



Photography
Wind farm at Taralga, NSW.

Regional NSW – the State’s powerhouse

By supporting the coordinated build out of energy infrastructure, the NSW Government can drive growth and long term jobs in the regions. The Electricity Infrastructure Roadmap is expected to deliver:

- \$32 billion in private investment in regional energy infrastructure investment expected by 2030
- around 6,300 construction jobs and 2,800 ongoing jobs expected in 2030 mostly in regional NSW
- lower energy costs for all NSW consumers, with household average annual electricity bill savings of around \$130 expected
- improved competitiveness of regional energy intensive industries and high value agriculture through their proximity to low cost energy
- infrastructure in priority areas that deliver regional growth
- up to \$265 million in community enhancement funds and around \$1.5 billion in landholder lease payments for farmers estimated by 2042.

All estimates of private investment, transmission capacity, jobs, bill savings, pricing and related outcomes are based on indicative development pathway forecasts developed by Aurora Energy Research for the Department. The Consumer Trustee, once appointed, will publish a detailed plan on the development pathway and the long term interests of consumers.

Driving jobs and investment in regional NSW

Jobs and investment

The Electricity Infrastructure Roadmap is set to drive economic growth in regional areas with an influx of investment and thousands of jobs. The Roadmap is expected to deliver up to \$32 billion in private sector investment and support around 6,300 construction and 2,800 ongoing jobs in 2030.

The majority of this investment and these jobs are expected to be in regional NSW, with approximately \$20.7 billion to be invested in the Renewable Energy Zones (REZs), supporting an anticipated 2,200 construction jobs and 1,700 ongoing jobs in 2030.

Figure 1 shows forecast construction and ongoing jobs under the Electricity Infrastructure Roadmap to 2040.

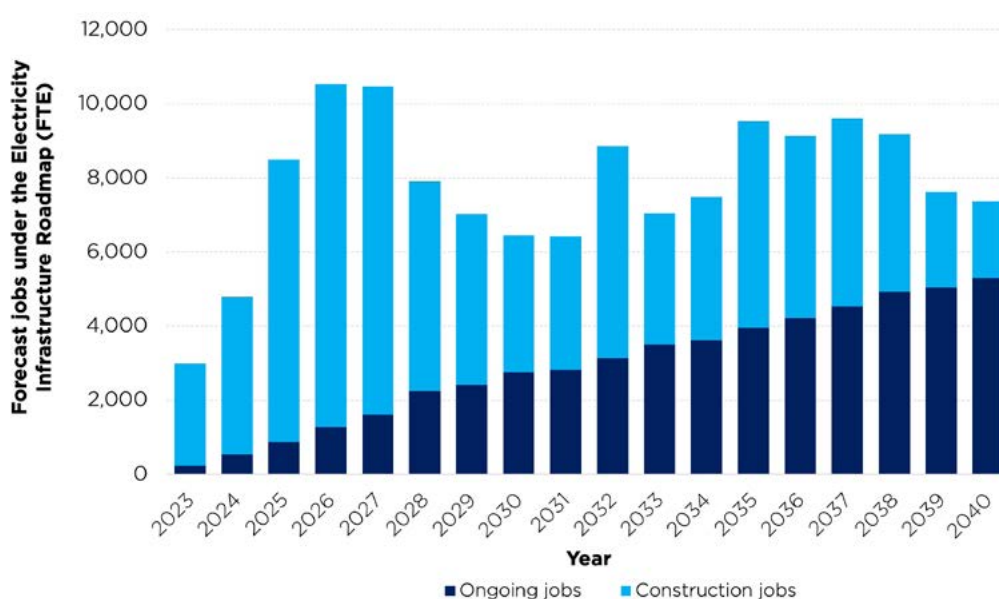


Figure 1. Forecast construction and ongoing jobs under the Electricity Infrastructure Roadmap.

Additional jobs are also expected to be supported through the development of energy storage infrastructure, such as pumped hydro. As demonstrated by Snowy 2.0, pumped hydro projects offer a significant boost to regional NSW. New reservoirs also have the potential to operate as a water source for firefighting and water security.

