



CLIMATE CHANGE creates a building boom

Infrastructure required to meet Australian energy demands by 2020

46
10 MW



small hydro
power stations

2
1500 MW



carbon capture &
storage power stations

137
250 MW



wind farms

660
thousand



building integrated
solar PV rooftops

4
500 MW



geothermal power
stations

2.5
million



domestic solar
hot water units

5
500 MW



solar power stations

9%
of



transport fuel provided
by bio-diesel and similar

4
250 MW



sea & ocean energy
power stations

... and improving building and
industrial energy efficiency
by about 9%



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Infrastructure required to meet Australian energy demands by 2020

46
10 MW

small hydro power stations

Estimated resource available is 1200 MW*
Example: Koombooloomba Hydro, North Queensland, 7MW, operational

2
1500 MW

carbon capture & storage power stations

Example: Hunt Energy Rig 3 at ZeroGen's Drilling Investigation Site

137
250 MW

wind farms

Estimated resource available is 64 000 MW*
Example: Lake Bonney Wind Farm, South Australia, 239.5 MW, operational

660
thousand

building integrated solar PV rooftops

Estimated resource available is 9.7 million units*
Example: Sustainable Energy Development Authority office, roof top solar panel, Sydney, New South Wales

4
500 MW

geothermal power stations

Estimated resource available is 6600 MW*
Example: Steam separator at Habanero 3, South Australia, 1MW operational shortly, 50MW power plant operational by 2012

2.5
million

domestic solar hot water units

Estimated resource available is 9.7 million households*
Example: Hot water system, Solahart

5
500 MW

solar power stations

Estimated resource available is 57 000 MW*
Example: Kimberlina solar thermal plant, California, 5MW, operational

9%
of

transport fuel provided by bio-diesel and similar

Estimated resource available is 22.5 giga litres from sources that do not compete with food production* (i.e. waste and crop residues)

4
250 MW

sea & ocean energy power stations

Estimated resource available is 5000 MW*
Example: CETO Project, Western Australia, pre-commercial prototype in operation

Energy efficiency can provide significant benefits to the economy. For example, a recent review of California's green energy program, established in the mid-1970s, found that it had created 1.5 million jobs (at a cost of 25,000 jobs), saved Californians about \$56 billion in energy costs and reduced per capita energy demand by 40% (see http://www.next10.org/pdf/report_eijc/UCB_Energy_Innovation_and_Job_Creation_10-20-08.pdf).

WWF would welcome the opportunity to provide you with a more detailed briefing. Please contact Nicole Ikenberg on 02 8202 1257, 0400 324 107 or nikenberg@wwf.org.au.

The Australian Government's existing mitigation and infrastructure schemes would provide sufficient incentive for deployment if an emission reduction target of 25% below 2000 levels by 2020 was adopted. It is assumed that approximately 18% of reductions are achieved in Australia and the balance overseas.

Estimated practically available resources based on published sources in Australian literature.