



DEBATE PACK

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Debate Pack: Biomass as a source of renewable energy

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Contents

1.	Summary	2
2.	Press Articles	6
3.	Press releases	8
4.	Parliamentary Questions	20
5.	Other Parliamentary material	33
6.	Further Reading and useful links	35

This debate pack is prepared for a Westminster Hall debate on Wednesday 24 February 2016 at 09:30 am to 11:00 am

The Member in charge is **Nigel Adams MP**

This debate pack includes recent press articles, Parliamentary material and links to further reading on biomass as a renewable energy source

The House of Commons Library prepares a briefing in hard copy and/or online for most non-legislative debates in the Chamber and Westminster Hall other than half-hour debates. Debate Packs are produced quickly after the announcement of parliamentary business. They are intended to provide a summary or overview of the issue being debated and identify relevant briefings and useful documents, including press and parliamentary material. More detailed briefing can be prepared for Members on request to the Library.

1. Summary

Biomass as a renewable source energy is used to produce electricity and heat in the UK. It is also used as feed stock for the production of fuels used toward meeting the [EU renewable transport fuel obligation](#) (RTFO). This brief focuses on the production of electricity and heat.

The [Renewable Energy Roadmap](#), published in 2011, identified non-domestic biomass heat and biomass for electricity as two of the seven technologies that would make significant contributions to meeting the UK's 2020 renewable energy target of 15%. The Government also published a [Bioenergy Strategy](#) in 2012 in which it set out its intention to focus on the more resource efficient uses of biomass. This included technologies that generate heat, especially combined heat and power (CHP), or make use of residual wastes. In addition, the conversion of existing coal power stations to biomass was identified as a transitional, low cost means to rapidly reduce the carbon intensity of the electricity grid.

Financial Support - electricity

Support for renewable electricity generated from smaller anaerobic digestion (AD) installations, generating biogas or 'green gas', and CHP is supported through Feed-in Tariffs, which have been recently [reviewed](#) by the Government. Lower levels of support have been introduced from February 2016 which include cap on quarterly levels of supply. The [first round of applications for AD](#) reached the 5.8WM first quarter cap in 15 minutes.

Larger installations are supported through the [Renewables Obligation](#) until it closes in 2017. After that it will be supported through Contracts for Difference (CfD). CfDs were introduced by the 2010 Coalition Government to replace the Renewables Obligation. They are a system of reverse auction intended to give investors the confidence and certainty they need to invest in low carbon electricity generation.

The Government's original stated intention was that the second contracts for difference auction would take place in autumn 2015. However in the energy policy reset [announcement](#) in November 2015 the Minister stated that the Government would make funding available for three auctions in this Parliament, with the intention of holding the first of these auctions by the end of 2016. There has not been any indication as yet as to whether any future auctions would include biomass.

The [EU has investigated](#) the support provided to the conversions of coal fired power stations to biomass which have all been cleared. More

recently the award of a CfD contract to Drax in the first round of actions has attracted the Commission's attention. It announced in January 2016 that it "has opened an in-depth investigation to assess whether the United Kingdom's plans to support the conversion of part of the Drax coal power plant to operate on biomass are in line with EU state aid rules"

Financial support – heat

The Renewable Heat Incentive (RHI) is similar to the Feed-in Tariffs. In 2011 the first phase of the Renewable Heat Incentive, non-domestic RHI, came into force. On 9 April 2014 domestic RHI was opened to homeowners, private landlords, social landlords and self-builders. [The policy paper "2010 to 2015 government policy: low carbon technologies"](#), provides further background.

While the Renewable Heat Incentive is similar to the Feed-In Tariffs, there are some important differences, and in particular:

- It will be paid for by the Treasury not by energy users.
- There is no 'National Grid for Heat' and so importing and exporting heat is not relevant.

Following its commitment to increase funding for the RHI to £1.15 billion in 2021, the Government published a series of [RHI review documents](#) in February 2016, in advance of an expected review of the scheme in 2017. The Government [concluded](#) that "the RHI had been wholly positive in its influence on the renewable heat technology market".

Sustainability of biomass

The Department of Energy and Climate Change (DECC) introduced new [sustainability criteria](#) for non-domestic installations using biomass and biogas fuels, and producers of biomethane under the Renewable Heat Incentive (RHI) on 5 October 2015. To continue to receive RHI payments participants must now use fuels that meet the sustainability criteria.

For electricity generation, there is mandatory reporting but not mandatory criteria for measuring the sustainability of biomass use by larger generators, although DECC did publish [Life Cycle Impacts of Biomass Electricity in 2020](#) in 2014. Concerns raised by the potentially significant [carbon impacts](#) of the large imports of biomass pellets by Drax from the US have led to DECC commissioning a further report from Ricardo AEA. This is not due to be completed until the next session of Parliament, later this year.

New Direction for UK Energy Policy Announcement

Following the May 2015 elections, a series of announcements were made throughout the summer with an impact on biomass electricity generation:

- The Summer Budget included an announcement on the removal of the [Climate Change Levy Exemption](#) that applied to renewable

electricity supplies. Drax challenged this decision in the courts but was not successful.

- The Government [announced](#) on July 22 that DECC's latest forecasts under the Levy Control Framework, set up to limit cost to consumers of renewable energy, had shown that forecast spend on renewable energy subsidy schemes would be higher than expected and needed to be brought under control.¹ At the same time DECC announced a [package of measures](#), to "control the cost of renewable energy", including controlling subsidies for biomass and solar PV under the Renewables Obligation and changing accreditation rules under the Feed-in Tariff. The Secretary of State for Energy and Climate Change, Amber Rudd, also set out why renewable energy subsidies were being reviewed:

My priorities are clear. We need to keep bills as low as possible for hardworking families and businesses while reducing our emissions in the most cost-effective way.

"Our support has driven down the cost of renewable energy significantly. As costs continue to fall it becomes easier for parts of the renewables industry to survive without subsidies. We're taking action to protect consumers, whilst protecting existing investment"²

The Secretary of State set her [vision](#) out in a [speech](#) on 18 November 2015 for "an energy system that puts consumers first, delivers more competition, reduces the burden on bill-payers and ensures enough electricity generation to power the nation". This included:

- Consultation on ending unabated coal-fired power stations by 2025
- New gas-fired power stations a priority
- Commitment to offshore wind support completes commitment to secure, low-carbon, affordable electricity supplies
- Move towards a smarter energy system

The Secretary of State did refer to district heating and biogas specifically as to areas of potential:

There are technologies which have great potential, such as district heating, biogas, hydrogen and heat pumps. But it is not yet clear which will work at scale. So different approaches need to be tested. We need a long-term plan that will work and keeps down costs for consumers. We will set out our approach next year, as part of our strategy to meet our carbon budgets..

Failure to meet the renewables target

A [leaked letter](#) from the Secretary of State to colleagues stated that the UK is on track to miss its legally binding obligation to achieve EU targets on renewable energy by an estimated 50TWh (terawatt hours), or 3.5% of its 15% obligation. The Secretary of State subsequently gave

¹ There are currently three components to the LCF: Renewables Obligation; Feed-in-tariffs scheme (FITs); and Contracts-for-Difference (CfDs).

² DECC, [Controlling the cost of renewable energy](#), 22 July 2015

[evidence to the committee](#) setting out how the shortfall in meeting the renewable energy targets should be filled by renewable heat, and by more biofuels in petrol and diesel:

I am concerned about the work that is being done on transport and on heat to make the additional targets. That is why I have been writing to other Ministers in other departments, particularly in transport, to urge them to work across Government to make sure that we do make these targets.

