



Esk Energy (Yorkshire) Limited

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Consultation on the Feed-in Tariffs Scheme

Response from Whitby Esk Energy

Question 1 Do you agree or disagree with the proposal to end the export tariff alongside the generation tariff, which would close the scheme in full to new applications after 31 March 2019?

We strongly disagree with the proposal to end the export tariff for new applications after 31 March 2019. We also strongly disagree with the proposal to end the generation tariff from that date.

We want to see continuation of the generation tariff and the export tariff for community groups, schools and individual householders. The tariffs promote the installation of renewable energy generators which in turn promotes cost reductions in the technologies. This has been proven with large scale PV and offshore wind which are now approaching viability without subsidy in some locations. There are other significant technologies which still need subsidy to achieve this grid cost parity, one of which is hydropower, the technology which we operate.

The generation tariff should continue until there is conclusive proof for each FIT eligible technology that costs have been reduced to a point that such small scale schemes are financially viable without subsidy. We would also like to see continuation of the export tariff with the existing requirements for an export meter and deemed export assumptions. These should continue until a time when smart metering technology is reliable and widely available. At that point there should be legislation to ensure that all small scale generators of renewable electricity will be paid by an electricity company for actual export to the grid at a price in line with the electricity market depending on time of day and time of year.

The strongest reason for opposing the end of the export tariff is on grounds of logic and fairness. If anybody bypasses an electricity meter to steal electricity from the grid they will quite rightly be prosecuted. The proposal to end export tariffs is a proposal to allow theft of electricity by electricity companies from electricity consumers who are connected to the grid and are also small generators of electricity from renewable sources. Given the dominance in the market of the 'big six' they would gain most from such theft as they would have the largest reduction in the need to generate or purchase electricity for their customers. Such a proposal is totally unacceptable and would be likely to lead to judicial review. The export tariff is not a subsidy but a simple mechanism to ensure fair recompense is available to all generators of any scale. We note that the Solar Trade Association in an [open letter to Claire Perry MP on maintaining fair payment for exported electricity](#) has identified the fact that a new European law will require member states to ensure that self-generators are fairly remunerated for their surplus power. The EU has



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accepted the logic of continuing with fair payments and we urge the UK Government to follow suit.

In paragraph 10 of the Impact Assessment for this consultation it is noted that Government has considered extending the export tariff in a revised form but that it does not have sufficient information to design a new export tariff scheme. Rather than abolition of the export tariff the logical way forwards would be to retain existing arrangements until there is evidence and legislative opportunity to develop a revised scheme.

One of the reasons for the proposals to end the FIT and export tariff is because of the impact on consumer bills. However any electricity consumer can reasonably expect that a proportion of the bills will be to cover new infrastructure. If there was less support for renewable electricity generation and for energy savings consumers would need to pay a higher proportion of their bills for fossil fuel or nuclear generation. It is also reasonable for consumers to contribute to measures that will help to reduce carbon emissions in proportion to their electricity consumption rather than the total cost of the required measures coming from general taxation.

Government should not be changing its policies to reduce support for renewable electricity without considering the impact on other areas of policy. Government [Road to Zero Strategy](#) is for at least 50% of new car sales to be ultra low emission by 2030 and to take steps to roll out the required infrastructure. The only logical way to meet the required extra electricity generation maximising carbon reduction from the transport sector is through a more ambitious programme to encourage renewable electricity. Renewable electricity generation has the possibility of generating electricity at or near the point of demand so reducing transmission losses and reducing the need for grid expansion. Storage of renewable electricity in the batteries of electric vehicles combined with advances in smart metering technology and control systems for both imports and exports has tremendous potential to enhance the role of renewable electricity in the system. For the government to meet its ambitions it is essential for the renewable energy industry to survive and to be available when required to meet the needs of electric vehicles.

Continuing FIT and Export Payments for Community Groups

As an existing generator of renewable electricity from hydropower Whitby Esk Energy will not be directly affected by the proposals. However we do want to see continuing opportunities for expansion of renewable energy generation by other community groups.

[Whitby Esk Energy](#) has generated 650 MWh of renewable electricity since our operation began in 2012, using an Archimedes screw turbine on the River Esk near Whitby. In addition to electricity generation we have worked closely with the local primary school to develop [Key Stage 2 resources](#) and had visits from secondary schools and local community groups of various kinds (often combined with talks to them), all helping to spread the message of the benefits of renewable energy. We have facilitated research on the influence of hydropower on fish migration and projects by university students. We have provided government funded [peer mentoring](#) to help other community hydro groups



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establish their projects. Interest paid on some of our loans for construction has been used to help set up other renewable energy schemes and sustainable development projects.

Many members of the Whitby Esk Energy team have installed their own energy saving and renewable energy projects at home and have then gone on to promote wider adoption in our local area and nationally, both as individuals and as members of other organisations. These additional activities are typical for a community energy group. These wider contributions have been analysed and reported by Community Energy England & Community Energy Wales in the latest annual [State of the Sector Report](#) published in June 2018.

DECC recognised the importance of community energy when it published its [Community Energy Strategy](#) in January 2014 and the [update to the strategy](#) in March 2015. Those strategy documents provide evidence as to why community energy development should not be hindered by changes such as those proposed in this consultation.

