



Electricity Market Reform Project
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The Renewable Energy Company (Ecotricity)
Consultation Response to Electricity Market Reform

To whom it may concern (Electricity Market Reform Project),

As a small supplier of both electricity and gas, Ecotricity welcomes the opportunity to respond to DECC's consultation on the Electricity Market Reform. Ecotricity own and operate several onshore wind farms throughout the UK, providing renewable energy to our customers. We are also adding solar parks to our generation mix in the very near future.

Ecotricity's response is divided into two parts:

- A) Answers to the questions outlined in the consultation and
- B) Our conclusion/summary views on the proposals outlined in the consultation.

A) Answers to questions detailed in the consultation paper

Current Market Arrangements

1. Do you agree with the Government's assessment of the ability of the current market to support the investment in low-carbon generation needed to meet environmental targets?

Ecotricity does not entirely agree with the Government's assessment of the ability of the current market to support the investment in low-carbon generation needed to meet environmental targets. The Government, suppliers and generators have already invested a significant amount in the current schemes to promote low-carbon generation. Ecotricity thinks that the current Feed-in Tariff model needs to be allowed to embed and develop to

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ensure environmental targets are met. Increased scheme uncertainty leads to projects being held back and not being able to flourish as designed.

Any assessment of the UK's ability to meet environmental targets needs to also consider energy efficiency initiatives such as the Green Deal, Carbon Reduction Commitment, Carbon Emissions Reduction Target and Energy Company Obligation from December 2012. All these measures will enable the UK to reduce their consumption and aid the ability of the UK to meet environmental targets.

2. Do you agree with the Government's assessment of the future risks to the UK's security of electricity supplies?

Ecotricity agrees with the Government's assessment of the future risks to the UK's security of electricity supplies. However, Ecotricity would like to see more detail on future projections of security of supply and where the information was obtained. We disagree that the current market arrangements are not sufficient to ensure increased generation capacity is built. The tightness of supply and demand should lead to rising prices and it will then become viable for more generation capacity to be built. The Government should allow the market to respond with the supply to meet the demand alongside support for cleaner generation. However, if the existing big suppliers are unable or unwilling to meet consumer demand new parties should be encouraged to compete in the market.

Options for Decarbonisation

Carbon Price Support

As requested, Ecotricity have responded to HM Treasury and HMRCs consultation on carbon price support directly.

Feed-in Tariffs

3. Do you agree with the Government's assessment of the pros and cons of each of the models of feed-in tariff (FIT)?

Ecotricity predominately agree with the pros and cons of each model of Feed-in Tariff outlined in the consultation. Ecotricity feel that the fixed Feed-in Tariff model would lead to the Government setting the price for electricity and needs to be carefully considered, as this would be a movement away from the market driving the price of electricity. However, we should note that a fixed Feed-in Tariff model will remove the risk from generators and may therefore promote build.

Additionally, we feel the premium Feed-in Tariff could cost the same as the other proposed models, depending on the level at which it is set and therefore disagree with the Government's assessment. The premium Feed-in Tariff model is the current model in practice, therefore the reasoning for choosing this model over the others are still present. The premium Feed-in Tariff model was chosen previously to encourage use of the generation onsite but also to encourage any unused generation to be exported and not wasted. Therefore, promoting generating capacity where it is needed most.

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Ecotricity believe that any model chosen needs to reward efficiency and not just enable technologies to become viable.

4. Do you agree with the Government's preferred policy of introducing a contract for difference based feed-in tariff (FIT with CfD)?

Ecotricity are in favour of the CfD model over the other Feed-in Tariff models outlined in this consultation. The CfD model enables a level of control by the Government whilst allowing the market to maintain a level of integrity. However, we are concerned that the CfD Feed-in Tariff will be administration heavy and will require a lot of additional work to establish the calculation.

5. What do you see as the advantages and disadvantages of transferring different risks from the generator or the supplier to the Government? In particular, what are the implications of removing the (long-term) electricity price risk from generators under the CfD model?

Ecotricity feels that transferring risks from the generator or the supplier to the Government will lead to more certainty for investors and cheaper finance for projects. However, Ecotricity also feel that if the Government carries the risk they will not be as efficient in the development of Feed-in Tariffs as private investors. Projects with greater risk can yield greater returns and therefore, can have larger appeal to private investors.

Ecotricity are concerned by the cost of Feed-in Tariff's being socialised across all consumers, akin to the current Feed-in Tariff arrangement. The cost of Feed-in Tariffs should be funded by the additional revenues collected through the carbon price support and then topped up through socialisation.

