



Department  
of Energy &  
Climate Change

# Consultation on a review of the Feed-in Tariffs scheme

27 August 2015



The consultation and Impact Assessment can be found on DECC's website:

<https://econsultation.decc.gov.uk/office-for-renewable-energy-deployment-ored/fit-review-2015>

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# General information

## **Purpose of this consultation:**

This consultation proposes a set of measures to control costs under the Feed-in Tariff, including revised tariffs based on updated technology cost data, a more stringent degeneration mechanism and deployment caps leading to the phased closure of the scheme in 2018-19. It proposes that if such measures cannot put the scheme on an affordable and sustainable footing then there should be an end to generation tariffs for new applicants as soon as legislatively possible, which we would expect to be January 2016. It also proposes other measures to ensure the scheme is more closely aligned with other DECC policy measures.

**Issued:** 27 August 2015

**Respond by:** 11:45am on 23 October 2015

## **Enquiries to:**

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Consultation reference: URN 15D/435 – Consultation on a review of the Feed-in Tariffs scheme

**Stakeholder events:** Stakeholders events will be arranged as part of the consultation process. Further details on this will follow.

## **Territorial extent:**

Great Britain

## **How to respond:**

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

Where possible, responses should be submitted electronically via the e-consultation available at [URL:https://econsultation.decc.gov.uk/office-for-renewable-energy-deployment-ored/fit-review-2015](https://econsultation.decc.gov.uk/office-for-renewable-energy-deployment-ored/fit-review-2015). Hardcopy responses sent to the postal address above or emailed to [FITReview@decc.gsi.gov.uk](mailto:FITReview@decc.gsi.gov.uk) will also be accepted.

## **Additional copies:**

You may make copies of this document without seeking permission. An electronic version can be found at [www.gov.uk/decc](http://www.gov.uk/decc).

Other versions of the document in Braille, large print or audio-cassette are available on request. As there is a need to consult promptly on this issue a Welsh version of this document has not been produced.

**Confidentiality and data protection:**

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 1998 and the Environmental Information Regulations 2004).

If you want information that you provide to be treated as confidential please say so clearly in writing when you send your response to the consultation. It would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

We will summarise all responses and place this summary on the [GOV.UK website](#). This summary will include a list of names or organisations that responded but not people's personal names, addresses or other contact details.

**Quality assurance:**

This consultation has been carried out in accordance with the [Government's Consultation Principles](#).

If you have any complaints about the consultation process (as opposed to comments about the issues which are the subject of the consultation) please address them to:

DECC Consultation Co-ordinator  
3 Whitehall Place  
London SW1A 2AW  
Email: [consultation.coordinator@decc.gsi.gov.uk](mailto:consultation.coordinator@decc.gsi.gov.uk)

# Executive Summary

1. Government is committed to moving to a low-carbon economy and meeting its carbon reduction and renewable energy targets. Alongside other measures, the Feed-in Tariff Scheme (FITs) has been part of our progress against these objectives. FITs has exceeded all renewable energy deployment expectations: under the scheme we have already passed, or would expect to pass by the end of this year, our projections from the 2012 Comprehensive Review for 2020/21 for wind, hydro, and anaerobic digestion. We are currently projected to be within the solar PV range from the time of the 2012 Comprehensive Review before then as well. In addition updated evidence suggests that there have been significant reductions in technology deployment costs, beyond 50% in certain tariff bands,<sup>1</sup> contributing to a more sustainable, cost-effective future for renewables deployment.
2. However, this deployment success has also come with costs exceeding our projections. We expect to breach the limits of the Levy Control Framework (LCF), the amount of money agreed within Government which can be added to consumer bills to pay for low-carbon electricity generation, and deploy more small-scale renewables than we envisioned when the scheme started.
3. We are therefore proposing measures to place policy costs on bills on a sustainable footing, improve bill payer value for money, and limit the effects on consumers who ultimately pay for renewable energy subsidies. This review follows an earlier consultation in July-August 2015 on removing FITs pre-accreditation to limit the impact on bill payers of deployment surges. Responses to the pre-accreditation consultation are still being considered at the time of launching this review.
4. This consultation asks sets of questions about the impact of major proposed changes to the scheme. The first, around value for money, proposes new generation tariffs based on fresh evidence about costs, technology characteristics, and rates of return new FIT participants might get. The second, around cost control, proposes a cap on new FITs expenditure of between £75-100m by 2018/19. If cost control measures are not implemented or effective in ensuring that expenditure under the scheme is affordable and sustainable, Government proposes that the only alternative would be to end generation tariffs for new applicants as soon as legislatively possible, which we expect to be January 2016, while keeping the export tariff as a route to market for the renewable electricity they generate.
5. There are further proposed changes, set out in the table below. Their aim is to improve the functionality of the FIT and more closely align it to other Government policy objectives.
6. Subject to stakeholders' views, changes are likely to take effect as soon as legislatively possible, which we expect to be January 2016. We will confirm the timetable in the Government Response. Government reiterates its commitment to the principle of grandfathering generation tariffs under the scheme and therefore existing installations will

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<sup>1</sup> Feed-in Tariffs Review Impact Assessment, August 2015.

not be affected by the proposed changes to tariffs and caps. We do not expect that implementation of the proposed changes will adversely affect our ability to meet our renewable electricity and carbon reduction targets.

7. We do not consider that any of the proposed changes, other than where indicated, would give rise to us having to re-notify the change to the European Commission. This is in line with the Commission's decision of 15 March 2013.<sup>2</sup> We consider the changes to be within the scope of this decision or be of a purely administrative nature.
8. With the exception of the 'Background' section, each chapter of this consultation opens with a proposal, explains the reasoning of the proposed change, and then ends with consultation questions. A summary of all the consultation questions can be found at Annex A. The following table summarises all the proposals and where further information can be found within this document. Measures on which we are seeking views but would consult on again before implementing are set out as future measures.

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<sup>2</sup> [http://ec.europa.eu/competition/state\\_aid/cases/247528/247528\\_1418847\\_115\\_2.pdf](http://ec.europa.eu/competition/state_aid/cases/247528/247528_1418847_115_2.pdf) - para 20

Description	Proposal	Page
Generation tariffs	Revised generation tariffs and revision of some tariff bands for new installations.	16
Degression	Default degression for all technologies will be quarterly. Contingent degression will now be 0%, 5% or 10% for all technologies depending on deployment rate, and will be in addition to default degression.	20
Generation and export tariff inflation indexation	Move from RPI-linked tariffs to a CPI-link for new installations.	25
New technologies eligible for FITs	FITs should not be extended to any other technologies.	25
Deployment caps	New expenditure under FITs is limited to an overall budget of £75-100m to 2018/19. Proposals to implement deployment and degression band caps to meet this budget.	27
Closure of generation tariff to new installations	Remove the generation tariff for new FIT applications from January 2016 if proposed cost control deployment caps are deemed unable to place the costs of the scheme on an affordable and sustainable trajectory or, alternatively, further reducing the size of the scheme's remaining budget available for the cap.	27
Installation extensions	Prevent extensions to existing installations from claiming FITs.	33
Extend FITs to projects based in Northern Ireland	We are not proposing to extend FITs to Northern Ireland.	34
Buying overseas renewable electricity	Limit the amount of renewable electricity purchased from overseas which can be offset against market contribution for levelisation process.	46
MCS standards	Link eligible technologies to specific MCS standards.	48

Description	Proposal	Page
Funding scheme administration	Use interest accrued in the Levelisation Fund for scheme administration.	49
<b>Future Measures</b>		
Export tariffs	Options to move to fully metered export for all generators and revise the export tariff so it is more reflective of system costs and benefits in the future.	22 & 36
Remote reading of generation meters	Views sought on how to move to remote generation meter reading.	38
Grid management	Views sought on obligation for all new FIT generators to inform their Distribution Network Operator (DNO) of their installation	40
Anaerobic digestion sustainability criteria	Views sought on the introduction of sustainability criteria for feedstock to bring it into line with existing RHI and RO criteria.	43
Minimum energy efficiency criteria	Views sought on increasing energy efficiency criteria for new FIT applications in the future	51

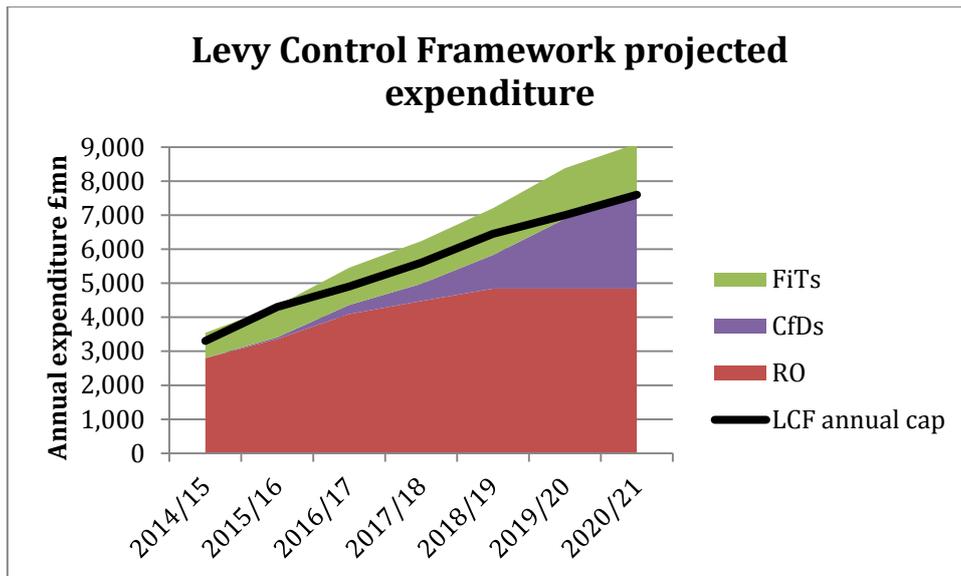
# 1. Background

## History of the Feed-in Tariff Scheme

1. The FITs scheme was introduced in 2010, with a comprehensive review of the scheme in 2011-12 introducing several changes. Alongside the Renewables Obligation and, more recently, the Contract for Difference regime, FITs is part of a set of initiatives to encourage the deployment of renewable energy across the UK.
2. The objectives of the scheme on its introduction were:
  - Encourage deployment of small scale (up to and including 5 MW) low-carbon electricity generation;
  - Empower people and give them a direct stake in the transition to a low-carbon economy;
  - Assist the public take-up of carbon reduction measures;
  - Foster behavioural change; and
  - Help develop local supply chains and drive down energy costs.
3. The European Commission's State aid approval for FITs places an obligation on the Government to review scheme performance every three years. This Review therefore follows on from our 2012 FITs Review. In particular, we are required to consider whether generation and export tariffs continue to give investors an appropriate rate of return and prevent over-compensation. However, projected overspend against the LCF provides a further reason for reviewing FITs.