Projects to compete on local jobs

As part of the Roadmap, the NSW Government is establishing a long term investment signal called the Electricity Infrastructure Investment Safeguard. The Safeguard will encourage projects to compete on delivering jobs and economic benefits for local communities, through merit criteria which include the number of local jobs supported and proportion of project costs offered to local contractors.

Reducing energy prices for all NSW consumers

The Electricity Infrastructure Roadmap will help deliver the affordable energy needed to grow the economy and support jobs, based on globally competitive energy prices. Keeping the cost of electricity down will benefit all NSW consumers but is especially important to lower the cost of living for regional communities.

The Roadmap is forecast to deliver:

- household average annual electricity bill reductions of around \$130

- small business average annual electricity bill reductions of around \$430, and
- heavy industry electricity prices of USD\$84 per megawatt hour, which would place NSW in the lowest 10 per cent of OECD energy prices based on today's prices.¹

Figure 2 shows forecast wholesale electricity prices under the Business as Usual scenario and under the Roadmap.

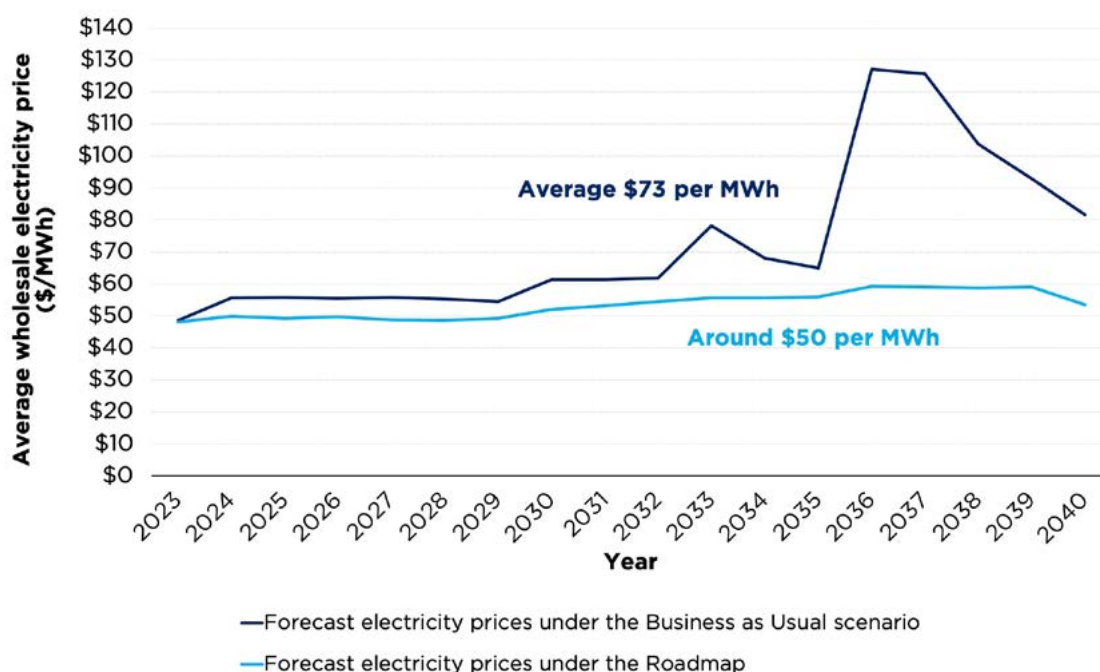


Figure 2. Forecast wholesale electricity prices under the Business as Usual scenario and under the Roadmap.

1. Based on International Energy Agency (IEA) industrial energy price information for 2018 collated for the OECD, and KPMG and Department analysis of delivered energy costs for a small industrial customer in NSW. NSW costs based on wholesale and scheme cost forecasts from Aurora Energy Research prepared for the Department with adjustments for equivalence with IEA prices. NSW prices include network costs for a typical customer using 10 gigawatt hours a year in the Ausgrid network area with an 80 per cent load factor and a 3 per cent retailer margin and existing NSW and Commonwealth schemes (e.g. Large-scale Generation Certificates, Small-scale Technology Certificates, Energy Savings Certificates, Climate Change Fund). Foreign exchange rate based on five year average.

