

Consultation on a review of the Feed-in Tariffs scheme

HHIC Response

1. About HHIC

The Heating and Hotwater Industry Council (HHIC) are the leading representative body for the UK domestic heating and hot water industry, worth £3-4 billion per year. HHIC's membership base covers approximately 94 per cent of heating and hot water solutions available in the UK. HHIC are a division of the Energy and Utilities Alliance (EUA).

2. Response Summary

HHIC have been representing all the major Micro CHP manufacturers in the UK for over ten years. We are at a critical point in developing this industry and continued Feed-In Tariff support is vital for the growth and development of this product.

In DECC's recent response to the Committee on Climate Change it was confirmed that a future for gas in the energy mix is now envisaged. Micro CHP as a domestic appliance will play an important part in ensuring any future gas consumed for heating will be consumed efficiently. In support of developing technologies, Amber Rudd stated;

'I believe there is an important role for governments to create the environment for businesses to flourish, innovate and bring down the costs of new technologies, so that over-time they can compete on a level playing field with established technologies. That is why, within the UK, we focus our support on those technologies that are still maturing, and where industry and Government can work together most effectively.'

Micro CHP also offers a higher level of flexibility than other renewable technologies. It produces electricity at peak times, which helps balance the grid and reduces operating costs. Micro CHP can also interact with smart meters and time of use tariffs.

Consultation Response

23rd October 2015



Because Micro CHP products offer intelligent control, help balance the grid and can reduce the gas required to heat our homes their development is vital. For this reason we urge DECC to continue to support and encourage the development of this product.

We have answered only the questions that relate to Micro CHP, along with questions on smart meters.

3. The Response

1. Do you agree or disagree with the proposed generation tariff rates set out above? Please provide reasons to support your answer.

HHIC understands that DECC has a limited budget and therefore has to balance tariffs to reflect that, so a commitment from DECC to continue supporting Micro CHP through the FIT is very welcome, as the industry is at a critical time in its development.

However, HHIC does not believe that the generation tariff delivers a rate of return between 4-9% for Micro CHP installations. This is because the research did not include all the product types available.

We have two main points of contention with the research produced by Parsons Brinckerhoff (PB).

Firstly, the scenario described in the PB analysis would not provide a positive rate of return, given the costs of the outlined system. Our analysis suggests that a load factor of 26% would correspond to a home with an annual heat demand of approximately 14,000 kWh. Installing the reference micro CHP in this home, with tariff levels of 13.45 p/kWh (generation) and 4.85 p/kWh (export), would result in a rate of return of approximately -5%. Our calculations suggest that a load factor of 40% - corresponding to an annual thermal demand of ~22,00kWh – would be needed to provide a 4% rate of return.

Consultation Response

23rd October 2015



At 13.45 p/kWh, the proposed tariff would provide an incentive to households with a higher than average heat demand. Although we recognise the imperative to avoid over-incentivising the uptake of a particular technology, it is disingenuous to imply (as the PB analysis does) that this tariff level would provide adequate support to a system with a load factor of 26%.

Furthermore – as will be explained in Question 2 – the Parsons Brinckerhoff analysis is based on an incomplete picture of the Micro CHP industry.

2. Do you agree or disagree that the updated assumptions produced by Parsons Brinckerhoff are reflective of the current costs of deployment for UK projects in your sector? If you disagree, please set out how they differ and provide documented evidence, such as invoices and/or contractual agreements to support this evidence. Please also mark this evidence as commercially sensitive where appropriate.

As stated in Question 1 our own research shows that the Parsons Brinckerhoff work is not reflective of the market. HHIC represents a number of Micro CHP manufacturers whose products were not considered in the Parsons Brinckerhoff analysis. We have collected data relating to costs and technical specifications for a number of Micro CHP products from the following manufacturers:

- Baxi
- British Gas
- Ceramic Fuel Cells Ltd
- Flow Products
- IE CHP
- Inspirit Energy
- Sustainable Power

Consultation Response

23rd October 2015



- Viessmann

These companies (except CFCL) have Micro CHP products that are close to commercialisation and should all have been considered in the tariff calibration exercise. However, the PB analysis used the Baxi Ecogen as the sole available Micro CHP product; in doing so, neglecting a significant proportion of the industry. It is disappointing that DECC and PB did not communicate more effectively with HHIC and its member companies while determining the proposed tariff level. If they had, the evidence may have been more accurate and a more realistic tariff would have been proposed.

Our analysis, based on a wider range of cost data, indicates that a generation tariff of 18p/kWh would provide the necessary level of support for the bulk of the industry. This level would also avoid the sort of over-incentivisation that led to the runaway “success” of solar PV. We would be happy to share our analysis and research with DECC.

5. Which of the options for changing the export tariff outlined above would best incentivise renewable electricity deployment while controlling costs and enabling the development of the PPA market? How should we account for the additional and avoided costs to suppliers associated with exports in setting the export tariff? Please provide reasons to support your answer.