## The Levy Control Framework (LCF)

4. Subsidies for low-carbon electricity generation are paid for through additions to consumer bills. This includes payments made through FITs, the Renewables Obligation (RO), Contracts for Difference (CfDs), Final Investment Decision Enabling for Renewables (FIDeR), and Carbon Capture and Storage (CCS) deployment.
5. In order to limit the impact on consumer bills, Government set a limit on the annual low-carbon energy subsidy expenditure which could be collected from consumers, known as the LCF. The LCF is designed to control impacts of support for low-carbon generation on consumer bills. There are annual caps but the current final LCF year of 2020/21 sets an expenditure limit of £7.6bn (2011/12 prices). In July 2015, the Office for Budgetary Responsibility (OBR) published new projections of LCF expenditure which revealed forecast expenditure equivalent to £9.1bn (2011/12 prices) in 2020/21 resulting in a forecasted overspend of around 20%. Figure 1 below illustrates projected LCF expenditure out to 2020/21 in the absence of measures to control costs.



**Figure 1 – Projected Levy Control Framework Expenditure**

6. Greater technological efficiency, higher uptake of schemes, and changes to wholesale prices account for the reasons why we are likely to overspend against the LCF restrictions without taking any action.
7. In light of these financial pressures, the Government is taking or proposing measures to control renewables subsidy expenditure, such as changes to grandfathering of subsidies for coal plants converted to burn biomass, or a mixture of biomass and coal, early closure of the RO to solar projects of 5MW and below, and a separate consultation on the removal of pre-accreditation from FITs.

## Performance of FITs to date

8. Set against this backdrop of financial pressure on the LCF it is also right to consider the performance of FITs so far. First and foremost, FITs is significantly exceeding our projections for deployment in terms of both the number of installations and capacity as calculated at both scheme launch in 2010 and the 2012 FITs Review.
9. In fact, we have already met our projections for 2020, as set out in the 2012 FITs Review, for deployment of anaerobic digestion, wind, and hydropower (including projections currently pre-accredited but not generating) and, we expect to be within our projected deployment ranges for solar PV by the end of 2015/16. Furthermore, the 2010 Impact Assessment<sup>3</sup> on the Feed-in Tariff projected that we would reach 750,000 installations by 2020: by the end of July 2015, we had already reached over 730,000. More information on FITs deployment levels can be found in the Impact Assessment accompanying this consultation.
10. However, renewables deployment is not the only objective of the FITs scheme. Published alongside this consultation document is an independent report, *Performance and Impact of the Feed-in Tariff Scheme: Review of Evidence* by Dr Colin Nolden of the University of Sussex, into the performance of FITs against its original objectives. It is important that we

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<http://webarchive.nationalarchives.gov.uk/20121217150421/http://decc.gov.uk/assets/decc/consultations/renewable%20electricity%20financial%20incentives/2710-final-ia-feed-in-tariffs-small-scale.pdf>

balance the overall objectives of the scheme against its affordability and distributional impact.

11. This report supports the Government's view that FITs has largely met, or is likely to meet, its objectives ahead of schedule. Consumers have been empowered to take a direct stake in the transmission to a low-carbon economy and have taken up carbon reduction measures. The costs of buying and installing renewable energy have also fallen for most technologies, particularly significantly in the case of solar PV.
12. However, the evidence is still emerging around the scheme's impact in other areas. There is some evidence that FITs is fostering behavioural change in energy usage but this is so far inconclusive. The Government is also concerned about the scheme's overall value for money and affordability within the context of carbon reduction, particularly when compared to other low-carbon schemes. The costs of technologies under FITs tend to be higher than for other technologies.<sup>4</sup>

## The future of the Feed-in Tariffs scheme

13. This consultation sets out proposals for a fundamental review of the FITs, intended in the short term to control scheme costs effectively. This is within the context of our success so far in deploying renewables under FITs against our 2020 projections, the fact that we are on track to meet our renewable electricity targets, and our affordability concerns around the cost to bill payers.
14. We are inviting stakeholders' views on the feasibility of the options set out, how they would respond to them and to what extent the different options would be mutually compatible. The proposals would put the FITs onto a more sustainable footing which provides consumers and industry clarity on levels of small-scale renewable electricity support until 2018-19. At this point, support under the scheme could end to new participants or change the nature of support, in line with some of the options outlined below.
15. The future and size of the scheme will be determined by affordability criteria. This will be determined by factors including but not limited to: applications under the scheme before full implementation of the outcomes of this review; Government's confidence in the implementation of an expenditure cap; future generation tariffs settled through this consultation; deployment in other areas of the LCF; and Government's decisions surrounding other renewables priorities.
16. If following the consultation we consider that the scheme is unaffordable in light of these criteria, we propose ending generation tariffs for new applicants from January 2016 or, alternatively, further reducing the size of the scheme's remaining budget available for the cap. This consultation seeks views on the impacts of scheme closure, whether implemented in the immediate term or as a phased closure over several years.
17. This consultation also discusses possible future directions for small-scale renewable support, which could build on or replace FITs. These options will be developed in full over a longer timeframe and would likely trigger a re-notification to the European Commission in

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<sup>4</sup> The electricity generation costs report provides levelised cost estimates for all technologies. Levelised costs are the average cost per MWh of generation over the lifetime of the project, and are used as a valid comparison between different technologies. The latest electricity generation costs report is available at [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/269888/131217\\_Electricity\\_Generation\\_costs\\_report\\_December\\_2013\\_Final.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/269888/131217_Electricity_Generation_costs_report_December_2013_Final.pdf). Table 13 clearly shows that costs tend to be higher for the smallest installations for each technology.

accordance with our State aid approval, but we welcome stakeholders' views as we consider which of these options would be feasible. In particular, we are looking at:

- Ways of introducing competitive allocation to drive down costs and increase value for money for bill payers. We wish to take views on the practical implications, advantages, and disadvantages of such a change.
- Restricting small-scale renewables support to particular groups, such as householders and community groups, or particular technologies, such as solar PV, which appears closest to achieving subsidy-free existence with a final push of public support.
- Limiting support to metered export so small-scale generators continue to have a route to market for the renewable electricity they produce.

## 2. Securing value for money

This chapter sets out **changes to ensure tariffs under the scheme provide value for money**. The proposed changes include:

- Revised generation tariffs based on updated data
- A revised degression mechanism to reflect our expectations over falling technology costs
- Allowing for more frequent tariff reviews
- Proposals on future changes to the export tariff
- Proposals on changes to how tariffs are linked to indexation

### Generation tariffs

#### Proposal

18. We propose to amend tariffs as follows:

Proposed Generation Tariffs for Jan 2016 (p/kWh, Nominal prices)		Ofgem Tariffs for installations with an eligibility date on or after 1 October 2015 (p/kWh, 2015/16 values)	
<b>Solar PV</b>			
0 -10kW	1.63	<4kW	12.47
10 - 50kW	3.69	4-50kW	11.30
50 - 250kW	2.64	50-150kW	9.63
250-1000kW	2.28	150-250kW	9.21
> 1000kW	1.03	250-5000kW	5.94
Stand alone	1.03	Stand alone	4.28
<b>Wind</b>			
<50kW	8.61	0-100kW	13.73
50–1500kW	4.52	100–500kW	10.85
		500–1,500kW	5.89
>1500kW	0.00	>1500kW	2.49
<b>Hydro</b>			
<100kW	10.66	<15kW	15.45
		15-100kW	14.43
100-500 kW	9.78	100-500kW	11.40
500-2000kW	6.56	500-2000kW	8.91
>2000kW	2.18	>2000kW	2.43

**Figure 2 – Proposed generation tariffs**

19. The new tariff levels seek to provide sufficient incentive for the deployment of well-sited projects, providing a rate of return appropriate to current market conditions.
20. For solar PV, multi-installations will continue to receive either the middle or lower rate as set out in Ofgem's "Guidance for Renewable Installations (version 9)" published in June 2015. The middle rate is 90% of the proposed higher rate unless that is less than the lower rate, in which case it shall be equal to the lower rate. The lower rate is equal to the proposed generation tariff for solar PV band >1,000kW.<sup>5</sup>
21. There are no proposals to change generation tariffs for anaerobic digestion (AD) as part of this consultation. There are complexities associated with estimating AD cost and revenue streams that do not apply to other technologies covered by the scheme, most importantly around the overlap with the Renewable Heat Incentive (RHI). The Department intends to consult on AD tariffs later this year.
22. More detail on how generation tariffs were determined for technology bands is set out in the impact assessment; the report on technology costs published alongside this consultation provides the basis for many of the assumptions used.<sup>6</sup>

## Background

23. The Feed-in Tariff was designed to incentivise the deployment of small-scale renewables, allowing generators to benefit from:
  - Bill savings – the occupier of the building would benefit from using electricity generated onsite, and therefore have a reduced bill;
  - An export tariff – paid to the generator by the supplier for electricity exported to the grid to compensate for the market value to the supplier of the electricity generated; and
  - A generation tariff – paid to the generator by the supplier, designed to incentivise the deployment of the low-carbon technology as opposed to fossil fuel alternatives.
24. Initially in 2010 the generation tariff levels were broadly set to provide a return of between 5-8% for most well-sited technologies, with some technologies achieving more but not exceeding 12%.<sup>7</sup> Returns up to these levels were considered appropriate within EU State aid guidelines and reflected a level of support appropriate to incentivise deployment at that time.
25. In the original State aid approval for the FITs scheme, the European Commission noted that:

*“the UK authorities indicated that three-year reviews will be carried out by the DECC. They will reassess the costs of technologies, electricity price forecasts and whether the target rate of return is still appropriate, and consider revision of tariff levels and decrease rates accordingly. In particular, consideration of tariff and decrease levels will take account of any decreases in the levelised production costs to ensure there is no overcompensation.”*<sup>8</sup>
26. The first comprehensive review of FITs in 2011/12 introduced new generation tariff levels which were broadly set to provide a return of between 4-8% for most well-sited

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<sup>5</sup> <https://www.ofgem.gov.uk/publications-and-updates/feed-tariff-fit-guidance-renewable-installations-version-9>

<sup>6</sup> Parsons Brinckerhoff, Small Scale Generation Cost Update, (August 2015).

<sup>7</sup> [http://ec.europa.eu/competition/state\\_aid/cases/235526/235526\\_1104588\\_39\\_2.pdf](http://ec.europa.eu/competition/state_aid/cases/235526/235526_1104588_39_2.pdf) para. 23.