Development which complements and drought-proofs farming communities

By supporting energy investment, the Electricity Infrastructure Roadmap will help drought-proof traditional farming communities, providing new income streams for landholders that host electricity infrastructure. It is expected that the Roadmap will lead to an estimated \$1.5 billion in lease payments for landholders by 2042.

Under the Roadmap, a Consumer Trustee will apply merit criteria to select projects that encourage development in places and ways that complement farming.



Photography
Large scale solar generation.

Locating energy infrastructure in the right places

Greater control of planning

The Roadmap builds on the NSW Government's commitment in the 2019 Electricity Strategy to deliver three Renewable Energy Zones in the State's Central-West Orana, New England, South West regions. By encouraging investment in new generation, storage and transmission in Renewable Energy Zones, the Roadmap will allow a coordinated, consultative approach to the development of energy infrastructure. This will help ensure the infrastructure can be built at the scale required while mitigating the risk of adverse cumulative impacts or land use conflicts, for example with prime agricultural land.

In addition to targeting investment in Renewable Energy Zones, the Roadmap includes the development of a whole-of-roadmap approach to land-use planning. This approach will provide an opportunity for communities to engage with Renewable Energy Zone delivery in a holistic, rather than piecemeal project-by-project way, and give communities more certainty about the location and timing of energy infrastructure.

Projects will compete on community engagement and benefits

Projects supported under the Roadmap's actions will be subject to merit assessment which will address:

- **Social impacts:** the level of community support for the project, including evidence of community engagement and strategies to minimise adverse social impacts and maximise community cobenefits.
- **Local economic benefits:** the level of local economic activity supported by the project, for example the number of in situ jobs supported in NSW by the project and the proportion of project costs offered to local contractors.
- **Energy Corporation of NSW:** be able to restrict network connection of projects over 30 megawatts in Renewable Energy Zones where reasonably necessary to maintain social licence, such as where projects would be in close proximity to towns.

Pilot Central-West Orana Renewable Energy Zone

Work on the Pilot Central-West Orana REZ is already underway, with the Pilot due to be 'shovel-ready' by the end of 2022 and provide 3 gigawatts of new transmission capacity. The NSW Government has already commenced community engagement in the region, holding two forums on the REZ with local councils and has established a Regional Reference Group to bring together key representatives and regional stakeholders to input into the development and delivery of the REZ.

On the same day, the NSW Government announced that the Energy Corporation of NSW will be repurposed to coordinate delivery of the REZ, including overseeing the design of transmission infrastructure in the REZ, implementing best practice community engagement and working with local stakeholders to maximise regional benefits.