HHIC has been calling for differential export tariffs for a number of years. One of the principal benefits of Micro CHP systems is that they produce electricity at times of high demand. Typically, a Micro CHP boiler will start producing electricity when the boiler starts to heat the home in the morning and then again in the evening. These two points coincide with the two peaks in energy demand. This places a higher value on the electricity produced by a Micro CHP unit compared to other forms of renewable small-scale electricity production. One that is currently not recognised by the FIT.

Therefore we would support dynamic rebalancing of the export tariff based on wholesale prices determined through smart metering. The other options would penalise Micro CHP as they would be balanced to the predominant technology, being Solar PV. Solar PV typically

Consultation Response

23rd October 2015



produces electricity at times of low electricity demand and the costs of balancing the electricity in the summer adds considerable costs for network operators.

It should be pointed out that Micro CHP can also be controlled to produce electricity when most needed by the grid. Therefore, whilst it is true that the periods of peak heat demand coincide well with periods of peak electrical demand, Micro CHP can be “fine-tuned” to maximise the benefit to the grid.

6. Do you agree or disagree with the proposed changes to the indexation link under the FITs scheme? Please provide reasons to support your answer.

Aside from a brief period during the Great Recession, CPI is typically lower than the RPI; therefore, this proposed change would likely result in the tariffs being raised at a slower rate. In spite of this, we are aware that the RPI is no longer supported as a “national statistic” by the Office of National Statistics. A compromise solution might be to link the tariff payments to the CPIH, which we feel reflects changes in the cost of living more realistically than the CPI.

8. Do you agree or disagree with the proposal to introduce deployment caps under the FITs scheme? Please provide your reasoning.

HHIC disagrees with the wording of the cap mechanism for Micro CHP. On page 9 of ‘The Government Response to Consultation on Comprehensive Review Phase 2B: Tariffs for non-PV technologies and scheme administration issues’ it states that for Micro CHP “30,000 should not be regarded as a cap.”¹

HHIC would ask DECC to clarify this. The current consultation states that there is a cap on 30,000 installations which limits Micro CHP’s ability to generate investment.

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/42917/5905-government-response-to-consultation-on-comprehensi.pdf

Consultation Response

23rd October 2015



Micro CHP is a product that is still developing. There are a number of very interesting innovations that are not commercially available today but will be in the near future. In order to enter the market they require investment. Investors will only provide capital if they are confident of a return. The existence of a cap is seen as an opportunity to cease all support.

The Micro CHP industry would support a review of the tariff after a set number of installations, however would ask DECC to clarify the word 'cap' in the legislation.

HHIC would also ask DECC to clarify whether it may look to apportion part of the capped budget of £75-100m to other technologies if their deployment rate is higher. For example, if Solar PV were to remain at the current installation rate could it be apportioned additional budget at the expense of other technologies? We would like DECC to confirm that the capped budgets will remain, even if deployment rates are under budget.

11. If it is not possible to sufficiently control costs of the scheme at a level that Government considers affordable and sustainable, what would be the impact of ending the provision of a generation tariff for new entrants to the scheme from January 2016, ahead of the 2018-19 timeframe or, alternatively, further reducing the size of the scheme's remaining budget available for the cap? Please consider the immediate and broader economic impacts and provide your reasoning

Given that this consultation closes towards the end of October 2015 it does not seem feasible to assess how the proposed changes detailed in this consultation have affected the market before January 2016.

Closing the scheme to new entrants from January 2016, before industry has had a chance to adjust, would have potentially wide ranging ramifications.

Ending the FIT from January 2016 would prevent any further development of the technologies that the government is currently supporting, at a time when a number of these are on the brink of self-sustainability.

We would urge government to assess how the changes proposed in this consultation affect the market and costs before seeking to the end the scheme. The inevitable job losses, business closures and loss of public confidence in future government initiatives would be significant.

HHIC accept that subsidies have a limited role to play. However, the political impact could reduce the government's success in other initiatives as the public will be less willing to engage. For example, the Smart Meter launch which is going to rely on significant good will from the public if it is to be delivered by the 2020 deadline.

12. What would be the impact of pausing applications to FITs for new generators for a short specified period to allow the full implementation of the cost control mechanisms? Please consider the immediate and broader economic impacts and provide your reasoning.

Any pause of the scheme would be interpreted as a long term closure and would have a similar negative impact. Therefore we would strongly urge the government not to follow this path.

The cost saving measures already proposed in this consultation should have the desired impact of saving government money. Any pause in the scheme will have a significantly detrimental impact on the whole market.

15. Should FITs be focussed on either particular technologies or particular groups (e.g. householders)? Please provide your reasoning.

The FIT mechanism should look to support all eligible technologies equally and not allow certain technologies to erode the budget for others. Unfortunately, the success of Solar PV has already achieved this and so all other technologies are facing reduced budgets.