We have made our interim target—in fact, we have just exceeded it—but it is going to be challenging to make the rest of the target. I remain committed to making good progress towards that target and it is because I am so committed to that that I am encouraging other Secretaries of State to take action. This is, after all, a cross-Government target; it is not just for my Department. I am going to be working with Transport and internally I am going to be putting together policies on heat to try to address the shortfall that we currently have in order to achieve that 2020 target.

And

It's my aim we should meet the 2020 target. I recognise we don't have the right policies, particularly in transport and heat, but we have four to five years and I remain committed to making the target.

2. Press Articles

Please note: the Library is not responsible for either the views or accuracy of external content.

Business Green
17 February 2016

[**Drax urges government to boost competition between renewables technologies**](#)

Jocelyn Timperley

Business Green
16 February 2016

[**Green gas projects hit feed-in tariff cap within 15 minutes**](#)

Jocelyn Timperley

Biomass Magazine
16 February 2016

[**DECC publishes new reports evaluating RHI renewable heat programs**](#)

Katie Fletcher

Business Green
12 February 2016

[**High Court rules in favour of government over controversial climate levy change**](#)

James Murray

Business Green
19 January 2016

[**Report: Bioenergy is still a low-carbon 'game-changer' despite CCS cuts**](#)

Madeleine Cuff

The Daily Telegraph
January 6, 2016

[**Blow to Drax plans as EC launches an investigation into state aid**](#)

Emily Gosden

The Daily Telegraph
December 2, 2015

[Boost for Drax after Brussels approves switch of coal plant to burn wood](#)

Emily Gosden

Guardian

November 10, 2015

[UK doesn't have right policies to meet renewable energy target, admits Amber Rudd](#)

Energy secretary says heat and transport must make a contribution to meeting the EU target of sourcing 15% of renewable energy by 2020

Adam Vaughan

The Ecologist

November 9, 2015

[Leaked letter: Rudd admits 25% green energy undershoot, misled Parliament](#)

Oliver Tickell

9th November 2015

The Guardian

July 9, 2015

[George Osborne is saving green pennies, but spending nuclear pounds](#)

Nils Pratley

Financial Times

February 19, 2015

[Drax falls on fears of subsidy cuts](#)

Bryce Elder

[Subscription required]

The Daily Telegraph

February 20, 2015

[UK biomass plan faces competition investigation](#)

3. Press releases

Drax

Consumers could save £2 billion if green light given for reform of energy generation auctions

16 February 2016

An [independent report](#) published today has revealed consumers could save more than £2 billion if the Government's planned renewable energy auctions are opened up to include a wider mix of technologies. Drax commissioned NERA Economic Consulting and Imperial College to look at hidden costs that are not reflected in the contracts Government awards for renewable generation.

These hidden costs, or whole system costs are increasing as intermittent renewables – those reliant on the sun and wind - increase. These intermittent renewables mean other forms of power generation need to kick in, and flex up and down to meet electricity demand. These costs are passed on to consumers via their energy bills.

Currently the Government is planning three auctions for new renewable energy contracts – Contracts for Difference (CfDs) - planned over the next four years, and all are focused on offshore wind. The new research shows significant differences in the true costs of renewables once these additional costs are recognised. Offshore wind could require a CfD of £127 per MWh, onshore wind £92-97 per MWh, solar £96 per MWh, and biomass £84 per MWh.

Once these new support levels are modelled over the planned energy auctions, the new energy mix that could win contracts is shown to save consumers £1.9 -£2.2 billion. This support is already paid for through energy bills and the new cost-efficient mix would lessen the impact.

Drax Group CEO, Dorothy Thompson said:

“This independent research shows it's crucial we get the right mix of energy generation. The UK's system faces growing challenges, from costs to reliability as traditional forms of generation are replaced with renewables.

“Intermittent renewables like wind and solar are vital as we continue to clean up energy generation, but they need to be backed up by a constant supply of electricity that can be flexed up and down to make sure the UK's businesses and households always have power on demand.

“Opening up energy auctions to include other renewables could save consumers £2 billion and with more biomass in the mix energy security is also boosted. Using the latest technology we've upgraded half our power station to run on compressed wood pellets, which give an 80% plus carbon saving against coal. With the right support we stand ready to finish the job.”

NERA Economic Consulting Associate Director, Daniel Radov, added:

“NERA Economic Consulting is pleased to be able to continue its partnership with Imperial College in modelling the total costs of different power generation technologies, and in helping to inform

the policy discussion around renewable energy and decarbonisation.

“To ensure that we achieve environmental targets as efficiently as possible, it is essential to have policies in place that provide the right incentives to minimise costs. We hope the combination of Imperial’s whole-system energy modelling with NERA’s ability to model the details of the CfD auctions will contribute to a better understanding of the advantages and disadvantages of different policy approaches.”

Notes to Editors

The report focuses on Whole System Costs. Whole System Costs (WSC) are simply the sum of the Levelised Cost of Energy and the associated System Integration Costs for a given technology (i.e. $WSC = LCOE + SIC$).

The Levelised Cost of Energy (LCOE) is the cost of building, maintaining and operating a generation asset (i.e. power station/wind farm/solar park) over the life of the asset. This is the figure that is currently factored into CfD auction bids. System Integration Costs (SIC) represent the additional expense of operating the electricity network as a result of those assets participating in the GB electricity market. These costs include maintaining sufficient levels of backup capacity (system reliability) and managing flows on the transmission network (system balancing). Different technologies (e.g. wind, solar, biomass, etc.) have different impacts on total System Integration Costs, depending on their reliability, flexibility and location on the system.

The Government has committed to support offshore wind capacity in the next three CfD auctions to promote technological learning and cost reduction in that technology. This analysis proposes that a proportion of the offshore wind budget is protected in each auction to promote such benefits. The analysis demonstrates that opening a proportion of the budget to full, technology neutral competition could reduce costs to consumers by up to £2.2bn.

Department of Energy and Climate Change

Evaluation of Renewable Heat Incentive (RHI): Over 80% of RHI applicants are satisfied with their new systems.

12 Feb 2016

Over 80% of applicants to the Renewable Heat Incentive (RHI) scheme are satisfied with their new systems, according to [new reports](#) published yesterday by the Department of Energy and Climate Change (DECC).

The Domestic and Non-Domestic RHIs are government financial incentives to promote the use of renewable heat through technologies such as biomass boilers and wind, ground and air source heat pumps. The schemes provide incentives for consumers to install renewable heating in place of fossil fuels and are open to homeowners and landlords, commercial, industrial, public, not-for-profit and community generators of renewable heat.

The new reports show the positive impact of the RHI schemes, with the majority of accredited renewable heat installers reporting that the RHI had been wholly positive in its influence on the renewable heat technology market. The evaluation reports follow the government's commitment to increase funding for the RHI to £1.15 billion in 2021 to ensure that the UK continues to make progress towards its climate goals while reforming the scheme to improve value for money, delivering savings of almost £700 million by 2020-21.

Energy Minister Lord Bourne said:

Reforming how we use energy for heating is critical to achieving secure, affordable and clean energy for families and businesses across the country. That is why the government will be pushing a more cost effective, targeted Renewable Heat Incentive scheme for the next five years.

Renewable Energy Association

Government survey shows Renewable Heat Incentive central to decarbonisation

11 February, 2016

The Department of Energy and Climate Change has today released several reports on renewable heating. The reports conclude that the Renewable Heat Incentive (RHI) has been critical to decarbonising the UK heat sector so far and that the vast majority of applicants have been happy under it.

The reports evaluated the domestic and non-domestic RHI, Heat Pumps in District Heating, combined heat and power and district heating and cooling in the UK, drivers of growth and cost changes in European renewable heat technologies, the Renewable Heat Premium Payment scheme, and scope for cost reductions.