<sup>8</sup> [http://ec.europa.eu/competition/state\\_aid/cases/235526/235526\\_1104588\\_39\\_2.pdf](http://ec.europa.eu/competition/state_aid/cases/235526/235526_1104588_39_2.pdf), para. 39.

technologies, with some technologies achieving more but not exceeding 13%.<sup>9</sup> Since the previous review of FITs took place in 2011/2012, the data on the cost of producing renewable electricity has not been updated until now. Therefore now is the appropriate moment to reassess generation tariffs under the scheme on the basis of updated evidence.

### Updating our evidence

27. DECC appointed Parsons Brinckerhoff, an external consulting firm, to carry out an update of the data on small-scale renewable generation costs used to calculate generation tariffs, looking at costs and technical assumptions associated with all five eligible generation technologies. The report which they produced, and upon which our proposed revised generation tariffs are based, is published alongside this consultation. The proposed new tariffs have been determined in light of the evidence produced, along with other industry feedback suggesting a fall in the cost of technology deployment for well-sited installations. The tariffs proposed in this consultation are generally set to provide a rate of return of between 4% and 9% for different technologies based on available information. Where we have diverged from this method, we have set it out in the Impact Assessment published alongside this consultation.
28. The data collection exercise was conducted using questionnaires issued to industry contacts, interviews with key stakeholders, and literature reviews. *Small Scale Generation Cost Update*, published alongside this consultation, sets out in greater detail how the data collected has been used to update capital and operating expenditure data for generation technologies across different capacity bands, as well as feeding into other key assumptions. The data collected and opinions expressed as part of the exercise have fed into this Review.
29. Assumptions have been made about technical characteristics of individual installations. The list below sets out the assumptions used in the analysis:
- load factors;
  - capital expenditure (capex);
  - hurdle rates;
  - technical potential;
  - operating expenditure (opex);
  - reference installation size;
  - plant operating life;
  - export fraction;
  - the value of bill savings; and
  - inflation assumptions.
30. The Impact Assessment, published alongside this consultation, sets out how the final data was interpreted when proposing new generation tariffs, deployment caps and degression thresholds.

### Tariff and degression bands

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<sup>9</sup> [http://ec.europa.eu/competition/state\\_aid/cases/247528/247528\\_1418847\\_115\\_2.pdf](http://ec.europa.eu/competition/state_aid/cases/247528/247528_1418847_115_2.pdf), para. 14.

## Proposal

31. We propose to amend the tariff and degression bands in line with changes in technology costs. The full set of revised tariff bands are set out in the accompanying Impact Assessment and summarised below.

## Background

32. The existing tariff bands under FITs were set at the time of the 2012 FITs Review. The tariff band structure is intended to incentivise a range of deployment, and to take account of technological and economic differences between different sizes of installation deploying under the scheme. Where tariff bands do not accurately reflect technology costs or availability within a given market, they can create artificial cliff edges in deployment, in particular when there is a significant step in tariffs between bands. The continuing concerns around the de-rating of wind turbines is one instance where technology bands failing to reflect developments in technology may have incentivised some inefficient deployment (with some developers capping 800-900kW turbines at an output of 500kW).

33. The following principles have been applied in proposing the changes to tariff bands:

- Minimal changes should be made to reduce complexity for participants in the scheme.
- Any changes should aim to simplify current arrangements
- Action should be taken to minimise the opportunities for gaming tariffs and to remove incentives which result in inefficiencies in renewable deployment.
- Tariffs should be reflective of an appropriate rate of return for different technologies given market conditions.

## Rationale for intervention

34. This consultation proposes some changes to the tariff bands. Figure 3 shows the current bands compared to the proposed bands. The general approach to tariff and degression bands has been to merge band to simplify the scheme.

35. The <4kW PV tariff band has been enlarged to include installations of <10kW. This is because installations up to 10kW share similar installation costs and are expected not to face significant grid connection costs. A generation capacity of <10kW is expected to be utilised by domestic households. Therefore they'll receive residential bill savings and pay negligible grid connection costs. Both of these factors impact on generation tariffs required to meet the target rate of return.

36. Revising the generation tariffs at current tariff bands (4-50kW) would have resulted in overcompensation of installations sized 4-10kW. This is because the analysis would have under-estimated the bill savings - installations 10-50kW are assumed to achieve bill savings on service/manufacturing contracts which tend to be lower than the domestic retail price. In addition the analysis would have to compensate for a higher capex cost which would include grid connection costs, as it is assumed that some installations 10-50kW band have to pay grid connection costs.

37. The mid-scale wind tariff bands have been merged to reduce the incentive to de-rate wind turbines. There is some evidence that wind installations that would be sized in the 500-2,000kW band are de-rating their turbines to benefits from the higher tariff in the 100-500kW band. Giving all mid-scale turbines (50-1500kW) turbines the same generation tariff reduces the incentives to de-rate.

38. Small wind turbines still benefit from a higher tariff under proposed tariff bands, although this consultation proposes moving the upper boundary from 100kW to 50kW. This is because it appears from the PB analysis that capex falls significantly for the 50-100kW band.

39. The two small hydro tariff bands have been merged to create a <100kW band. If generation tariffs were revised at current tariff bands the smallest band (<15kW) would receive a significantly lower tariff than the band above (15-100kW). The main driver behind this is the lower capex for the <15kW installations. It is assumed that at current tariff bands no hydro installations would accredit as <15kw generators would artificially increase the capacity of their installation to benefit from the higher tariff being offered to the 15-100kW band. To prevent this, the two bands have been merged.

Proposed tariff bands	Current tariff band
<b>PV</b>	
0 -10kW	<4kW
10 - 50kW	4-50kW
50 - 250kW	50-150kW
250-1000kW	150-250kW
> 1000kW	250-5000kW
Stand alone	Stand alone
<b>Wind</b>	
<50kW	0-100kW
50–1500kW	100–500kW
	500–1,500kW
>1500kW	>1500kW
<b>Hydro</b>	
<100kW	<15kW
	15-100kW
100-500 kW	100-500kW
500-2000kW	500-2000kW
>2000kW	>2000kW

**Figure 3 - Proposed tariff bands compared to current tariff bands**

40. We do not propose any changes to the tariff bands for anaerobic digestion, hydro or micro-CHP.

41. Degression bands will be amended where necessary to reflect changes to tariff bands.

## Degression mechanism

### Proposal

#### Default degression

42. We propose that the default degression mechanism is amended to ensure generation tariffs take into account projected changes to the bill savings and to the costs of installations,

which we project will maintain a constant rate of return. We also propose that the frequency of default depression for all technologies be harmonised to quarterly. Proposed levels of default depression across all technologies are set out in the table below.

Generation Tariffs p/kWh, Q1 2016 prices		Jan-2016	Apr-2016	Jul-2016	Oct-2016	Jan-2017	Apr-2017	Jul-2017	Oct-2017	Jan-2018	Apr-2018	Jul-2018	Oct-2018	Jan-2019
PV	<10kW	1.63	1.50	1.36	1.22	1.09	0.95	0.82	0.68	0.54	0.41	0.27	0.14	0.00
	10 - 50kW	3.69	3.59	3.48	3.38	3.27	3.17	3.06	2.96	2.86	2.75	2.65	2.54	2.44
	50 - 250kW	2.64	2.54	2.44	2.34	2.24	2.13	2.03	1.93	1.83	1.73	1.63	1.53	1.43
	250-1000kW	2.28	2.18	2.08	1.98	1.88	1.78	1.68	1.58	1.48	1.38	1.29	1.19	1.09
	> 1000kW	1.03	0.94	0.86	0.77	0.69	0.60	0.51	0.43	0.34	0.26	0.17	0.09	0.00
	Stand alone	1.03	0.94	0.86	0.77	0.69	0.60	0.51	0.43	0.34	0.26	0.17	0.09	0.00
Wind	<50kW	8.61	8.52	8.42	8.32	8.22	8.13	8.03	7.93	7.83	7.74	7.64	7.54	7.45
	50-1500kW	4.52	4.48	4.44	4.40	4.36	4.32	4.28	4.24	4.20	4.16	4.12	4.08	4.04
	>1500kW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydro	<100kW	10.66	10.63	10.60	10.56	10.53	10.50	10.46	10.43	10.40	10.36	10.33	10.30	10.27
	100-500 kW	9.78	9.77	9.75	9.74	9.72	9.71	9.69	9.68	9.67	9.65	9.64	9.62	9.61
	500-2000kW	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56
	>2000kW	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18	2.18

**Figure 4 – Generation tariffs with default depression to 2018/19**

### Contingent depression

43. We propose that the frequency and the threshold for contingent (i.e. deployment-based) depression should be harmonised across all technologies. It is proposed that a contingent depression of 5% would occur when deployment exceeds projections across depression bands. There would be a further 10% depression when the cap is reached for both PV and non-PV technologies. We also propose that contingent depression should take place on a quarterly basis and in addition to proposed default depression. More detail on explicit thresholds is set out in the accompanying Impact Assessment.

44. We will consult on depression for AD at the same time as we consult on generation tariffs for AD, but we would expect depression to follow a similar pattern.

### Background

45. Currently, generation tariffs degress on a quarterly basis for solar PV and every six months for AD, hydro and wind power (there is no depression for micro-combined heat and power). The amount by which tariffs degress depends on the level of deployment and is controlled by two separate mechanisms:

- **Default degression** aims to ensure tariffs decrease in line with forecast reductions in the cost of deployment.
  - For solar PV, this is set at a baseline rate of 3.5%, although if deployment is lower than a specified floor threshold, degressions can be skipped for no more than two consecutive quarters.
  - For AD, hydro and wind power, default degression is set at 5% (allowing for a lower rate of 2.5% if deployment is well below expectations).
- **Contingent degression** enables tariffs to decrease more rapidly where deployment exceeds DECC's projections.
  - This can be up to 28% for solar and 20% for other technologies, and is triggered when deployment of any particular technology exceeds a specified threshold (with separate deployment thresholds for different installations sizes), on a quarterly basis for solar PV and biannually for AD, hydro and wind power. These thresholds were set out in the Government responses to consultations on the 2011/12 comprehensive review.<sup>10</sup>

46. While the new system of degression introduced in the 2011-12 review has improved the ability for tariffs to react to deployment patterns, reducing the need for interim reviews, it has not prevented further overspend against DECC's central projections under the LCF. There are several reasons for this, including upper limits on the level of tariff degression (even when contingent degression thresholds have been significantly surpassed); and pre-degression surges in applications for pre-accreditation significantly increasing the number of installations eligible for higher tariffs.

