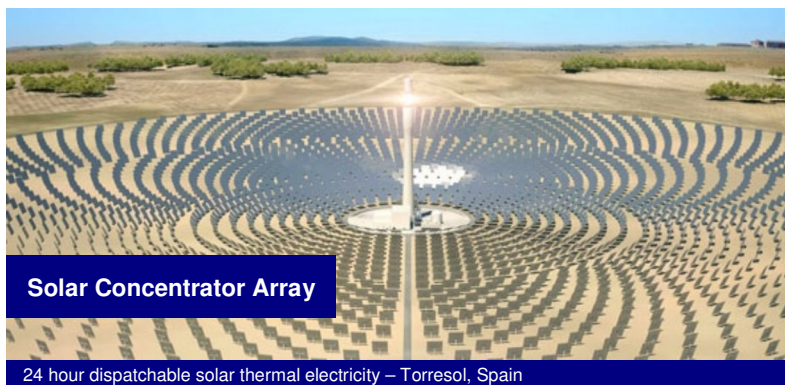


# 100% Renewable Energy in 10 Years

## 100% Renewable

Australia can – and must – move quickly to zero carbon energy. We could make the shift to 100% renewables in a decade using wind and solar thermal with storage. The \$370 billion cost, less than 4% of GDP, would reap fossil fuel savings of \$1.6 trillion by 2040.

This bold plan will help end the global stalemate on climate action, make Australia a world leader in the low-carbon economy of the future, create 80,000 high-quality ongoing jobs (more than the fossil energy supply workforce) and build lucrative export industries.



Solar Concentrator Array

24 hour dispatchable solar thermal electricity – Torresol, Spain



Wind Generation

Electrical grids can manage 40% contribution from wind energy (Milborrow 2009)

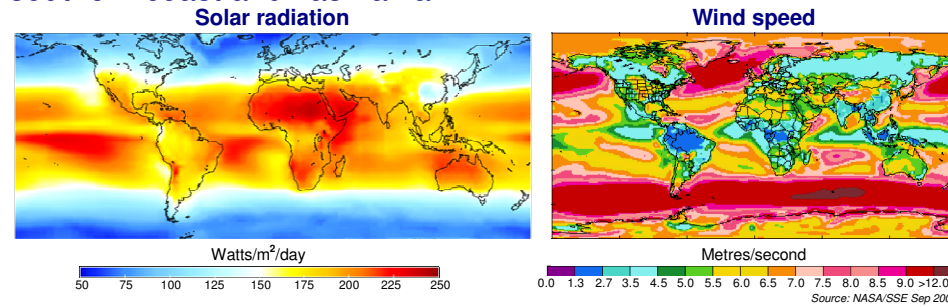


High Speed Train

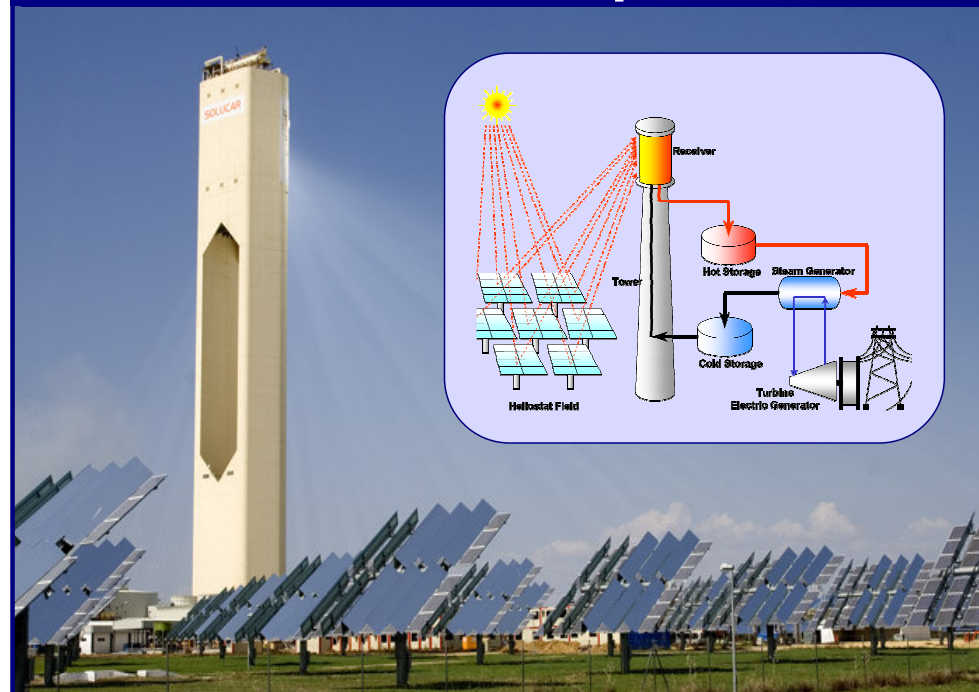
Fly by rail – 360 km/h zero emission inter-capital trains

