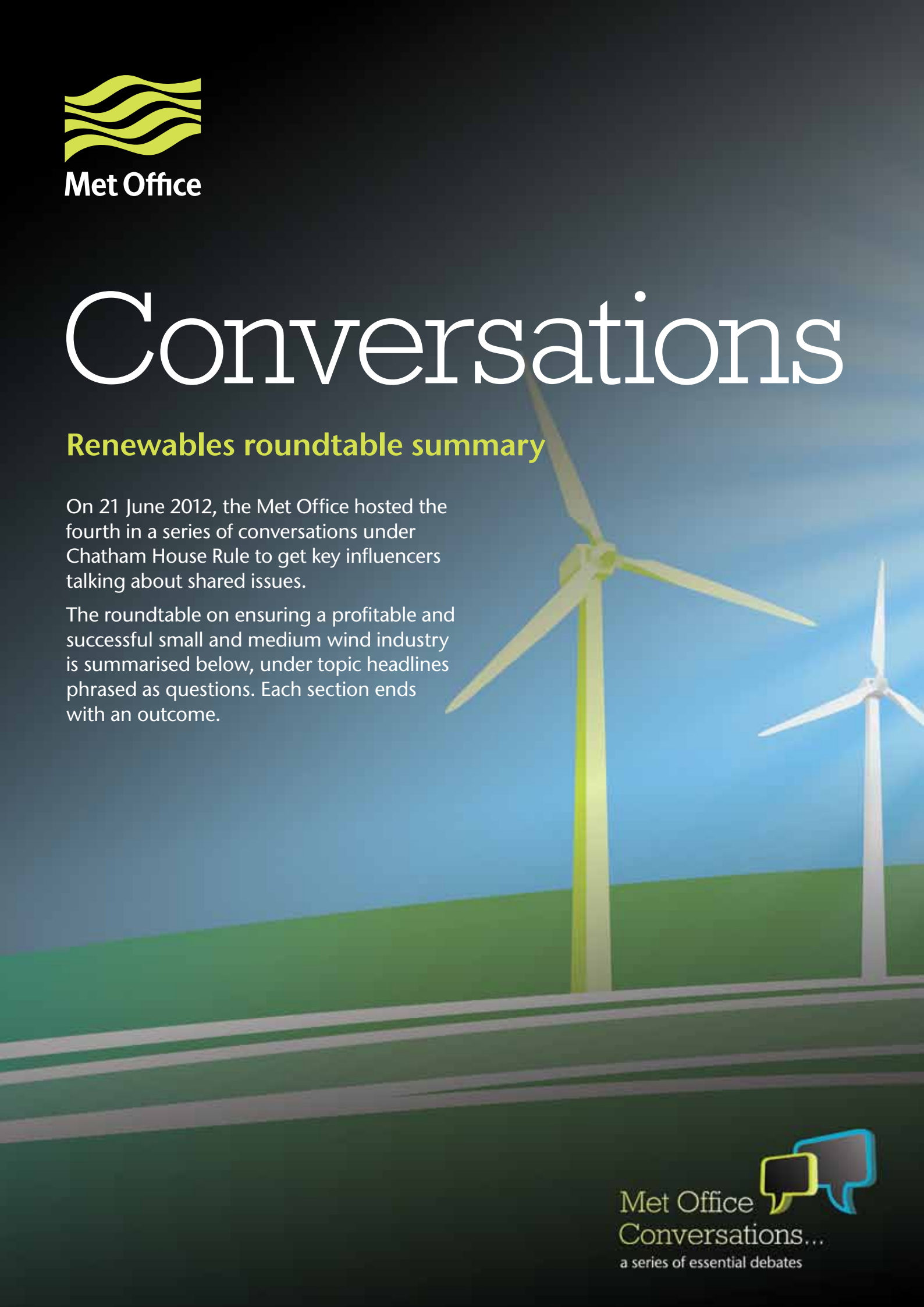
Met Office

Conversations

Renewables roundtable summary

On 21 June 2012, the Met Office hosted the fourth in a series of conversations under Chatham House Rule to get key influencers talking about shared issues.

