



‘Evolution’ of the climate change ‘debate’

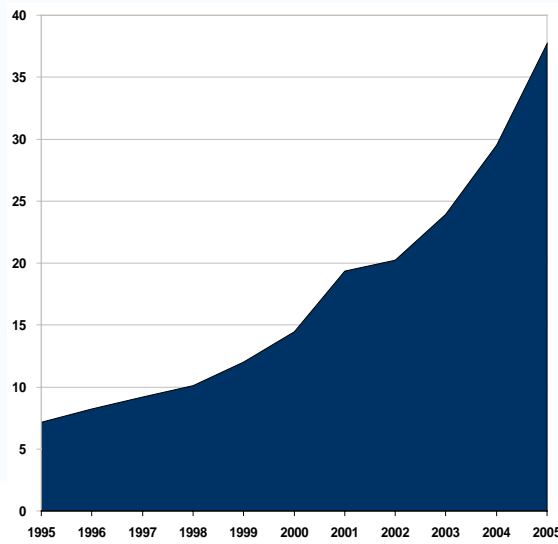
- Ian MacFarlane, Minister for Resources and Energy : ***“I’m a sceptic of the connection between emissions and climate change”*** to Laurie Oakes, August 06
- John Howard, Prime Minister: ***“I think this nation, if it is serious about climate change, has to look at the nuclear option”***. 7.30 Report, Feb 07
- Malcolm Turnbull, Minister for the Environment and Water Resources: ***“You cannot run a modern economy on wind farms and solar panels. It’s a pity that you can’t but you can’t.”*** 4 Corners, April 2007

Renewable energy and energy efficiency central to deep cuts



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Annual Investment in Renewable Energy, 1995 - 2005 (billion US dollars)

