https://www.theguardian.com/environment/2017/jul/23/drop-in-wind-energy-costs-adds-pressure-for-government-rethink

Wind power

Drop in wind energy costs adds pressure for government rethink

Tories urged to look at onshore windfarms which can be built as cheaply as gas plants and deliver the same power for half the cost of Hinkley Point, says Arup

983 | 636

Adam Vaughan

Sunday 23 July 2017
18.03 BST

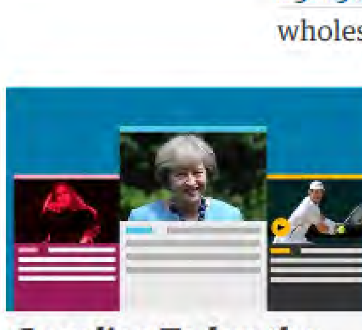


Building windfarms in the windiest places, such as Whitelee in East Renfrewshire, would cut opposition from Tory heartlands in the English shires, says Arup. Photograph: Danny Lawson/PA

Onshore windfarms could be built in the UK for the same cost as new gas power stations and would be nearly half as expensive as the Hinkley Point C nuclear plant, according to a leading engineering consultant.

Arup found that the technology has become so cheap that developers could deliver turbines for a guaranteed price of power so low that it would be effectively subsidy-free in terms of the impact on household energy bills.

France's EDF was awarded a contract for difference - a top-up payment - of £92.50 per megawatt hour over 35 years for Hinkley's power, or around twice the wholesale price of electricity.



Guardian Today: the headlines, the analysis, the debate - sent direct to you

Read more

By contrast, Arup's report found that windfarms could be delivered for a maximum of £50-55 per MWh across 15 years.

ScottishPower, which commissioned the analysis, hopes to persuade the government to reconsider its stance on onshore windfarms, which the Conservatives effectively blocked in 2015 by banning them from competing for subsidies and imposing new planning hurdles.

Keith Anderson, the firm's chief operating officer, told the Guardian that onshore wind could help the UK meet its climate targets, was proven in terms of being easy to deliver, and was now "phenomenally competitive" on price.

"If you want to control the cost of energy, and deliver energy to consumers and to businesses across the UK at the most competitive price, why would you not want to use this technology? This report demonstrates it's at the leading edge of efficiency," he said.

The big six energy firm believes that with a cap on top-up payments so close to the wholesale price, onshore windfarms would be effectively subsidy-free - but the guaranteed price would be enough to de-risk projects and win the investment case for them.

"What we are asking for is a mechanism that underpins the investment risk," said Anderson.

The group believes that any political sting for Tory MPs concerned about public opposition to turbines in English shires would be removed because such a low guaranteed price would see only the windiest sites coming in cheap enough - which means windfarms in Scotland.

"You put these projects in the right place, you will get the correct level of resource out of them to keep the costs down and you will get public acceptance of people liking them," Anderson said, citing the example of the company's huge Whitelee windfarm near Glasgow.

Dr Robert Gross, director of the centre for energy policy and technology at Imperial College, said: "Onshore wind has been coming in at remarkably low prices internationally, so a contract for difference price of around £50-60 per MWh looks perfectly feasible for a good location in the UK, one of the windiest countries in Europe.

"Windfarms generally need fixed price contracts in order to secure finance, otherwise volatile electricity prices can make investing in wind risky."

The Conservative manifesto was seen by some in industry as softening the party's stance on onshore wind, saying that it did not believe "more large-scale onshore wind power is right for England" but not mentioning Wales and Scotland, which have some of the best potential sites.

The party also promised a review of the cost of energy which the Guardian revealed last week was likely to be led by the University of Oxford economist Dieter Helm, a critic of the cost of today's renewable and nuclear power technologies.

However, Anderson said he saw the report, due in October, as a good opportunity.

"I would find it surprising if anybody else doing a costs review of the energy sector comes to a fundamentally different argument [to the Arup report]," he said.

Leo Murray, of climate change charity 10:10, said: "It looks increasingly absurd that the Conservatives have effectively banned Britain's cheapest source of new power."

