

Sustainability First Response to BEIS Consultation, 5 November 2021

Designing a framework for transparency of carbon content in energy products: call for evidence

About us

Sustainability First is a charity and think-tank working on social and environmental issues in the water, energy and communications sectors. We have done extensive work on issues around consumer and citizen engagement – see for example our [report](#) as part of our Fair for the Future programme – and also on the role of flexibility – including as facilitators of National Grid’s Power Responsive programme and more widely.

Sustainability First welcomes the opportunity to respond to this consultation on green tariffs. Much of our work focuses on consumers’ role in the energy transition and as the consultation highlights many consumers see using renewable energy as an easy way to play their part in addressing climate change. As such it is vital that consumers have confidence in marketing claims and that greenwashing concerns are addressed.

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Q1: Does the current approach of retrospective annualised matching (using REGO certificates) provide a sufficient level of consumer transparency? Please provide reasons.

It is clear from the press commentary around greenwashing that consumers expect “100% renewable energy” to mean what it says on the tin. They would not expect that on a still day with little wind generation they are being provided with energy that is very likely to have come from a gas fired generator, with a REGO that corresponds to another day when there is a lot of wind.

While the focus in the media has been on the fact that REGOs are separately traded (and of low value), the fact that they cannot be double counted does provide some protection. It is the time granularity that is the root cause of the problem – and also the reason why REGOs are of low value. [A recent paper by Imperial](#) showed that on 3 March only 0.6GW of wind was generated in contrast to 18GW later that month. If suppliers had to have REGOs to cover their green tariffs on 3 March they would have attracted a hefty premium – and helped provide renewable generators with the finance they need. As things stand, suppliers could match the electricity they provided on 3 March with REGOs from the end of the month.

Q2: Can you provide any evidence on your commercial experiences with PPAs for renewable energy? For example – availability, commercial competitiveness etc.

No comment

Q3: Can you provide any evidence on operational issues or other challenges that may materially limit a supplier’s ability to offer PPA backed green electricity tariffs? For example, how do you balance forecasting of consumers usage vs the need to settle on a half hourly basis?

It is clear that suppliers using PPA backed green electricity tariffs will still face challenges in how they then balance supply and demand on a half-hourly basis. We have heard anecdotally of one supplier whose portfolio is 105% matched, reflecting the need to over-procure. However, BEIS could helpfully delve into this area. At present PPA backed tariffs are seen as the gold standard. However it may be that some tariffs that are described as PPA backed reflect an annualised matching and hence energy is still being procured through the balancing market which is not renewable. Transparency remains key.

Q4: Can you provide any insights or evidence as to the role REGO certificates play in financing and commercial decision making?

No comment

Q5: How can green tariffs be regulated to enable consumer choice to drive additional investment in low carbon electricity generation? Please provide reasons.

The question of additionality is difficult – and has been hotly debated since Ofgem introduced its certification scheme back in 2010. There is an argument, reflected in part in the consultation and espoused by for example Dieter Helm, that the level of renewables is determined by the policy framework and hence paying for a green tariff does nothing for the overall level of investment in renewables. This is an unhelpfully static view of the situation. The more customers who are ready to signal through their buying patterns that they are willing to pay a premium for renewable energy, the more confident investors will be and the more government will be willing to set ambitious targets. Choosing a green tariff won't result in more investment in renewable generation today but does still send an important signal and can give consumers a sense of agency in the energy transition. The other element of “additionality” that BEIS might usefully consider goes back to the granularity question. While policy (through the CFD auctions) determines the amount of renewable generation capacity that is built there may still be opportunities to increase the amount actually generated if there were stronger price signals to support renewable generation at times of low wind (beyond the wholesale price signal).

As the consultation acknowledges, most domestic customers do not want to get into the detail of assessing various claims but are looking for simple explanations and assurance from a trusted third party. The regulator's role in this is important – as a trusted source of information. However, one advantage of the USwitch Accreditation panel that I am involved in is that it was able to make decisions quickly in response to market developments and put in place a scheme that is helpful to customers even if it is not perfect – and to then evolve that over time. This is harder for the regulator to do. As a panel we took the view last year that PPA backed tariffs represented the gold standard as they provided additional certainty to investors and more closely reflected what we thought customers expected from a green tariff.

The role of the regulator should be to set minimum standards for green tariffs and also to ensure that companies report on their fuel mix in a transparent way that allows third party intermediaries to provide easy to understand assessments to help consumers make an informed choice. The Energy Digitalisation Task Force has been looking at how to achieve an effective low carbon energy market and reporting of carbon intensity is one of their emerging recommendations.

