Fact Sheet

EnergyAustralia is one of Australia's largest producers of greenhouse gases, particularly carbon dioxide, which we generate in supplying electricity and gas to more than 2.6 million customers.

This fact sheet explains what we're doing to reduce our emissions.

How much we produce

Our largest source of emissions is carbon dioxide, commonly referred to by its chemical symbol, "CO_2".

Carbon dioxide is produced by burning fossil fuels. But it also occurs naturally in oceans, hot springs and volcanos, and when we breathe.

Carbon dioxide is a greenhouse gas; its increased concentration in the atmosphere since the industrial revolution has caused the planet to warm.

In 2013-14 EnergyAustralia generated 23.2[1] million tonnes of carbon dioxide, mainly from burning coal and gas to produce the electricity we use to heat and cool homes and power businesses.

We accounted for about 6.7 per cent of the greenhouse gases generated by industry in Australia[2].

Our biggest source of carbon dioxide is the Yallourn power station in the Latrobe Valley, 150 km east of Melbourne. Yallourn, which burns brown coal, provides about 22 per cent of Victoria's energy and about 8 per cent of the National Energy Market, or NEM.

Addressing the issue

Energy underpins lifestyle, jobs and economic development. We all want reliable energy, produced and distributed cost-effectively, so we can enjoy a good quality of life.

All electricity retailers, EnergyAustralia among them, buy electricity through the NEM, a central pool which aggregates and distributes power produced from a range of sources, including coal- and gas-fired power stations, wind farms and hydroelectric plants.

Electricity can't be stored in large quantities, yet. It means that over the course of an average day, homes and business have their demand met by a mix of both fossil fuels and renewables.

While renewable technology is advancing, at present coal-fired power stations are the community's cheapest source of energy. On average it costs a little more than 2 cents[3] to produce one kilowatt hour of energy using brown coal in the Latrobe Valley.

In contrast, it costs more than 8 cents[4] to produce one kilowatt hour of energy from a new wind farm.

To put that in context, switching from coal to wind would add about $300[5] a year, or 15 per cent, to the average household electricity bill.

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[1] Based on National Greenhouse and Energy Reporting data.
[2] Based on National Greenhouse and Energy Reporting data.
[3] ACIL Tasman 2014, Latrobe Valley Brown Coal estimate
[4] Cost based on successful ACT Wind Auction bidder - Coonooer Bridge, in NW of Bendigo, VIC
[5] Estimate based on average residential use of 5000 Kwh per year, sourced AEMO December 2014

Not everybody can afford that. However, people have the choice of signing up to GreenPower to ensure their power comes from renewable sources.

But that's only half the equation. We are also reducing our environmental impact.

In 2007, we were the first energy business in Australia to commit to reducing our emissions because we believe that's the right thing to do.

By 2050, we expect to produce 60 per cent less emissions than we do now.

While we want to reduce our emissions faster, we are mindful that cleaner forms of energy are expensive, take time to plan and build, and can lead to higher household bills if we aren't thoughtful.

We plan decades ahead to ensure the transition to a new generation does not affect reliability of supply or cause financial hardship to people who are struggling to pay their bills.

Here's what we're doing

At EnergyAustralia we see that it's our job to help our customers manage how much energy they use, and how they use it. When our customers use less energy, or use that energy more efficiently, carbon emissions are reduced.

Here are some of the ways our customers can manage their energy use, and their carbon emissions, according to their budgets:

- We offer GreenPower-accredited products which allow customers to choose how much electricity they buy comes from renewable sources. At the end of 2014, EnergyAustralia was the third largest provider of GreenPower. About 43,700 of our customers had bought at least one GreenPower product.

- We provide solar panels for homes and commercial sites. EnergyAustralia supports 135,000 electricity customers with solar photovoltaic systems, up 8.4 per cent in 2014 compared to 2013. EnergyAustralia has 11.3 per cent solar photovoltaic market share in the national electricity market.

- We have created a Home Services business, which provides customers with energy-efficient end-to-end heating, cooling, hot water and solar systems.

We're also reducing our environmental impact through:

- Making our existing generation assets more efficient. For example, a major maintenance program at Yallourn over the past five years has improved the power station's operational efficiency. In practical terms, the power station can now produce power for 100,000 extra homes from the same amount of coal, which equates to 2.6 % less tonnes of carbon dioxide equivalent per MWh produced.

- Working with partners Monash University and CSIRO to reduce the impact of brown coal until we can responsibly switch to cleaner energy.

- Supporting renewable energy. We have locked in long-term agreements to buy energy produced by wind farms. In this way we financially underpin around 14 per cent of the large scale wind

projects in the National Energy Market, equating to more than $1 billion of investment in renewables. Our investments delivered 1,075 GWh of renewable energy in 2014, which is enough energy to power 200 000 homes.

About EnergyAustralia

EnergyAustralia is one of Australia's leading companies, providing gas and electricity to more than 2.6 million residential and business customers in Australia.

We are a wholly-owned subsidiary of Hong Kong-listed CLP, the largest non-government power business in the Asia-Pacific.

Our headquarters are in Melbourne, Victoria.

Read more about us here: www.energyaustralia.com.au