The roundtable on ensuring a profitable and successful small and medium wind industry is summarised below, under topic headlines phrased as questions. Each section ends with an outcome.



Met Office Conversations...
a series of essential debates

How will the proposed reductions in Feed-in Tariffs affect the small and medium wind industry?

To set the scene, the group was given a recap on two reviews being carried out by the Department of Energy and Climate Change (DECC): the Renewables Obligation (RO) Banding Review and the Feed-in Tariffs (FiTs) Comprehensive Review. The second of these covered all forms of renewable energy technology other than photovoltaic (PV) solar panels — that is wind, hydropower, Anaerobic Digestion (AD) and microgeneration. The Office for Renewable Energy Deployment (ORED) within DECC appreciated the need for clarity on FiTs across the industry so that new projects could be developed and existing ones sustained. Final decisions on both reviews were due before the summer recess in July.

Of the FiTs that were introduced in April 2010, PV solar panels were by far the most popular; but on 3 March 2012 the tariff was reduced. Although this still allowed a decent rate of return, the move was seen by the media as a reduction in the financial incentive for families to 'go sustainable'. Calls for an end to further cuts in the FiTs for households that feed excess electricity from their PV solar panels into the grid were again making news headlines. Despite the current controversy around solar, there was a steady growth in new projects across the small and medium wind industry, with manufacturers and developers positive about the future.

Given the huge uptake in PV panels since 2010 and the previously high solar tariff, DECC had used up its entire budget for renewables until the next Spending Review in 2014–15. To keep FiTs going, DECC was now using flexibilities afforded by the Levies Control Framework which governed RO, FiTs and the Warm Home Discount. The purpose of the framework was to make sure that DECC achieved its fuel poverty, energy and climate change goals in a way that was consistent with economic recovery and minimised the impact on consumer bills. This gave the Department some flexibility to cover costs, if, say, PV solar panels continued to be popular.

The challenge for Government and the small and medium wind industry was therefore to find a balance between restricted finances, manufacturing opportunities and project development. At the same time, there were important Public Relations (PR) issues to contend with, such as consumers not wanting their bills to go up and some people's opinion that wind turbines ruin landscapes.

Overall, DECC ministers were very positive about the renewables sector as a whole and officials had met with lots of people across the industry as part of the consultation. DECC had listened when the small and medium wind industry had asked for advance notice of changes to FiTs so that projects could still go ahead and secure financing. The Department was looking into this.

But there was still a need to justify the cost per unit generated by the wind industry compared to other sources of renewable energy in the UK. As a result, DECC had capped all subsidies at 21p per kilowatt hour (kWh) — equivalent to what solar was making — with a question on the appropriate rate of return included in the consultation and attracting a huge response.

Outcome: The outcome of the reviews should provide long-term stability across the renewables sector out to 2020 but there would always be some political uncertainty.

What are the other challenges facing the small and medium wind market?

The group voiced concern that the 21p cap would affect smaller wind turbines (e.g. 5 kW, 6 kW, 11 kW) far more than larger ones (e.g. 50 kW). A few felt this meant the FiTs review would be unfair if it didn't take into account advantages of scale.

On the financial side, loans for PV solar panels could now be extended from ten years to fifteen years despite the reductions in FiTs. There was a similar relaxation in the terms of loans to small and medium wind projects, although it was noted that the reduced FiT may be a disincentive for people to invest in the industry in the first place.

Another possible disincentive was planning permission. Due to the controversy surrounding large-scale wind farms and their impact on the landscape, smaller projects (e.g. 2–3 turbines) now needed to satisfy almost as many planning requirements as larger scale (e.g. 30 turbines) sites. While the National Planning Policy Framework, published by the Department for Communities and Local Government, recognised the importance of sustainable development, the Government's general line on renewables was to leave planning decisions to local authorities rather than to apply the same policy across the country.

For others around the table, the Microgeneration Certification Scheme (MCS) was a concern. Not only was it expensive, the MCS was also closely linked with financial incentives and therefore to FiTs.

There were further issues around connection and distribution costs. For example, at the moment wind farms that connected directly to local homes and businesses had to pay the same costs as those linked into the grid. Here, DECC had been working closely with National Grid to look at the charging regime for networks and other issues.