Ofgem should also make clear the requirement for suppliers to be transparent about what their green tariffs offer (in line with their wider obligations on treating customers fairly). There is also a role

for Ofgem to ensure that the results on price comparison sites are objective and robust and aren't influenced by any contractual arrangements between the switching site and providers.

Q6: Should the ability to report emissions using both market-based and location-based emission factors be maintained, and if so, should there be a requirement to report both side by side in corporate reporting?

Carbon reporting by companies is becoming an increasingly important issue. Organisations like the Science Based Targets Initiative / the Greenhouse Gas Protocol provide robust assurance around the climate targets that companies set and it remains important to align UK emissions reporting approaches with these international standards, while also providing a framework for companies who want to go further (as in the Google example in the consultation).

Moving to a system of carbon reporting that takes account of not just how much energy is used but when it is used would provide an additional impetus for companies to think about demand side response and storage as ways to reduce their carbon footprint. This is key to driving the flexibility markets that BEIS and Ofgem want to see developed. This may well need to start as a voluntary initiative but consistency in the metrics would be helpful.

Q7: Can you provide any evidence regarding the types of messages associated with green electricity tariffs that you believe to be misleading to consumers?

It is also vital that we help consumers understand that when they use energy is becoming at least as important as how much they use, to support the shift to time of use tariffs and the necessary role of flexibility in the energy system. National Grid (and others) now have apps to tell you what % of energy is renewable in your area at any time. This sort of initiative has the potential to get people engaged in thinking about when they use energy and to reduce demand at times of low wind for example. But if you think that you are using 100% renewable energy because of the tariff you are on, the risk is that you will see this sort of information as irrelevant to you.

Q8: Can you provide any evidence as to the type of interventions or remedies (including international best practice approaches) which may help achieve greater transparency in green electricity tariffs?

Larger customers who want to show that they are genuinely committed to using 100% renewables can do this by more granular matching on a voluntary basis. The EnergyTag technology enables that by time-stamping the REGOs in effect¹. Their website includes a comprehensive report on the benefits of more granular reporting and some of the issues it raises.

¹ <https://www.energytag.org/>

Q9: How best do you think the carbon content of energy supplied to a home or business consumer could be made more transparent to consumers?

One feature of IHDs provided as part of the smart meter rollout is that they are required to show the carbon content of the energy being consumed. We have no visibility of the basis on which this is calculated and suspect that the function is relatively rarely used by consumers as it is not easy to access or interpret. However if it could be made meaningful then the technology exists for this information to be provided on a device (the IHD) that all homes are provided with.

With National Grid now making the underlying data openly available to innovators and using hackathons etc to identify new ways of presenting and sharing data, there should be market opportunities for innovative products that could help make this more transparent in a way that responds to growing consumer interest in climate change.

The focus has to move from simply an annualised matched demand to showing carbon intensity in closer to real time.

Q10: Should there be any avenues to accommodate flexibility technologies within a future green tariff framework (should a future framework be necessary)? If so, how could this be achieved?

Accommodating flexibility is clearly important. The biggest issues will be on the treatment of storage where definitional rules will be needed for fuel mix disclosure.

Demand side response (including behind the meter storage) is different but points again to the need for granular reporting.

Q11: Can you provide any evidence on areas where the current REGO system works well or creates barriers to the market offering more innovative ToU tariffs?

No comment

Q12: Are there any other emerging needs you believe a future green or low carbon tariff framework (should a future framework be necessary) should accommodate?

As noted in the consultation there is consumer interest in tariffs linked to local generation. Any new framework should not be a barrier to such tariffs.

Longer term we expect to see energy-as-a-service offerings emerge which might require different approaches.

Q13: Should other forms of low carbon power, such as nuclear, hydrogen, CCUS and CHP be considered as part of any future green or low carbon tariff regulatory developments (should developments be necessary)?

There is clearly a need for these to be considered. From a carbon perspective nuclear should be included and may be relevant for companies setting net zero goals. However, for many domestic consumers nuclear raises different concerns and they would expect a green tariff to be purely renewables based. Other customers would expect a green tariff to be an indication that the company practices as a whole are sustainable. The key of course is for suppliers to provide full transparency as to what is / is not included.

Q14: There is an emerging market for 'green gas' tariffs. Should our work consider any interventions to include these within the tariff regulatory framework?

Green gas tariffs are likely to be of increasing interest and raise similar issues around greenwashing. However, given the low levels of green gas available in the system, most suppliers in the domestic market offer green gas tariffs based around offsetting, which raises its own issues. With many domestic suppliers offering dual fuel tariffs some basic guidance on green gas tariffs would be helpful but electricity remains the priority given the complexity of the issues involved. At this stage there is still a need for basic information about the fact that gas heating contributes to climate change.