6. What are the efficient operational decisions that the price signal incentivises? How important are these for the market to function properly? How would they be affected by the proposed policy?

Price signals should incentivise economic generation strategies for all generators. This is important to optimise the use of all generation within the industry.

7. Do you agree with the Government's assessment of the impact of the different models of FITs on the cost of capital for low-carbon generators?

Ecotricity partly agrees with the Government's assessment of the impact of the different models of Feed-in Tariffs on the cost of capital for low-carbon generators. The Government states in the consultation that the more risks passed from the generator to the Government, the lower the financing costs or cost of capital for a low-carbon generating projects. However, this is will only be the case if there is stability and reliability in the chosen model by the Government. There will need to be some guarantee to try and rebuild confidence that will have been shaken by the turnaround in available support in the current Feed-in Tariff scheme. Ecotricity agrees with the Government's position that, to attract new entrants and new sources of finance to invest in low-carbon electricity generation at the pace needed action is needed now as any model chosen will take time to embed.

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The Redpoint assessment in Table 4 of the consultation illustrates the cost of capital for different generating technologies under each of the models of Feed-in Tariff. Ecotricity agrees that the premium Feed-in Tariff will remove risk from generators, so the cost of capital should be akin to the Renewable Obligation. Ecotricity also agrees that the fixed Feed-in Tariff's and CfDs might be more attractive to a wider group of investors. In particular smaller independent generators and institutional investors as these models are higher risk and therefore could have a greater cost of capital but yield higher returns. However, investment in the fixed Feed-in Tariff model is dependent on the stability of the scheme. Ecotricity thinks that the CfD Feed-in Tariff being more market dependent will take more time to embed and therefore in the short term could lead to increased cost of capital but will lead to a more stable support mechanism longer term.

8. What impact do you think the different models of FITs will have on the availability of finance for low-carbon electricity generation investments from both new investors and the existing investor base?

At first there will be no impact on the availability of finance from the different Feed-in Tariff models. For a Feed-in Tariff model to thrive there needs to be availability of finance from both new investors and the existing investor base. For this to happen there needs to be certainty in the scheme. The review of the current Feed-in Tariff scheme taking place is affecting the stability of the scheme. Any Feed-in Tariff model chosen needs to be allowed to embed and must be bound by statute against premature review in order to promote investment.

9. What impact do you think the different models of FITs will have on different types of generators (e.g. vertically integrated utilities, existing independent gas, wind or biomass generators and new entrant generators)? How would the different models impact on contract negotiations/relationships with electricity suppliers?

Ecotricity feel that less mature technologies will find it more beneficial to receive a fixed payment. Therefore, the fixed Feed-in Tariff model would promote more renewable innovation. It is important that any model chosen promotes efficient types of generation and the market is allowed time to adjust and react to the true market conditions.

10. How important do you think greater liquidity in the wholesale market is to the effective operation of the FIT with CfD model? What reference price or index should be used?

Ecotricity thinks greater liquidity in the wholesale market is important to the effective operation of the Feed-in Tariff with CfD model. For the CfD Feed-in Tariff model to flourish generators need the ability to trade their generation effectively. However, with a CfD Feed-in Tariff model the overall value (p/kWh) remains the same regardless of the proportion provided by Government or by market price. Therefore, how that proportion varies is of no real interest to the generator, so from a generators perspective market liquidity is of no relevance. However, since a liquid market should produce a stable, reliable index then the amount that would need to be provided by Government would be more stable and therefore so would the cost to socialise. Stability and predictability in this regard would likely mean lower costs. Therefore, the CfD model would fulfil all three parts of the National Energy

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Policy Trilemma: security of supply; a low carbon environment; and affordability for customers.

Ecotricity support a reference price being used, such as the spot price on APX or N2EX. Healthier liquidity will lead to a better index price. The index used needs to be reliable; a less reliable index will cost the Government more through increased market volatility. However, if a capacity mechanism is introduced, this should not be included in the reference price.

11. Should the FIT be paid on availability or output?

To ensure efficiency is rewarded there needs to be a mixture of payment on both availability and output. Incentivising output encourages efficiency, incentivising availability will encourage flexibility.

Emissions Performance Standards

Ecotricity has not provided an individual response to questions posed on the emissions performance standards. However, we are able to provide an overview of opinion.

