



# TOWARDS A NEW ENERGY FUTURE

## The Australian Government is securing the foundations of our energy system to meet Australia’s future needs

The Australian Government is committed to ensuring that all Australians can access reliable and affordable energy as we transition to a low emissions future. The Budget delivers the first step of changes to meet today’s challenges and lays the foundations to secure our future energy needs.

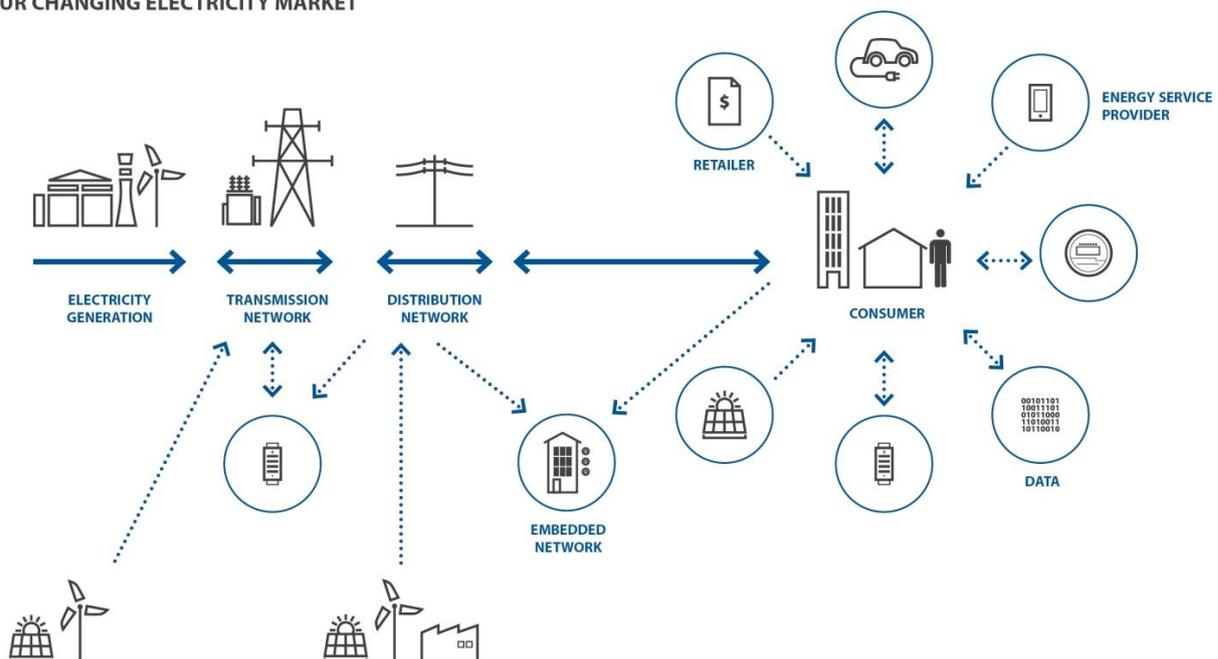
Australia’s energy system is undergoing the biggest change since electricity became widely available more than a century ago. This is because Australians are changing how we use energy, and we are embracing new technologies such as solar, wind power, and battery storage.

As our energy system changes, the Government needs to deliver certainty for the market and has committed to helping reduce pressure on Australians’ electricity bills.

The Government is leading with an energy security plan that meets the needs of all Australians. We are focusing on measures that deliver energy **reliability** and **affordability**, and that help us meet our **emissions reduction** targets.

Upgrading the Snowy Hydro Scheme is a key element of the Government’s plan. A 50 per cent increase in the generation capacity of Snowy will produce enough energy to power an additional 500,000 homes. The Government has indicated to NSW and Victoria that, in order to accelerate expansion of the Snowy Scheme, it is open to acquiring a larger share or outright ownership of Snowy Hydro. This would be subject to some sensible conditions including a requirement that all funds received by the States are reinvested in priority infrastructure projects, that Snowy Hydro’s obligations under its water licence are reaffirmed, that governments work together to expedite and streamline environmental and planning processes without compromising any standards or controls, and that Snowy Hydro remains in public hands.