Some of the key findings are:

- 63% of non-domestic applicants would not have installed a renewable heat technology if not for the RHI
- The majority of applicants (87%) were satisfied with the operation of their installation
- 88% of applicants would recommend their renewable heat technology to others
- The European biomass heat market is moving to a more competitive phase with a wider range of boiler suppliers available than ever before.
- The reducing costs of biomass represent an opportunity for the UK to import the technologies from Europe; therefore adopting late mover advantage
- DECC report sees potential for the market growing to a point where over 800 MW of additional capacity are added each year, and could see a real terms reduction in installation costs of between 9% and 11% resulting from the development of mass market. Overall costs (including the lifetime fuel costs) are forecast to fall by a third in mass-market conditions looking at the UK market as a whole

Frank Aaskov, Policy Analyst at the REA said:

“The reports show that consumers and businesses are in general very satisfied with their renewable heat installations, and 88% would recommend their renewable heat technology to others.

There are always room for improvement, both in the RHI and within the sector, but it is clear that biomass and wood heating is a modern and mature technology that has huge potential for growth. We hope this is reflected in the Government’s reform of the RHI, when this consultation is launched later this quarter.”

Notes to editors

1. The RHI is a government scheme designed to incentivise organisations and households in Great Britain to install heating systems that use renewable energy.

The RHI was first introduced for non-domestic applicants (commercial, industrial, public sector, not for profit and systems heating multiple domestic dwellings) in November 2011 and was expanded to include domestic households in April 2014.

2. Biomass and wood heating is crucial to decarbonising the UK’s heating sector, which in itself represents 47% of UK’s energy consumption and a third of all carbon emissions. The RHI has been successful in kick starting the expansion of renewable heating.

Department of Energy and Climate Change

What the Government is doing to secure investment in clean, secure and affordable energy

26 January 2016

In response to a letter about energy policy in the Times newspaper on 26 January 2016, Energy and Climate Change Secretary Amber Rudd said:

This Government is taking long-term decisions today to tackle a legacy of under-investment, build a system of energy infrastructure fit for the 21st century and to create the right environment for business to invest in clean, affordable and secure energy. But we don’t apologise for doing this at the same time as working to keep bills as low as possible and making sure that the people that foot the bill, the hardworking families and businesses of Britain, get a good deal.

We know that old and dirty coal, and some ageing nuclear power plants will be closing over the next few years, and that’s precisely why we’ve put in place a long-term plan to ensure we have secure, affordable and clean energy supplies that can be relied on now and in the future.

We are the first country to propose an end date to using unabated coal and we will do so in a way that maintains energy security, which comes first. We are clear that a range of energy sources such as nuclear, offshore wind and shale gas all have roles to play in the low-carbon energy mix, powering our country and safeguarding our future economic security.

Amber Rudd set out the Government's stall on [what course energy policy will take over this Parliament](#) in a speech late last year.

The top 10 things the government is doing to secure investment in clean secure energy:

- Committed to the first new nuclear plant for a generation at Hinkley Point C. It will power 6 million homes for 60 years and also provide 25,000 jobs giving the UK economy a huge boost.
- Boosting innovation funding to over £500m, including £250m for nuclear innovation and Small Modular Reactors.
- Confirmed we could support up to 10GW of new offshore wind projects in the 2020s, with a further three auctions in this Parliament if the Government's conditions on cost reduction are met.
- Set out world leading plans to close all unabated coal-fired power stations by 2025 if we're confident that the shift to new gas can be achieved within the necessary timescales.
- Allocated £295 million to invest in energy efficiency measures in schools, hospitals and other local public services.
- Introduced a new energy efficiency supplier obligation for 5 years from April 2017 set at £640 million a year - helping more than 1 million homes cut carbon emissions and keep their bills low.
- Committed to more than double the support we give to households and businesses to decarbonise their heating supply in this Parliament (from £430 million to £1.15 billion).
- Allocated over £300 million to deliver up to 200 heat networks in communities, leveraging up to £2 billion in private investment.
- Announced a 50% increase in the UK climate finance commitment to a total of £5.8 billion over the next five years to help the poorest countries cut carbon emissions and adapt to climate change.
- Signed the Paris agreement, which sends a clear signal to business to invest in the low carbon transition.

European Commission

State aid: Commission opens in-depth investigation into UK public support for Drax power plant

5 January 2016

The European Commission has opened an in-depth investigation to assess whether the United Kingdom's plans to support the conversion of part of the Drax coal power plant to operate on biomass are in line with EU state aid rules.

The Commission fully supports Member State efforts to increase the use of renewable energy and pursue EU energy and climate objectives. At the same time, EU state aid rules make sure that the cost of such support for consumers is limited and does not give certain operators an unfair advantage over competitors. Therefore, the Commission will now investigate further to make sure that the public funds used to support the Drax project are limited to what is necessary and do not result in overcompensation. It will also assess whether the positive effects of the project in achieving EU energy and environmental objectives outweigh potential competition distortions in the market for biomass. The opening of an in-depth investigation gives the UK and interested third parties an opportunity to submit comments. It does not prejudge the outcome of the investigation.

In April 2015 the UK notified plans to subsidise the conversion of one unit of the coal-fired Drax power plant to operate entirely on biomass. The unit concerned by this measure would have the capacity to generate 645 MW of renewable electricity running exclusively on wood pellets. The measure fixes a certain price ('strike price') for the electricity generated. If the average wholesale price of electricity falls below the strike price, the Drax power plant operator would receive an additional payment on top of the money it earns from selling its electricity into the market. According to UK estimates, the project would operate until 2027 and supply about 3.6 TWh of electricity per year. The plant would require approximately 2.4 million tonnes of wood pellets per year, mainly sourced from the United States and South America.

In its preliminary analysis, the Commission considered that the estimates of the plant's economic performance may be too conservative. A positive change in operating parameters could significantly affect the project's rate of return. At this stage, the Commission therefore has concerns that the actual rate of return could be higher than the parties estimate and could lead to overcompensation.

Moreover, the amount of wood pellets required is considerable, as compared to the volume of the global wood pellets market and demand from the Drax conversion project could significantly distort competition in the biomass market. The Commission is therefore also concerned that on balance the measure's negative effects on competition could outweigh its positive effect on achieving EU 2020 targets for renewable energy.

The Commission will investigate further to see if its concerns are justified. It will give all interested parties the opportunity to express their views on these issues before finalising its assessment.

Background

The Drax power plant is one of several projects selected under the Final Investment Decision Enabling for Renewables (FIDeR), a UK support measure for renewable energy projects. The plans notified by the UK concern state support to convert one of the six units at the Drax plant to operate entirely on biomass.

In January 2015, the Commission approved construction of the [Teesside combined heat and power biomass plant](#). Following an investigation, in December 2015 the Commission approved [aid for converting the Lynemouth power plant](#) to biomass.

The non-confidential version of the decision will be published in the [State aid register](#) on the [competition](#) website under the case number SA.38760 once eventual confidentiality issues have been resolved. The [State Aid Weekly e-News](#) lists new publications of state aid decisions on the internet and in the EU Official Journal.

European Commission

State aid: Commission authorises UK support to convert Lynemouth power station to biomass

1 December 2015

The European Commission has concluded that UK support for the conversion of Lynemouth power station from coal to biomass complies with EU state aid rules. The Commission found that the project will further EU environmental and energy goals without unduly distorting competition.

In December 2014 the UK notified plans to subsidise the conversion of the coal-fired Lynemouth power plant to biomass. The plant would be able to generate 420 MW of electricity running exclusively on wood pellets. The UK Government intends to support the project in the form of a premium paid on top of the market price of the electricity generated (a so-called "Contract for Difference"). The project will receive aid until 2027 and, according to UK estimates, will generate about 2.3 TWh of low-carbon electricity per year. The plant is due to use approximately 1.5 million tonnes of wood pellets per year, mainly sourced from the United States, Canada and Europe.