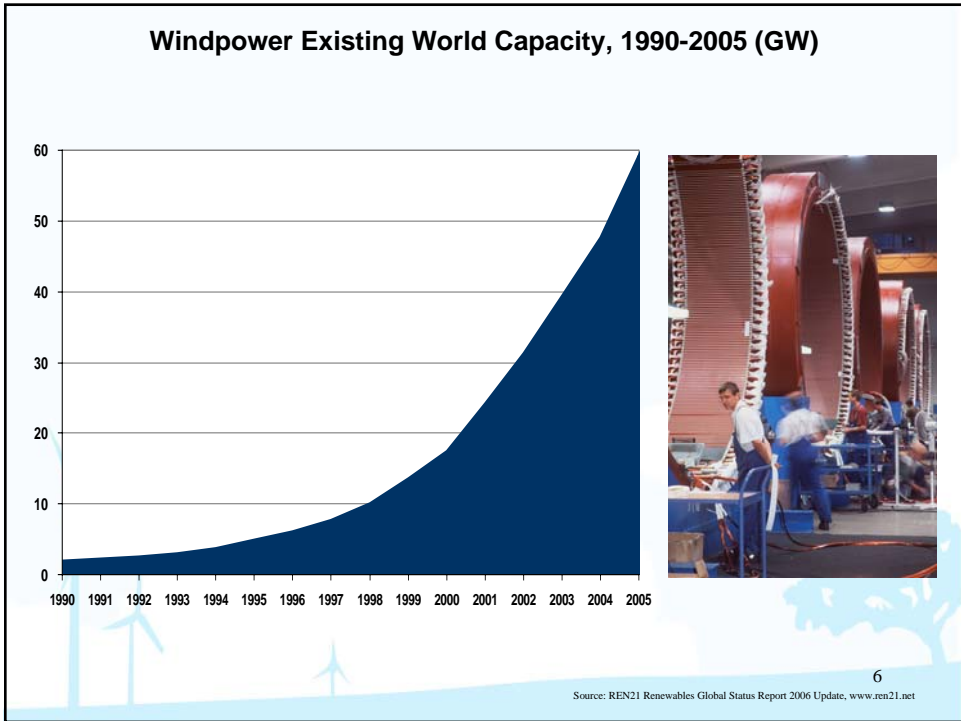


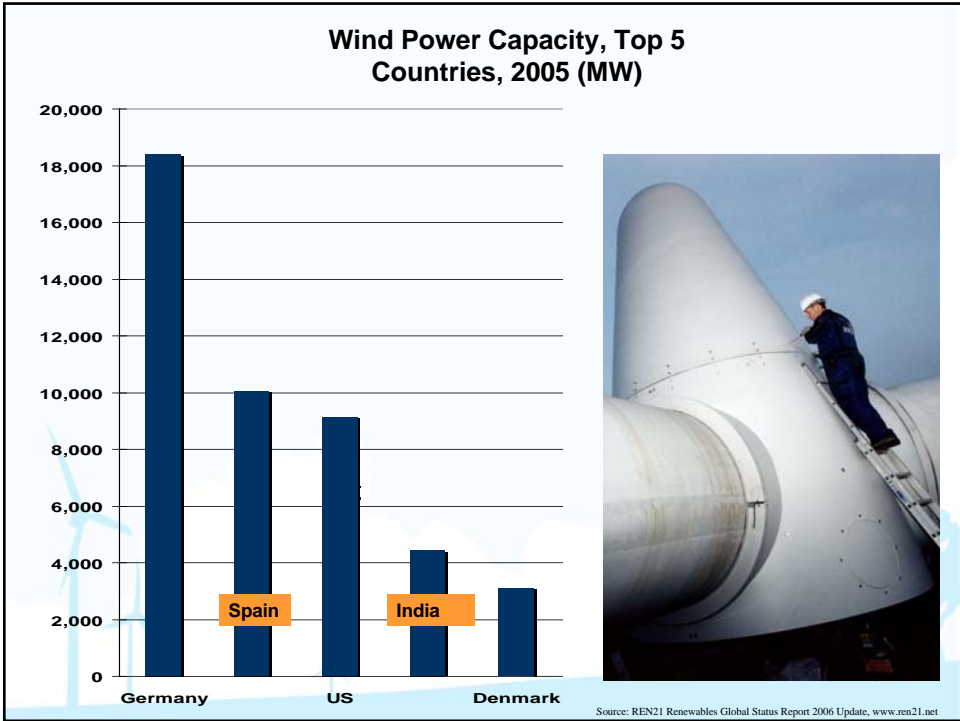
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Source: REN21 Renewables Global Status Report 2006 Update, www.ren21.net

Selected Indicators	2004	2005
Investment in new renewable capacity (annual)	\$30	\$38 billion
Renewables power capacity (existing, excl. large hydro)	160	182 GW
Renewables power capacity (existing, incl. large hydro)	895	930 GW
Wind power capacity (existing)	48	59 GW
Grid-connected solar PV capacity (existing)	2.0	3.1 GW
Solar PV production (annual)	1150	1700 MW
Solar hot water capacity (existing)	77	88 GWth
Ethanol production (annual)	30.5	33 billion liters
Biodiesel production (annual)	2.1	3.9 billion liters
Countries with policy targets	45	49
States/provinces/countries with feed-in policies	37	41
States/provinces/countries with RPS policies	38	38
States/provinces/countries with biofuels mandates	22	38

Source: Renewable Energy Status Report 2006, REN21





A SUSTAINABLE WORLD. ENERGY OUTLOOK

Case Study Germany: Renewable Energy Law (Feed-in tariff):

Table 1: Key data on renewable energies in Germany 2005/2006

	2005 ¹⁾	2006 ¹⁾	Changes
Share RE in total primary energy consumption	4.7 %	5.3 %	+ 12.8 %
Share RE in total final energy consumption	6.6 %	7.4 %	+ 12.2 %
Share RE electricity in total gross electricity consumption	10.4 %	11.8 %	+ 13.4 %
Share RE heating in total heat consumption	5.3 %	5.9 %	+ 11.3 %
Share RE in total fuel consumption of road traffic	3.8 %	4.7 %	+ 23.7 %
CO ₂ emissions avoided through RE ²⁾	ca. 86 m t	ca. 97 m t	+ 12.7 %
- of which through EEG	ca. 37 m t	ca. 44 m t	+ 18.9 %
Total turnover from RE	ca. €18.1 bn	ca. €21.6 bn	+ 19.3 %
of which:			
- Turnover from constructing plants	ca. €10.3 bn	ca. €11.3 bn	+ 9.7 %
- Turnover from operating plants	ca. €7.8 bn	ca. €10.3 bn	+ 32.1 %
Employees in RE sector	ca. 157,000 (2004)	ca. 214,000	+ ca. 36 % compared with 2004

RE = renewable energies
 1) provisional data
 2) calculated according to substitution of other energy forms