Maximising benefits to host communities

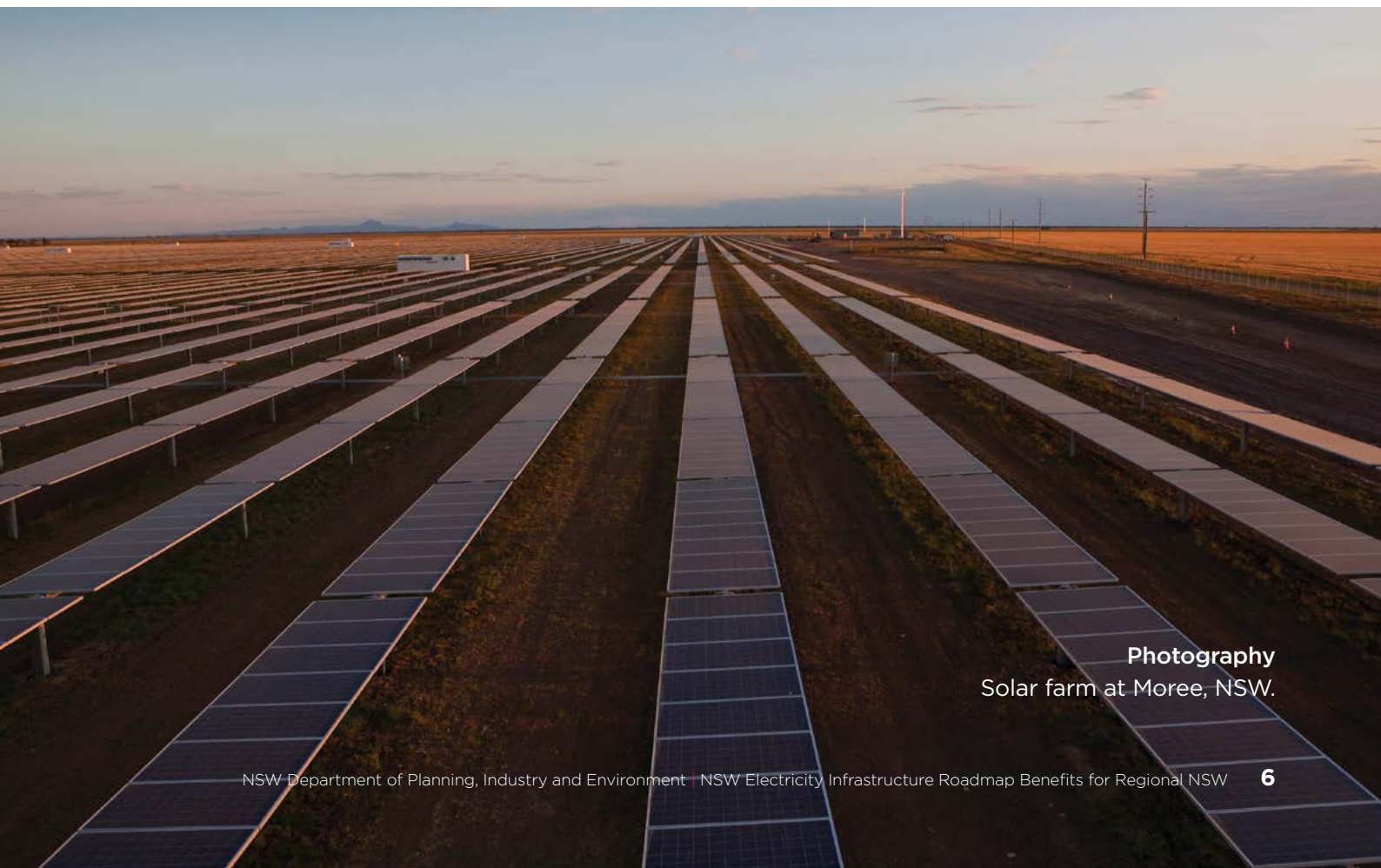
The Government will also work with generation and storage proponents and local communities to ensure the economic benefits of Renewable Energy Zones are equitably shared across the community through community benefit sharing schemes.

Experience from recent projects suggests that developer contributions, such as community enhancement funds, are expected to contribute up to \$265 million to host communities by 2042.

The Roadmap plans for community benefit sharing to be coordinated in areas with multiple generation and storage projects, making contributions go further, and helping make social initiatives happen such as in health, sports or upgrading playgrounds and parks.

In addition to direct financial contributions, major energy infrastructure projects will bring flow on benefits to local communities, including improvements to roads and telecommunications. In developing the Renewable Energy Zones, the Government will also work with the community and local stakeholders to identify ways energy infrastructure projects can support local employment.

This may include undertaking a local skills assessment and providing training to help build the capacity of the local workforce.



Photography
Solar farm at Moree, NSW.

Supporting local industry development

Abundant, cheap, clean and reliable energy provides a platform to attract international investment in emerging, energy intensive industries to NSW, and importantly to NSW regions. The Roadmap will help NSW position itself to take advantage of major energy industry opportunities including a share of the national hydrogen industry (\$200 million per year in additional GDP by 2030);² green ammonia (\$102 million for every percentage point of global ammonia market share captured by NSW);³ and green steel (up to \$20 million in annual revenue for every percentage point increase in industry

output).⁴ The industry opportunities identified in the Roadmap have strong alignment with many regions across the state, not just the three Renewable Energy Zone regions.

In the Renewable Energy Zones, the NSW Government will work to attract co-located industries, such as minerals processing, IT and data centres, agriculture, manufacturing or food processing to maximise the benefits of low cost clean energy to local communities and ensure these benefits last beyond construction.

2. Council of Australian Governments Energy Council, 2019, *Australia's National Hydrogen Strategy*, accessed at: www.industry.gov.au/data-and-publications/australias-national-hydrogen-strategy

3. KPMG and NSW Office of Chief Scientist and Engineer, *Report on NSW: A Clean Energy Super Power*, November 2020.

4. Ibid.

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