The Commission opened [an in-depth investigation in February 2015](#) to assess whether the terms and conditions of the UK support, and in particular the financial calculations and estimates regarding key cost parameters, would avoid overcompensation. In light of the comments received from interested third parties as well as detailed technical information submitted by the UK, the Commission is now satisfied that the submitted parameters are robust and present no risk of overcompensation.

The Commission's investigation also did not find any evidence of market distortion in the global wood pellets market. Finally, it is satisfied that the measures will not lead to undue distortions of competition in the market for other wood-based products.

On the basis of this analysis the Commission concluded that the project's contribution to the European renewable energy and CO₂ emissions reduction targets clearly outweighs any potential distortions of competition that could be triggered by the state support.

Background

The Lynemouth plant is one of several projects selected under the Final Investment Decision Enabling for Renewables (FIDeR), a UK support measure for renewable energy projects. In July 2014, the Commission already [approved five FIDeR projects to develop offshore wind farms](#). In January 2015, the Commission also approved construction of the [Teesside combined heat and power biomass plant](#).

The non-confidential version of the decision will be published in the [State aid register](#) on the [competition](#) website under the case number SA.38762 once eventual confidentiality issues have been resolved. The [State Aid Weekly e-News](#) lists new publications of state aid decisions on the internet and in the EU Official Journal.

Department of Energy and Climate Change

New direction for UK energy policy

18 November 2015

Energy and Climate Change Secretary Amber Rudd has set out her vision for an energy system that puts consumers first, delivers more competition, reduces the burden on bill-payers and ensures enough electricity generation to power the nation.

- Consultation on ending unabated coal-fired power stations by 2025
- New gas-fired power stations a priority
- Commitment to offshore wind support completes commitment to secure, low-carbon, affordable electricity supplies
- Move towards a smarter energy system

Energy and Climate Change Secretary Amber Rudd has set out her vision for an energy system that puts consumers first, delivers more competition, reduces the burden on bill-payers and ensures enough electricity generation to power the nation.

Speaking at the Institution of Civil Engineers in London today the Energy Secretary revealed her policy priorities and her strategy for putting them into action.

Amber Rudd set out the challenges facing the country's energy system, saying:

"We now have an electricity system where no form of power generation, not even gas-fired power stations, can be built without government intervention. And a legacy of ageing, often unreliable plant.

"Perversely, even with the huge growth in renewables, our dependence on coal - the dirtiest fossil fuel - hasn't been reduced. Indeed a higher proportion of our electricity came from coal in 2014 than in 1999.

"So despite intervention we still haven't found the right balance."

The Energy Secretary signalled her intention to develop a cleaner, more secure energy network by consulting on closing coal fired power stations by 2025 She continued:

“One of the greatest and most cost-effective contributions we can make to emission reductions in electricity is by replacing coal fired power stations with gas.

“I am pleased to announce that we will be launching a consultation in the spring on when to close all unabated coal-fired power stations.

“Our consultation will set out proposals to close coal by 2025 - and restrict its use from 2023. If we take this step, we will be one of the first developed countries to deliver on a commitment to take coal off the system.

“But let me be clear, we’ll only proceed if we’re confident that the shift to new gas can be achieved within these timescales.

She also explained that nuclear power had a central role in the UK’s energy future:

“Opponents of nuclear misread the science. It is safe and reliable. The challenge, as with other low carbon technologies, is to deliver nuclear power which is low cost as well. Green energy must be cheap energy.

“We are dealing with a legacy of under-investment and with Hinkley Point C planning to start generating in the mid-2020s, this is already changing.

“It is imperative we do not make the mistakes of the past and just build one nuclear power station. There are plans for a new fleet of nuclear power stations, including at Wylfa and Moorside. It also means exploring new opportunities like Small Modular Reactors, which hold the promise of low cost, low carbon energy.”

Amber Rudd went on to commit Government support for offshore wind on the condition that it comes down in cost:

“We should also support the growth of our world leading offshore wind industry.

“Today I can announce that – if, and only if, the Government’s conditions on cost reduction are met – we will make funding available for three auctions in this Parliament. We intend to hold the first of these auctions by the end of 2016.

“On current plans we expect to see 10GW of offshore wind installed by 2020”.

“The industry tells us they can meet that challenge, and we will hold them to it. If they don’t there will be no subsidy. No more blank cheques.”

The Government is also committed to taking action on climate change and to meeting the UK’s 2050 target, looking ahead to the conference in Paris in December where an international deal is expected to be agreed.

The Energy and Climate Change Secretary explained:

“Action on climate change is linked to the action we’re taking now to reduce the deficit. It is about resilience now and in the future. But climate change is a global problem, not a local one. Action by one state will not solve the problem. It’s what we do together that counts. And that is why achieving a global deal in Paris next month is so important.

“But climate change will not be solved by a group of over-tired politicians and negotiators in a Conference centre. It will take action by businesses, civil society, cities, regions and countries.

“Paris must deliver that and help unleash the levels of private investment needed. Our most important task is providing a compelling example to the rest of the world of how to cut carbon while controlling costs.”

Notes

- A consultation will be published in the spring on when to close all unabated coal-fired power stations. The consultation will set out proposals to close coal by 2025 and restrict its use from 2023.
- The full text of the Secretary of State’s speech is available on the [DECC website](#)

Department of Energy and Climate Change

Controlling the cost of renewable energy: Renewable energy subsidies revised to ensure consumers are protected from higher energy bills.

23 Jul 2015

Measures to deal with a projected over-allocation of renewable energy subsidies have been announced yesterday.

Reducing energy bills for hard working British families and businesses and meeting climate goals in the most cost effective way are Government priorities. The measures set out yesterday will provide better control over spending and ensure bill payers get the best possible deal as we continue to move to a low-carbon economy.

Announcing the changes to bring costs under control, Energy and Climate Change Secretary Amber Rudd said:

“My priorities are clear. We need to keep bills as low as possible for hardworking families and businesses while reducing our emissions in the most cost-effective way.

“Our support has driven down the cost of renewable energy significantly. As costs continue to fall it becomes easier for parts of the renewables industry to survive without subsidies. We’re taking action to protect consumers, whilst protecting existing investment”.

Financial support for renewable technologies primarily comes in the form of subsidies which are paid for via energy bills. The total amount of subsidies available is capped via a mechanism called the Levy Control Framework (LCF).

The measures announced yesterday include:

- [Removing the guaranteed level of subsidy for biomass conversions and co-firing projects for the duration of the Renewable Obligation, known as grandfathering](#). This could reduce the risk of more allocations under the LCF by around £500m per annum in 2020/21 (i) .
- Launching a [consultation on controlling subsidies for solar PV of 5MW and below under the Renewables Obligation \(RO\)](#). This includes consulting on early closure and removing the guaranteed

level of subsidy for the duration of the RO, known as grandfathering.

- A [consultation on changes to the preliminary accreditation rules under the Feed-in Tariff \(FIT\) scheme](#) followed by a wider review of the scheme to drive significant further savings.

The Government will also:

- Set out totals for the LCF beyond 2020, providing a basis for electricity investment into the next decade.
- Set out its plans in the Autumn in respect of future CFD allocation rounds.

The Government has provided vital financial support to the renewable sector which has helped new and innovative technologies, reduced our emissions, and increased the amount of low-carbon electricity that powers homes and businesses across the UK.

However, the Office for Budget Responsibility's latest projections show that subsidies raised from bills are currently set to be higher than expected when the schemes under the LCF were set up. This is due to a number of uncontrollable factors such as lower wholesale electricity prices, higher than expected uptake of the demand-led Feed in Tariffs and the Renewables Obligation (such as solar panels on roofs) and a faster than expected advancement in the efficiency of the technology, meaning renewables are projected to generate more electricity than previously projected.