47. The changes we are proposing are intended to better ensure the degression mechanism's effectiveness in ensuring tariffs reflect deployment costs and offer value for money. They also aim to align the degression mechanism with the introduction of deployment caps.

## Tariff reviews

48. While the default and contingent degression mechanisms are designed to ensure tariffs remain in line with changes in technology costs, it cannot be guaranteed this will be the case should an unexpectedly rapid reduction in technology costs occur.

49. DECC will continue to monitor developments in technology costs. If we become aware that tariff levels are not in line with technology costs, we will consider conducting a future review of tariff levels and implement the revised tariffs as soon as practicable.

## Export tariffs

### Proposal

50. We do not propose any change to export tariffs at this stage. However, we are consulting on options to ensure the long-term sustainability of the export tariff. The options are to re-base the export tariff to a lower level or introducing a more dynamic link to wholesale electricity prices for new FITs applicants.

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<sup>10</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/43085/5386-government-response-to-consultation-on-comprehensi.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/43085/5386-government-response-to-consultation-on-comprehensi.pdf) for solar PV.  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/42917/5905-government-response-to-consultation-on-comprehensi.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/42917/5905-government-response-to-consultation-on-comprehensi.pdf) for other technologies.

## Background

51. The export tariff was introduced to address the difficulty of market access for small-scale generators. At the time of its introduction, markets for small-scale generation were underdeveloped and dominated by large energy suppliers. The export tariff and the requirement on FITs licensees to buy small generators' output provided these generators with a guaranteed route to market and a fair price for their exports.
52. The export tariff has been set to reflect the estimated value to electricity suppliers of the electricity that is exported to the grid based on the wholesale price plus the value of avoided costs, such as for transmission and distribution (though we acknowledge that in certain circumstances these can be additional rather than avoided costs), less the transaction costs, such as metering. We welcome views on how to account for these additional and avoided costs in setting the export tariff.
53. The fact that the methodology of setting the export price is not able to move dynamically in line with the wholesale electricity price has led to an issue where the current export tariff is higher than the wholesale electricity price with resulting overcompensation of generators by suppliers.
54. We discuss elsewhere in this document (Chapter 4) the rationale for proposals to end deemed exports in favour of using smart meters to measure actual exports.

## Rationale for intervention

55. Over the course of 2014, the spot wholesale electricity price fell below the export tariff. Linkage of the export tariff to RPI has exacerbated this gap. Given ongoing uncertainty about the future trend of wholesale power prices, we are seeking to address the gap between the export tariff and market prices for FITs installations. The main concerns we have about this emerging gap are:
  - FITs licensees may be reluctant to take on new FITs generators larger than 30kW because of the risk of having to purchase exports from those installations at a price higher than the electricity's value, given these costs cannot be levelised across industry and are not qualifying FITs costs.<sup>11</sup>
  - The risk of long-term damage to the Power Purchase Agreement (PPA)<sup>12</sup> market for FITs installations, since both existing and new FITs generators may switch onto the export tariff if it remains at a premium to market prices.
  - The net cost of deemed exports (whereby the export element will be deemed to be 50% of the power generated by the system) is passed through to consumers. An export tariff that is higher than the value of exports may therefore be burdening energy consumers with higher than necessary electricity bills. Conversely, an export tariff lower than the value of exports may risk overcompensating suppliers.
56. We are also aware that in areas of high solar PV deployment the value of electricity generated at installation sites in terms of avoided transmission and distribution costs varies considerably. For example, at periods of peak PV generation there may be additional,

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<sup>11</sup> Qualifying FITs costs are the reasonable costs of a FITs licensee as a result of administering the FITs scheme. These costs are determined by the Secretary of State.

<sup>12</sup> A power purchase agreement (PPA) is a contract between two parties, one who generates electricity (the seller) and one who is looking to purchase electricity (the buyer). There is little visibility over the terms of these contracts as they are commercially sensitive bilateral agreements.

rather than avoided, distribution and transmission costs if power flows put pressure on the network infrastructure. In contrast, where PV generation coincides with periods of high demand it can be valuable in reducing power flows on the network.

57. In addition, in spite of the variation in value to the energy system noted above, the price paid for exporting energy remains static and customers have no incentive to store energy produced at times of low demand for use during times of peak demand. It may be appropriate in the future to consider how the export tariff can more accurately reflect the value to electricity suppliers of electricity exported onto the grid.
58. The level of the export tariff is considered in setting the generation tariff: together with bill savings achieved by consuming some of the electricity generated on site, the two tariffs provide the overall return on investment available under the scheme. In setting the generation tariffs proposed in Figure 2 above, we have assumed that there is no change to the current rate of the export tariff. If the current approach to maintaining rates if return constant is retained, any future changes to the level or setting of the export tariff would most likely need to be taken into account in setting generation tariffs.

#### Measures under consideration for setting the export tariff

59. We do not propose any change to export tariffs at this stage. However, for the reasons set out above, we remain concerned about the sustainability of the export tariff and welcome stakeholders' views on the following potential options to address this.

#### **Withdraw the right for >50kW installations to opt for the export tariff**

60. All installations larger than 30kW are required to install an export meter if they wish to receive the export tariff. Of these, we consider that the vast majority of installations larger than 50kW have the ability to sign a PPA with their FITs licensee for the off-take of their exported electricity. The original intention of the export tariff was to provide a route-to-market for smaller generators unable to access the market. We are therefore considering the option of withdrawing the export tariff option for larger installations (above 50kW) that should be able to access market pricing.

#### **Re-base the export tariff to a lower level**

61. Given the aforementioned concerns about potential consequences of the emerging gap between the export tariff and wholesale power prices, the export tariff could be re-based to a lower level than the prevailing 4.85p/kWh (in 2015/16 terms) for all new installations.

#### **Formalise annual re-set of the export tariff to a wholesale power price index**

62. We could introduce an annual reset process for the export tariff linked to an electricity price index to address the gap between the export tariff and the wholesale price. For example, the export tariff for the forthcoming year could be set annually according to a pre-specified formula, calculated using historical data (e.g. the last 12 months' daily average) from a wholesale power price benchmark index such as the APX Power UK Spot price. This would aim to ensure that export tariffs for new installations remain aligned with market wholesale power prices.
63. When smart meters have been rolled out, we could consider whether a dynamic export tariff, updated every half hour to reflect the current wholesale spot price, would be appropriate. There are various options for setting the value of smart-metered exports.

## Indexation

### Proposal

64. We propose to change the Retail Price Index (RPI) link for generation and export tariffs to a Consumer Price Index (CPI) link for new installations. Whilst we recognise that investors place a high value on the opportunity to earn real returns on their investment, we believe a CPI link is a more appropriate way of compensating investors for inflation. Any such change would apply only to new entrants to the scheme and would not affect existing generators.

### Background

65. The 2012 FITs Review considered removing inflation linkage of tariffs altogether. This was based on uncertainties about investor behaviour with regards to inflation and real versus nominal returns. However, the consultation indicated a strong preference from stakeholders to keep the RPI link. Given this, and the relatively minor expected impact of the proposed change, the review decided not to change the RPI link.

66. However, on 8 January 2015 the Institute for Fiscal Studies (IFS) published an independent review of UK consumer price statistics which concluded that there are statistical flaws in the construction of RPI,<sup>13</sup> and recommended that Government and regulators move towards ending the use of the index to inflate prices. The IFS said that the Consumer Price Index (CPI) was a better constructed measure of inflation that users should have confidence in.

67. Clearly, any linking between export tariffs and RPI or CPI would be superseded if we adopted the proposal above to set export tariffs with reference to a wholesale power price benchmark.

## Other technologies under the FITs Scheme

### Proposal

68. The FITs scheme was designed to support the widespread deployment of proven technologies that can be realistically and effectively deployed in the short term, rather than to support unproven technologies. We consider that at this stage there are no other technologies which meet the criteria for support under FITs.

69. We do not propose to change policy around micro CHP, because there has been insufficient deployment to justify a review of this area and there is not therefore a sufficiently broad set of data on which to base tariff changes. We propose that the existing cap on installations remains in place, along with the trigger of 12,000 installations for a review of tariff and deployment levels.

### Background

70. Micro combined heat and power (CHP) has been part of the FITs scheme since its inception. As of April 2015, 645 micro CHP installations had deployed under FITs, totalling 0.7MW of capacity. While Government continues to believe that micro CHP could play a useful part in supporting lower carbon technologies in the domestic context, deployment in comparison with other technologies under FITs has remained very low, and there has been little sign of micro CHP reaching the 12,000 installations which would trigger a review of tariff and deployment levels, much less the existing cap of 30,000 installations.

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<sup>13</sup> <http://www.statisticsauthority.gov.uk/reports---correspondence/current-reviews/range-of-prices-statistics.html>

## Questions

<b>Consultation Question</b>	
1.	Do you agree or disagree with the proposed generation tariff rates set out above? Please provide reasons to support your answer.
<b>Consultation Question</b>	
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.
<b>Consultation Question</b>	
3.	Do you consider the proposed default degeneration pathways fairly reflect future cost and bill savings assumptions in your sector? Please provide your reasoning, supported by appropriate evidence where possible.
<b>Consultation Question</b>	
4.	Do you consider it appropriate to harmonise the triggers for contingent degeneration across all technologies, and do you consider the proposed triggers will ensure tariffs reflect falling deployment costs? Please provide your reasoning, supported by appropriate evidence where possible.
<b>Consultation Question</b>	
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.
<b>Consultation Question</b>	
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.
<b>Consultation Question</b>	
7.	Do you agree or disagree with the proposal not to include any additional technologies in the FITs scheme? Please provide reasons for your response.

## 3. Cost control measures

**This chapter sets out measures to control the overall cost of deployment under the FITs scheme**, in particular through an overall cap on the level of deployment under the scheme. This covers:

- the proposed level of deployment caps;
  - how an overall cap would be divided between technologies and tariff bands; and
  - how caps would be implemented, pausing the scheme if necessary.
- It also proposes a rule prohibiting extensions to installations under the FITs scheme.

### Proposal

71. We propose that the FITs scheme is limited to a maximum overall budget of £75-100m from January 2016 to 2018/19. This is the uppermost level that we currently consider to be affordable within the context of higher than expected spend on the LCF and given that the FITs scheme has either achieved for wind, anaerobic digestion and hydro, or is close to achieving for solar PV, projected deployment. We propose that this budget is enforced via deployment caps. This will be accompanied by an amended degression mechanism, reflecting the experience of the last three years. At the end of this period, we propose that the generation tariff is phased out for new applicants to the scheme but the export tariff is retained.
72. If events through the duration of this consultation indicate that deployment caps will not prove sufficiently effective in controlling the costs of the scheme at an acceptable level, or in light of other affordability criteria, we propose ending generation tariffs for new applicants or, alternatively, further reducing the size of the scheme's remaining budget available for the cap as soon as legislatively possible, which we expect to be January 2016.

