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## A storm brews over UK offshore wind subsidies

### ANALYSIS:

## A storm brews over UK offshore wind subsidies

On 8 January, the Crown Estate, the body which manages Britain's sovereign lands, announced the names of the companies who have successfully bid for the right to build giant offshore wind farms in nine zones established around the UK. The farms will be large enough to generate 32.2 gigawatts (GW) of electricity per year and are intended to meet 25% of the country's electricity needs by 2020.

This is a substantial development for offshore wind power, which, according to Reuters, currently has only 1.5 GW of capacity installed globally. It also represents a significant investment in the UK economy. Prime Minister Gordon Brown, quoting statistics from The Carbon Trust, stated that it could create an industry worth £75 billion and support 70,000 jobs.

A number of environmental advocacy organizations welcomed the announcement, including Greenpeace UK, one of whose spokespeople talked with *Subsidy Watch*. "We think this is a massive shot in the arm for clean domestic energy production in Britain. It's definitely the direction we want to go in."

"In a context where fossil-fuel demand is set to continue to grow globally, and we expect fossil-fuel energy prices to continue to increase, it is very sensible to invest in renewable, domestic sources – on economic grounds, energy-security grounds and a number of other grounds as well."

But numerous articles in major British newspapers have objected to the costs that may need to be borne by electricity consumers in order to fund these

*"We feel the cost to the consumer is unduly high, and particularly so at this terrible time," said Renewable Energy Foundation Director of Policy and Research John Constable, "with the UK barely crawling out of recession – perhaps not actually crawling out of a recession. To put a barnacle of this size on the hull of the UK economy for very little in return is simply not acceptable."*

new investments, through a support mechanism called the Renewables Obligation (RO).

The RO is a complex support mechanism that has existed since 2002 and guarantees aid through to 2027. It defines actors in the electricity market as generators or suppliers, and transfers wealth to companies producing electricity from renewable energy via two related but distinct mechanisms.

First, electricity suppliers are legally obliged to ensure that a set percentage

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## A storm brews...

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of the electricity they have sold is generated by renewable-energy technologies. This percentage increases year-on-year: 6.7 per cent in 2006/7, 7.9 per cent in 2007/8 and 9.1 per cent in 2008/9. This is more expensive than the market price they could be paying for electricity generated by coal, gas or nuclear power plants, creating a stream of revenue directed towards renewables producers by the government.

On top of this, at the end of each financial year, suppliers must possess as many Renewables Obligation Certificates (ROCs) as the number of megawatt hours (MWh) of renewables-generated electricity they have been legally obliged to sell. A fine is paid for each missing certificate, and the money raised is distributed among all the suppliers who *have* met the requirements.

But the only people with ROCs are generators, each of whom receives a certain number for each MWh of electricity they sell to the grid (between 0.25 and 2, depending on the renewable-energy technology). And because the ROC has a market value – based on the fine that can be avoided and recycled, and the availability of certificates – they are sold to suppliers as a separate product, for a price in addition to the cost of electricity. This second revenue stream represents another subsidy for renewable-energy generators, as it results from an artificial market in certificates established by the government.

At the end of the day, it is consumers who pay the price for the support, through increased electricity bills.

UK charity The Renewable Energy Foundation (REF) estimates that

the Renewables Obligation is worth

*“There has to be a significant investment in the energy generation system and the question is: what’s the most sustainable way to achieve that, both economically and ecologically? As Ofgem themselves conclude, a low-carbon path is more financially sustainable as we come out of the recession than a high-carbon path.”*

a substantial amount to generators, typically making up 50 to 60 per cent of their income. This breaks down to around £40–£50 per MWh due to the requirement that suppliers buy a certain percentage of their electricity, and another £50 per MWh due to the price of the ROC. In the case of offshore wind, which entitles generators to two ROCs per MWh if they are operational by 2014, the second subsidy stream is currently worth around £100 per MWh. This extra support to offshore wind may be extended past 2014 following a review of the scheme that is expected to take place this year.