Notes to editors

- With regards to Biomass: the changes to grandfathering apply to England and Wales only. Decisions regarding the operation of the RO, including grandfathering policy, in Scotland and Northern Ireland are for the Scottish Government and Department of Enterprise, Trade and Investment in Northern Ireland respectively.
- With regards to small scale solar: the proposals in relation to early closure would, if implemented, apply across GB. The proposals in relation to grandfathering, and any future banding review, would, if implemented, apply to England and Wales only.
- With regards to the FITS scheme: the proposed changes to pre-accreditation would, if implemented, apply across GB.
- The Office of Budgetary Responsibility's (OBR) Economic and Fiscal Outlook – July 2015 (published 8 July) sets out in Table 4.5 Current Receipts on page 98 the cost of Environmental Levies, these can be found at <http://cdn.budgetresponsibility.independent.gov.uk/July-2015-EFO-234224.pdf>.
- Table 2.7 Environmental Levies provides the breakdown of spend on the RO, FIT and CFD making up these figures and can be found at <http://budgetresponsibility.org.uk/economic-fiscal-outlook-supplementary-fiscal-tables-july-2015/>. These are nominal figures.

The table below provides these in 2011/12 figures

Environmental Levies -£ million 2011/12 prices

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
RO	2795	3360	4090	4475	4840	4840	4840
FiTs	740	925	1095	1255	1375	1490	1600
CfDs	5	50	270	505	990	2050	2660
Total expected cost	3540	4335	5455	6235	7210	8380	9100

Renewables Energy Association

Renewables industry react to Budget

8 July, 2015

Following the decision of the Chancellor of the Exchequer to remove the exemption of the Climate Change Levy, the Renewable Energy Association has concerns that this will affect all renewable and low-carbon generation for our members.

George Osborne said in his statement that:

“Now we have a long term framework for investment in renewable energy in place, we will remove the out-dated Climate Change Levy exemption for renewable electricity that has seen taxpayer money benefitting electricity generation abroad.”

Whilst there was an issue with foreign generators benefiting from this policy, it has also driven investment, and has been factored into both original project finance decisions and current business plans. This measure is due to come into effect on the 1st August. Such snap changes undermine confidence in the UK from the finance community, as well as making renewables less attractive compared to fossil fuel generation.

The value of the exemption was worth £5.50 per MWh, and all financial assumptions have been based on this.

The REA will be calling on the Treasury to rethink this proposal, and urges the Chancellor to work with the industry to address the problem of foreign generators without hindering the UK's ability to meet our climate targets.

Chief Executive of the Renewable Energy Association, Dr Nina Skorupska said:

“The removal of the Climate Change Levy exemption for renewables will have a significant effect for our members immediately, and will undermine investor confidence by changing the stable market conditions needed for financing and business planning.

“If the intention was to remove the anomaly of international firms benefiting from the CCL exemption, this is a disproportionate action that now turns a measure designed to encourage low-carbon electricity, into just an electricity tax for business.”

4. Parliamentary Questions

Asked by: Harpham, Harry

To ask the Secretary of State for Energy and Climate Change, which coal-fired power stations her Department expects to close before 2020.

Answering member: Andrea Leadsom Department for Energy and Climate Change

Decisions to close power stations are taken by their owners based on market conditions. The owners of Longannet, Lynemouth and Ferrybridge have announced their intention to stop generating by March 2016. The owners of Eggborough (2GW) have announced they may close by March 2016. Following the European Commission's approval of state aid in December 2015 followed by its sale, EPH are converting Lynemouth to biomass. We expect this process to take about 18 months.

18 Jan 2016 | Written questions | 21792

Asked by: Dr Alan Whitehead

In her letter to other Departments on 29 October the Secretary of State—whom I congratulate on stressing in her letter the importance of reaching EU renewables targets in perhaps more recalcitrant Departments—she indicated that the highest potential for additional renewable heat is from biomethane injection into the grid, but she also said that we will face a shortfall against the part of that target that is related to the heat sector, even if support for her proposed measures was agreed by the Chancellor in the comprehensive spending review. Now that she has a reduced amount of money for the renewable heat incentive up to 2020, does she consider that that amount will enable us to reach our heat targets by 2020 and, if not, what new proposals will she bring forward to make sure that there is investment in this sector that can enable us to reach that target?

Answering member: Andrea Leadsom | Energy and Climate Change

The hon. Gentleman is right to point out that we had a good settlement in the comprehensive spending review. We were very pleased with the commitment to enhancing—increasing—the renewable heat incentive each year between now and 2021, and we are making good progress towards that. He will realise that the fourth carbon budget is for 2023-27. He would not expect us to be meeting it today, but we are putting plans in place and working towards that progress as we speak, and we will continue to set out plans during this year.

07 Jan 2016 | 604 c420

Asked by: Matthew Pennycook

To ask the Secretary of State for Energy and Climate Change, what assessment she has made of the total projected expenditure on (a) the feed-in-tariff scheme, (b) contracts for difference, (c) the Renewable Heat Incentive and (d) the capacity market mechanism in each year between 2016 and 2021 on her Department's current estimate of wholesale prices.

Answering member: Andrea Leadsom | Energy and Climate Change

The Office for Budget Responsibility's (OBR) report, published alongside the Autumn Budget on 25 November includes projected expenditure on individual environmental levy schemes, as well as the Renewable Heat Incentive, as summarised in table 1 below. These are based on DECC's current published estimates of wholesale prices, available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/477625/Annex-m-price-growth-assumptions.xls.

Renewable Heat Incentive: November 2015 forecast of expenditure

£ billion (nominal prices)	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Renewable Heat Incentive	0.42	0.64	0.78	0.9	1.01	1.15

Source: OBR, November 2015.

05 Jan 2016 | 20492

Asked by: McCaig, Callum

To ask the Secretary of State for Energy and Climate Change, what recent projections her Department has made of the (a) total installed capacity and (b) generation output of each renewable heat technology in 2020-21.

Answering member: Andrea Leadsom | Department for Energy and Climate Change

The Department has made projections for the renewable heat generation of renewable heat installations under the Renewable Heat Incentive (RHI), the main scheme of our heat strategy. Projections to the end of 2015/16 can be found in the Impact Assessment for the RHI, which is quoted below.

Detailed projections do not go beyond 2015/16 because this is the end of agreed RHI budget; and so policy beyond that period is subject to future budget arrangements. The Department's projections only cover the generation projected from deployment under the RHI. The Department does not hold projections for the market beyond the RHI.

The Department has not published projections for the total capacity (by technology) under the RHI, as, due to the highly variable use patterns (known as load factors) of heating technologies, capacity is not a very useful metric. Instead, we consider generation per year, which is also

the unit that we report against the target set by the EU Renewable Energy Directive (RED).

Renewable heat projections under RHI (GWh)

Source	Low MI scenario	Central MI scenario
Small and Medium Biomass	2,799	3,167
Large Biomass	818	1,228
Ground-source Heat Pumps	138	194
Air- and water-source heat pumps	312	427
Biomethane and Biogas	708	1,073
Combined heat and power (CHP)	186	879
Other (e.g. Deep Geothermal)	28	34
Domestic (all technologies)	178	370
TOTAL (non-domestic and domestic)	5,167	7,373

Source: Table 8, RHI Tariff Review, Scheme Extensions and Budget Management (24/09/2013).

The table uses the Low and Central scenarios for Market-Intelligence based projections of potential deployment, spend and installation numbers under the RHI (MI). Non-domestic projections are split by technology; domestic technologies are aggregated.

18 Nov 2015 | Written questions | 14347

Asked by: McCaig, Callum

To ask the Secretary of State for Energy and Climate Change, what recent projection her Department has made of the (a) total installed capacity and (b) generation output of each renewable electricity technology in 2020-21.