Renewables Portfolio Standards

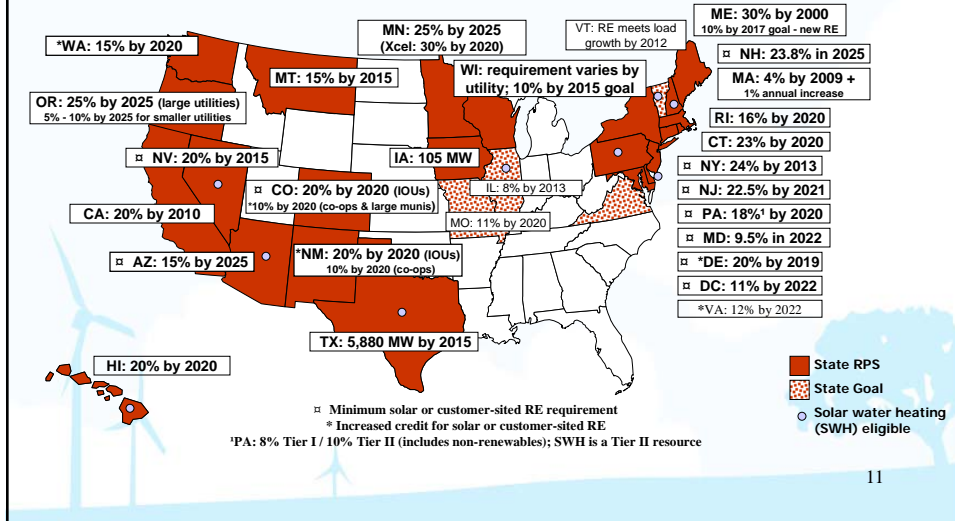