### Background

73. As well as revising tariffs in response to falling technology costs, the 2012 FITs Review introduced additional cost control measures. The existing system of degression for generation tariffs was introduced as a means of moving towards a tariff structure capable of responding dynamically to deployment costs without the need for emergency reviews. It also aimed to keep expenditure as close as possible to the central trajectory for FITs within the LCF, to ensure the scheme's costs could be better controlled through transparent and predictable changes to tariffs.
74. The FITs scheme is open to all applicants eligible for the scheme and there is ultimately no mechanism to limit overall expenditure. Degression alone has not been sufficiently responsive or effective to ensure deployment levels are within the constraints of what is affordable and offer value for money for consumers.
75. We are therefore proposing to increase the frequency of degression and to make some changes to the contingent degression thresholds. We also feel that, even with these proposed changes, degression alone is not able to provide the robust cost control

mechanism we believe is necessary to avoid the risk of future overspend for FITs. We are therefore also proposing introducing deployment caps, linked to degeneration, and designed to place an absolute limit on the level of deployment that can be afforded at a particular tariff.

## Design and implementation of caps

### Levels of caps

76. Given the current pressures on the LCF, the relative maturity of FITs technologies compared to when the scheme was introduced, and the Government's desire to set a clear pathway to a subsidy-free world for the technologies supported under FITs, we propose that the introduction of cap of £75m - £100m would provide a maximum affordable budget for new generation supported under FITs from January 2016 to 31 March 2019.
77. We envisage these caps integrated into the proposed changes to the tariff degeneration system; placing an absolute limit on the level of deployment that can be afforded at a particular tariff level. Once a cap is reached, no further generating capacity would be eligible for the tariff available in that degeneration period.
78. We propose dividing this budget into deployment caps for individual technologies and degeneration bands, calculated on the basis of their projected deployment as a proportion of overall projections for FITs deployment and expenditure (under the tariffs proposed in this consultation). These caps will work independently of one another so a cap could be hit for one degeneration band without affecting other technologies or different tariff bands of the same technology. This would avoid some technologies or scales of technology being constrained by over-deployment of others.
79. This approach would also enable caps to be aligned with contingent degeneration to provide a unified cost control mechanism – it is proposed that deployment exceeding our deployment projections results in degeneration of 5%, and that if the cap is hit it results in degeneration of 10%. We would welcome views on this proposed approach and suggestions for any alternatives (for example single technology caps).
80. We are also proposing to divide the overall budget into quarterly caps, to coincide with the proposed frequency of degeneration. Quarterly instead of annual caps should reduce the risk of boom and bust which we recognise is a risk with any cap based system. It should also help improve the value for money of FITs and ensure, for example, that an annual FITs budget is not fully committed early in the year to a small number of installations supported at the highest tariffs. We would welcome views on the proposal for quarterly caps and suggestions for any alternatives (for example, more or less frequent caps, recognising that the answer might be different for different technologies).
81. The proposed caps are set out in Figure 5 and we would welcome views on these. As set out above, these caps have been calculated on the basis of our modelled projections of deployment and expenditure under the new generation tariffs proposed in this consultation.
82. **It is important to note that if tariffs change either as a result of this consultation or future tariff reviews, including that on AD tariffs, then the caps will need to be adjusted accordingly.** Put simply, a reduction in tariffs for a particular technology and/or degeneration band, could lead to an increase in the cap for other technologies and vice versa. This is because lower tariffs mean more deployment can be afforded for the same cost and vice versa.

Maximum Deployment (MW)		Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
PV	<10kW	17.8	18.4	18.8	19.2	19.7	19.9	19.7	19.5	19.2	19.2	19.8	20.5	21.1
	10 - 50kW	10.3	10.4	10.3	10.2	10.1	10.0	9.9	9.9	9.8	9.9	10.4	11.0	11.5
	>50kW	8.8	9.0	8.9	8.9	8.8	8.7	8.6	8.6	8.5	8.7	9.3	9.9	10.6
	Stand alone	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Wind	<50kW	4.4	4.6	4.7	4.8	5.0	5.1	5.2	5.2	5.3	5.5	5.7	6.0	6.2
	>50kW	14.6	14.8	15.0	15.1	15.3	15.5	15.7	15.8	16.0	16.2	16.5	16.7	16.9
Hydro	All	13.4	13.8	14.0	14.3	14.6	14.8	15.0	15.2	15.3	15.4	15.5	15.6	15.6
AD	AD<500kW	2.7	2.8	2.7	2.7	2.6	2.7	2.7	2.6	2.5	2.7	2.6	2.6	2.5
	AD>500kW	4.4	3.8	3.6	3.3	3.1	3.1	2.9	2.7	2.5	2.5	2.3	2.1	2.0

**Figure 5 - Maximum Deployment caps**

Estimated number of installations		Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
PV	<10kW	5466	5626	5762	5903	6049	6122	6044	5965	5884	5888	6067	6254	6447
	10 - 50kW	308	314	311	307	304	301	299	296	294	298	313	330	347
	>50kW	34	34	34	33	33	32	32	32	31	32	34	36	38
	Stand alone	2	2	2	2	2	2	2	2	2	2	2	2	2
Wind	<50kW	463	479	494	508	524	537	547	557	567	583	611	640	669
	>50kW	18	18	19	19	19	19	19	19	19	19	20	20	20
Hydro	All	53	54	55	56	57	59	60	61	62	63	64	65	67
AD	AD<500kW	3	3	3	4	4	4	4	4	4	4	3	3	3
	AD>500kW	1	1	1	1	1	1	1	1	1	1	1	1	1

**Figure 6 – Estimated number of installations at maximum deployment**

83. The proposed caps are based on our central deployment forecasts under the proposed generation tariffs and default depression. If for any reason there is significant underspend under any of the caps we will consider the possibility of recycling underspend into future caps.

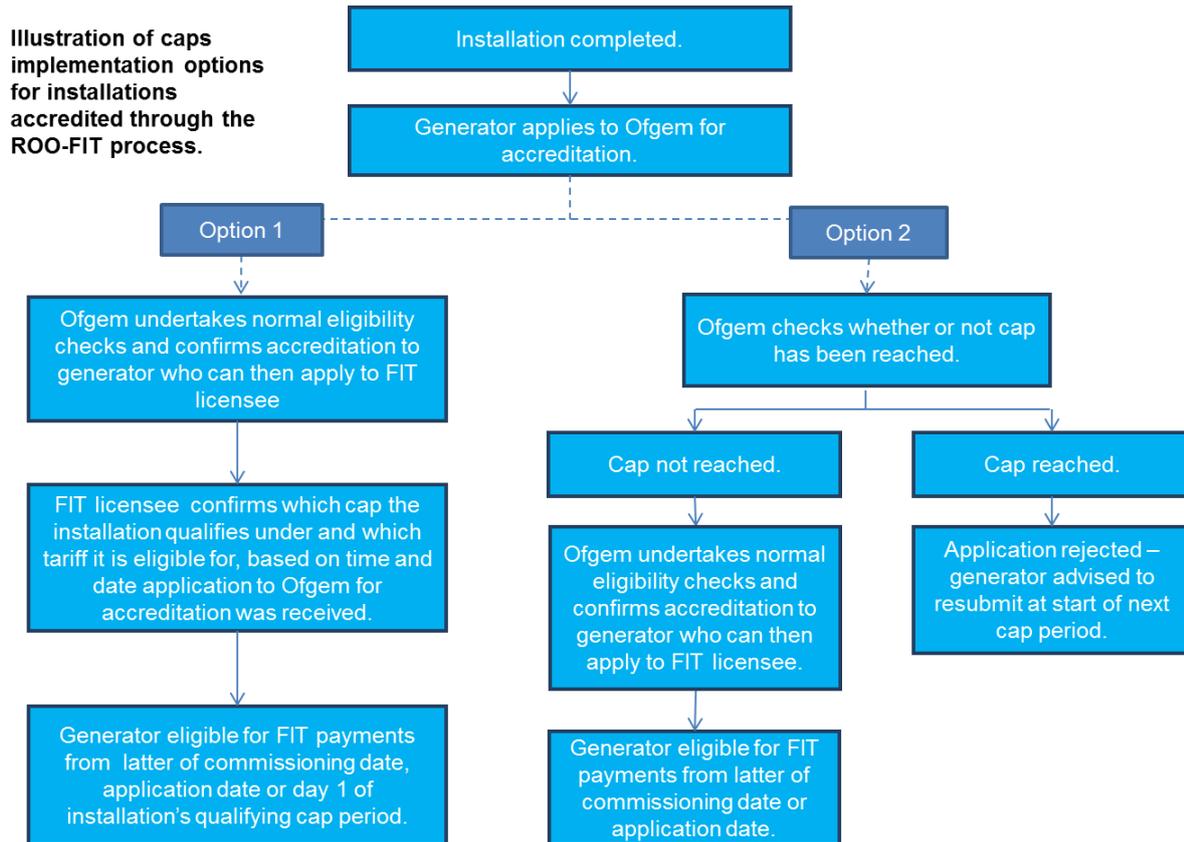
84. We do not propose amending the current arrangements for the micro CHP cap. There has been relatively little take-up of accreditation of such installations and little indication that this will change. We propose that the existing cap on installations remains in place, along with the trigger of 12,000 installations for a review of tariff and deployment levels.