We would like to raise the idea of supporting carbon capture and storage under Feed-in Tariffs as this technology does not emit carbon and should be rewarded as such. Rather than penalising those who do emit carbon, Ecotricity would like to suggest it would be more positive to reward those who do not. Coal is the only means of flexible large scale electricity generation which can be entirely produced by Great Britain independently and can therefore ensure security of supply. Although, only renewable energy is truly secure in the long term.

The primary concern for Ecotricity is the increase in consumer bills as a result of the emissions performance standard. This proposal will therefore not satisfy part of the National Energy Policy Trilemma; affordability for customers.

Options for Market Efficiency and Security of Supply

19. Do you agree with our assessment of the pros and cons of introducing a capacity mechanism?

Ecotricity is unsure that introducing a capacity mechanism will improve security of supply above and beyond the current market arrangements. The cost of capacity payments need to be set to a purposefully higher level than the current cost of peak demand buy-out, leading to increased investment.

Ecotricity does not agree with the pros identified in the consultation that a capacity mechanism will lead to reduced balancing costs. Ecotricity thinks that introducing a capacity mechanism will lead to increased cost to consumers.

20. Do you agree with the Government's preferred policy of introducing a capacity mechanism in addition to the improvements to the current market?

The primary concern for Ecotricity is the cost of introducing a capacity mechanism to the end consumer. Therefore this proposal is unlikely to aid part of the National Energy Policy

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Trilemma; affordability for customers. We are concerned that a capacity mechanism could lead to generators holding back on generation until financially persuaded to generate. Any capacity mechanism introduced needs to be tightly regulated to guarantee this does not occur.

Ecotricity generates electricity using renewable technologies and therefore will be unable to benefit from the introduction of a capacity mechanism. This is the case for all renewable electricity generators, unless there is significant development in storage technologies. Therefore, this measure will not promote renewable generation.

One suggestion Ecotricity would like to make is that rather than the Government introducing a capacity mechanism, an obligation on generators to build a certain amount of reserve capacity could be introduced.

21. What do you think the impacts of introducing a targeted capacity mechanism will be on prices in the wholesale electricity market?

Ecotricity feel that by the Government introducing a targeted capacity mechanism, wholesale electricity prices will increase. The increased costs should enable investment to ensure security of supply at peak demand.

22. Do you agree with Government's preference for the design of a capacity mechanism:

- *a central body holding the responsibility;*
- *volume based, not price based; and*
- *a targeted mechanism, rather than market-wide.*

The cost of security of supply is concerning to Ecotricity. Rather than funding being allocated to capacity payments, could it not be put into demand-side response and the development of smart grids? Perhaps consumers should take some responsibility for their actions and not have continuous supply guaranteed. Capacity payments will enable the status quo to be maintained and does not address the real market issues.

Ecotricity feel that a targeted capacity mechanism would be open to exploitation. We would also like to see less intervention into the market. Ecotricity favour a market-wide capacity mechanism, as this option will not enable generators to manipulate the system.

Ecotricity does not support a capacity obligation as this would not be adequate to guarantee security of supply.

23. What do you think the impact of introducing a capacity mechanism would be on incentives to invest in demand-side response, storage, interconnection and energy efficiency? Will the preferred package of options allow these technologies to play more of a role?

If the capacity mechanism is designed with demand-side response, storage, interconnection and energy efficiency in mind then it will enable these technologies to play more of a role. We feel a capacity mechanism needs to be considered along with progress in demand-side

response. A capacity mechanism in conjunction with smart meters and smart grids could be workable.

24. Which of the two models of targeted capacity mechanism would you prefer to see implemented:

- *Last-resort dispatch; or*
- *Economic dispatch.*

Ecotricity are in support of the economic dispatch model of the targeted capacity mechanism as this model can be the most easily regulated. If the last-resort dispatch model was chosen the market could be squeezed intentionally to set the price.

25. Do you think there should be a locational element to capacity pricing?

Yes, Ecotricity agree there should be a locational element to capacity pricing. A locational element would encourage more generation in areas of higher consumption density such as South East England.

Analysis of Packages

26. Do you agree with the Government's preferred package of options (carbon price support, feed-in tariff (CfD or premium), emission performance standard, peak capacity tender)? Why?

Ecotricity is in support of the Governments preferred package of options (Package Three), Feed-in Tariff with CfD, emissions performance standard, carbon price support and capacity payments but with a market-wide capacity mechanism in accordance with our comments and suggestions above.