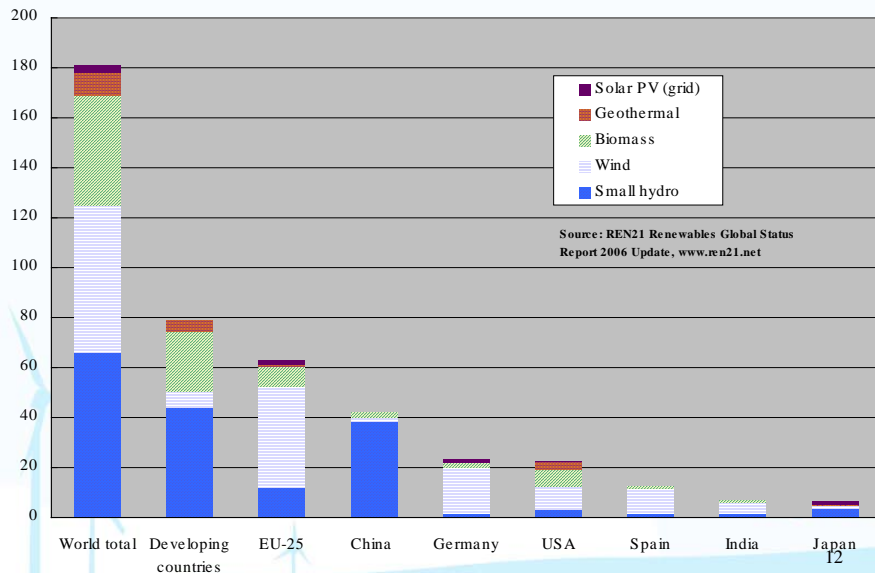
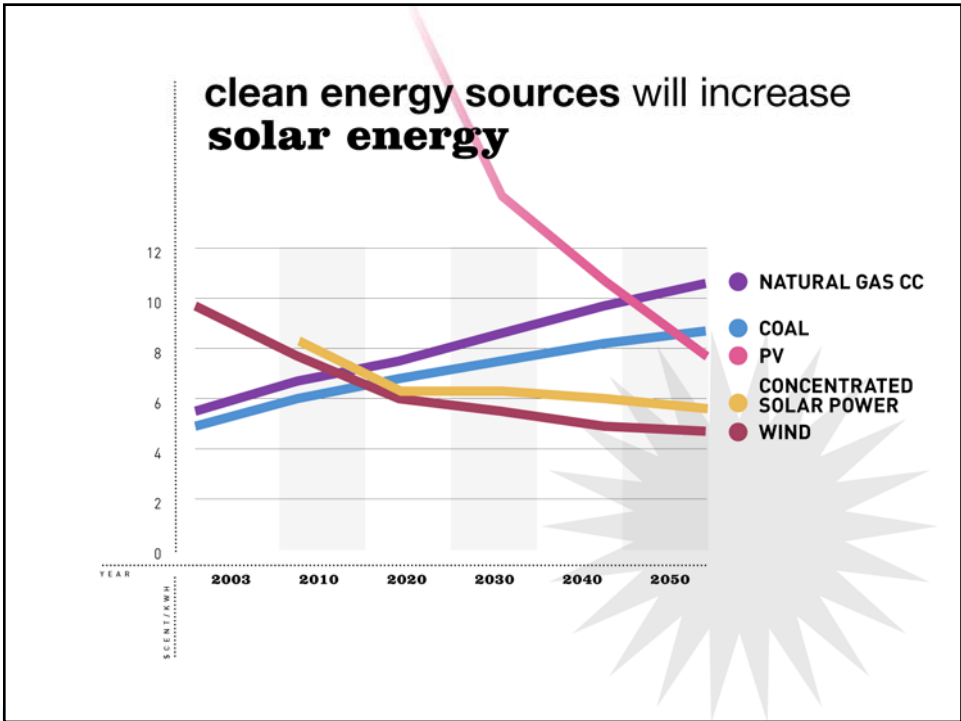
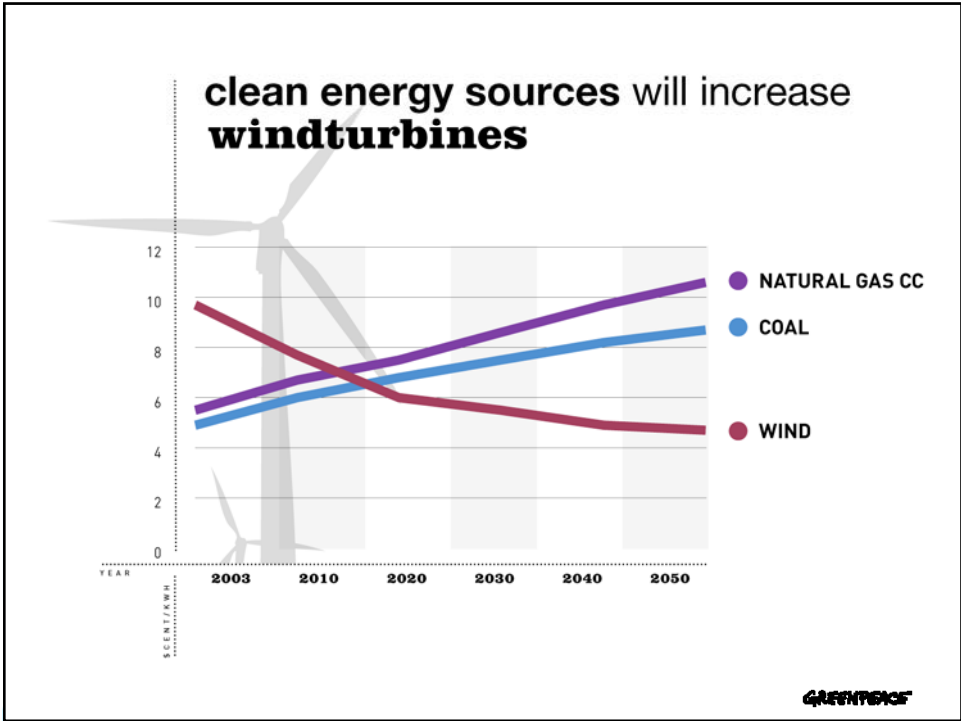
