



— New South Wales: Electricity Infrastructure Roadmap

- Building back greener -



Government: New South Wales, Australia

Population: 8 million

GDP: \$625 billion

Region: Asia-Pacific

Sector(s): Electricity

Date of publication: February 2020

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Summary

On 9 November 2020, the New South Wales (NSW) Government released its Electricity Infrastructure Roadmap, a plan to modernise the NSW electricity grid into one that is cheaper, cleaner and more reliable. The Roadmap is forecast to attract \$32 billion of private investment to build 12 gigawatts of renewable generation across the State over the next decade.

The Roadmap is expected to create an estimated 6,300 construction jobs and 2,800 ongoing operational jobs by 2030, mostly in regional NSW, and reduce average household energy bills by \$130 per year and average small business energy bills by \$430 per year between 2023 and 2040.

The Roadmap will also help NSW deliver on its ambitions to reach net zero emissions by 2050. It will help reduce NSW electricity emissions by 90 million tonnes by 2030.

Electricity Infrastructure Roadmap

Across the world, energy systems are changing. Old technologies are reaching the end of their technical lives and global markets are demanding cheaper, cleaner and more reliable renewable alternatives. New South Wales is no different. Four of the State's five remaining coal-fired power plants will need to be replaced in the next 15 years.

The [Electricity Infrastructure Roadmap](#) is a coordinated framework that will ensure the next generation of NSW's energy infrastructure is built in time to keep the grid cheap, clean and reliable.

The Roadmap builds on years of work by the NSW Government to transition the energy grid and to meet its net zero by 2050 objective:

- Climate Change Policy Framework (2016)
- NSW Transmission infrastructure Strategy (2018)
- NSW Pumped Hydro Roadmap (2018)
- NSW Electricity Strategy (2019)
- Net Zero Plan: Stage 1 2020 to 2030 (2019)

This latest NSW Government policy provides a long-term investment signal to promote private sector investment in new generation, energy storage and on-demand supply. It will also be supported by an expanded transmission network that brings this electricity to the consumer. The Electricity Infrastructure Roadmap will establish a Transmission Development Scheme to progress the development of the [Renewable Energy Zones](#). The Roadmap's supporting legislation, the [Electricity Infrastructure Investment Act 2020 \(NSW\)](#), identifies five Zones in the Central West, New England, South-West, Hunter-Central Coast and Illawarra regions. **These Zones will become modern-day power stations and deliver an intended network capacity of 12 gigawatts.** By connecting multiple renewable energy generators in these energy resource-rich regions, they will capitalise on economies of scale to deliver cheap, reliable and clean electricity to replace aging power stations as they close.

The Transmission Development Scheme and five Renewable Energy Zones will also be supported by an Electricity Infrastructure Investment Safeguard and a **\$50 million Pumped Hydro Recoverable Grants Program**. The Grant Program expands on the NSW Government's Emerging Energy Program, which is already supporting four pumped hydro projects across the State. **It will assist prospective pumped hydro developers overcome the barriers presented by long and expensive pre-feasibility site studies by providing grant funding.**

The Electricity Infrastructure Investment Safeguard provides a framework for generation, long duration storage and firming technologies to deliver the energy services they are best placed to deliver. Long Term Energy Service Agreements will be awarded to successful projects.

The Government will also establish an Electricity Infrastructure Jobs Advocate and NSW Renewable Energy Sector Board **to ensure the use of locally manufactured and supplied goods and services and maximise the engagement of suitably qualified local workers.**

Together, these initiatives will support an increase in private investment and, as we come out of one of the biggest challenges the world has had to face, **the Roadmap is the recipe to stimulate the economy, and to create the jobs and reforms NSW needs to secure its energy future.**

With the Electricity Infrastructure Roadmap, NSW is showing leadership in preparing for the transition of the energy system to renewable power while also supporting increased jobs and investment.

\$50 million

to assist prospective pumped hydro developers

Expected results:

The Roadmap is a decisive step towards thriving regions, a revitalised and re-industrialised economy, and better livelihoods for all NSW citizens.

It is expected to:

- attract up to **\$32 billion private investment** in generation, transmission and storage infrastructure for regional energy infrastructure by 2030;
- **support an expected 6,300 construction jobs and 2,800 ongoing jobs**, mostly in regional NSW;
- lower energy prices, which will increase household disposable income and business investment. This is forecast to **support a net increase of 23,600 jobs between 2032 and 2037**;
- **save around \$130 a year on the average NSW household electricity bill** and \$430 a year on the average small business electricity bill between 2023 and 2040;
- support an estimated **\$1.5 billion in lease payments to landholders in regional NSW by 2042**;
- **Reduce NSW's carbon emissions by a total of 90 million tonnes of CO₂e (MtCO₂e) by 2030.**

More information

To stay up to date on the latest Roadmap developments, please visit the [Electricity Infrastructure Roadmap](#) webpage.

For all other questions and inquiries, please email:
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