The REF also argues that the government’s subsidies for renewables and the UK’s existing energy infrastructure do not add up: the large-scale fluctuations in supply created by wind energy could not be supported by the current grid system, so that would also need to be overhauled. If such complications are taken into account, the REF estimates that by 2020 the

annual subsidy to make offshore wind work would be around £10 billion a year.

“We feel the cost to the consumer is unduly high, and particularly so at this terrible time,” said Renewable Energy Foundation Director of Policy and Research John Constable, “with the UK barely crawling out of recession – perhaps not actually crawling out of a recession. To put a barnacle of this size on the hull of the UK economy for very little in return is simply not acceptable.”

And offshore wind is not the only contender for energy subsidies: in addition to other renewable technologies under the RO, and the problems facing the national grid, there is also a levy on electricity bills to fund four carbon-capture and sequestration (CCS) demonstration plants (raising £9.5 billion over 15 years, as reported in *Subsidy Watch Issue 34*), plans to build a new fleet of nuclear power plants (which skeptics doubt could be accomplished without state aid), and recently announced feed-in tariffs to support the micro-generation of electricity and heating using renewable energy.

Official sources have also noted their concern. British electricity and gas market regulator Ofgem confirmed for *Subsidy Watch* that a report to be published later this month will conclude that UK wind subsidies cost electricity consumers a little over £1 billion for the first time in 2009. Ofgem has previously been critical of the Renewables Obligation in terms of efficiency and certainty of returns to investors, stating in a 2008 government consultation that constraints on the supply of renewable electricity generation had “result[ed] in excessive profits on average for renewable generators and even higher profits when wholesale prices are high”.

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## A storm brews...

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According to their calculations, assuming an offshore wind capacity of 12 GW by 2020 – just a third of the amount now proposed – and on the grounds that the UK will meet its 2020 target to generate 29% of its electricity from renewables, the total cost of the RO would be around £3 billion a year. The Chief Executive of Ofgem has said that, by 2020, around 30% of UK electricity bills are expected to be made up of government intervention.

As a consequence of these developments, an increasing number of people are asking the question: how much is reasonable? This is a difficult area of policy debate, as none of the participants oppose renewable energy per se, but it is easy for messages of fiscal responsibility to be diluted into simple ‘for’ or ‘against’ perspectives.

The Renewable Energy Foundation contends that UK subsidies are among

the most generous in Europe, and unnecessarily so. They take the stance that Renewables Obligation has retarded research and development and efficiency increases by driving investment towards currently available technology, all the while cutting off the market from traditional energy generators who will nonetheless be expected to provide the base load of electricity beneath fluctuating renewable supply. And given the intermittency problems of renewables, they argue that the need for conventional generation will not change. “It’s very expensive for the consumer and it’s not actually encouraging development of renewable energy technologies or innovation in the sector. It’s simply creating high profits for speculative investors,” stated Mr. Constable.

In turn, Greenpeace UK argues that as much as £200 billion might be required

between now and 2020 alone to get the UK on the right track – and someone has to pay. “A large proportion of Britain’s power stations, around a third, are set to close,” stated their spokesperson. “There has to be a significant investment in the energy generation system and the question is: what’s the most sustainable way to achieve that, both economically and ecologically? As Ofgem themselves conclude, a low-carbon path is more financially sustainable as we come out of the recession than a high-carbon path.”

For the moment, it seems there are no clear-cut answers in sight, though it is likely that consumers will eventually bring some weight to bear on the politicians who back the scheme. Until then, as Bob Dylan so aptly put it, ‘the answer, my friend, is blowing in the wind’.

## ANALYSIS:

### China agrees to eliminate ‘famous brand’ subsidies to end WTO dispute

The People’s Republic of China has agreed to end dozens of controversial subsidies under its World Top Brand, Famous Export Brand and China Name Brand programs that the United States claimed were supporting Chinese exports of a variety of goods, ranging from electronic appliances to apparel and agricultural products.

The agreement reached between China and the United States was announced on 18 December by U.S. Trade Representative Ron Kirk and appears to put an end to one of several disputes between the two countries at the World Trade Organization (WTO).

The U.S. initiated the dispute (WTO Dispute DS387) in December of 2008 when it asked for consultations with

China over the programs, the first step in the WTO’s dispute resolution process.