27. What are your views on the alternative package that Government has described?

Ecotricity agree that if the design and implementation issues for introducing a CfD Feed-in Tariff model cannot be resolved then an alternative package will have to be introduced. Ecotricity is in support of Package Two, where a system of premium Feed-in Tariff's replaces the CfD because we feel the premium Feed-in Tariff could cost the same as the other proposed models, depending on the level at which it is set. Furthermore, the premium Feed-in Tariff model is the current model in practice, therefore the reasoning for choosing this model over the others are still present.

The two least preferred packages for the Government to introduce in Ecotricity's opinion are Package One and Package Four. Package One relies solely on the carbon price to drive investment and Ecotricity are strongly in support of carbon credits for low-carbon generation rather than exclusive penalties for fossil fuel generation. Ecotricity feel Package Four, which would introduce a fixed Feed-in Tariff model, would lead to the Government setting the price for electricity and needs to be carefully considered. As this package would be a movement away from the market driving the price of electricity.

28. Will the proposed package of options have wider impacts on the electricity system that have not been identified in this document, for example on electricity networks?

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Yes, Ecotricity think there will be wider impacts on the electricity system and need to be carefully considered. Network capacity also needs to be considered, the new types of incentives introduced will need network capacity to support it. The overall impact of increasing network costs will be passed onto all consumers.

29. How do you see the different elements of the preferred package interacting? Are these interactions different for other packages?

Ecotricity feel the interaction of the different elements of Package Three will support each other if designed as such. Further incentivising low-carbon generation and increasing carbon price support should collectively achieve the desired effect of increased low-carbon generator build. Increased low-carbon generation capacity will also require more system balancing therefore; there is a need for capacity payments but with a market-wide capacity mechanism in accordance with our comments and suggestions above. The Emissions Performance Standard element could interact with Feed-in Tariffs by providing support for carbon capture and storage under Feed-in Tariffs as this technology does not emit carbon and should be rewarded as such.

Implementation Issues

30. What do you think are the main implementation risks for the Government's preferred package? Are these risks different for the other packages being considered?

The cost of implementing an incorrect solution is the largest risk. This is the same for all packages considered.

31. Do you have views on the role that auctions or tenders can play in setting the price for a feed-in tariff, compared to administratively determined support levels?

- *Can auctions or tenders deliver competitive market prices that appropriately reflect the risks and uncertainties of new or emerging technologies?*
- *Should auctions, tenders or the administrative approach to setting levels be technology neutral or technology specific?*
- *How should the different costs of each technology be reflected? Should there be a single contract for difference on the electricity price for all low-carbon and a series of technology different premiums on top?*
- *Are there other models Government should consider?*
- *Should prices be set for individual projects or for technologies*
- *Do you think there is sufficient competition amongst potential developers/sites to run effective auctions?*
- *Could an auction contribute to preventing the feed-in tariff policy from incentivising an unsustainable level of deployment of any one particular technology? Are there other ways to mitigate against this risk?*

Ecotricity feels prices should not be set for individual projects or technologies. Prices should be over-arching and in accordance with predicted output and availability data. Furthermore, Ecotricity does not believe there will be sufficient competition amongst potential developers/sites to run effective auctions.

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We do not think that an auction could contribute to preventing the Feed-in Tariff policy from incentivising an unsustainable level of deployment of any one particular technology. People investing into solar at the moment, are not necessarily doing so because of the overall rate of return, which is significantly lower than for an equivalent capacity wind park and more to do with the ease of build and of gaining planning consent.

32. What changes do you think would be necessary to the institutional arrangements in the electricity sector to support these market reforms?

Since the amount of distributed generation directly affects the level of socialised imbalance Elexon apportions via the Group Correction Factors. Ecotricity believe it should be Elexon who operates the Feed-in Tariff scheme in place of Ofgem.

33. Do you have view on how market distortion and any other unintended consequences of a FIT or a targeted capacity mechanism can be minimised?

Analysis should be undertaken on exhaustive possibilities of where unwarranted additional value can be gleaned from market participants.

34. Do you agree with the Government's assessment of the risks of delays to planned investments while the preferred package is implemented?

The cost of implementing an incorrect solution is the largest risk. If the Government stick to their implementation timetable then projects can be planned accordingly. Any delay in implementing the reforms will cause uncertainty in the market and will lead to delays in investment and subsequent build. However, the Feed-in Tariff with CfD is the preferred option and to ensure it is implemented successfully enough time to implement the solution correctly should be allowed for.

