

## How does Australia's Renewable Energy Target compare with what other G20 countries are doing?

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Many power companies say Australia's Renewable Energy Target (RET) is too high and should be reduced so that renewables make up no more than 20 per cent of electricity in 2020. How would that compare with what other countries are doing?

### Many other developed countries are aiming higher.

EU countries' targets cover all forms of energy. For example, France and Germany are aiming for 23 cent of total energy use to be from renewables by 2020; this will result in nearly 40 per cent renewable electricity in Germany and nearly 30 per cent in France. The UK's 15 per cent target will result in 30 per cent renewable electricity by 2020.<sup>1</sup>

The United States is the world's second biggest investor in renewable energy. Twenty-nine U.S. states have binding renewable electricity targets. Leaders include Texas (achieved its 2025 target in 2009, now the country's largest wind producer) and California (on track for 33 per cent by 2020).<sup>2</sup> Under current policies renewable energy is on track to provide 43 per cent of new electricity capacity to 2020, while about 50 gigawatts (GW) of existing coal capacity will close.<sup>3</sup> Proposed new federal rules cutting power plant emissions are likely to further increase renewable energy production.

### Developing countries are closing the gap.

Renewable energy investment in developing countries increased ten-fold in the last decade, from \$8 billion in 2004 to \$93 billion in 2013 (large hydro excluded). China, India and Brazil are among the top 10 investment destinations with China number one globally. In 2013, China spent \$56 billion on renewable energy, investing more than all of Europe.<sup>4</sup> China's targets for wind, solar and hydro power are expected to ensure 30 per cent renewable electricity by 2020.<sup>5</sup>

### Renewable energy provides economic benefits.

As well as reducing carbon pollution, renewable energy also contributes to countries' energy security, by reducing reliance on internationally-traded and costly fuels; air quality, by displacing polluting energy sources; and employment and industrial development, as a growing sector with long-term strategic importance.

**Table 1. Renewable Energy Targets – key members of the G20.**

Country	Renewable energy target (share of electricity in 2020 unless specified)	Achieved so far (share of electricity in 2012 unless specified)
<b>Australia</b>	About 28% as legislated	15% (2013)
<b>Brazil</b>	Tech-specific targets (e.g. 15.6 GW wind by 2021)	85% of electricity
<b>Canada</b>	Province-level targets (projected national share: 70%)	65%
<b>China</b>	9.5% final energy by 2015 Tech-specific targets (e.g. 200 GW wind by 2020)	9.2% final energy 21% electricity (2013)
<b>France</b>	27%	16% (2011)
<b>Germany</b>	40-45% by 2025	25%(2013)
<b>India</b>	15%	5%
<b>Japan</b>	10% primary energy	7% primary energy (2011)
<b>South Korea</b>	6% primary energy	3% primary energy (2011)
<b>Mexico</b>	35% by 2026	15%
<b>South Africa</b>	9% by 2030	2.6%
<b>UK</b>	30%	15% (2013)
<b>US</b>	Binding targets in 29 states (projected national share: 14%)	13% electricity
<b>EU</b>	35%	24%

Sources include those cited in endnotes.

### Electricity must approach zero-carbon.

To avoid global warming above 2°C, the global electricity supply needs to decarbonise over the next few decades.<sup>6</sup> Renewables are essential to achieve a zero-emission power sector, which then enables emission reductions in sectors like transport and buildings.

### ENDNOTES

<sup>1</sup>P. Capros et al., *EU Energy, Transport and GHG Emissions: Trends to 2050, Reference Scenario 2013*. European Union, Luxembourg.

<sup>2</sup> Lawrence Berkeley National Laboratory, 2013. *Renewables Portfolio Standards in the United States: A Status Update*. State-Federal RPS Collaborative National Summit on RPS, 6 November, Washington, DC.

<sup>3</sup>United States of America, 2014. *United States Climate Action Report 2014*. Department of State, Washington, DC.

<sup>4</sup>REN21, 2014. *Renewables 2014: Global Status Report*.

<http://www.ren21.net/REN21Activities/GlobalStatusReport.aspx>.

<sup>5</sup> John Mathews and Hao Tan, 2014. 'China's Continuing Renewable Energy Revolution: Global Implications', *The Asia-Pacific Journal*, Volume 12, Issue 12, No. 3, March 24.

<sup>6</sup> IEA, 2014. *Energy Technology Perspectives 2014*. IEA/OECD, Paris.