### Implementing caps

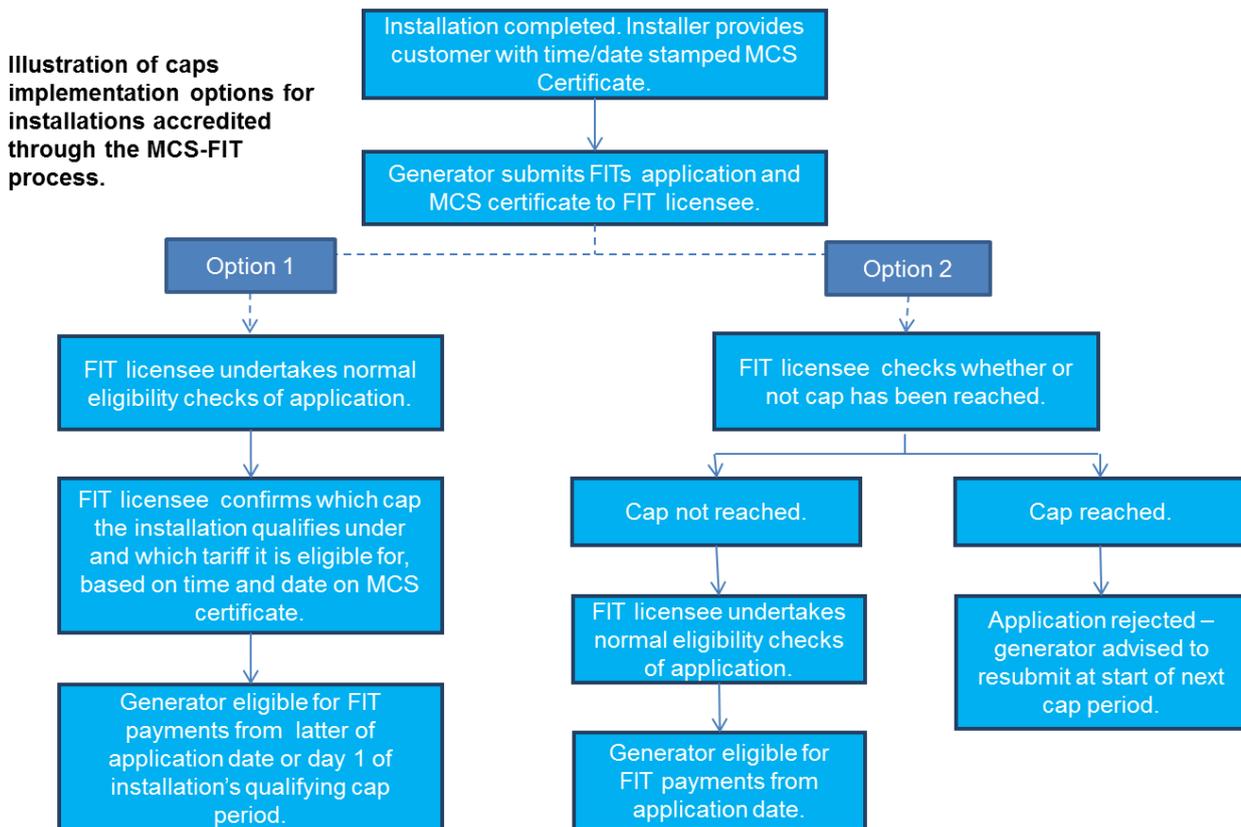
85. For caps to work there needs to be a robust, fair and transparent monitoring/tracking system which can determine (i) when a cap has been reached and (ii) which installations count towards the cap and therefore qualify for the tariff in place at that time.
86. For the purposes of determining if and when a cap has been reached, we propose that deployment will be measured using data on the total installed capacity of new installations from:
- the Microgeneration Certification Scheme (MCS) database (in the case of the relevant caps for <50kW solar PV and wind subject to accreditation under the MCS-FITs process); and
  - Ofgem's records of applications received for full accreditation under the ROO-FITs accreditation process (in the case of the relevant caps for >50kW solar PV and wind, and all anaerobic digestion and hydro projects).
87. These data sources provide the most up-to-date measure of deployment activity, and therefore how much capacity is likely to become eligible for FITs. We recognise that the data from the MCS database may provide an overestimate of the total capacity of installations that will become accredited under FITs, because not all installations that are registered on the MCS database progress to receiving FITs. Nonetheless, we feel that a capped system justifies opting for the most up-to-date measure of deployment which, in the case of <50kW solar PV and wind, is the MCS database.
88. If and when the deployment data shows that a cap has been reached, the exact date and time (to the second) will be recorded by Ofgem. Installations with MCS certificates timed and dated before and up to the point when a cap is reached will be eligible for the tariffs in place at that time; installations with MCS certificates timed and dated after the point when a cap is reached will have missed out on the cap and will not be eligible for the tariffs in place at that time. Similarly installations whose applications to Ofgem for full ROO-FIT accreditation are received before the time and date when a cap is reached will be eligible for the tariffs in place at that time; installations whose applications for full ROO-FIT accreditation are received after the time and date when a cap is reached will have missed out on the cap and will not be eligible for the tariffs in place at that time.
89. We welcome views on what should happen to installations which miss out on a cap. One option would be that, once a cap has been hit, any further applications (i.e. applications to Ofgem for ROO-FIT accreditation with a time and date after when the cap has been reached; and applications to FITs licensees supported by an MCS certificate with a time and date after when the cap has been hit) should be rejected and required to be re-submitted at the start of the next cap period. This approach would enable a more controlled spread of the overall cap across the three years to 2018/19, removing the risk of the entire cap being committed early on. However, it could be more challenging to implement and would mean increased uncertainty for those missing out on a cap.
90. The alternative would be to operate a rolling system in which applications could continue to be made and processed even when a cap has been hit, with the tariff they are ultimately assigned determined by which cap they qualify under. This approach would remove some

of the uncertainty for those who miss out on a cap but would leave open the risk of the overall cap across the three years to 2018/19 being fully committed early on (even if the actual start dates for FITs payments were spread out over the three years).

91. Under both options we propose that an installation should only be eligible for FITs payments from the latter of its commissioning date, application date, or the start date of the relevant cap under which it qualifies. We would expect it to be the start date of the relevant cap for any installations which miss out on a cap and for which, as a result, generators would also be required to provide an accurate meter reading at this date to their FITs licensee. We are not proposing that this would have any impact on the lifetime of FITs payments that an installation is eligible for, just the start date.
92. This approach represents a change from the current system where eligibility for a particular tariff is determined by the latter of the commissioning or application date. Under the proposed approach, the date and time of an installation's MCS certificate or the date and time when Ofgem receive an application for full ROO-FIT accreditation will become key in determining which cap an installation qualifies under and therefore for which tariff it is eligible. This will mean that generators have less certainty about the exact tariff their installation will be eligible for when they install it, although they will be aware of the range of possible tariffs (and we recognise that this uncertainty will be increased if the proposals to remove pre-accreditation set out in the Government's consultation of 22<sup>nd</sup> July to 19<sup>th</sup> August 2015 are implemented). Again, we feel that this change is justified for a capped system to work and provide the robust budgetary control required although we are open to suggestions for alternative approaches to implementing caps which provide greater certainty to generators whilst being workable and providing robust budgetary control.
93. Amending the definition of "eligibility date" as proposed would also require consequential changes to the energy efficiency requirement for solar PV under FITs. Currently, applications for FITs for solar PV installations up to 250kW have to be accompanied by an energy performance certificate (EPC) proving that the building that the solar PV installation is wired to provide electricity to, has an EPC rating of level D or above. The rules require that the EPC must have been issued on or before the installation's eligibility date. However, under the proposed changes to the definition of "eligibility date" this could be some time after the installation in question has been up and running. This would be contrary to the original policy intent behind the energy efficiency requirement that solar PV installations should only be eligible for the higher solar PV tariffs if the building to which they are wired to provide electricity already meets a recognised energy efficiency standard. To address this, we propose amending the rules so that the EPC must have been issued before the installation's "commissioning date" rather than its "eligibility date." Further information on Energy Efficiency proposals is contained in Chapter 8.
94. Figures 7 and 8 provide an illustration of the proposed approach to implementing caps. We would welcome views on this proposal and will, as appropriate and working with Ofgem, provide further guidance.



**Figure 7 – Caps implementation options under ROO-FIT**



**Figure 8 – Caps implementation options under MCS-FIT**

## Alternative options to caps

95. We recognise that implementing deployment caps presents significant logistical challenges. If the consultation suggests that more time is therefore needed to introduce a robust system of caps together with the other cost control measures, then we would not rule out temporarily pausing applications to the scheme from new generators. However, if it becomes apparent that deployment caps will not prove sufficiently effective in controlling the costs of the scheme at an affordable and sustainable level, we propose taking action to end generation tariffs for new applicants as soon as legislatively possible, which we expect to be January 2016, or, alternatively, further reducing the size of the scheme's remaining budget available for the cap. This would be done through making modifications to the licence conditions to prevent the FITs licensees from paying generation tariffs to new entrants, yet retaining the other aspects of the scheme such as the payment of export tariff to these generators.
96. The government is also considering further amendments to the existing FITs scheme to ensure it provides better value for money. This includes consideration of whether future applications within a system of caps could be prioritised through a competitive process. We welcome stakeholders' views on this, including what forms of competition may be appropriate and what differences in approach should be considered depending, for example, on technology, size or ownership model.

## Extensions to installations under the FITs scheme

### Proposal

97. DECC proposes to put in place a rule to prevent new extensions claiming support under FITs. This will encourage developers to deploy their entire capacity in one go, limit the impact of degeneration upon smaller scale installations and increase the administrative ease of the FITs scheme, therefore reducing costs.

### Background

98. The FITs scheme currently allows for extensions to installations which have already deployed under the scheme. Where a FITs installation is extended using the same technology type, the extension is assessed as a separate eligible installation. If successfully accredited, the extension will be assigned a separate eligibility date and period and separate tariff code based on the aggregate total installed capacity (TIC) of both the extension and the existing FITs installation. In this situation, the eligibility date and the eligibility period of the extension will be based on the commissioning date of the extension. The original installation's eligibility date, tariff, and eligibility period will not be affected.
99. There are legitimate reasons for extending an installation already deployed under the scheme, such as improved access to finance, increased on-site loads or (for AD installations) an increased source of feedstock.
100. However, there are also risks of project overcompensation through payment under different tariff bands. For example, in the current scheme, a solar installation commissioned in increments of 4kW, 6kW and 40kW up to the tariff band limit of 50kW, would receive higher tariffs for the first two phases (in the 4kW and 10kW tariff bands) while potentially benefiting from the economies of scale of a 50kW installation, leading to that installation being overcompensated.
101. Extensions are particularly prevalent in the wind and AD sectors. Figure 9 below shows the proportion of installations with extensions since the scheme began.

	<b>% with extension(s)</b>
<b>Anaerobic digestion</b>	14%
<b>Hydro</b>	3%
<b>Micro CHP</b>	0%
<b>Photovoltaic</b>	1%
<b>Wind</b>	8%

**Figure 9 – Proportion of installations with extensions**

102. The ability under current rules to extend installations under the FITs scheme has the following impacts:

- It results in certain installations with extensions being overcompensated for the lifetime of their scheme;
- It has the risk of incentivising less efficient deployment of renewable projects;
- It can trigger depressions in lower capacity bands even though installations at these sizes have not really deployed fully;
- It adds to administration costs.

## Geographical scope of the FITs scheme

### Proposal

103. We do not intend to extend the geographical scope of FITs to Northern Ireland.

### Background

104. We have considered extending the scope of FITs to Northern Ireland, to take account of the lack of a support mechanism for small-scale renewables following the removal of the Northern Ireland Renewables Obligation from 2017 onwards. However, increasing the scope of the FITs to cover new geographical areas would be likely to increase the cost of the FITs scheme at a time when we are seeking to limit costs under the scheme. Extending the scheme at this point would require primary legislation and also trigger a requirement to re-notify the scheme to the EU Commission and impact on the implementation timeframe for any cost control proposals resulting from this consultation.