35. Do you agree with the principles underpinning the transition of the Renewables Obligation into the new arrangements? Are there other strategies which you think could be used to avoid delays to planned investments?

Ecotricity agrees with principles underpinning the transition of the Renewables Obligation: to ensure that implementation proceeds on a timetable that enables investors to bring forward projects they are proposing, to minimise uncertainty for investors during the transition and to smoothly transfer responsibilities across bodies where responsibilities are reallocated.

36. We propose that accreditation under the RO would remain open until 31 March 2017. The Government's ambition to introduce the new feed-in tariff for low-carbon in 2013/14 (subject to Parliamentary time). Which of these options do you favour:

- *All new renewable electricity capacity accrediting before 1 April 2017 accredits under the RO;*
- *All new renewable electricity capacity accrediting after the introduction of the low-carbon support mechanism but before 1 April 2017 should have a choice between accrediting under the RO or the new mechanism.*

[REDACTED]

Ecotricity believe there should not be a choice of options available to new generators in order to promote security, confidence and stability in the scheme. Providing a choice to generators will make the transition unnecessarily complicated. The Renewables Obligation cut-off for new generators should be made in 2017. Loans from banks will be more expensive and harder to obtain if there is uncertainty in the scheme.

37. Some technologies are not currently grandfathered under the RO. If the Government chooses not to grandfather some or all of these technologies, should we:

- Carry out scheduled banding reviews (either separately or as part of the tariff setting for the new scheme)? How frequently should these be carried out?*
- Carry out an "early review" if evidence is provided of significant change in costs or other criteria as in legislation?*
- Should we move them out of the "vintaged" RO and into the new scheme, removing the potential need for scheduled banding reviews under the RO?*

Ecotricity believe that efficiency should be allowed to develop as part of the Renewables Obligation and the Government should not make the market.

38. Which option for calculating the Obligation post 2017 do you favour?

- Continue using both target and headroom*
- Use Calculation B (Headroom) only from 2017*
- Fix the price of a ROC for existing and new generation*

The option Ecotricity support for calculating the Obligation post 2017 is option one, continue using both target and headroom. The target will need to be reduced in order to maintain headroom. The reverse of the ramping up of the Renewables Obligation scheme will need to be fashioned.

Ecotricity requires assurance that Renewables Obligation Certificate values will not drop. Ecotricity has a large capacity of renewable generation eligible for Renewables Obligation Certificates and therefore trades a large number of Renewables Obligation Certificates each year. Renewables Obligation Certificate values are a key part of our business. Devaluation of Renewables Obligation Certificates would be costly to Ecotricity and to the renewable generation sector as a whole.

B) Our conclusion/summary views on the proposals outlined in the consultation

In conclusion Ecotricity thinks the current Feed-in Tariff model needs to be allowed to embed and develop to ensure environmental targets are met. Increased scheme uncertainty leads to projects being held back. The proposed Feed-in Tariff model Ecotricity favour is the CfD model. However, any model chosen needs to reward efficiency and not just enable technologies to become viable.

Ecotricity agrees with the Governments assessment of the future risks to the UK's security of electricity supplies but the Government should allow the market to respond with the supply to meet the demand. We are also concerned by the overall cost of introducing a capacity

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mechanism to the end consumer. Ecotricity feel that a targeted capacity mechanism would be open to exploitation and instead favour a market-wide capacity mechanism.

The option Ecotricity support for the calculating the Obligation post 2017 is option one, continue using both target and headroom. Ecotricity requires assurance that Renewables Obligation Certificate values will not drop.

In our response to HM Treasury and HMRCs consultation on carbon price support we declared our strong support of carbon credits for low-carbon generation rather than exclusive penalties for fossil fuel generation. We feel this should be in addition to the current emissions trading scheme and not in place of. Low-carbon generation should be incentivised and therefore the financial benefit of carbon credits should sit with such generators. As a green company we are in support of increasing the incentives for low-carbon generation.

Ecotricity would also like to take this opportunity to request that Ofgem continue their work on liquidity and do not hold back on any actions or interventions while the Electricity Market Reform takes place. A liquid market has a key impact on our business model and our ability to do business, it could make the difference between Ecotricity being profitable or not.

We are grateful for the opportunity to comment on the Electricity Market Reform. Ecotricity look forward to your response and the White Paper due to be published in late spring 2011.

Ecotricity welcomes the opportunity to respond and hope you take our comments on board.

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