



FACT SHEET

Wind energy generation



Wind generation is providing low-emissions renewable electricity to customers across Western Australia.

What is wind energy?

Wind generation is the conversion of the energy in wind to electricity. Wind rotates turbine blades, which spin a generator, creating electricity.

A wind farm usually incorporates several turbines, and a substation connects them to the grid.

Benefits of wind energy

Wind generation requires no fuel and provides a very low-emissions alternative to traditional coal and gas-powered generation.

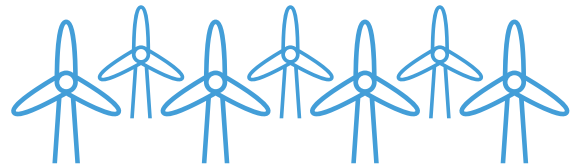
Wind energy also supplements and supports greater levels of other renewables such as solar.

Solar panels are unable to generate electricity at night or when cloud cover decreases the amount of solar energy available. Provided the wind is blowing, wind generation can produce energy at any time, helping meet our flexible energy needs.

Wind energy in Western Australia

Western Australia has great potential to capture the benefits of wind energy. Our state has excellent wind resources, and Perth is one of the windiest capital cities in the world.

Western Australia also has plenty of suitable areas for wind generation with vast coastal areas, rounded hills and flat plains, and the potential for offshore wind.



Already, wind is playing a key role in our energy mix. On an average day, 17% of the electricity in our State's main grid comes from wind generation.

Like other types of generation, new wind projects must meet a range of requirements to ensure any community or environmental impacts are minimised.

Wind doesn't blow consistently, so wind energy needs to be complemented with other energy sources like solar and batteries. This will ensure the system remains stable and renewable energy is available when we need it.

New wind projects

The State Government and Synergy are supporting the transition to more renewables through developing new wind projects, including new proposed developments at Warradarge and King Rocks, and investing in more storage.

