

EMR FAQs

Institutional Framework:

1. What new decisions have you announced?

- The update we have published provides:
 - I. Detail on how the delivery plan process will work, and content.
 - II. Who will be accountable for what and to whom.
 - III. Role of a Panel of Technical Experts in reviewing analysis.
 - IV. Role of Devolved Administrations.

2. Why have you chosen the System Operator (National Grid) as the delivery organisation for Electricity Market Reform?

- The System Operator's unique place at the heart of the electricity system means it best meets the criteria Government set out for selection of the delivery body: accountability, independence, value for money, credit-worthiness, technical expertise, and financial and commercial skills. As a private body it is independent of Government, providing investors with confidence that the schemes will operate transparently and predictably. However, this independence will be balanced through structures to ensure clear accountability, such as final sign-off of plans by Government and regular reporting by the SO to Government. OfGem will oversee the System Operator's delivery performance, in line with its role as market regulator.

3. How will the performance of the delivery organisation be monitored?

- The System Operator will report regularly to Government on delivery against its objectives and the delivery plan. OfGem will oversee the System Operator's delivery performance, in line with its role as market regulator.

4. What role will Government play?

- The Government will set the objectives, take the policy decisions, and establish the parameters of the System Operator's delivery role. In taking policy decisions, Government will consider evidence and analysis provided by the System Operator, as well as input from other experts.

5. What is the delivery plan?

- Government will publish a delivery plan every five years, to provide certainty and clarity on its long-term objectives, to communicate its key policy decisions to support the effective delivery of the EMR mechanisms, and to set out its analysis on the expected impacts of its decisions on its objectives and how those might be met. The System Operator will report annually to Government on how the mechanisms have been delivered and updated analysis of the implications for Government's objectives. This will support Government's annual updates to the

delivery plan, which will include confirmation of policy decisions, for example on the volume of capacity to contract for through the Capacity Market (assuming it is initiated), as well a summary of information on the delivery of the mechanisms.

6. Will the delivery body have an explicit decarbonisation target?

- Every five years Government will publish a delivery plan to provide certainty and clarity on Government's long-term objectives: ensuring a secure electricity supply; investment in sustainable, low carbon technologies; and maximising the benefits while minimising the costs. The first step in the process is for Government to commission the evidence and analysis that it needs in order to be able to take its decisions on an informed basis. To guide the System Operator's analysis, the Government will identify its high-level objectives such as the UK Renewables Target^[1], the UK's Carbon Budgets^[2] and any security of the electricity supply objective. The intention is to ensure that Government is fully informed of the potential impacts of its decisions before it takes them.

7. When will there be more detail on the payment models for CfD and the Capacity Market

- The draft CfD Operational Framework set out further detail on the operation of the CfD, for discussion with industry and other interested parties.
- The CfD legal framework and payment model outlined in the draft operational framework and the draft Bill reflects our current preferred option. The Government recognises that industry has strong concerns about this model and has suggested alternatives. We are seriously considering these concerns and the alternatives and it is expected that there will be further detailed consideration given to these questions as part of the pre-legislative scrutiny process.

8. How will the legislative framework and delivery plan be transparent and take account of the views of industry/ investors/ consumers?

- Both the delivery plans and the legislative framework will be published and thus available to any member of the public. When developing the evidence and analysis for the delivery plan the System Operator will engage extensively with industry before providing it to Government, including through a call for evidence, and there will be ongoing scrutiny of the process by an independent panel of technical experts. Having considered the SO's analysis and the Panel's report, Government will publicly consult on its draft delivery plan before taking final decisions.
- In developing the detail of the institutional framework and the delivery plan process, we will continue to hold regular discussions with a broad range of

^[1] Set out in EC Directive 2009/28/EC, transposed via the Promotion of the Use of Energy from Renewable Sources Regulations 2011 <http://www.legislation.gov.uk/ukxi/2011/243/made>

^[2] http://www.decc.gov.uk/en/content/cms/emissions/carbon_budgets/carbon_budgets.aspx

stakeholders, including investors, consumer groups, NGOs, generators and suppliers and there will be further formal consultation.