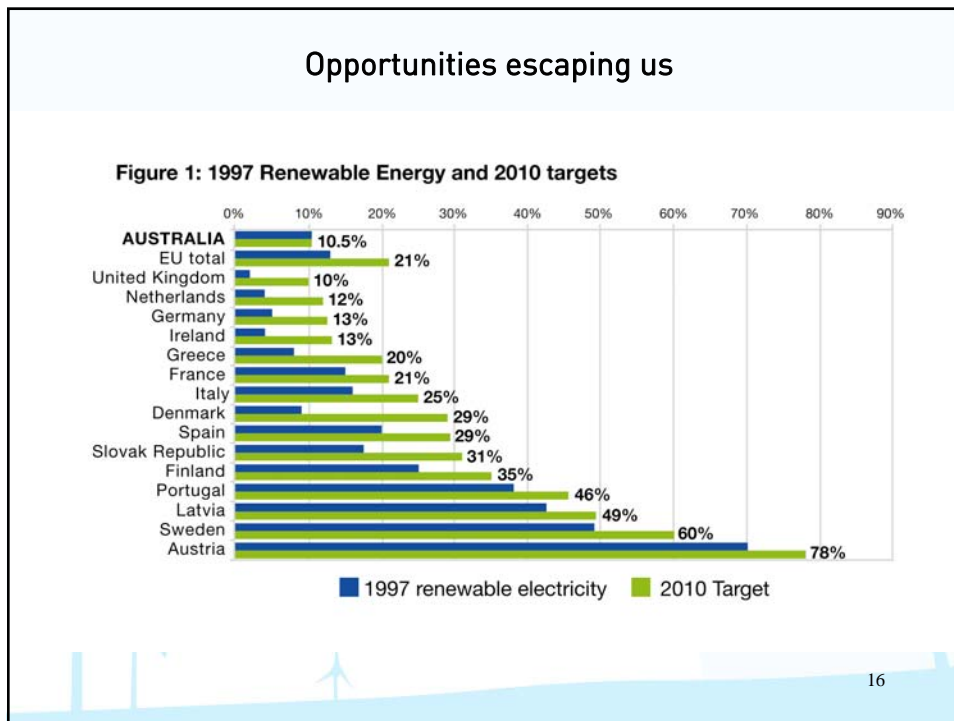
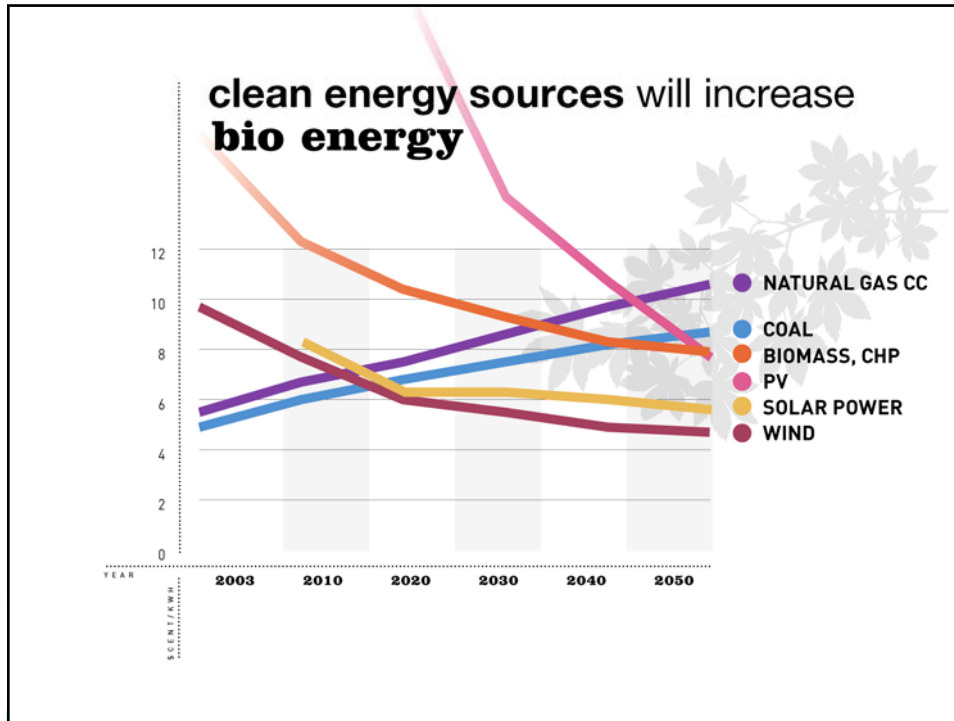