In its letter to China and the WTO’s Dispute Settlement Body (DSB), the U.S. cited the three central ‘famous brand’ initiatives, and over a 100 instruments which implemented them, established at other levels of government, as appearing to “provide grants, loans, and other incentives to enterprises in China on the condition that those enterprises meet certain export performance criteria.”

According to the United States these measures appeared inconsistent with Article 3 of the Agreement on Subsidies and Countervailing Measures (SCM Agreement), which prohibits the use of subsidies contingent on export performance.

Export subsidies are considered among the most trade distorting because they lower the costs for businesses to export their goods overseas, allowing them to unfairly undercut local or third country products in export markets. Along with subsidies dependant on the use of domestic over imported products (‘import substitution subsidies’), they are the only subsidies prohibited outright by the SCM Agreement.

At the centre of the DS387 Dispute were a series of measures which set out criteria for Chinese enterprises to receive a designation as a Famous Export Brand, China World Top Brand or China Name Brand Product. “Enterprises with these designations were entitled to various government preferences, including, it appeared,

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## COMMENTARY:

### Forget subsidies: just give me cash

In spite of opposition that saw the streets of Kuala Lumpur filled with pro-fuel subsidy groups during the Abdullah administration, efforts to liberalize Malaysia's fuel subsidy regime have gone a long way. Several arguments, including one that criticizes the untargeted and blanket nature of the policy, have gained tremendous traction. The fact that it benefits those who do not need or deserve the subsidy is clearly one of the main motivators behind the reform of the policy, the other big drivers probably being cost and the waste of revenues that could be spent elsewhere.

The Najib administration is trying to address this particular criticism, which has resulted in multiple novel moves and proposals from the federal government. Among those reported in the mainstream media are different prices for different consumer groups, a cap on subsidized fuel consumption and making access to the subsidy linked to vehicle engine size. All of the suggestions try to discriminate between consumers at the pump. While they may reduce the size of the fuel subsidy either in value or in quantity, the proposals appear to be too convoluted. And the more convoluted the methods are, the more complex the implementation will be. That is a recipe for a disaster, policy-wise.

I appreciate the government's effort at making the policy more targeted, and hence making it less wasteful in terms of opportunity cost. Yet these novel ideas are unnecessary given the existence of at least one simpler alternative.

Just observe the recent attempt to limit the sale of subsidized fuel to foreigners at the border. It was so complicated that everybody was confused and in the end it did not work. Consumers found ways around the restriction.

There is a better and much simpler way to do to this.

Before we proceed to that better and simpler policy, however, it is crucial for us to recall the purpose of the fuel subsidy. Its goal is ultimately to reduce the cost of living for the less well-to-do Malaysians. On top of that, a fuel subsidy is not the only way to achieve this goal.

*"...cash can be used for a variety of things and not just fuel. Maybe a beneficiary of such a cash transfer appreciates books or food more than fuel. This has the potential of increasing the beneficiary's welfare above that which a fuel subsidy policy can achieve."*

With that in mind, the better alternative to a targeted fuel subsidy is a simple targeted cash transfer from the government to those who deserve it.

Why use a targeted cash transfer?

The first reason is that it paves the way for the total elimination of the fuel subsidy, removing distortions from the market. Since free prices can rise to signal scarcity, individuals and businesses make decisions that better reflect the reality of the energy market. And it would create real competition among pump owners. The same system of free prices already exists in the United States and Australia. Its effectiveness is proven.

Elimination of the subsidy at the pump also reduces consumption, all else being

constant. That means lower carbon emissions. In times when carbon emissions are a worldwide concern, and in light of the Najib administration's promise to announce a low-carbon roadmap in the near future, this is an opportunity to integrate transportation and energy policies together with environmental policy. Such integration is important given that, according to the International Energy Agency in 2007, the transportation sector was the source of 30 per cent of Malaysia's carbon dioxide emissions in 2005.