Answering member: Andrea Leadsom | Department for Energy and Climate Change

In August 2015 DECC published estimated capacity of key renewable technologies through delivery under Contracts for Difference, the Renewables Obligation and Investment Contracts in 2020/21 after cost control measures are implemented:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/457313/Estimated_capacity_of_selected_renewable_technologies_in_2020-21.pdf.

We also published an Impact Assessment for the review of the FITs scheme which set out projected installed capacity and generation output under the options proposed:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/458662/IA_for_FITs_consultation_August_2015_-_FINAL_docx_e-signature_included_v2.pdf.

The estimated total installed capacity (in gigawatt) and generation (gigawatt hours) from all renewable electricity support schemes

(Renewables Obligation, Feed-In Tariff, Contracts For Difference and Investment Contracts) in 2020/21 is set out in the table below:

In 2020/21	Capacity (GW)	Generation (GWh)
Offshore Wind	10.2	38,200
Onshore Wind	13.2	33,500
Solar PV	9.6	9,100
Biomass Conversions	2.2	14,800

Please note that the generation has been rounded to the nearest 100th gigawatt hour.

It is important to note that these estimates include assumptions about policy changes which have been proposed but not yet finalised and which could therefore change subject to the responses received – in particular, the consultation on a review of the Feed-in Tariff scheme, and the consultation on changes to financial support for solar PV under the Renewables Obligation:

<https://www.gov.uk/government/consultations/consultation-on-a-review-of-the-feed-in-tariff-scheme#history>;

<https://www.gov.uk/government/consultations/changes-to-financial-support-for-solar-pv>.

09 Nov 2015 | Written questions | 14348

Asked by: Howlett, Ben

To ask the Secretary of State for Energy and Climate Change, if she will bring forward proposals to allow the creation and sale of licences and franchises to provide heating using power station waste heat.

Answering member: Andrea Leadsom | Department for Energy and Climate Change

The Government has a range of policies in place to promote the use of Combined Heat and Power (CHP), which is a key technique capable of generating heat from power station waste heat. Environmental permitting requires developers of power plants to consider opportunities for operating CHPs, and provides them with CHP permits if these are cost effective. CHP installations that are certified by our Quality Assurance Programme are eligible for Enhanced Capital Allowances, Business Rates exemptions, a partial exemption from the Carbon Price Support tax, and Renewable Obligation Certificates and Renewable Heat Incentive payments for any heat they generate from biomass. Developing heat networks offers further opportunities for power plants to recover and supply heat.

16 Oct 2015 | Written questions | 10707

Asked by: Cunningham, Mr Jim

To ask the Secretary of State for Energy and Climate Change, what estimate her Department has made of the value of biomass imported for the purposes of power generation in each of the last five years; and if she will make a statement.

Answering member: Andrea Leadsom | Department for Energy and Climate Change

DECC holds data, obtained from HMRC, on the imports of fuel wood products, including: wood, wood pellets, wood chips, sawdust and wood waste. The vast majority of wood pellets are used for the purpose of electricity generation in large biomass plants. However, this may not be the case for other fuel wood products. This is summarised in the table below:

Value of imports (£million)	2010	2011	2012	2013	2014
Wood pellets	68	129	185	412	545
Other fuel wood products (wood, wood chips, sawdust, wood waste)		9	10	13	15
All fuel wood products	68	138	195	425	560

15 Sep 2015 | Written questions | 9775**Asked by: Cunningham, Mr Jim**

To ask the Secretary of State for Energy and Climate Change, what estimate her Department has made of the total subsidy paid for biomass production for the purposes of power generation in each of the last five years; and if she will make a statement.

Answering member: Andrea Leadsom | Department for Energy and Climate Change

The previous government supported the Energy Crop Scheme which provided a five year subsidy support for farmers and landowners producing biomass for electricity and heat production. This scheme, which provided support for planting and developing new energy crops, closed on 31st August 2013 to new applicants but continues to support those still in the scheme. The payments in the last five years were estimated by Natural England to be:

2010 – £425,942

2011 – £594,698

2012 – £1,320,813

2013 – £427,198

2014 – £330,438

Natural England, who run the scheme, estimate that 80% of the energy crops planted under the scheme will eventually be harvested for power generation, the remainder being for heat generation.

15 Sep 2015 | Written questions | 9683

Asked by: Cunningham, Mr Jim

To ask the Secretary of State for Energy and Climate Change, what assessment her Department has made of the effectiveness of biomass energy crops in delivering carbon reductions as set out in the UK Bioenergy Strategy.

Answering member: Andrea Leadsom | Department for Energy and Climate Change

The 2013/14 Renewables Obligation sustainability data [1] indicate that, for data available, the average greenhouse gas saving from energy crops on the European Union fossil fuel electricity average, by consignment, was approximately 90% (within a range of 85-94%). Feedstock data will begin being collected for Renewable Heat Incentive from the beginning of October, but energy crops are expected to make up a small proportion of heat biomass feedstock.

As recommended in the Bioenergy Strategy, this year the UK government is introducing mandatory sustainability criteria for biomass supported under the Renewables Obligation and the Renewable Heat Incentive. This will ensure that bioenergy feedstock is from sustainable land types, and that feedstock must meet a minimum 60% greenhouse gas saving on the EU fossil fuel electricity average. These requirements apply to energy crops.

[1] <https://www.ofgem.gov.uk/publications-and-updates/biomass-sustainability-dataset-2013-14>

15 Sep 2015 | Written questions | 9776

Asked by: Nigel Adams

The Prime Minister will be aware that the new owners of Eggborough power station in my constituency are consulting on the closure of a station that provides 4% of the country's electricity. This comes on top of the announcement that Ferrybridge power station, adjacent to my constituency, is to close, as well as Longannet in Scotland. Drax power station is taking legal action against the Government over changes to the tax regime. These power stations are being taxed out of existence, and we are potentially walking into power capacity issues next year. Will he meet me to discuss a way forward for the station and the industry and for the hundreds of people in my constituency whose jobs are under threat?

Answered by: The Prime Minister

I am very happy to meet my hon. Friend. I have discussed this issue with him before. I believe we have sufficient capacity in our energy market,

but I have regular meetings with Ofgem and Energy Ministers to make sure that is still the case. We have this difficult situation of wanting to see, over time, a phasing out of unabated coal, which needs to happen if we are to meet our carbon emissions targets, and when it comes to replacing coal in these power stations with renewable technologies, of needing to make it affordable. We have to make a judgment about how much we are prepared to add to consumers' bills, because, in the end, this has to be paid for.

09 Sep 2015 | Prime Minister's questions | 599 c402

Asked by: Harpham, Harry

To ask the Secretary of State for Energy and Climate Change, pursuant to the Answer of 1 June 2015 to Question 596, how many UK supply chain (a) jobs and (b) apprenticeships were created by each type of renewable energy for each year since 2010.

Answering member: Andrea Leadsom | Department for Energy and Climate Change

Figures published by BIS in *The Size and Performance of the UK Low Carbon Economy* (March 2015)¹ report show that in 2013 the renewable energy sector (including both renewable heat and renewable electricity) supported around 168,400 jobs in total.

Table 1 details the number of jobs supported by each type of renewable energy, both directly and within the supply chain each year for 2010-2013. The equivalent information is not available for 2014 or 2015 or for the number of apprenticeships that have been created.