Figure 4: Renewable Power Capacities in 2005 (GW) for Developing Countries, EU, and Top Six Individual Countries (excluding large hydropower)

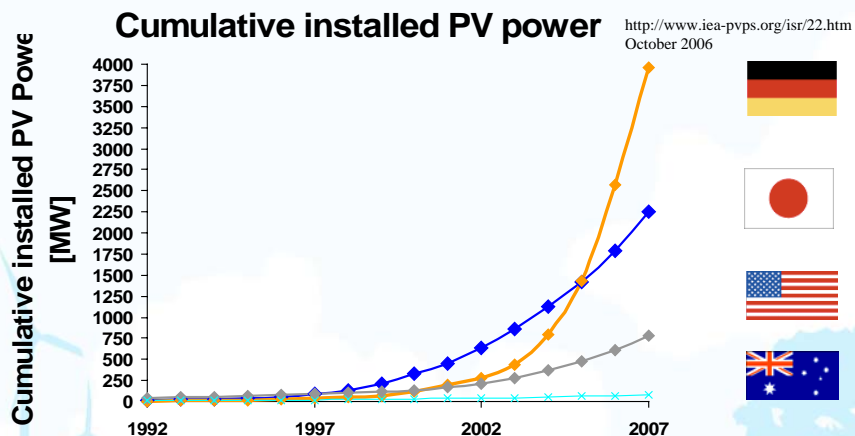






Germany leads the pack on solar

Australia Goes From Leader To Laggard Over Past 10 Years

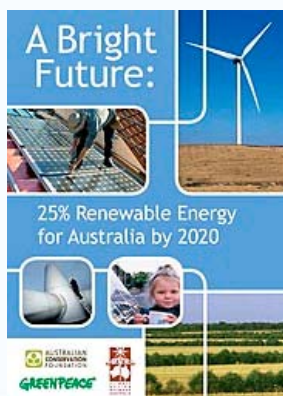


Based on early data for 2006 and projections for 2007

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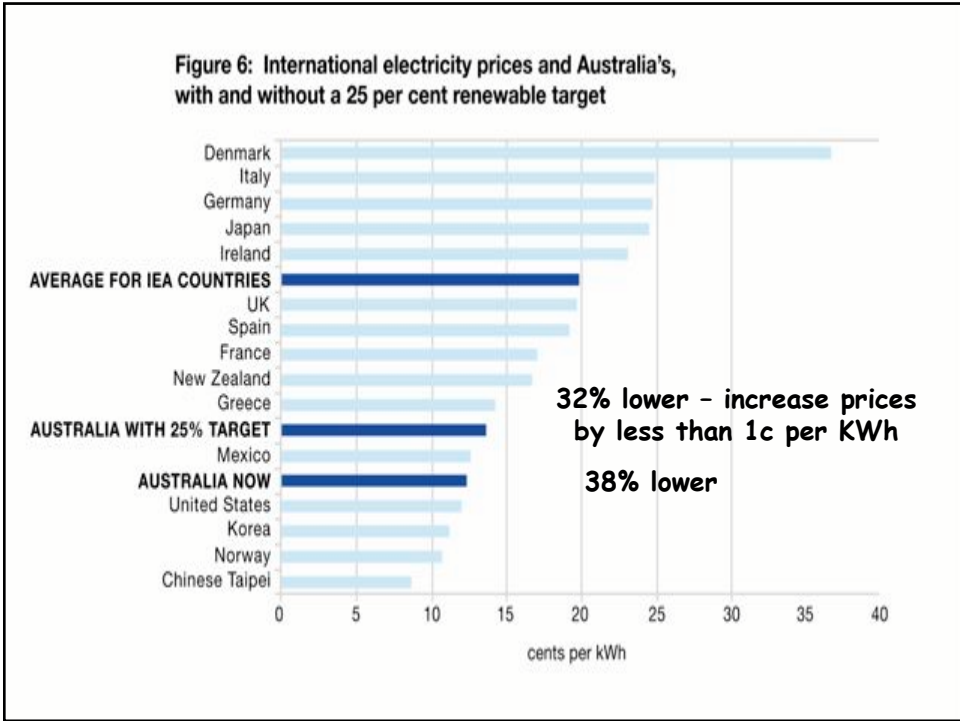
Compiled by **GREENPEACE** using IEA data

A 25% RE target would deliver:



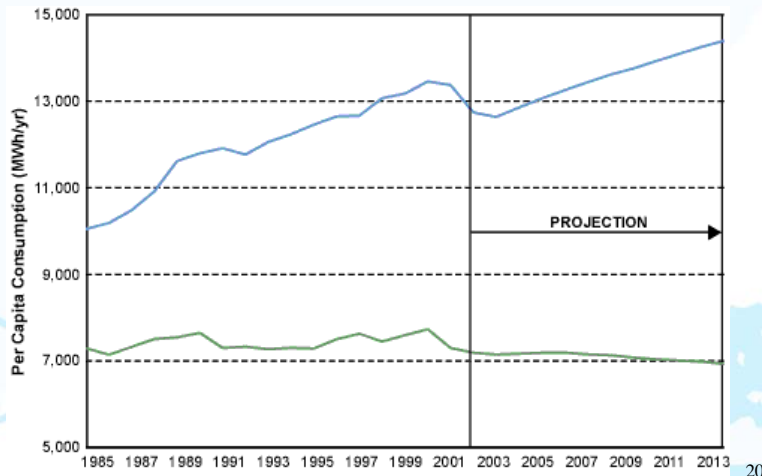
- 16,600 new jobs,
- \$33 billion in new investment,
- 15,000 MW new renewable capacity,
- 69 million tonnes reduction in electricity sector GH emissions
- Enough RE to power every home in Australia

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Renewable energy without energy efficiency will not reduce emissions enough

California's electricity use per person vs other US states



The Baseload myth

- Wind- variable, predictable, can be baseload**
- Solar- variable, predictable, great for peak power needs**
- Solar thermal- baseload**
- Tidal and wave- baseload, early stages of development**
- Geothermal- baseload, on-line before nuclear or 'clean coal'**
- Bioenergy- mature, baseload**
- Hydro- baseload, mature but limited**

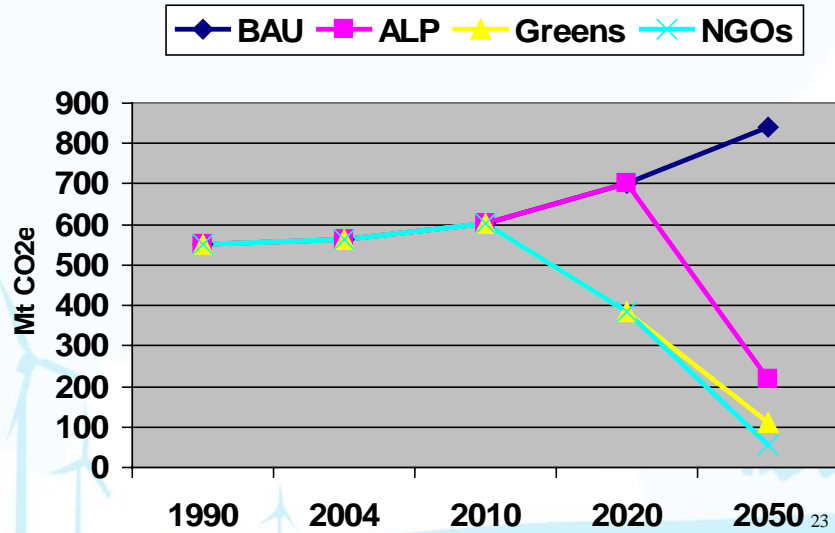
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Assessing greenhouse policy

- Is there a target to REDUCE emissions? Is it binding?**
- Is there a legislated target for increased energy efficiency and renewable energy?**
- Does it rely on technologies which don't yet exist? Or which are dangerous?**
- Does it involve burning more or less fossil fuels**
- Does polluter pays principle apply?**
- Is there a solid plan for reducing transport sector and agricultural emissions?**
- Is it fair?**

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Is there a target to reduce emissions? Is it binding?



Nice argument but needs political support



Let's revitalise democracy as we solve climate change

www.thebigswitch.org.au



The Big Switch website features:

- Cutting edge analysis and information about Climate Change
- Bold, inspiring and realistic solutions
- Exciting opportunities and tools for individual action
- Sophisticated audience segmentation by electorate
- Rates every MP in the Parliament n climate change.

Get your MP excited about supporting action to halt climate change!

- Visit your MP - Tell them that you want them to do more on climate change
- Every time you do something to reduce your own impact on climate change, write them a letter/email:

"Today I switched to 100% Green Power because I'm concerned about climate change. As you're my representative in Parliament, I want you to do more on climate change."



Federal Member for Deakin: Phil Baressi

email:
Phil.Baressi.MP@aph.gov.au
Phone: (03) 9873 8351