Thirdly, cash can be used for a variety of things and not just fuel. Maybe a beneficiary of such a cash transfer appreciates books or food more than fuel. This has the potential of increasing the beneficiary's welfare above that which a fuel subsidy policy can achieve. If the beneficiary does appreciate fuel more than anything else, then he or she can simply buy the same amount of fuel he or she would have otherwise bought under the fuel subsidy policy. In other words, there are more choices. The economics behind a cash transfer is clearly more welfare-enhancing than a simple fuel subsidy.

The next question, naturally, is how to do it.

If the sale of subsidized fuel is to be limited, then the government will have a good idea about the maximum amount of money it needs to spend on the fuel subsidy. Furthermore, the lower the cap, the higher the likelihood that a beneficiary of the subsidy will exhaust his or her quota. From there on, certain statistical calculations can give us the size of money transfer required per capita to make the cash transfer method the equivalent of the fuel subsidy policy in terms of value.

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## Forget subsidies...

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The cash transfer itself can be delivered to the deserving via the existing tax system. Here is another beauty of a cash transfer. It only pays money to those who have filed their taxes. Thus, this is yet another incentive for those who have not filed their taxes to finally do so.

For those who just want to fill up their vehicles, here is another reason to support a simple cash transfer instead of an explicit targeted fuel subsidy policy: no weird rule at the pump. With a cash transfer, any discriminative method used to ensure that the policy is targeted

is done not at the pump but during the transfer of cash. This makes its implementation simpler.

So, what is there not to like?

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<http://maddruid.com/>

<http://kl.metblogs.com/>

<http://www.themalaysianinsider.com/index.php/opinion/hafiznoorshams/>

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## China agrees to eliminate 'famous brand'...

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financial support tied to exports," said the U.S. State Department.

The United States argued that the Chinese government support was promoting increased worldwide recognition and sales of the designated brands of Chinese merchandise, "giving an unfair competitive advantage to Chinese products and denying U.S. manufacturers the chance to compete fairly with them in the United States and in third country markets."

In announcing the agreement between the United States and China, Ambassador Kirk said that the termination of the subsidies "will level the playing field for American workers in a wide range of manufacturing and export sectors, including household electronic appliances, textiles and apparel, light manufacturing industries, agricultural and food products, metal and chemical products, medicines, and health products."

*Subsidy Watch* spoke to London School of Economics lecturer Dr. Stephanie J. Rickard who said that the agreement

marked a significant development in U.S-China trade relations. "More importantly, however, this is an important development in China's engagement with and participation in the multilateral trading institution. By terminating these subsidies, China has demonstrated their willingness to abide by WTO rules," she added

Dr. Rickard suggests two key reasons why China may have decided to reverse course on these subsidies. First, it is likely that China would have lost the dispute. "The WTO Agreement on Subsidies and Countervailing Measures is quite clear and WTO Panels have consistently ruled against countries' export subsidies," she said.

China is also coming under increasing pressure to revalue its currency. "As these pressures mount, China may be more willing to 'give in' on other issues, such as subsidies," argues Dr. Rickard. Doing this allows China to focus their political efforts on defending their currency while pointing to the termination of these subsidies as evidence of their willingness to level

the playing field in global trade, she concludes.

Among the other WTO violations cited in the U.S. request for consultations, were alleged violations of export subsidy provisions in the WTO Agreement on Agriculture (AoA). Agricultural products covered by the AoA are exempt from the normal subsidy rules under the SCM Agreement.

Under the AoA, export subsidies to agricultural products are prohibited beyond those set out by each member in the WTO Member's agricultural schedule. According to the U.S. State Department, China's agricultural schedule does not permit any export subsidies.

Canada, the European Communities, Mexico, Turkey and Australia were also involved in the dispute, having requested to join the consultations as third parties.

The United States and China are currently the principal opposing parties in 12 other disputes at the WTO.



## NEWS:

### Fossil-fuel subsidies round-up: January 2010

*Following announcements that fossil-fuel subsidies will be phased out by the G-20, the Asian-Pacific Economic Cooperation (APEC) and a number of independent countries, including Iran, Nigeria and Bahrain, Subsidy Watch will be highlighting important news stories that touch on this theme each month...*

#### 8 January

Protestors march on the streets of Bahrain against proposed changes to government subsidies to food and fuel, despite assurances from His Royal Highness Prime Minister Prince Khalifa bin Salman Al Khalifa that aid would increase for citizens in genuine need. Participants included 12 political organisations and trade unionists, led by Al Wefaq block MP Jawad Fairouz. They objected to not having been consulted by the government. According to reports, protestors numbered between 600 and 2,000.