Since you're here ...

... we have a small favour to ask. More people are reading the Guardian than ever but advertising revenues across the media are falling fast. And unlike many news organisations, we haven't put up a paywall - we want to keep our journalism as open as we can. So you can see why we need to ask for your help. The Guardian's independent, investigative journalism takes a lot of time, money and hard work to produce. But we do it because we believe our perspective matters - because it might well be your perspective, too.

High quality journalism is essential intellectual nourishment. The generosity of providing such a service without a paywall deserves recognition and support

Giacomo P, Italy

I've been enjoying the Guardian's top-quality journalism for several years now. Today, when so much seems to be going wrong in the world, the Guardian is working hard to confront and challenge those in power. I want to support that

Robb H, Canada

I appreciate there not being a paywall: it is more democratic for the media to be available for all and not a commodity to be purchased by a few. I'm happy to make a contribution so others with less means still have access to information.

Thomasine F-R, Sweden

If everyone who reads our reporting, who likes it, helps to support it, our future would be much more secure.

Become a supporter → | Make a contribution →

Topics
Wind power
Renewable energy / Energy / Energy bills / Energy industry / Consumer affairs / news

Reuse this content

Most popular in US


Bear chases 200 sheep over cliff edge to their deaths


The billion-dollar palaces of Apple, Facebook and Google


Big, bold ... and broken: is the US shopping mall in a fatal decline?


'Imagine living with this crap': tempers in Venice boil over in tourist high season


Face-sitting protest outside parliament against new porn rules
This article is 2 years old

more on this story


Full tilt: giant offshore wind farm opens in North Sea
9 May 2017


Higher, cheaper, sleeker: wind turbines of the future - in pictures
8 May 2017 233


State-owned Swedish firm Vattenfall enters UK energy market
1 May 2017


Tory windfarm policy endangers cheap energy in UK, commission finds
25 Apr 2017 495

Scottish wind powers housebuilding in groundbreaking joint venture
19 Apr 2017 135

Scottish islands hold out for government U-turn on windfarm subsidies
13 Apr 2017 595

People who blame sickness on windfarms 'may be bypassing doctor'
10 Apr 2017 444

UK wind power overtakes coal for first time
6 Jan 2017 1,015

comments (636)

Sign in or create your Guardian account to join the discussion.

Order by Newest | Threads Collapsed | 1 2 3 4

Kim Davies 13m ago · 1

It's time to face facts about wind energy.

Here's the IAE report on renewables for 2014.

Renewables = 13.8% of world total primary energy supply.
Wind = 3.3% of world total renewable energy supply.

Wind is providing 0.46% of world total primary energy supply.

https://www.iea.org/publications/freepublications/publication/KeyRenewablesTrends.pdf

If all wind turbines were shut down tomorrow it wouldn't make a jot of difference. Solar and tidal do no better accounting for just 0.35% combined of world total primary energy supply.

Given that all three of these energy sources require fully functional, continuous energy production systems as backup they are nothing more than very costly white elephants.

Reply | Share | Report

judyse → Kim Davies 5m ago · 0

Do you think those stats might have something to do with: '...the government (to reconsider its) stance on onshore windfarms, which the Conservatives effectively blocked in 2015 by banning them from competing for subsidies and imposing new planning hurdles' - which seems to characterise global responses to renewables. Too many vested interests...?

Reply | Share | Report

SouthSeas → Kim Davies 2m ago · 0

The IEA is a rabid free-market think tank that believes everything should be deregulated. It consists of 3 people knows nothing about the energy market and it's research will involve googling to look for data to support the conclusion they've already reached. Their other mission at the moment is connecting Socialism to Stalin .

Reply | Share | Report

nodemocracyhere 14m ago · 0

Nothing that the tory party does will make any sense until we all accept they are the party of minority greed and entrenched privilege. Don't bother trying to apply logic, forward thinking or altruistic motivation. It doesn't exist with tories.

Reply | Share | Report

View more comments

most viewed

© 2017 Guardian News and Media Limited or its affiliated companies. All rights reserved.