As a result of reductions in FIT payments and other measures such as the abandonment of the Enterprise Investment Scheme (EIS) and Social Investment Tax Relief (SITR) to community energy projects Government has succeeded already in making it impossible for new community hydro projects to be financially feasible. We are in contact with other community groups that have been planning hydro schemes and know that at present none are planning to go ahead. If the proposals in this consultation document go ahead to end FIT and export payments from 1st April 2019 nobody will form a community hydro group in future to even start thinking about the possibility of a scheme.

We are also concerned about the impacts on community energy involving other technologies but we will not provide any evidence. Instead we urge BEIS to fully take into account the document [The Future for Small-scale Low-carbon Generation - A Call for Evidence - A response by CEE CES CEW](#) as well as the Community Energy England response to this consultation that we have not yet seen.

Continuing FIT and Export Payments for Schools

DECC and BEIS have allowed schools certain benefits in FIT policy, treating them much the same as community energy groups. For example in this consultation document paragraph 1.11 (e) regarding schools is similar to the proposals in 1.11 (d) for community energy groups. Government appears to recognise the educational benefits of school children having an opportunity to see installations and to make use of the data generated in their studies. They can help the citizens and voters of the future gain a greater understanding of energy systems, climate change and the role of individual decision making in solving global problems.

We therefore hope that as a result of this consultation both FIT and export payments will continue for schools as well as for community energy groups. If the case is accepted for one of these categories it should also be for the other.



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Continuing FIT and Export Payments for Households

Domestic electricity use in the UK is the largest of the major sectors with 105.4 TWh consumed in 2017, amounting to 29.8% of total consumption in 2017 ([DUKES 2018 Chapter 5: Electricity](#)). With the adoption of electric cars the quantity of electricity passing through homes will increase. The Government's [Road to Zero Strategy](#) includes a commitment to consult "as soon as possible" on a requirement for charging points to be included in all new homes. There is a petition on the UK Parliament website to [make it compulsory for all new homes in England and Wales to have solar panels](#). In the long run it will become possible for a higher proportion of electricity generated from domestic PV or small scale wind turbines to be used on site via battery storage for electric vehicles or for domestic use. The proportion exported will decrease. Smart metering and associated technologies will enable electric vehicles to be charged at times of day when electricity is cheapest and is also likely to have the lowest carbon emission factor. The problem is that we are not there yet. While there is a vision for the future the Government must not break the route to achieve it.

According to paragraph 22 of the [Feed-in Tariffs closure: impact assessment](#) "even though IRRs will be lower without support they are likely to be sufficient in some cases for deployment to occur, and therefore we would expect to see some – though uncertain – deployment in the absence of FIT support". This optimism is totally unreasonable for the domestic sector. For a more realistic assessment see for example the [MoneySavingExpert.com](#) article [Solar energy payments are set to be slashed - will getting panels still be worth it?](#) Typical householders will not calculate IRR or think about a possible purchase of an electric vehicle at some time in the future. Instead they will follow consumer advice of this type and forget about domestic renewable electricity. Both consumer confidence and the installation industry will be destroyed and it will be far more difficult for the vision described above to become a reality.

For the domestic sector it is essential to maintain generation and export payments until costs have come down and Smart metering technology has evolved to fairly reward consumers for what they export and to encourage them to make appropriate use of battery storage systems,

Question 2 Do you agree or disagree with the administrative closure and exception arrangements?

As described above we object to the proposals for closing the Feed-in Tariff scheme and ending export payments. But if Government insists on going ahead we have no objections to the proposed administrative measures and exceptions.

Questions 3 – 5

We do not have available useful experience or evidence to answer these three questions.

Question 6 What would you expect the likely replacement rate for generating plant to be, for each FIT supported technology, if the rules were changed to allow unlimited replacements?

We can only respond to this question in the context of low head hydro. Replacement rates of some ancillary equipment only would be low but necessary. The bulk of any individual hydro installation is designed with a life far in excess of the FIT scheme. It is vital for continued generation of renewable electricity into the future for a Community hydro group or other body to be financially viable after exiting from the FIT scheme. To achieve this some of the ancillary equipment will need replacement to improve the installation's efficiency. We would expect a 10-20% improvement in generation over the FIT period.

Load factors are meaningless for low head hydro as they are determined by the available flow in the river. The conversion efficiency (kW per m³ of water), however, would improve with innovative replacement of ancillary equipment (e.g. control algorithms, inverter technology, motor and gearbox technology).

Question 7 What would the impact be of not allowing replacement of generating plant?

If we were not allowed to replace ancillary equipment which had become outdated (e.g. inverters, gearboxes, motors) we could exit the FIT scheme financially unviable, so be forced to cease operations. This would be a waste of an asset where the bulk of the equipment would have significant life left after the scheme closes and would reduce the availability of renewable electricity for the grid at a time of greater demand.

Question 8 How can government ensure that any budgetary impact from allowing the unlimited replacement of plant can be controlled in an administratively practical manner?

The current profitability on low head hydro is so low that it will be self limiting on re-investment and not have a significant impact on budgets.

Conclusion

The ending of the FIT generation tariff and the export tariff would be a disaster for community energy groups and for schools and householders who want to do their bit to help in the fight against climate change. The ending of the export tariff would be grossly unfair. Government policy in other areas such as transformation of road transport to low carbon energy will be severely impacted. We sincerely hope that BEIS will act on our views and those of others who will be responding to this consultation.