

## Changing Picture of Energy Generation in Australia and the U.S.

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Australia is rich in fossil-fuel resources, has been the world's leading exporter of coal, and is increasing its exports of natural gas. Australia has relied heavily on burning these two fuels for supply of electricity and 12 years ago was one of the leading per-capita emitters of CO<sub>2</sub>. A subsequent rapid increase in wind and solar generation of electricity (now 23%) has substantially reduced emissions. The country holds the world's largest proved recoverable reserves of uranium but has no nuclear-powered electricity generation capacity and exports all of its uranium production. Debate continues about whether Australia should begin to allow and even develop nuclear power as a way to combat climate change. Professor George Dracoulis advised the government on nuclear issues and published his positive views on nuclear energy [1] after the 2011 tsunami disrupted reactors at Fukushima. The U.S. has also decreased use of coal, increased natural gas consumption, and rapidly ramped up wind (but not solar) generation of electricity. Nuclear remains a substantial component (19%) in the U.S. but is decreasing as cheap natural gas forces closure of some nuclear plants. Both countries are struggling (in different ways) with the role of nuclear energy in a world with a warming climate.

1. G. Dracoulis, *Asian Scientist Magazine*,  
<https://www.asianscientist.com/2011/03/features/will-nuclear-energy-survive/> (2011).