9. How will FiT CfDs and the capacity market be delivered in the Devolved Administrations?

- The Government has now agreed the important part each devolved administration will play. Scottish and Welsh Ministers will be consulted by DECC before decisions are taken on CfD strike prices. Because energy is broadly devolved to Northern Ireland Ministers DECC will seek to get the consent of Northern Irish Ministers before setting the CfD strike prices for Northern Ireland. In the unusual event where Northern Irish Ministers cannot agree with the SoS, they will be able to set their own strike prices, but any additional costs would not be borne across the UK. Finally, because there is an all Ireland energy market which has its own capacity mechanism in place in Northern Ireland, the UK Government's proposed Capacity Market will apply in GB only.

10. What if National Grid has a conflict of interest in delivering EMR?

- There are many important and valuable synergies from the System Operator taking on the EMR delivery role. However, it is also possible that it could give rise to conflicts of interest with National Grid's existing roles in the electricity market, for example as owner of the transmission network in England and Wales, or its other commercial interests. DECC and Ofgem are conducting a joint piece of work to assess the extent to which the System Operator performing the EMR delivery role creates new conflicts of interest and/or new synergies for National Grid from when National Grid formally takes on the delivery role.
- We published an open letter to stakeholders in April seeking views on potential synergies and conflicts of interest. A summary of responses has been published on our website:
[\[http://www.decc.gov.uk/en/content/cms/consultations/emr_coi/emr_coi.aspx\]](http://www.decc.gov.uk/en/content/cms/consultations/emr_coi/emr_coi.aspx),
- The project will produce final recommendations by the end of the year.

Capacity Mechanism

11. What new decisions are you announcing?

- We are not announcing any firm decisions, but we are setting out the design questions we are considering, and sharing emerging thinking in the following areas:
 - I. That we are minded to exclude Contracts for Difference funded plants from the Capacity Market to avoid overcompensation of low carbon plants.
 - II. That we see problems with a pure financial Capacity Market model, and do not expect to choose a model that cannot provide assurance that physical capacity is in place.
 - III. If making a distinction between new and existing plants in the Capacity Market, Ministers expect that plants becoming operational between now and the introduction of a Capacity Market would have the option of being treated as 'new'. This will help ensure investments are not deterred until the Capacity Market is introduced.
- We intend to provide decisions on these issues later this year.

12. What is a Capacity Market?

- A Capacity Market is intended to address resource adequacy, that is to ensure sufficient reliable and diverse capacity to meet peak demand, for example during cold, still periods where demand is high and wind generation is low.
- At a high-level the Capacity Market will work as follows:
 - I. A forecast of future peak demand will be made a number of years ahead;
 - II. The total amount of capacity needed to ensure security of supply will be contracted through a competitive central auction; and
 - III. Providers of capacity successful in the auction will enter into capacity agreements, committing to be available to provide electricity when needed in the delivery year (in return for a steady capacity payment) or face penalties.

13. Why do we need a Capacity Market?

- There is a risk to security of electricity supplies in the medium term, as over a fifth of existing capacity is expected to close over the next decade and more generation which is intermittent (wind) or less flexible (nuclear) generation is built to replace it.
- The changing nature of our market creates an investment challenge, in particular as the increased unpredictability of the market – for example as a result of volatility of electricity wholesale electricity prices and concern about regulatory

intervention – potentially makes investment in flexible capacity more difficult. This increases the risk that there will not be sufficient capacity available to meet demand, particularly in periods of low wind and high demand.

- The Government is taking action now to address this risk by legislating to introduce a Capacity Market.

14. How big is the security of supply problem?

- We model the future security of our electricity supply by projecting the future capacity margin (the gap between peak demand and the total amount of capacity), and estimate what this is likely to mean in terms of failure to deliver energy – potentially leading to voltage reductions¹ and power cuts.
- In our central scenario, the security of supply outlook remains broadly healthy until the 2020s, but margins become tighter in that decade. We have also modelled a plausible ‘stress test’ which sees the capacity margin becoming tight in the second half of this decade.
- It is not possible to say with certainty the scale or timing of any capacity shortage. But because there is potential for a capacity shortfall, we are taking clear action to ensure the GB market can continue to deliver high levels of security of supply by legislating to introduce a Capacity Market.

