



## If Portugal Can Do It, Why Can't We ?

Posted by [Big Gav](#) on June 9, 2008 - 12:34am in [The Oil Drum: Australia/New Zealand](#)

Topic: [Alternative energy](#)

Tags: [portugal](#), [renewable energy](#), [solar power](#), [wave power](#) [[list all tags](#)]

The Guardian has an interesting article on the rapid build-out of [renewable energy generation](#) in Portugal. The country seems to be determined to become free of dependency on fossil fuels as soon as possible, with the country's energy minister also sagely pointing out "When you have a programme like this there is no need for nuclear power. Wind and water are our nuclear power".

The country currently has Europe's largest solar power plant, is constructing Europe's largest wind farm and is on the leading edge of research into wave and tidal power. The obvious question is - if Portugal can do this, why can't we ? This applies more to Australia than New Zealand obviously...

From a distance the bizarre structures sprouting from the high Alentejo plain in eastern Portugal resemble a field of mechanical sunflowers. Each of the 2,520 giant solar panels is the size of a house and they are as technically sophisticated as a car. Their reflective heads tilt to the sky at a permanent 45 degrees as they track the sun through 240 degrees every day.

The world's largest solar photovoltaic farm, generating electricity straight from sunlight, is taking shape near Moura, a small town in a thinly populated and impoverished region which boasts the most sunshine per square metre a year in Europe.

When fully commissioned later this year, the £250m farm set on abandoned state-owned land will be twice the size of any other similar project in the world, covering an area nearly twice the size of London's Hyde park. It is expected to supply 45MW of electricity each year, enough to power 30,000 homes.

Portugal, without its own oil, coal or gas and with no expertise in nuclear power, is pitching to lead Europe's clean-tech revolution with some of the most ambitious targets and timetables for renewables. Its intention, the economics minister, Manuel Pinho, said, is to wean itself off oil and within a decade set up a low carbon economy in response to high oil prices and climate change.

"We have to reduce our dependence on oil and gas," said Pinho. "What seemed extravagant in 2004 when we decided to go for renewables now seems to have been a very good decision."

He expects Portugal to generate 31% of all its energy from clean sources by 2020. This means lifting its renewable electricity share from 20% in 2005 to 60% in 2020, compared with Britain's target of 15% of all energy by 2020. Having passed its target for

2010 it could soon top the EU renewables league.

In less than three years, Portugal has trebled its hydropower capacity, quadrupled its wind power, and is investing in flagship wave and photovoltaic plants. Encouraged by long-term guarantees of prices by the state, and not delayed by planning laws or government indecision, it has proved a success. Firms are expected to invest £10bn in renewables by 2012 and up to £100bn by 2020.

However, Portugal says it wants to develop a renewables industry to rival Denmark or Japan. When the government invited companies for tenders to supply wind, solar and wave power, it demanded they work with manufacturing companies to establish clusters of industries.

This is a great success, say regional governments. In northern Portugal, where the world's biggest wind farm, with more than 130 turbines, is now being strung across the mountainous Spanish border, a German firm employs more than 1,200 people building 600 40-metre-long fibreglass wind turbine blades a year. The turbines are earmarked for Portuguese farms first, but orders are being taken from Britain and other countries. Half the workforce are women who once worked in the declining textile industry.

It is Portuguese plans for wave power that are prompting the most interest in Europe. The world's first commercial wave farm is being assembled near Porto. Three "sea snakes", developed by the Edinburgh-based company Pelamis, will shortly be towed out to sea and will start pumping modest amounts of electricity into the grid later this year.

It is the start of a potentially giant global industry with Portuguese firm Enersis planning to invest more than £1bn in a series of farms that together would power 450,000 homes.

Pinho dismisses nuclear power. "When you have a programme like this there is no need for nuclear power. Wind and water are our nuclear power. The relative price of renewables is now much lower, so the incentives are there to invest. My advice to countries like the UK is to move as fast as they can to renewables. With climate change and the increase in oil prices, renewables will become more and more important.

Of course, the question has a fairly simple answer - Portugal doesn't have an economy dominated by coal, gas and uranium extraction industries, which is why we will probably remain on the lagging edge when it comes to moving towards a modern, clean energy supply as fossil fuels become part of history.



This work is licensed under a [Creative Commons Attribution-Share Alike 3.0 United States License](https://creativecommons.org/licenses/by-sa/3.0/).