



The Energy Transformation

A brighter energy future

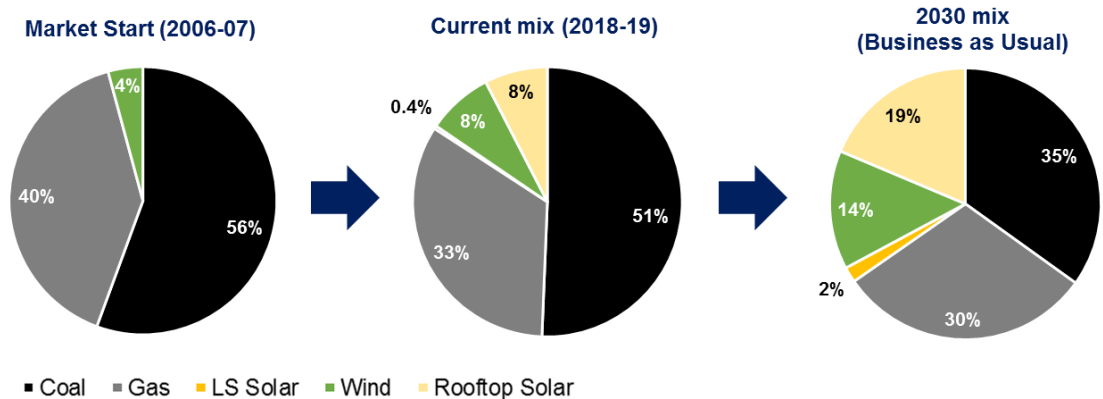
An energy transformation is underway. Our vision for the future is a safe, secure, reliable, and low-emission power system for Western Australian households and businesses. Assisting new technologies to join the grid and enabling households and businesses to have more choice and control over their electricity use will help us achieve this vision at the lowest sustainable cost.

Background

We are experiencing an unprecedented transition in the way electricity is supplied and used. More households and small businesses than ever are installing solar photovoltaic (PV) systems to take control of their electricity production. In fact, over a quarter of Western Australian households have already installed a solar PV system. At the same time, large-scale renewable generators are supplying more of our electricity needs.

Renewable energy from solar and wind now supplies around 15% of the annual energy needs of our largest electricity grid in the south west of the State. At certain times of the day, these renewable energy sources now account for nearly 50% of electricity supply in the south west. With Western Australia's excellent renewable resources, this trend is set to continue.

Our changing energy mix in the south west



Sources: Australian Energy Market Operator data and Public Utilities Office modelling

While this transition presents an exciting opportunity for low cost, low emissions energy, it also presents challenges for maintaining a secure and reliable system as more of our energy is supplied by intermittent energy sources.

Our response

We are working to deliver an innovative, resilient and dynamic electricity system that continues to provide affordable, reliable and clean energy to consumers. We will do this by leveraging our State's major advantages, such as our world class solar and wind resources, abundant natural gas, and access to battery metals.

Our key initiatives to help us during the energy transformation include:

- development of a **Whole of System Plan** for our south west; and
- development of a **Distributed Energy Resources Roadmap** to guide the integration distributed energy sources (like solar PV) in a secure way.

These initiatives complement work already underway to modernise the rules, regulations and frameworks underpinning the Wholesale Electricity Market and the grid in the south west of the State to enable the connection of more renewables into the future.