### OUR CHANGING ELECTRICITY MARKET



## Energy Reliability

Energy reliability means Australians have a stable and competitive supply of energy. To deliver this we need to integrate renewable energy into the electricity grid while ensuring there is enough power available during peak demand periods.

### *Reliable clean power through pumped hydro*

Pumped hydro provides 99 per cent of the world's grid-connected electricity storage. The Australian Government is taking steps to plan for the expansion of this critical energy storage infrastructure in Australia.

- We are planning for the expansion of the landmark Snowy Mountains Scheme. **Snowy Hydro 2.0** would increase generation capacity by 2,000 megawatts as well as storing energy to provide ongoing reliability for the National Electricity Market.
- We are working with the Tasmanian Government to assess options for new pumped hydro energy storage schemes and expand existing hydro power stations. This would boost **Hydro Tasmania's** energy output and store additional energy for the National Electricity Market.
- We are supporting the development of pumped hydro capacity in South Australia and northern Queensland.
- ARENA and the CEFC have also agreed to work together on a priority new funding round for large-scale storage and other flexible capacity projects including pumped hydro.



Snowy Hydro scheme (© Snowy Hydro Ltd)

## Tackling the gas crisis

Gas supply is critical as we transition to a lower emissions future. Gas-fired generators can respond rapidly as electricity demand increases, while having a lower emissions output than traditional coal-fired generators.

A tightness in the domestic gas market has caused prices to rise. The Australian Government is addressing immediate gas shortfalls with its recently announced export controls on gas and securing medium-term supply through a package of around \$90 million:

- \$30.4 million for a **Geological and Bioregional Assessments program** to examine new gas reserves and support increased domestic supply by assessing the environmental safety of unconventional gas projects
- \$28.7 million to accelerate the **development of new onshore gas supply** in the Northern Territory and along the east coast of Australia
- \$19.6 million to accelerate the work of the **Gas Market Reform Group** to increase gas supply through improving access to, and transparency in the gas market
- \$5.2 million to explore the potential benefits and costs of **building gas pipelines** to connect gas reserves in the north and west of Australia to the south east through Moomba in South Australia
- \$2 million to **boost transparency** in the gas market by improving the publication of real-time assessments of gas flows and market information
- \$0.5 million to **examine constraints on increasing gas supply** on the east coast of Australia such as regulatory barriers and inconsistent policies

## Better information

We are investing \$13.4 million in the **Energy Use Data Model** which will provide energy-use data through an online platform, providing a strong foundation to enable better forecasting, management and planning for Australia's future energy system.

## Energy Affordability

Australians should pay no more than necessary for a reliable and low emissions energy supply. We have traditionally enjoyed relatively low energy prices but this is no longer the case. Families and small businesses are feeling the pressure of rising electricity prices.

The Australian Government is pursuing a number of reforms to reduce pressure on power prices.

## Ensuring consumers and industry get a fair deal

To ensure consumers and industry get a fair deal, the Australian Government is holding energy retailers to account to ensure the energy market is operating in a transparent, reliable and fair manner. We have instructed consumer watch-dog, the Australian Competition and Consumer Commission (ACCC) to conduct **inquiries into competition in the retail electricity market and price monitoring in the gas market.**

- \$7.9 million to investigate the drivers of recent electricity price rises, the acceptability of profit made by retailers and whether competition is delivering the best energy offers to households and businesses.
- \$6.6 million to conduct a wide-ranging inquiry into prices, transport, supply and demand for wholesale gas in Australia. The ACCC will report regularly on the supply and pricing of gas over the next three years.

## Increased funding for the Australian Energy Regulator

The Australian Government is providing an additional \$7.95 million in 2017–18 to **ensure the Australian Energy Regulator (AER) is able to rigorously monitor the energy market and energy providers.** This will ensure consumer needs are being served effectively and efficiently.