Table 1: Number of jobs supported by the renewable energy sector by energy type, in the UK

	2010			2011		
	Direct	Supply chain/ Indirect	Total	Direct	Supply chain/ Indirect	Total
Offshore wind	6,300	4,600	10,900	6,700	4,900	11,600
Solar PV	11,500	8,000	19,500	17,000	11,800	28,800
Hydroelectric energy	3,900	2,900	6,800	4,200	3,100	7,300
Onshore wind	8,200	6,000	14,300	10,300	7,500	17,800
Biomass and bioenergy ¹	16,600	12,200	28,800	16,900	12,400	29,400
Marine	1,700	1,300	3,000	1,800	1,300	3,100
Geothermal electricity	400	300	700	400	300	700
<i>Total renewable electricity</i>	<i>48,700</i>	<i>35,200</i>	<i>83,900</i>	<i>57,300</i>	<i>41,300</i>	<i>98,600</i>
<i>Total renewable heat</i>	<i>31,400</i>	<i>22,100</i>	<i>53,500</i>	<i>32,200</i>	<i>22,600</i>	<i>54,900</i>
Total renewable energy	80,100	57,300	137,400	89,600	64,000	153,500

Table 1: Number of jobs supported by the renewable energy sector by energy type, in the UK

	2012			2013		
	Direct	Supply chain/ Indirect	Total	Direct	Supply chain/Indirect	Total
Offshore wind	7,200	5,300	12,400	7,900	5,800	13,700
Solar PV	21,000	14,600	35,600	20,300	14,100	34,400
Hydroelectric energy	4,100	3,000	7,100	4,300	3,100	7,400
Onshore wind	10,600	7,800	18,400	11,000	8,000	19,000
Biomass and bioenergy [1]	17,400	12,800	30,200	18,300	13,400	31,700
Marine	1,800	1,300	3,000	1,800	1,300	3,100
Geothermal electricity	500	300	800	500	400	900
<i>Total renewable electricity</i>	<i>62,600</i>	<i>45,000</i>	<i>107,600</i>	<i>64,100</i>	<i>46,200</i>	<i>110,300</i>
<i>Total renewable heat</i>	<i>33,200</i>	<i>23,300</i>	<i>56,500</i>	<i>34,100</i>	<i>24,000</i>	<i>58,100</i>
Total renewable energy	95,700	68,300	164,100	98,200	70,100	168,400

[1] Biomass and bioenergy include the following sectors: energy generation from waste and biomass, biomass equipment, alternative fuels. Alternative fuels category includes jobs supported by both renewable and non-renewable energy sectors.

02 Jul 2015 | Written questions | 3569

Asked by: Ruane, Chris

To ask the Secretary of State for Energy and Climate Change, what recent estimate he has made of the projected number of years of active energy projection from (a) nuclear power, (b) offshore wind turbines, (c) onshore wind turbines, (d) coal powered power stations, (e) gas powered power stations, (f) solar powered farms, (g) tidal lagoon, (h) biomass and (i) anaerobic digesters.

Answering member: Matthew Hancock | Department for Energy and Climate Change

DECC's most recently published figures for levelised costs contains information on the operating duration of selected electricity generation for technologies. These are available in the DECC Electricity Generation Costs (December 2013) report:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/269888/131217_Electricity_Generation_costs_report_December_2013_Final.pdf.

09 Mar 2015 | Written questions | 225910

Asked by: Jones, Susan Elan |

To ask the Secretary of State for Energy and Climate Change, with reference to his Department's report Life Cycle Impacts of Biomass Electricity in 2020, what assessment he has made of the implications of that report for the future of biomass energy in the UK; and if he will make a statement.

Answering member: Amber Rudd | Department for Energy and Climate Change

The report shows that biomass, when sourced responsibly, can provide a cost-effective, low carbon and controllable source of renewable energy. We are committed to improving further the evidence base on the carbon impacts of heat and power generation from biomass. A programme of work is underway to understand the likelihood of the various scenarios developed in the report.

This Government has introduced some of the toughest sustainability criteria in the world and we have taken steps to strengthen them further, introducing a trajectory of tightening GHG standards and a requirement to demonstrate that wood is sourced only from sustainably managed forests; together with reporting requirements which will allow us to assess how biomass is being sourced.

10 Feb 2015 | Written questions 223144

Asked by: Osborne, Sandra

To ask the Secretary of State for Energy and Climate Change, with reference to his Department's report, Life cycle impacts of biomass electricity in 2020, what assessment he has made of the (a) reliability of evidence that the main UK biomass supplies come from North America and (b) effect of such imports on domestic industries; and if he will make a statement.

Answering member: Amber Rudd | Department for Energy and Climate Change

As part of their sustainability requirements, biomass generating stations must report their biomass sustainability data to Ofgem, and this includes the country of origin. This data is published annually on Ofgem's website¹. From later this year, biomass generators will also be required to have their sustainability data independently audited, annually.

In 2013, the Department carried out an analysis of domestic and imported wood use by major biomass generating stations, using both the above sustainability reporting and additional five- year forecasts that large scale generators provided to the Department as part of a voluntary exercise². The forecast weight of domestically sourced wood used for biomass power generation is expected to remain stable between 2.3 and 2.5 million oven dried tonnes (modt). This analysis supports the Department's assessment that major generators intend to focus on international rather than domestic sources of wood.

Furthermore, as 'high quality' wood, such as that suitable for saw logs and timber production, commands a significantly higher market price than residues, this makes high quality wood unattractive and unaffordable for use as woodfuel. Therefore market forces, both here and abroad, should mean mixed use of wood continues.

[1] <https://www.ofgem.gov.uk/publications-and-updates/biomass-sustainability-dataset-2012-13>

[2] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/246006/UK_wood_and_biomass.pdf

10 Feb 2015 | Written questions | 223088

Asked by: Cox, Mr Geoffrey

To ask the Secretary of State for Energy and Climate Change, if he will take steps to ensure that both (a) Combined Heat and Power facilities where biogas production and combustion take place on the same site and (b) facilities that also produce biogas on the same site, but which generate their power from a combination of that biogas and some other energy source, receive equal treatment under the Government's proposal to amend the Renewable Heat Incentive Regulations.

Answering member: Amber Rudd | Department for Energy and Climate Change

Heat produced from Combined Heat and Power (CHP) plants may be eligible for renewable heat incentive scheme payments under the Renewable Heat Incentive Scheme Regulations 2011 (as amended) ("the Non-domestic Scheme"), where the fuel is biomass (including solid biomass contained in waste), biogas or geothermal energy, either in isolation or in combination. Decisions on whether or not individual installations meet the requirements of the Non-domestic Scheme are determined by Ofgem.

The draft Renewable Heat Incentive Scheme (Amendments) Regulations 2015, which are currently before Parliament for approval, make proposed amendments to the Non-domestic Scheme which are intended to introduce greater flexibility for CHP generators to use a mixture of fuels if each combustion unit burns a single fuel type. Generators are paid under the Non-domestic RHI Scheme based on the amount of eligible renewable heat used for eligible purposes.

27 Jan 2015 | Written questions | 221585

Asked by: Leslie, Charlotte |

To ask the Secretary of State for Energy and Climate Change, what assessment he has made of the amount of wood waste in the UK which is suitable for incineration in biomass power stations.

Answering member: Amber Rudd | Department for Energy and Climate Change

The Government has made no assessment of the amount of wood waste in the UK which is suitable for incineration in biomass stations. However, a market situation report published by Waste & Resources Action Programme UK in 2011 stated that "almost 2.3 million tonnes of wood waste was recycled or used in energy recovery in the UK in 2010, over 50% of estimated UK wood waste arisings". Of this, the end market for 0.55 million tonnes is listed as biomass/energy.

http://www.wrap.org.uk/sites/files/wrap/Wood%20Market%20Situation%20Report_0.pdf

03 Dec 2014 | Written questions| 216276

Asked by: Fitzpatrick, Jim

To ask the Secretary of State for Energy and Climate Change, if his Department will estimate the potential change in annual household energy bills arising from government subsidies to Drax for biomass power generation over the next 13 years.