15. How does a Capacity Market work?

- A Capacity Market aims to ensure that there is enough reliable capacity to meet demand – reducing the likelihood of costly power cuts.
- A Capacity Market puts in place agreements to provide reliable capacity, up to the total volume required in GB to cover periods of high demand. The Capacity Market operates alongside the electricity market – it does not replace it.
- Providers of capacity – including existing and new plant, and non-generation technologies such as demand side response and storage – will enter into an auction to secure capacity agreements.
- If providers of capacity are successful in the auction, they will receive, in the delivery year, a payment to provide reliable capacity when needed, and be penalised if they fail to deliver.

¹ In voltage reduction, the system voltage is reduced by a few %, and so performance of heaters, lights etc. diminish a little. This has no significant impact on customers, but after a while systems start to compensate e.g. a heater may run longer, a consumer may turn more lights on.

- The costs of capacity will be shared among suppliers, but suppliers will benefit from lower and less volatile electricity prices because the Capacity Market ensures adequate capacity is brought forward to avoid the high-demand conditions that lead to high prices in short term markets.

16. What impact will the Capacity Market have on domestic bills?

- Modelling suggests that the introduction of a Capacity Market should have a limited impact on bills, and could reduce them slightly compared with what they would otherwise have been. However, the costs of the Capacity Market will ultimately depend on the extent of the security of supply problem, and on detailed mechanism design.
- The possible reduction in bills is because a Capacity Market is likely to result in there being far fewer periods where there is very little spare electricity capacity. At these times, prices in the current wholesale market could rise very high and all generators selling electricity would benefit from scarcity rents – or windfall payments. This can have a significant impact on consumer bills.

17. When will you be providing more detail on the design of the Capacity Market?

- The Technical Update published in December 2011 sets out high-level decisions on the design of the Capacity Market.
- In the annex on the Capacity Market in the Electricity Market Reform May policy update sets out our emerging thinking on the Capacity Market design.
- We are proceeding with detailed design of the Capacity Market in parallel with legislation being taken through Parliament and are working closely with stakeholders to provide more certainty on how the Capacity Market will work and minimise impacts on future investment decisions.
- We intend to set out more detail on key design decisions by the end of the year.

18. When could the first Capacity Market auctions be run?

- Ministers will decide when to run the first auction process based on future estimates of security of supply from the System Operator and possibly other technical experts such as Ofgem.
- Our central scenario (published in December 2011), suggested a capacity problem could arise in the next decade. However, a plausible stress test scenario indicated a shortfall could arise in the middle of this decade.

- Given this uncertainty, the legal framework for the Capacity Market will be put in place as soon as possible and, if necessary, the first capacity auction could, if needed, be run by the System Operator as early as 2014.

19. How long is the gap between the first capacity auction and delivery of capacity?

- We intend that auctions will be run around 4 or 5 years ahead of the delivery year to allow for long build times and maximise the range of participants in the auction.
- This lead time could be compressed if necessary to ensure security of supply. A capacity auction process with a shorter lead time could stop existing plants closing, incentivise maintenance investment in existing plant, incentivise mothballed plants to re-enter the market, or encourage additional demand side response or other non-generation solutions.

20. Why have you chosen a Capacity Market over other options?

- A Capacity Market offers the surest way to ensure security of supply against a range of potential scenarios, because it addresses this investment problem at source. Under a Capacity Market, providers of reliable capacity exchange volatile revenues in the electricity market for a steady, predictable revenue flow.
- A Capacity Market also helps to reduce the likelihood of wholesale electricity prices rising to very high levels as a result of scarcity, and can provide support to non-generation technologies such as demand side response and storage.

21. How will non-generation technologies and approaches be treated in the Capacity Market?

- The Government is keen for non-generation technologies and approaches to form a central element of delivering security of supply and play a fair and equivalent role in a capacity mechanism.
- We are developing our approach to non-generation technologies with our expert industry group in the detailed design phase and will provide more detail on this at the end of the year.