#### 11 January

According to a [Financial Times article](#), Saudi Arabia's state oil company Saudi Aramco estimates SR 30 billion (US\$ 8 billion) is spent on fuel subsidies every year, selling oil domestically for US\$ 5 a barrel that would have been worth US\$ 70 a barrel in 2009. This differential was even wider in 2008 when oil prices peaked at US\$ 147. Journalist Abeer Allam states that "phasing out subsidies, particularly for gasoline, is not on the cards", though does not speculate what this means for Saudi Arabia's agreement as a G-20 member to phase out and rationalize fossil-fuel subsidies.

#### 12 January

The Indonesian government decides to increase budgetary allocations to energy subsidies by 50 per cent because of higher-than-expected oil prices, [according to the Jakarta Post](#).

This brings the subsidy budget for 2010 to a total of Rp 150 trillion (US\$ 15 billion). A similar decision was taken in September 2009 when price expectations rose from US\$ 60 to US\$ 65 a barrel. Prices are now around US\$ 80 a barrel. The *Jakarta Post* interprets this as the total abandonment of the government's previous policy of fuel-price flotation with monthly price adjustments.

#### 13 January

Iran's legislative watchdog the Guardian Council gives final approval to a bill that will reform subsidies on energy, water, food, health and education, despite earlier conflict between the administration and the parliament over how the saved revenues should be spent. [According to Iranian newspaper Donya-e Eqtesad](#), translated by Booz Allen Hamilton's *Persia House*, Iranians may have to wait as late as March 2011 for implementation, and not all subsidies will be reformed at the same time. It adds, "One must now sit and wait for the president's reaction to the approved law, because experience shows us that without Ahmadinejad's approval, the law's implementation is not certain."

#### 18 January

[The Malaysian Insider](#) reports on speculation that sudden reform of Malaysia's subsidies to fuel, gas, flour and sugar, worth RM50 billion a year, could be better for the country than piecemeal reform, if savings can be accurately targeted at poor consumers. The discussion follows public criticism of government proposals to create a two-tiered pricing system for fuel oil, widely perceived as cumbersome and potentially open to abuse.

#### 20 January

[According to the Wall Street Journal](#), India announces plans to limit this year's subsidies to state-run fuel retailers

to US\$ 2.6 billion, with the finance secretary saying this is the beginning for fuel-price reforms. The Indian Parliament's approval will be needed for the proposal to be implemented.

#### 29 January

[As reported by the Business Day](#), Nigeria's Minister of Petroleum Resources Rilwanu Lukman has stated to press that negotiations to deregulate the downstream oil and gas sector in Nigeria have been concluded and that the government is only waiting for the "right time" to implement reforms. Journalist Abubakar Nuhu Koko notes that consumers have been paying free-market prices since 1 November 2009, the target date originally announced by public officials for deregulation. However, marketers still enjoy low prices for petrol sold to them by the government, support that may prove difficult to remove in the run-up to a 2011 general election.

#### 29 January

The Indonesian Energy Ministry announces that government plans to introduce a smart-card system to restrict the sale of subsidized gasoline "will be rolled out nationwide from 2011 and will be fully operational by 2014." [The Jakarta Globe reports](#) that consumers will have to register for the smart card and there will be a daily limit on purchases of subsidized fuel, though this amount has yet to be decided.

*For readers interested in tracking of fuel-pricing developments worldwide, GTZ's monthly Fuel Price News is an invaluable resource that announces publications and events, and major fuel-pricing news stories in different regions of the world. For more information see: <http://www.gtz.de/en/themen/29957.htm>*



## NEWS: India struggles to cap subsidy budget

The Indian government is reportedly considering the partial reform of fertilizer subsidies in an effort to reign back its fiscal deficit. According to *The Times of India*, the proposal is thought to be relatively low-risk, as many farmers in India still use urea to fertilize their crops.