105. The primary focus of the current review is to ensure generators are incentivised appropriately and to seek views on how to control future costs. We therefore do not consider it appropriate at this moment to extend the scope of the scheme.

## Questions

### Consultation Question

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

### Consultation Question

9. Do you agree or disagree with the proposed design of the system of caps (i.e. quarterly deployment caps broken down by technology and depression band)? If you disagree,

are there any alternative approaches? Please provide your reasoning, making clear if your answer is different for different technologies or sectors.

### Consultation Question

10. Do you agree or disagree with the proposed approach to implementing caps? If you disagree, are there any alternative approaches that you'd suggest? Please provide your reasoning, making clear if your answer is different for different technologies or sectors and provide any views on what should happen to applications for FITs for installations which miss out on a cap.

### Consultation Question

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.

### Consultation Question

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.

### Consultation Question

13. What would be the impact if FITs continued as an export-only tariff for new generators on reaching the cap of £75-100m additional expenditure? Please provide your reasoning.

### Consultation Question

14. Do you have any views on the use of competition to prioritise applications within a system of caps? What do you think are the advantages and disadvantages of this approach? What forms of competition may be appropriate and is this different for different sorts of installations? Please provide your reasoning.

### Consultation Question

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

### Consultation Question

16. Do you agree or disagree with the proposal to remove the ability of new installations to extend their capacity under the FITs scheme? Please provide your reasoning

## 4. Metering export and generation – smart meters and other options

This chapter sets out possible future measures to **ensure the Feed-in Tariff scheme is aligned with the roll-out of smart meters**. This includes our intention to end deemed exports in favour of metered exports to ensure export tariffs are more closely aligned with wholesale electricity costs and consider options to enable the remote reading of generation meters.

### Proposal

106. We seek stakeholders' views on options for ending deemed exports in favour of fully metered exports and possible future measures to enable remote generation meter reading.

### Background

107. The existing export tariff effectively establishes a price floor for the export of FITs-accredited generation to the grid. Generators up to 30kW without an export meter have the option of a deemed tariff, based on an assumption of about the level of export (currently, 50% of generation (75% for hydro)). Many larger generators currently choose a Power Purchase Agreement (PPA) over the export tariff, while eligible smaller installations tend to opt for the deemed tariff. Out of the total installed capacity of FITs installations that have an export meter, as of June 2015 c.32% of capacity opts for the export tariff, with the remaining on a PPA.

108. It has been clear since the introduction of FITs that deemed export was intended as a temporary measure to be in place until smart meters are available, which will be able to record the amount of energy exported in each half-hour period.<sup>14,15,16</sup> Building on our proposals set out below, we intend to end deemed exports for all FITs installations and see the entire scheme moved to export tariff payments based on actual meter reads on the completion of the smart meter roll-out.

109. Energy suppliers are responsible for the roll-out of smart meters to domestic properties and smart (or subject to certain exceptions, advanced) meters to smaller non-domestic properties.<sup>17, 18</sup> Suppliers are obliged to take "all reasonable steps" to install smart meters at

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[http://webarchive.nationalarchives.gov.uk/20121217150421/http://decc.gov.uk/assets/decc/consultations/renewable%20electricity%20financial%20incentives/1\\_20090722165845\\_e\\_@@\\_consultationonrenewableelectricityfinancialincentives2009.pdf](http://webarchive.nationalarchives.gov.uk/20121217150421/http://decc.gov.uk/assets/decc/consultations/renewable%20electricity%20financial%20incentives/1_20090722165845_e_@@_consultationonrenewableelectricityfinancialincentives2009.pdf)

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[http://webarchive.nationalarchives.gov.uk/20121217150421/http://decc.gov.uk/assets/decc/consultations/renewable%20electricity%20financial%20incentives/1\\_20100204120204\\_e\\_@@\\_fitsconsultationresponseandgovdecision\\_s.pdf](http://webarchive.nationalarchives.gov.uk/20121217150421/http://decc.gov.uk/assets/decc/consultations/renewable%20electricity%20financial%20incentives/1_20100204120204_e_@@_fitsconsultationresponseandgovdecision_s.pdf)

<sup>16</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/43079/4309-feedin-tariffs-scheme-phase-2a-consultation-paper.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/43079/4309-feedin-tariffs-scheme-phase-2a-consultation-paper.pdf)

<sup>17</sup> Those in profile classes 1-4. Larger non-domestic sites in profile classes 5-8 are already required to have an advanced meter.

<sup>18</sup> Whilst the Government recognises the substantial benefits that advanced metering has brought to non-domestic customers, the significant majority of benefits for the Smart Meter Programme will be enabled through

their customers' premises by the end of 2020 and there must be no upfront cost placed on the customer for the installation of the metering equipment. Consumers are not obliged to accept the offer of a smart meter. The majority of installations are expected to occur between 2016 and 2020, but there are no constraints on suppliers in terms of planning or customer prioritisation. This flexibility is designed to ensure that suppliers can deliver their roll-out programmes in the most efficient way, reflecting the needs and distribution of their varying customer bases.

110. A meter is considered “smart” if it meets the Smart Metering Equipment Technical Specifications (SMETS) in force at the time of installation.<sup>19</sup> For an electricity meter, this means it must be capable, inter alia, of collecting and sending data on the amount of electricity imported and exported through it. A meter is considered “advanced” if it is able to meet Standard Licence Condition definitions; as a minimum, to provide half-hourly electricity data that can be remotely accessed.<sup>20</sup> The data must also be made available to the customer in a timely way. There is no requirement under the roll-out for an advanced meter to be able to measure export.

## Measures under consideration for moving towards fully metered exports

111. In order to pave the way for our aim of moving away from deemed export, we propose two alternative options for installations of 30 kW and below.

**Option 1: New entrants and existing FITs generators with installations of 30kW or below would be required to accept a smart meter or, in the case of non-domestic generators in certain circumstances, an advanced meter, when offered one by their energy supplier.**

112. After installation, export tariff payments would be based on remote readings received from the smart or advanced meter by the FITs licensee. In cases where non-domestic customers are offered an advanced meter that is not able to measure export, the FITs licensee would be required to provide additional equipment that provides this functionality.
113. We propose introducing this obligation after the Data and Communications Company (DCC), which will operate the smart meter data and communications system, has begun operating (due in 2016).
114. We consider that this proposal could represent an appropriate way to move away from deemed export without impacting on suppliers' smart meter roll-out plans. However, we recognise it may also create issues that would need to be addressed. For example, we would need to consider whether it should apply to FITs generators who already have meters.
115. In addition, in relation to ensuring compliance with the above proposal and in relation to accessing export data received from the smart meter, the responsibilities and interactions between the energy supplier and FITs licensee may need to be clarified where they are two

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the installation, enrolment in the Data and Communications Company and operation of meters that comply with the second version of SMETS (“SMETS2 meters”). Advanced metering can provide detailed consumption feedback to customers and can enable other benefits such as accurate billing, but the functionality supported by SMETS2 meters opens up a wider range of benefits. The Government's position is therefore to maximise the number of SMETS2 meters installed in the non-domestic market.

<sup>19</sup> <https://www.gov.uk/smart-meters-information-for-industry-and-other-stakeholders>

<sup>20</sup> See:

<https://epr.ofgem.gov.uk/Content/Documents/Electricity%20Supply%20Standard%20Licence%20Conditions%20Consolidated%20-%20Current%20Version.pdf>

different entities. Similarly, installing a smart meter that can record and send export readings directly to the licensee may create administrative or operational hurdles that would need to be dealt with, for example if the licensee has not yet become a DCC User. Also, the obligations and steps involved in ensuring that an advanced meter for non-domestic properties can record and send export data may need further exploration.

**Option 2: All new applicants to the FITs scheme are required to have a smart (or advanced meter where appropriate) installed before applying for FITs payments.**

116. This obligation could come into effect as soon as possible following the end of this consultation, or alternatively apply from a later point such as the start of DCC operations or once the 'new and replacement obligation' applies.<sup>21</sup> For existing generators, option 1 would apply. For both new applicants and existing generators, export tariff payments would be based on remote readings from their smart or advanced meter once installed.
117. While smart meters are key enablers in moving away from deemed export payments, we are aware of the potential hurdles that an early introduction of an obligation into the FITs scheme to use smart meters to measure export might create.
118. For example, it could potentially require suppliers to install smart meters in response to requests from consumers interested in applying to the FITs scheme in a manner that is outside of their plans for the roll-out.
119. While a number of large and small suppliers are already installing smart meters, we are also aware that there are some suppliers who are FITs licensees who may not be rolling out smart meters currently, and such an approach could therefore adversely impact on their businesses as well as reducing consumer choice.
120. Introducing this obligation at a later point in the roll-out would therefore have the potential to reduce the complexity and constraints that it may create.
121. We would welcome stakeholders' views on the proposals under these options and the issues relevant to them, including whether there are any additional technical, commercial or other barriers that would need to be addressed and how that might be achieved.

## Remote generation meter reading

122. Given the aim of introducing remote export meter readings for FITs, it could be appropriate to consider whether and how we might also enable remote retrieval of generation meter readings in the future in order to move away from manual readings, taking into account implications for consumers, FITs licensees and the general running of the scheme. There could be benefits for FITs licensees in terms of streamlining the administration of the scheme and for generators in terms of payments based on accurate readings being made in a more prompt manner. We would therefore welcome views from stakeholders on possible approaches to introducing remote reading for generation meters.

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<sup>21</sup> The 'new and replacement obligation' is the date from which suppliers must take all reasonable steps to install a compliant smart meter where a meter reaches the end of its life or is installed for the first time (e.g. in new build properties). We have proposed that this should apply from mid-2018 as by this point we would expect that smart metering systems will have been operating at scale for some time and industry will be able to roll out to the vast majority of property types. See: [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/450167/Smart\\_Meters\\_Rollout\\_Strategy\\_Government\\_response\\_FINAL.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/450167/Smart_Meters_Rollout_Strategy_Government_response_FINAL.pdf)

123. One option would be to use the smart metering system for remote retrieval of generation readings. This has been designed so that up to four SMETS-compliant electricity meters per property can communicate via the DCC, allowing a second SMETS meter to be installed at the property to record generation.<sup>22</sup>
124. However, this approach could have cost implications, as well as the risk of over-specifying requirements for generation meters. SMETS meters contain functionality that may not be relevant to generation meters, such as the ability to support pre-payment metering. In addition, there may be other practical considerations such as compatibility of the current registration system for generation meters with the DCC.
125. There may, however, be alternatives to the smart metering approach that could avoid such issues whilst achieving the same outcomes. For example, introducing a broad requirement for generation meters to be able to be read remotely.
126. We would welcome stakeholders' views on these, and any alternative approaches to introducing cost-efficient remote reading of generation meters for FITs.