Answering member: Matthew Hancock | Department for Energy and Climate Change

We currently support two units of Drax under the Renewables Obligation (RO), one as a full conversion, the other as an enhanced co-firing unit. One further unit has been awarded a contract under Final Investment Decision Enabling for Renewables (FIDeR). Government spending on levy funded support for low carbon electricity, including renewables, is capped by the Levy Control Framework (LCF), thereby helping to minimise the impact on consumer bills.

An estimate of the cost of support for renewable electricity generation by Drax cannot be provided as such information would allow the determination of operational factors which are commercially confidential.

30 Oct 2014 | Written questions |221889

Asked by: Farron, Tim |

To ask the Secretary of State for Environment, Food and Rural Affairs, what steps her Department is taking to promote the forestry industry.

Answering member: Dan Rogerson | Department for Environment, Food and Rural Affairs

The Government is committed to promoting the forestry industry in line with its Forestry and Woodlands Policy Statement.

In addition to supporting the industry-led Grown in Britain initiative, which has already gained commitment from 26 major UK Contractors Group companies, with a collective turnover of over £26 billion, to buy British timber preferentially where possible, we are providing support to the sector through the Rural Development Programme, which has provided over £167 million over the past seven years. The new Farming and Forestry Productivity Scheme will further improve the forestry industry's productivity by supporting new business entrants, innovative practice and our forestry skills base.

The Government's Renewable Heat Incentive has funded over 3,400 woodfuel boilers, helping to create a new sustainable market for British timber. In addition, our £15 million Rural Community Energy Fund is supporting 12 projects enabling communities to utilise local woodlands to meet their biomass energy requirements.

22 Jul 2014 | Written questions | 206547

Asked by: John Mann |

To ask the Secretary of State for Energy and Climate Change for what reasons Eggborough is no longer listed as an energy plant for biomass energy generation.

Answering member: Michael Fallon | Energy and Climate Change

The Digest of UK Energy Statistics (DUKES1) published by the Department and the Renewables Obligation Register² published by Ofgem classify Eggborough power station as both a coal and an accredited biomass fuelled plant respectively.

In addition, under the Final Investment Decision (FID) Enabling for Renewables³ process, Eggborough Power Ltd biomass conversion applications were listed under the 16 projects which met the Phase 2 minimum threshold evaluation criteria (published on 4 December). Although Eggborough is not on the list of the 10 projects that have been assessed as provisionally affordable (published on 19 December), their applications remains in the process. The final selection of projects and affordability assessment will be carried out following the receipt of binding applications in March, with the potential for project rankings to change if project circumstances change, or if some projects do not submit binding applications. Given the commercial nature of this process it is not appropriate to comment on the specifics of

Eggborough's application.1 DUKES Chapter 5.11 Power stations in the United Kingdom

<https://www.gov.uk/government/publications/electricity-chapter-5-digest-of-united-kingdom-energy-statistics-dukes-2>

Ofgem Renewables Register

<https://www.renewablesandchp.ofgem.gov.uk3>

Further details of the FID Enabling for Renewables process can be found at:

<https://www.gov.uk/government/publications/increasing-certainty-for-investors-in-renewable-electricity-final-investment-decision-enabling-for-renewables>

28 Jan 2014 | Written questions | 184232 | 574 cc517-8W

5. Other Parliamentary material

Ministerial Statements

[Levy Control Framework](#)

Lord Bourne of Aberystwyth | Department for Energy and Climate Change

22 Jul 2015 | Written statements | HLWS164

My Right Honourable Friend the Secretary of State for Energy and Climate Change is today announcing a package of reforms to take control of the costs of renewable electricity subsidies under the Levy Control Framework (LCF). This is part of the Government's commitment to control energy bills for hard-working British families and businesses as we continue to move to a low carbon economy and make progress toward our carbon reduction and renewable energy targets.

The Department of Energy and Climate Change's latest forecasts under the Levy Control Framework to 2020/21, confirmed in the Office of Budgetary Responsibility's (OBR) report 'Economic and Fiscal Outlook – July 2015'[1], have shown that forecast spend on renewable energy subsidy schemes is set to be higher than expected when the schemes under the LCF were established. The Government has set a limit of £7.6bn in 2020-2021 (in 2011/12 prices), so the current forecast is £1.5bn above that limit. This is due to accelerated developments in technological efficiency, higher than expected uptake of demand-led schemes and changes in wholesale prices. This means that the forecast of future spend under the LCF is now estimated at around £11.4bn (in nominal prices) or £9.1bn (in 2011/12 prices) in 2020/21. The Government is determined to bring these costs under control to protect consumers and provide a basis for investment in clean electricity in future.

It is important therefore to control spending under the demand-led schemes in order to deliver renewable electricity at competitive prices. As part of this the Government has recently announced its intention to end new subsidies for onshore wind and to close the Renewables Obligation to new onshore wind in Great Britain from 1 April 2016. Today the Government is announcing further measures to control costs under the demand-led schemes managed under the LCF.

These measures indicate our move away from demand-led schemes while providing appropriate protection for existing investments.

Changes to grandfathering provisions for biomass co-firing and conversion plant under the Renewables Obligation (RO)

Following consultation and a careful review of the evidence and opinions, the Government's assessment is that unless grandfathering is withdrawn as proposed in the consultation there is strong likelihood that additional biomass conversion units not previously accounted for in RO budgets would convert under the RO. This could result in a potential additional cost of around £500m per annum in 2020/21 (2011/12

prices). The Government is therefore taking action to ensure that the support rate under the RO for future biomass co-firing and conversion projects in England and Wales will no longer be covered by grandfathering[2]. Exceptions will be provided to protect those who have already made significant financial commitments.

Further detail can be found at

<https://www.gov.uk/government/consultations/changes-to-grandfathering-policy-with-respect-to-future-biomass-co-firing-and-conversion-projects-in-the-renewables-obligation>

[...]

George Osborne.| Treasury

[Budget Statement](#)

[HC Deb 8 July 2015 c331](#)

[Extract]

Now that we have a long-term framework for investment in renewable energy in place, we will remove the outdated climate change levy exemption for renewable electricity that has seen taxpayer money benefiting electricity generation abroad.

6. Further Reading and useful links

Department of Energy and Climate Change (DECC)

[Renewable Heat Incentive evaluation](#)

12 February 2016

DECC

[Low carbon technologies](#)

Appendix 6 Renewable Heat Incentive

Appendix 10 Heat networks

8 May 2015

Department for Business, Innovation and Skills

[The Size and Performance of the UK Low Carbon Economy](#)

Report for 2010 to 2013

March 2015

DECC

[UK Renewable Energy Roadmap Update 2013](#)

November 2013

[Reviews the contribution of renewable heat to its renewable targets in 2013]

DECC

[The Future of Heating: Meeting the challenge](#)

March 2013

Department of Energy and Climate Change (DECC),

Department for Environment, Food and Rural Affairs (Defra)

Department for Transport (DfT)

[UK Bioenergy Strategy](#)

April 2012.

DECC

[UK Renewable Energy Roadmap](#)

July 2011.

[Sets out the targets for deployment of renewable energy]

House of Commons Library Briefing Paper

[*Climate Change Levy: renewable energy*](#)

23 October 2015

House of Commons Energy and Climate Change Committee

Current inquiry: [Investor confidence in the UK energy sector inquiry](#)

Ofgem

[*Renewables Obligation Annual Report 2013/14*](#)

February 2015

Chapter 4 Biomass sustainability

National Economic Research Associates (NERA) and Imperial College

[*UK Renewable Subsidies and Whole System Costs: The Case for Allowing Biomass Conversion to Compete for a CfD*](#)

Prepared for Drax

16 February 2016

Renewable Energy Association

[Biomass website](#)

Renewable energy statistics collection covering the Digest of United Kingdom (DUKES), Energy Trends and regional data.

<https://www.gov.uk/government/collections/renewables-statistics>

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