22. What will be the impact of introducing this mechanism on the wholesale market?

- The Capacity Market works alongside the electricity market – it does not replace it.

- The Capacity Market pays all providers of reliable capacity a stable revenue that is intended to replace revenues from high prices that would otherwise be earned by market participants at times when capacity is scarce. So introducing the capacity mechanism should reduce wholesale electricity prices at times of scarcity (in comparison with a scenario where the Capacity Market is not introduced).

Contracts for Difference (CfD)

23. What new decisions are you announcing?

- The draft Operational Framework for CfDs provides further sighting to industry on key aspects of the CfD design, and will provide a platform for further engagement and discussion.
- It is intended to give a high level overview of the CfD system, and focuses on four primary elements: the price setting process, the system for allocating CfDs, the key terms of the CfD (such as duration and reference price source), and the legal framework underpinning it.
- The Operational Framework will be finalised in the autumn

24. What are the next steps for the CfD beyond that?

- The Government plans to publish the first CfD strike prices (for eligible renewable electricity technologies) in draft by mid-2013 and final prices by end 2013, in advance of issuing the first CfDs to generation projects around mid 2014.

25. Why did we choose the CfD over other alternatives?

- The White Paper set out our conclusions that the CfDs will provide the most efficient long term support for all forms of low carbon generation. The CfD gives greater certainty and stability of revenues by removing exposure to volatile wholesale prices and protects consumers from paying for support when electricity prices are high; it consequently makes the development of low carbon generation cheaper for both investors and consumers, and it is suitable for all forms of low carbon generation.

26. What is different about the support under CfDs compared to the Renewables Obligation?

- The CfD provides for greater stability of revenues by providing a fixed strike price. This means that investors in low carbon plant are protected from wholesale price volatility and should make the development of low carbon generation cheaper for both investors and consumers in the long term.
- The Renewables Obligation, in comparison, acts as a premium on top of the wholesale electricity price. Therefore investors are not protected against wholesale price volatility, e.g. when electricity prices drop, and as it is not capped consumers continue to pay even when electricity prices rise to a level where generators' costs are covered.

27. When will a CfD be signed and how is it better than the Renewables Obligation?

- Accreditation (e.g. inclusion in the Renewables Obligation) and the level of support is only assured for the Renewables Obligation once the plant commissions. The CfD will give developers certainty over the price they will receive for their power earlier in the project development process. This is because developers will be able to apply for and be awarded CfDs immediately prior to reaching a financial investment decision on a project.

28. When will CfD strike prices be published?

- The Government is aiming to publish the first CfD strike prices for renewable electricity technologies by mid 2013 and final strike prices by end 2013. This will provide investors with clarity up to a year ahead of the first issue of CfDs.

29. When will renewable generators be able to compare and make a choice between the RO and CfD tariffs?

- Eligible projects will be able to compare levels of support under the Renewables Obligation and CfD strike prices from mid 2013 when the first draft CfD strike prices are published. Eligible projects planning to commission in advance of 31 March 2017 (the closing date of the Renewables Obligation) will be able to make a choice between the two schemes from mid 2013.

30. What is the process and timetable for moving to auctions?

- As set out in the Electricity Market Reform White Paper it is our intention to move to a competitive price setting process as soon as reasonably practicable. However, we envisage that the price setting process will need to be an administrative process initially, moving to a more competitive procedure for some technologies once the market allows. This may occur from 2017.
- We have set out a number of factors that will affect the decision to introduce auctions or tenders and these include:
 - I. having confidence that there are enough potential participants in the auction or tender for there to be competitive tension;
 - II. knowing that the development capacity of the potential participants exceeds the volume of new development sought by the delivery body in a given time period or tendering round; and
 - III. knowing that the projects or technologies eligible for the tender or auction are comparable so that the strike price is a meaningful way to discriminate between them.
- The Government's ultimate aim is to move to a technology neutral competitive process in the 2020s. This is likely to be preceded by a technology specific

competitive process which we are planning to implement for certain technologies from 2017.