The final problem raised was the low resale value of wind turbines under the current scheme. At the moment, if you took down a turbine and put it up again in a different location it no longer qualified for a FiT. The group felt that resolving this issue was the key to increasing banks' confidence in financing small and medium wind projects. A possible answer was to leave the turbine in place and simply transfer receipt of the FiT and repayment of the loan between owners. DECC would look into this.

All in all, there was agreement that the UK public was generally supportive of the principle of renewable energy. However, urgent action was needed to improve public perception in light of recent negative press coverage, such as images of turbines disintegrating in high winds. It was particularly important to counteract the assumption that consumers' energy bills were going up as a direct result of the subsidies paid to the renewables sector. It was, though, down to individual companies to draw up their own PR strategies. For example, DECC confirmed there was already information on its website that helped consumers decipher the charges on their energy bills.

Outcome: The small and medium wind industry should aim to win hearts and minds by:

a] educating the public on where their electricity comes from;

b] briefing future investors (landowners, developers, financiers) on opportunities within the renewables sector; and

c] publishing 'good news' stories, such as the recent joint press release from NatWest and the NFU that was picked up by the Guardian.

To support the industry, the Met Office would:

d] provide planners, such as the Town and Country Planning Association and local authorities, with information and impartial advice to help them distinguish good sites for wind turbines from bad ones;

e] produce PowerPoint slides to support RenewableUK in its presentations to planners; and

f] consider hosting future roundtables for the small and medium wind industry on planning issues and local grid connectivity.

How can we grow successful and profitable small and medium wind projects?

To ensure continued domestic growth, the group felt that the industry should support farmers — not just wealthy landowners — who may own viable sites but lack the money to invest in wind turbines. With the right information and financial support, farmers could double the use of their assets, for example, by grazing sheep on land under wind turbines. Many farmers were already investing in second-hand turbines; others were renting out their land to wind farm developers.

While the proposal for more farmers to get involved was supported by the NFU, it was currently a very big investment risk for finance companies. This was because energy yields were critically dependent on wind speed, meaning that if the wind was below projected levels there may not be enough income to repay the loan.

Here, the Met Office could help with services such as Virtual Met Mast™ (VMM). Using over 21 years of wind climatology, VMM could be used to accurately assess the wind resource at the start of a project to determine its viability and then to identify the best turbine sites to maximise energy production. In addition, industry professionals could register to receive a free Wind Review that the Met Office produced every quarter which summarised the wind conditions across Europe, by region, over the last season.

The expansion of renewable energy projects around the world, in particular the small and medium wind industry, should be seen as a major export opportunity for UK manufacturers. At the same time, other countries were keen to build wind turbines over here. Overall, the signs of growth in the sector were very positive.

Outcome: The small and medium wind industry needed to find ways of promoting the benefits of renewable energy in the UK. The Met Office would support the industry by investigating the feasibility of creating a new UK 'power' forecast through its weather services for the public.

How do we ensure small and medium wind energy continues to play a significant role in the energy mix?

The group felt that long-term certainty was the key to realising the full potential of the small and medium wind industry. However, while DECC was working towards a more secure future it was important to remember that this could be undone by the next Government — although there wouldn't be a general election until 2015. There was a suggestion that renewables should be purely about economics and therefore free of Government intervention as it was in countries like Denmark.

Another big issue was the need to switch turbines off in gale-force winds due to the limited amount of power that could be transported to the grid at any one time. Wind turbines remaining static despite it being windy had also led to negative press coverage and included stories about wind farms being compensated in these circumstances. The group believed the answer lay in a smart grid — such as the one that was introduced on the Isle of Wight as part of the 'EcoIsland' sustainability project — that could respond to variable conditions. There was agreement that more information on smart grids, how they work and what they do, should first be made available to the public.

Outcome: Everybody — Government, manufacturers, investors, developers and operators — was responsible, within their own remit, for delivering facts on the role of renewables in the UK's energy mix. The Met Office as a trusted and impartial scientific organisation, and now part of the Department for Business, Innovation and Skills, would support UK growth in this area by publishing facts about the UK's natural resources (e.g. wind, solar, tides) and linking them to the country's ability to generate power.

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