## Australia – energy superpower

Australia has the best solar resource of any developed country, perfectly complemented by a world-class wind resource along our southern coast and Tasmania.



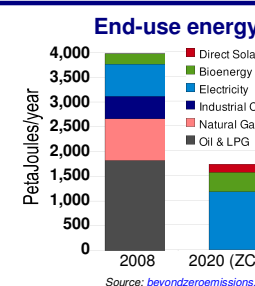
## 24 hour solar power



Solar thermal power stations focus sunlight onto a boiler to generate steam, driving a turbine to make electricity. Some now use tanks of molten salt to store the heat and generate power later when needed. In Spain, 50 megawatt solar power stations installed in 2008 are operating 24 hours a day during summer.

## Changing the mix

Under the Zero Carbon Australia 2020 plan, electrification of transport and space heating and energy efficiency reduce demand by 56%. The remainder is met with 60% solar thermal and 40% wind energy, plus biomass backup.

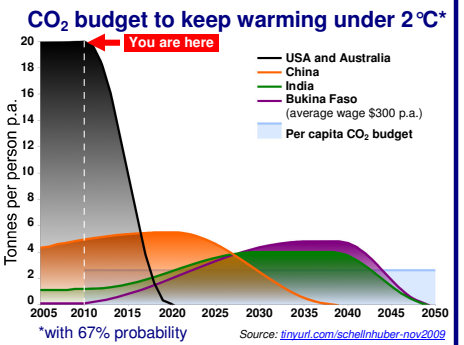


## Why 100% in 10 years?

### Australia's carbon budget

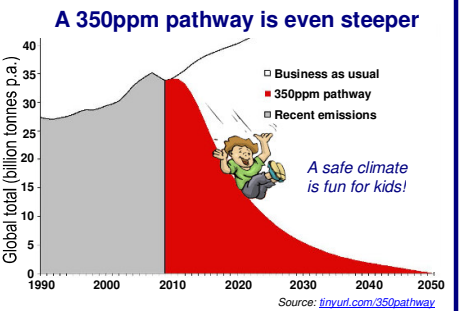
A global climate deal will only succeed if it is fair and ambitious enough to save the most vulnerable. The emissions pathway shown at top right, from Europe's chief climate advisor Prof Hans Schellnhuber:

- has just a 2/3 chance of keeping global warming below 2°C (so we actually need stronger action than this, like the pathway back to 350ppm CO<sub>2</sub> shown below right)
- within this limit, allocates the world's remaining emissions budget fairly based on population.



Note that Schellnhuber's pathway:

- doesn't account for past emissions (carbon debt), which would require even deeper cuts from USA and Australia
- doesn't include emissions trading – richer countries funding clean technology to help poorer countries avoid emissions growth.



## Wind & solar across Australia



## What you can do

- **Learn more:** read about the *Zero Carbon Australia 2020* plan at [beyondzeroemissions.org](http://beyondzeroemissions.org)
- **Spread the word:** tell your friends and family; ask us for a presentation to your community or social group.
- **Contact your MP:** email, phone or visit your State or Federal MP. Ask them to speak out in support of 100% renewable energy for Australia.