

Renewable Energy

What is renewable energy?

Renewable electricity is generated from nature's energy by using wind farms, hydro power stations, solar plants and biomass plants which use straw and waste organic products. Renewable energy sources are continually replenished, unlike fossil fuels which are finite.



Why do we need to use renewables?

Nearly all of Australia's current electricity is produced from fossil fuels. The generation of electricity is the most significant contributor to carbon dioxide emissions, accounting for about one third of Australia's greenhouse gas emissions.

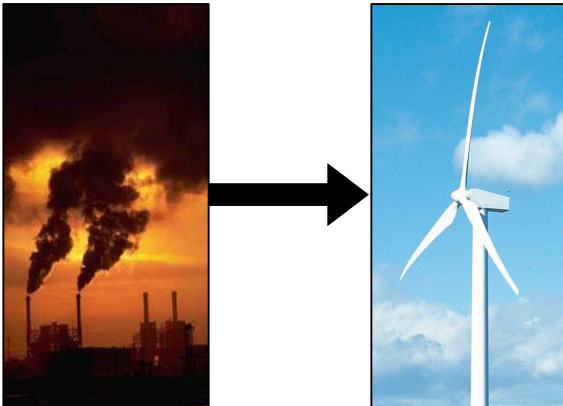
The use of renewable energy to generate electricity does not produce greenhouse gas emissions, which contributes to the global problem of climate change.

Climate change is recognised as a serious threat to the environment and life as we know it. Scientists have established that the primary cause of climate change is greenhouse gas emissions from the burning of fossil fuels, such as coal and gas.

Scientists predict the effects of climate change will be global and include significant weather events such as drought and flood. This will affect agriculture, our health, and ability to supply food and water.

A CSIRO report on the effect of climate change in New South Wales predicts an increase in the number of days over 35 degrees Celsius and decreased rainfall, which will have a significant impact on agricultural activities in the regions.

Moving towards increasing renewables in the energy mix



How much does it help?

Australia has the highest per capita greenhouse gas emissions of any nation in the developed world.

Using a 50 megawatt wind farm to generate electricity will avoid over 180 000 tonnes of greenhouse gas emissions per year. This is the equivalent of removing 28 000 cars from the road.

Using renewable energy to generate electricity not only reduces the earth's greenhouse gas emissions and pollution it creates economic and social benefits at local, regional and state levels. It also strengthens the electricity grid as generation is distributed through the network and it supplies power closer to where it is used by consumers.

What is the Mandatory Renewable Energy Target (MRET)?

As part of Australia's strategy to reduce greenhouse gas emissions, the Federal Government commenced the Mandatory Renewable Energy Target (MRET) scheme in April 2001, requiring an additional 2% of electricity be provided from renewable sources by 2010. The MRET requires retail energy companies to buy more renewable electricity and sell it to customers.

The MRET target is already full and the Federal Government has decided not to extend it.

A number of State Governments, including South Australia, Victoria, Western Australia and New South Wales have set their own targets to ensure renewable sources of energy continue to be harnessed as a response to the Federal Government's decision not to extend the Federal target.

In comparison to other countries, Australia's MRET scheme provides a very modest target. Currently, wind power alone provides a significant proportion of electricity in Denmark (19% of its national electricity demand), Germany (10%) and Spain (6%) Wind power is the most economically viable renewable technology available today in Australia for large scale electricity generation.

To reduce Australia's greenhouse emissions by using more renewable energy the Federal MRET needs to be raised to levels comparable with other countries leading the way in the use of renewables.

How can you help?

Everyone can make a difference by reducing the use of energy, using energy efficiently, purchasing green power products and supporting the development of new renewable energy facilities such as wind farms.

Electricity utilities source green power from a range of wind, solar and hydro facilities. They offer a variety of products to customers to suit your preference and budget.

Look for the Green Power tick to ensure you are receiving a government accredited product.



For more information on the above or any of Acciona Energy's projects please contact us on free call 1800 283 550.