Consultation Response

23rd October 2015



We do not believe specific groups should be targeted because FITs still requires capital investment and unfortunately there are a number of groups that will not be able to afford renewable systems. Whilst this is not desirable, changing it would inevitably cost the government more money. So if the government is looking to control costs, deployment should be left to the market to allocate in the most cost effective way possible.

If the government wants to help the fuel poor or those off the gas grid, then separate schemes, like making energy efficiency a National Infrastructure priority would be more appropriate.

We have concerns that a “dash for PV” may cause a disproportionate amount of the remaining Feed-In Tariff budget to be consumed leaving less for Micro CHP and other technologies. We would therefore suggest some form of annual ring-fencing of budget allocations per technology.

It should be noted that the runaway “success” of solar PV not only consumed the available funds but also obscured the Micro CHP opportunity leading to the collapse of developers such as Whispergen and CFCL.

17. Given our intention to move to fully metered exports for all generators, do you agree with the proposal that new and existing generators should be obliged to accept the offer of a smart meter (or advanced meter) when it is made by their supplier? Please provide reasoning for your response.

HHIC is part of a wider industry trade body, the Energy and Utilities Alliance (EUA). EUA is currently heavily involved in the smart meter roll out as it represents meter manufacturers and energy suppliers.

We believe DECC need to do more research in the implications of mandating smart meters at the point of installation. The energy companies will be developing deployment schedules for the 2020 roll out. Any coordination with FITs needs to be in line with these.

Consultation Response

23rd October 2015



We are also concerned that the DCC is currently still not operational and the SMETS2 specification and protocol are not fully agreed. Once these two factors are achieved then HHIC would agree that all new and existing generators could accept a smart meter. However, before then it would mean installing a meter that may not be capable of communicating with energy suppliers, other than the one that installed the meter. This would run counter to DECC's aim of enabling 24 hour switching and it could have an impact on the ability to meet the need of metered exports.

We would also propose that the smart meter installed is SMDA assured.

18. Do you agree or disagree with the alternative proposal that new applicants must have a smart meter (or advanced meter) installed before applying to the FITs scheme, with existing generators being obliged to accept the offer of a smart meter (or advanced meter) when it is made by their supplier? Please provide reasoning for your response.

Once the DCC is established and SMETS2 protocol agreed then DECC should do further research how this could be linked to the energy company's deployment schedule. We support the proposal that all homes should have a smart meter by 2020.

19. Do you have any views on possible approaches to introducing remote reading for generation meters? Please provide reasoning for your response.

Through conversations with our members, all smart meters should be able to carry out generation reading. It is assumed that a standard SMETS2 meter would be installed; this would be joined to the Secure HAN like any other meter, and read like any other meter.

20. Do you agree or disagree that recipients of FITs should be required to notify the relevant DNO of new installations as a condition of the scheme?

Consultation Response

23rd October 2015



HHIC agrees

21. Do you agree or disagree the FITs scheme should be amended to include requirements that help mitigate and limit the impact on grids such as requiring generation to be collocated with demand or storage?

This is not applicable for Micro CHP as it already produces electricity at peak times and with demand. There would be no additional benefit from mandating storage.

HHIC's sister trade association, the Hot Water Association (HWA), believes however that all domestic Solar PV FIT installations should be accompanied with storage. This could be in the form of a battery which are now becoming commercially available or in the form of hot water storage. Given the lower capital cost of hot water storage HWA would suggest this is a more viable option in the short to medium term.

Renewable installations that generate electricity at non peak hours can store energy within a hot water tank. Hot water demand correlates with times of peak demand and so would help DNOs balance the system. Hot water tanks are also easy to install and the mechanism to divert the renewable electricity is cheap and widely available.

HWA would be happy to discuss this in more detail with DECC.

30. Do you agree or disagree with the revision being considered to increase the energy efficiency threshold to EPC band C for anyone with an installation to which the criteria apply? Please provide your reasoning.

HHIC agrees that the threshold should be increased to a band C. However this should be accompanied by assistance for homeowners to meet this banding.

Camden House, Warwick Road, Kenilworth, CV8 1TH

T: +44 (0)1926 513777 **F:** +44 (0)1926 511923

E: info@hhic.org.uk **W:** www.centralheating.co.uk

HHIC is a division of the Energy and Utilities Alliance (EUA)

Consultation Response

23rd October 2015



Contact

If DECC wishes HHIC to clarify any of the points outlined in this consultation please contact us at:

Stewart Clements, HHIC Director, stewart@hhic.org.uk, 01926 513777

HHIC, Camden House, Warwick Rd, Kenilworth, CV8 1TH

Camden House, Warwick Road, Kenilworth, CV8 1TH
T: +44 (0)1926 513777 **F:** +44 (0)1926 511923
E: info@hhic.org.uk **W:** www.centralheating.co.uk

HHIC is a division of the Energy and Utilities Alliance (EUA)