## Lifting domestic gas supply

The shortage of domestic gas supplies has resulted in higher prices in Australia. The Government has reached agreement with gas producers to ensure supply to the domestic market. To complement this, we will introduce the Australian Domestic Gas Security Mechanism to allow the Government to impose **export controls** on companies when domestic gas supply is forecast to be inadequate. These export controls will restore certainty to the market as we roll out reforms to boost the supply of gas.

## Emissions Reduction

The Australian Government has ratified the Paris Agreement and set a strong, credible and responsible target of reducing emissions by 26 to 28 per cent below 2005 levels by 2030.



Workers at the De Grussa Solar Farm, Western Australia  
(© ARENA)

## Existing economy-wide initiatives

The Government is supporting the development of low emission technologies such as wind, solar and pumped hydro and is building on significant work already in train.

- The Government has already provided \$1.2 billion of funding for **low emission technologies** through the Australian Renewable Energy Agency (ARENA) with around \$1 billion available to support future projects. The CEFC has provided over \$3 billion of debt and equity to support low emissions projects throughout the country.
- The \$2.5 billion **Emissions Reductions Fund**, providing incentives for organisations and individuals to adopt new practices and technologies to reduce their emissions.
- The **Renewable Energy Target**, growing the share of renewable energy to 23.5 per cent by 2020.
- The **National Energy Productivity Plan**, improving Australia's energy productivity by 40 per cent between 2015 and 2030.

## Facilitating solar thermal

From 2017–18, we will make available up to \$110 million for a new **concentrated solar thermal** power plant in Port Augusta, South Australia. This investment could supplement funding available through ARENA and the CEFC, if required.

## Next Steps

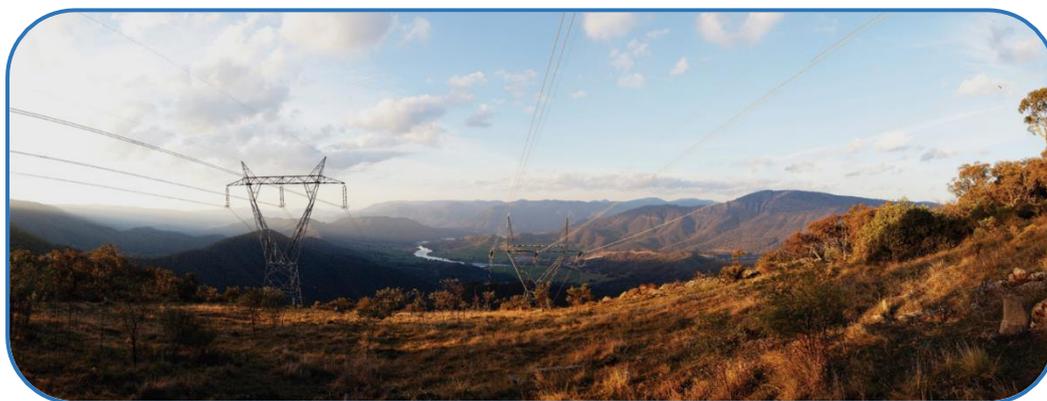
Australia has a once-in-a-generation opportunity to reform our energy system to make it more resilient and to provide the new and better services Australians want.

The Australian Government is meeting this challenge by leading the energy system through this change.

We are delivering measures to ensure Australians have secure and affordable energy in the immediate term.

The Government's longer-term reform program will be informed by independent expert advice. Australia's Chief Scientist, Dr Alan Finkel AO, has been commissioned to develop a blueprint for the future security and reliability of the national energy market. We are also reviewing our climate change policies to ensure they remain effective in achieving our 2030 target and Paris Agreement commitments.

Working together, Australians will be able to take advantage of the opportunities the change to our energy system will offer and have the services we want at a price we can afford.



Snowy Hydro Scheme (© Snowy Hydro Ltd)