31. Will the banding review for the Renewables Obligation be used to set CfD tariffs?

- For the initial CfD price setting process for renewables, the process will be similar to the most recent Renewables Obligation Banding Review, and much of the same data will be used to ensure consistency between the two schemes. However, additional data may be required to cover the pricing period beyond 2017. Adjustments will also be made where appropriate, to reflect the different nature of the CfD mechanism; for example adjusting analysis to account for the lower cost of capital available under the CfD.

32. When will a windfarm be paid under CfD?

- Under the FiT CfD, wind farms will be paid on the basis of the amount of electricity they produce. We are still looking at options for how often generators will receive (or make) CfD payments. Our current view is that payments should be made at least every month, but possibly more frequently.
- We are also looking at options for paying generators, including wind farms, on their availability in certain limited cases. This would only happen if it helps to ensure system stability and reduces negative prices.

33. How will wind farms gain CfD support on days that the wind does not blow?

- The Government is minded that wind farms and other low carbon generation will need to generate electricity in order to receive CfD payments. Wind generators will not receive CfD payments for those days on which the wind does not blow.

34. How does the work on liquidity that Ofgem is doing tie in with the CfD?

- Ofgem is actively pursuing measures to improve liquidity and we expect them to reach decisions shortly. Ofgem and DECC will work to ensure that EMR outcomes and the measures taken on liquidity are compatible and taken together deliver a coherent market framework that supports effective competition and investment and enables the CfD to function effectively.

35. What are the interactions between the CfD and the Capacity Market?

- The CfD will facilitate investment in new low-carbon electricity generation while the Capacity Market will provide a financial incentive to ensure that there is enough reliable electricity capacity to meet demand.
- We are considering options for resolving how plants receiving support through the FiT CfD and Renewables Obligation (RO) interact with a Capacity Market, and we will take decisions on this in the detailed design phase. We will avoid

overpaying low-carbon plant for capacity and ensure that there are appropriate incentives to be available.

- Subject to further work in the detailed design phase, we are currently minded to exempt FiT CfD plant from non-availability penalties under the Capacity Market and that this plant should not receive payment.
- If plants receiving support through the CfD are excluded from the Capacity Market, the reliable capacity they are expected to provide will be deducted from the total volume of capacity contracted for.

36. Will there be contracts with Government?

- The FiT CfDs will be supported by Government through legislation. Our aim is to provide investors with a level of certainty equivalent to a conventional contract with a counterparty who has a strong credit rating. We have set out a number of key principles to ensure a robust and stable legal framework for the FiT CFD:
 - I. there should be no unilateral changes made to FiT CfD terms once signed, other than through pre-established procedures and in accordance with parameters set in the CfD itself.
 - II. payments will flow from counterparties to generators (or vice versa) as defined in the CfD.
 - III. the system will limit exposure to default, through amongst other things an efficient and effective settlement mechanism.

37. Who will be the counterparty to the CfDs?

- The Government is aware of the importance of creating an investable CFD structure and are working closely with industry to develop an appropriate approach. The Draft Bill and Operational Framework set out a legislative framework and payment model which is based on a statutory obligation on suppliers. Under this model licensed suppliers collectively would act as a counterparty to the CfD. However we will be seeking feedback from industry on this approach and will not be taking a firm decision until the Bill is published.

38. How will strike prices be calculated for renewable technologies?

- The System Operator will be commissioned to conduct analysis and issue a call for evidence from industry on both the market costs of building each of the renewable generation technologies eligible for support under the CfD, and their deployment potential. This data will then be used to model the renewable electricity market, including a forecast of the levelised cost (including capital, fuel, operating and maintenance costs) per MWh of each renewable technology. Cost benefit analysis will be carried out based on this model to examine the impact of

different strike prices on deployment and Government's objectives (security of electricity supply, meeting renewable and decarbonisation targets, and minimising costs to consumers). The Government will make a decision on the level strike prices are to be set at in order to bring forward maximum deployment at least cost to consumers mindful of Government's wider objectives.

