providers and local industry to increase rural and remote student achievement, ambition and access to post-school opportunities.
<p>Destination NSW</p> <p>https://www.destinationnsw.com.au/tourism/facts-and-figures/regional-tourism-statistics</p>	<p>The NSW Visitor Economy Strategy 2030 sets a target to triple 2009 overnight visitor expenditure in NSW by 2030 surpassing previous targets despite recent challenges. Specific targets include</p> <ul style="list-style-type: none"> • \$65 billion in total visitor expenditure for NSW by 2030 • \$10 billion in domestic daytrips by 2030 • \$55 billion in overnight visitor expenditure by 2030 • \$25 billion in regional overnight visitor expenditure by 2030.
Federal Government Plans	
<p>Australia's Critical Minerals Strategy</p> <p>https://www.industry.gov.au/data-and-publications/australias-critical-minerals-strategy</p>	<p>It targets actions in 3 areas:</p> <ul style="list-style-type: none"> • promoting investment in Australia's critical minerals sector and downstream processing • providing incentives for innovation to lower costs and increase competitiveness • connecting critical minerals projects with infrastructure development
<p>CSIRO missions</p> <p>https://www.csiro.au/en/about/challenges-missions/missions</p>	<p>Co-creation opportunities will be explored to help Australia achieve these outcomes:</p> <ul style="list-style-type: none"> • Increase our resilience and preparedness against pandemics • Mitigate the impact of disasters: drought, bushfires and floods • Create a hydrogen industry to generate a new clean energy export industry • Accelerate the transition to agile manufacturing for higher revenue and sovereign supply

	<ul style="list-style-type: none"> • Overcome our growing resistance to antimicrobials, so they keep saving lives • Create a national climate capability to navigate climate change uncertainty • Help our farmers overcome drought, mitigate climate impacts, increase yield and profitability, create a sustainable future protein industry and leverage the world's love of Australian-grown food to collectively drive our trusted agriculture and food exports to \$100 billion • Use technology to navigate Australia's transition to net zero emissions, without derailing our economy • Safeguard the health of our waterways by monitoring the quality of our water resources from space • Create new industries that transform raw mineral commodities into unique higher-value products like critical energy metals that build Australia's value added offering, jobs, and sovereign supply • End plastic waste by reinventing the way plastic is made, processed and recycled • Double the number of SMEs utilising Australian R&D to become a collaboration nation.
<p>2021 Australia Infrastructure Plan</p> <p>https://www.infrastructureaustralia.gov.au/2021-australian-infrastructure-plan</p>	<p>Reform areas:</p> <ul style="list-style-type: none"> • Place-based outcomes for communities — unlocking the potential of every location. • Sustainability and resilience — balancing infrastructure outcomes in an uncertain future. • Industry productivity and innovation — facilitating a step change in productivity. • Transport — delivering an integrated network. • Energy — enabling an affordable transition to a net zero future. • Water — prioritising safety and security. • Telecommunications and digital — ensuring equity in an era of accelerating digitalisation. • Social infrastructure — supporting economic prosperity and quality of life. • Waste — accelerating Australia's transition to a circular economy.
Other relevant plans worth considering	
<p>Regional Australia Institute Strengthening Liveability</p> <p>http://www.regionalaustralia.org.au/home/liveability-toolkit/</p>	<p>Step 1: Gather your local champions</p> <p>Step 2: Know your neighbours</p> <p>Step 3: Map out mobility</p> <p>Step 4: Predict jobs and skills needs</p> <p>Step 5: Know your target market</p> <p>Step 6: Assess local liveability</p> <p>Step 7: Activate</p>
<p>Beyond Zero Emissions</p> <p>The million Jobs Plan</p>	<p>The Million Jobs Plan shows how in just five years, renewables and low emissions projects can deliver 1.8 million new jobs in the regions and communities where these are needed most.</p>

https://bze.org.au/research_release/million-jobs-plan/	It identifies key sectors across our economy where strategic investment over the next five years will have the most impact and create the most jobs.
National Farmers Federation – 2030 Roadmap https://nff.org.au/policies/roadmap/	Pillar 1 – Customers and the Value Chain Pillar 2 – Growing Sustainably Pillar 3 – Unlocking Innovation Pillar 4 – Capable People, Vibrant Communities Pillar 5 – Capital and Risk Management

Other Resources	LINK TO PLAN
Insurance Council of Australia Insurance in an era of climate change	VIEW LINK
ABC Online: The rise of red zones of risk By: Inga Ting, Nathanael Scott, Alex Palmer & Michael Slezak	VIEW LINK
ABC Online: Insurers brace for rising flood damage amid climate change, and they warn you should too By: Michael Janda	VIEW LINK
PwC Australia ESG – an opportunity for companies to build greater trust ESG – trends in 2022	VIEW LINK VIEW LINK
Forbes: What is Industry 4.0? Here's A Super Easy Explanation for Anyone By: Bernard Marr	VIEW LINK
ARENA – Hydrogen energy	VIEW LINK
AFR: Forrest commits to \$1b hydrogen-equipment factory in Gladstone By: Mark Ludlow & Angela Macdonald-Smith	VIEW LINK
AFR: 'Pens down' on AGL bid, but is it game over? By: Chanticleer	VIEW LINK
National Press Club: Andrew 'Twiggy' Forrest	VIEW LINK
CSIRO – Inland Rail report TraNSIT Dr Andrew Higgins	VIEW LINK
Parkes Champion Post: Inland Rail could drop ag transport costs by up to \$100/ tonne By: Jamieson Murphy	VIEW LINK
ARA: Governments must get behind freight rail to avoid B-double gridlock	VIEW LINK
SGS Economic & Planning Parkes Special Activation Precinct – Economic & Industry analysis	VIEW LINK
Quay Consulting The Portfolio Career in the Era of Uncertain Work	VIEW LINK
ABS: Building Approvals by LGA July 2020 – Sept 2021	VIEW LINK
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CSIRO Our Future World Global Megatrends	VIEW LINK
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KPMG – Think Big, think fresh	VIEW LINK
Grattan Institute Towards net zero practical policies to reduce agricultural emissions	VIEW LINK
WRI for DPIE Region Shapers Analysis report for Central West & Orana	