Government officials have stated they do not expect the change to reduce India's subsidy burden significantly – rather, the aim is to prevent it from increasing. India's announcement that it will try to cap its subsidies to state-run fuel retailers can be seen in the same light.

But India has also announced a raft of new subsidies for renewable energy production in the past few months.

The Jawarharlal Nehru National Solar Mission, launched in early January, aims to generate 20,000 megawatts (MW) of energy by 2020, which according to online newspaper *VentureBeat* will be achieved with “major subsidies”. The total cost is estimated to be US\$ 19 billion, with the Indian government stating that it will put up 90 per cent of the money needed to make plants operational in diesel-dependent states and 30 per cent in others.

*VentureBeat* has also reported on India's intention to spend US\$ 200 billion on a Smart Grid by 2015, and an incentive package for wind energy that will put aside US\$ 81 million to reduce the cost of wind-generated energy for consumers. Other wind subsidies include tax breaks and accelerated depreciation.

India's fiscal deficit is currently 6.7 per cent of GDP, and the economy is expected to have grown 7.2 per cent this quarter.

## STUDY: Earth Policy Institute reveals food-cost of U.S. biofuels policy

On 21 January, the Earth Policy Institute published a data highlight on their website about the impact of United States biofuels production on world food supplies. Originally part of the larger work, *Plan B 4.0: Mobilizing to Save Civilization*, which stresses more generally the importance of acting to ensure world food supplies, the analysis starkly illustrates the cost of U.S. biofuels in terms of foregone food.

“The 107 million tons of grain that went to the U.S. ethanol distilleries in 2009 was enough to feed 330 million people for one year at average world consumption levels,” it begins. Also underlining the role of the United States in world grain supplies – the leading exporter – and the ultimate inability for biofuels to meet the nation's fuel needs – even if all grain crops were converted, only 18 per cent of fuel needs could be met – it is a persuasive contribution to the

state of knowledge about the secondary impacts of increased biofuels production.

The data highlight can be accessed at [http://www.earthpolicy.org/index.php?/press\\_room/C68/2010\\_datarelease6](http://www.earthpolicy.org/index.php?/press_room/C68/2010_datarelease6).

The full book *Plan B 4.0: Mobilizing to Save Civilization* can be downloaded for free in its entirety from <http://www.earthpolicy.org/index.php?/books/pb4>.

## STUDY: German report on environmentally harmful subsidies translated into English

This month, Germany's Federal Environment Agency has published an English translation of *Environmentally Harmful Subsidies in Germany*, a 2008 report that had previously only been available in German.

Divided in three parts, it begins by introducing readers to some basic concepts underlying environmentally harmful subsidies: how subsidies can be defined, how they affect the environment and why it is important that they be reformed. It then discusses how significant such subsidies are in Germany, reviewing and adding up the subsidies with environmentally harmful effects in four sectors of the economy: housing and construction, energy, transport and agriculture. It ends with

practical advice on how governments can monitor the effects of their subsidies and change or abolish them if necessary.

Interestingly, transport comes out as the sector with the highest amount of harmful subsidy spending in Germany (€19.6 billion), largely thanks to exemption of kerosene from energy tax, an energy tax reduction for diesel fuel and a VAT exemption for international flights. But at least two big-ticket items, nuclear power subsidies and European Union agricultural subsidies are listed as ‘not quantifiable’ – evidence in themselves of the challenges facing governments who want to take environmentally harmful subsidies seriously. The total spending on environmentally harmful subsidies in 2006 is estimated at €42 billion.

The paper also offers some useful insights into the complex policy challenges facing governments, noting, for example, that some subsidies are not possible to change in the short term. Bilateral air transport agreements prevent Germany from implementing kerosene taxes, and would need to be renegotiated for the system to change.

The report draws a number of interesting lessons from its analysis, many of which are well-summarized at the end, in a 10-point list of “principles behind an effective, efficient and environmentally sound subsidy policy”.

It can be downloaded from the Federal Environment Agency's website, <http://www.umweltdaten.de/publikationen/fpdf-l/3896.pdf>