Carbon Price Floor (CPF)

39.What changes to the Carbon Price Floor (CPF) will be introduced in Finance Bill 2012?

- Following the announcement at Budget 2011 that a carbon price floor (CPF) would be introduced on 1 April 2013, most of the primary legislative provisions were included in Finance Act 2011. Legislation in Finance Bill 2012 will introduce the following four additional provisions, the first two of which were announced at Budget 2011:
 - I. lower Carbon Price Support (CPS) rates of climate change levy (CCL) and fuel duty for supplies of fossil fuels to good-quality combined heat and power (CHP) stations that are intended to be used to generate electricity. The levels of the lower rates will be announced at Budget 2012;
 - II. abated CPS rates of CCL for supplies of fossil fuels to generation stations fitted with carbon capture and storage (CCS) technology;
 - III. clarification over which person will be responsible for charging and accounting for the CPS rates of CCL; and
 - IV. changes to the taxation under the carbon price floor of solid fuels from weight (i.e. kilogram) to heat / calorific value (i.e. joule).
- The reliefs outlined above also require secondary legislation, which will also set out the detailed administrative provisions to enable HMRC to administer the CPS rates of CCL. Other secondary legislation will also provide that oils used in electricity generation will no longer be fully relieved of fuel duty, which will, in effect, make such oils subject to CPS rates of fuel duty, with an effective lower rate applying to oils used in CHP stations. All these changes take effect from 1 April 2013.

40.How have the CPS rates for 2014-15 been set?

- Carbon price support rates are set two years in advance. Budget 2012 set 2014–15 carbon price support rates equivalent to £9.55/C02 in line with the carbon price floor set out at Budget 2011. For a detailed explanation of how CPS rates are set, please see the Government's response to the CPF consultation (http://www.hm-treasury.gov.uk/d/carbon_price_floor_consultation_govt_response.pdf).

Emissions Performance Standard (EPS)

41. What new decisions are you announcing?

- We are providing further technical details on aspects of the EPS design and its implementation, method for calculating plant CO₂ limits overview of intended approach for monitoring and enforcement treatment of upgrades and life extensions, treatment of heat and technology scope.

42. What level will the EPS be set at?

- The EPS will be set as an annual limit, equivalent to 450g/kWh at baseload.

43. Who will the EPS apply to?

- The EPS will be applicable to new fossil fuel power stations.

44. What is 'grandfathering'?

- "Grandfathering" refers to the Government's policy of limiting the impact that possible future changes to the level of the EPS could have on plants that are subject to EPS when they are consented. Without this, investors in new gas plant that are needed to maintain security of supply may not have sufficient certainty about the operation of EPS. As part of a wider package of announcement on gas generation, the Government confirmed in March that plant consented under the 450g/kWh-based limit will be subject to that limit until 2045.

45. How will the EPS affect plant with Carbon Capture and Storage (CCS)?

- There will be exceptions for plant within the CCS Programme, to help support the development of the technology. The provisions under the draft Bill provide for a consultation on the policy for these exceptions.

46. How will biomass be treated under the EPS?

- Emissions from biomass will not count towards the EPS, and will be treated in a way consistent with its the European Union Emissions Trading System (EU-ETS).

47. Who will be responsible for administering the EPS?

- This will be subject to detailed regulation, but we expect that the relevant environmental regulators will be best placed to administer the EPS.

Enabling investment decisions for early projects

48. When should a developer approach DECC on this matter?

- The Technical Update provides a timeframe of up to June 2013 for developers to submit an expression of interest to DECC. This date may be subject to review.

49. How many projects do you expect to apply?

- It is difficult to say at this early stage of inviting expressions of interest. We will carry out an ongoing assessment of projects and volume.

50. What if projects come forward to start discussions only to be told later that they do not qualify for the CfD?

- We do not expect any form of enabling product to be provided where a project does not meet the eventual eligibility criteria for the CfD. The Technical Update alerts developers to this possibility by explaining that the continuation of any discussions with a developer about a project will be conditional on the project meeting published FiT CfD eligibility criteria.