## Questions

### Consultation Question

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.

### Consultation Question

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.

### Consultation Question

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

<sup>22</sup> An alternative approach would be to use a twin element SMETS-variant meter that can record both import/export and generation levels.

## 5. Effects of the Feed-in Tariffs scheme on grid management and costs

This chapter sets out proposals to **ensure the Feed-in Tariff is aligned with DECC's strategy for grid management.**

- The main proposal is to consider introducing a requirement ensuring Distributed Network Operators (DNOs) are notified of new small-scale generators.
- It also considers what other steps could be taken to mitigate the impact of small scale generation on grid management.

### Proposal

127. In order to improve the data that DNOs have on their networks, we are seeking views on using FITs to ensure that DNOs are always notified of new small-scale installations. Under the new EU Requirements for Generators code, it will become mandatory for all new installations over 800W to be notified to the DNO by early 2019. However, we feel the FITs data will bring benefits for network management and planning and this proposed requirement would enable that to happen much earlier.

### Background

128. Generation connecting to the lower voltage distribution networks ('distributed generation') has largely been regarded as beneficial from a network perspective as it reduces the level of electricity needed to be exported from the transmission network to distribution networks, in turn reducing the need for investment in the former. The charging regime for distributed generation reflects this avoided transmission investment.

129. However, rapid and concentrated deployment of distributed generation has meant that significant amounts of generation now exports to the distribution network. Whilst this can be beneficial as the power generated helps meet local demand, it can create constraints on the network. Furthermore, at times, the level of generation is beyond that needed to meet demand on the local distribution network, meaning that it has to export on to the higher voltage transmission network or be curtailed, which can add costs. National Grid published an informal consultation on 6 August on the treatment of transmission charging arrangements at exporting grid supply points (i.e. where energy flows from the distribution network onto the transmission network) which includes consideration of how these costs should be attributed<sup>23</sup>.

130. Distributed generation is at times causing system issues such as voltage increases. Voltage increases occur when generation is high and demand is low requiring network operators to take actions to keep the transmission network within statutory voltage limits. These actions, such as constraining transmission connected generation or installing

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<sup>23</sup> <http://www2.nationalgrid.com/UK/Industry-information/System-charges/Electricity-transmission/Transmission-Network-Use-of-System-Charges/Transmission-Charges-Open-Letters/>

equipment on the network, incur costs to consumers, yet are necessary to maintain efficient, safe and resilient operation of electricity networks. National Grid has set out the potential impacts in its 2015 Future Energy Scenarios.<sup>24</sup> It will publish potential solutions and actions in the System Operability Framework chapter of its 2015 Electricity Ten Year Statement due to be published in November.

131. Distributed generation has also contributed towards a reduction in the available grid capacity at distribution level resulting in network constraints in some parts of the country. This limits the amount and size of new generation that can connect until grid reinforcement is carried out or new smart solutions are deployed. This can be expensive for connecting customers who are asked to pick-up their share of the cost, but also consumers as wider costs are passed through to energy bills.
132. DNOs are looking to manage these impacts. One area of concern is that DNOs are not currently routinely receiving notice of new installations, where no work is required by them, e.g. those on domestic premises. This means that DNOs do not have sight of all the generation connected to their network, which hinders their ability to develop and deploy of solutions that increase network efficiency.
133. DECC is working with Ofgem and the network operators to consider the issues of grid constraints and costs in more detail, including understanding the level and impacts of constraints, the expected pipeline of new generation and what steps network operators are taking to manage connections more efficiently. Ofgem is currently considering responses to its 'Quicker and More Efficient Connections' consultation which sought views on addressing grid constraints and improving connections processes and will respond in the autumn.<sup>25</sup>

#### Rationale for intervention

134. Smart meter proposals elsewhere in this document would give DNOs much better information on the actual use of networks in real-time. However, some stakeholders have suggested we should go further in order to reduce system impacts and maximise network capacity. For example, some have proposed that new FIT installations should be required to locate close to demand, so that generation can primarily be used on-site rather than exported to the grid. Others have suggested that new installations should be required to incorporate storage devices to limit the level of export and/or equipment to mitigate adverse impacts on the network.
135. Concerns have also been raised that small-scale generation is causing issues and costs on the wider system, such as voltage control, for which it does not pay for. It has been suggested that changes be made through FITs, or wider network regime, to ensure that small scale generation pays for the costs it imposes on the system.
136. In addition, the FITs Review provides an opportunity to improve the data available to DNOs on new small scale generation installed on their networks. Currently, installers are required to notify the DNO when a new installation has been installed, however, this does not always happen in practice. Ofgem collects this information in its maintenance of the Central FITs Register, however, due to data protection requirements, there are limitations in the level of detailed site-specific information that can be shared. Ofgem is working with DNOs to consider this issue further, but DECC also seeks views as to whether a requirement should be included under FITs to help ensure notification happens routinely as the current process intends.

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<sup>24</sup> <http://fes.nationalgrid.com/fes-document/>

<sup>25</sup> <https://www.ofgem.gov.uk/publications-and-updates/quicker-and-more-efficient-distribution-connections>

## Questions

### Consultation Question

- |     |                                                                                                                                                   |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 Question

- |     |                                                                                                                                                                                                           |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 co-located with demand or storage? |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Consultation Question

- |     |                                                                                                                                                             |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 22. | Do you agree or disagree that the FITs scheme or wider networks regime should be amended to ensure generators pick-up the costs they impose on the network? |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 6. Ensuring sustainability for anaerobic digestion

This chapter contains a proposal to **implement sustainability criteria for new anaerobic digestion installations** deploying under the FITs scheme. We are seeking stakeholders' views on:

- the eligibility of FITs generators for sustainability criteria;
- the design of sustainability criteria and
- the reporting system which would be used to implement them.

### Proposal

137. While we are not proposing any immediate measures, we are considering implementing sustainability criteria for solid and gaseous biomass for new AD installations under the FITs scheme and are seeking stakeholders' feedback on how such criteria could work.
138. This would provide a consistent application of sustainability across incentive schemes, to further encourage the use of waste and avoid the risk that AD operators gravitate to the FITs if their feedstock is not likely to pass sustainability criteria in the RO or RHI. Sustainability criteria under FITs would provide standards consistent with the RHI and RO sustainability criteria, whilst taking into account the fact that under FITs these measures are likely to apply largely to crops as opposed to woody biomass under the RO and RHI.

### Background

139. FITs subsidises electricity generated from AD whether the plant is fed with waste materials such as food waste or manure, or non-waste material such as maize. The FITs scheme has seen a sharp increase in accreditations of AD installations, up 46% in 2014 from the previous year, and currently supports around 90MW of AD generation with a number of plants in the pipeline (0.66GW in total, 370MW consented but not yet operational).
140. The 2012 FITs comprehensive review recognised concerns that the use of crops in AD generation may not be sustainable,<sup>26</sup> but foresaw only a modest increase in crop use under the FITs. As such, the Government decided to allow the industry to adopt a voluntary approach to addressing this issue, rather than itself imposing measures.<sup>27</sup>

### Rationale for intervention

141. The expansion of the AD sector is anticipated to provide benefits for those managing food and farm waste, and also to deliver affordable renewable energy. It was not

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<sup>26</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/42917/5905-government-response-to-consultation-on-comprehensi.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/42917/5905-government-response-to-consultation-on-comprehensi.pdf) (Para 122)

<sup>27</sup> [http://adbioresources.org/wp-content/uploads/2014/09/cbp-a5\\_Web.pdf](http://adbioresources.org/wp-content/uploads/2014/09/cbp-a5_Web.pdf)

anticipated to encourage a high proportion of crops, the use of which has an impact on both the sustainability and profitability of a typical AD plant.

142. The potential to use crops for AD is much higher than waste, yet presents higher sustainability risks compared to waste. In some cases, high crop use can be a more commercially attractive proposition, but the unchecked use of crops for AD generation is less consistent with Government's aims for AD, namely to deliver the multiple objectives of waste management and low carbon energy.
143. In order to reduce the risks of generating energy from material which does not achieve a substantial greenhouse gas saving, or has a detrimental impact on land with a high ecological value, we have sought to set minimum standards for crop use by implementing sustainability criteria in the Renewable Transport Fuel Obligation, Renewables Obligation (RO), Renewable Heat Incentive (RHI) and Contracts for Difference (CfDs).
144. At present, in the absence of evidence showing widespread industry uptake of the guidelines, we do not feel that the voluntary code alone is sufficient to ensure the sustainability of crops in the FITs scheme. While we support farmers using the guidelines set out in the voluntary code of practice to help minimise sustainability risks, Government considers it is appropriate to put in place regulatory controls to ensure that crops used in AD deliver a sustainable outcome.

## Design and implementation of sustainability criteria

### Criteria

145. We intend for the measures to apply at all scales to newly accredited schemes. FITs payments will be conditional on generators demonstrating:
- A lifecycle greenhouse gas emission saving of at least 60%.
  - That biomass was not sourced from land with a high biodiversity value, including primary forests, grasslands and of areas designed by law for nature conservation purposes.
  - That biomass was not sourced from land with a high carbon stock value, including wetlands, continuously forested areas or peatlands.
146. We propose that for stations not receiving RHI support, the greenhouse gas (GHG) trajectory follows that of new dedicated biomass in the RO, tightening over time for a single installation. As already noted, the sustainability criteria will apply only to new installations able to plan for the higher GHG trajectory. Feedstocks made wholly from waste or animal manure/slurry will not be required to demonstrate a minimum greenhouse gas saving.
- 240kg CO<sub>2</sub>eq per MWh from implementation date to 31<sup>st</sup> March 2020.
  - 200kg CO<sub>2</sub>eq per MWh from 1<sup>st</sup> April 2020 to 31<sup>st</sup> March 2025.
  - 180kg CO<sub>2</sub>eq per MWh from 1<sup>st</sup> April 2025 to 31<sup>st</sup> March 2030.
147. For land criteria, we propose that biomass feedstocks, with the exception of waste and feedstocks made wholly from waste or animal manure/slurry, will be subject to the land criteria set out in the Renewable Energy Directive sustainability criteria for transport biofuels and bioliquids.<sup>28</sup> Because woody biomass is unlikely to be used for the purposes

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<sup>28</sup> (28/2009/EC) :

<http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CCEQFjAAahUKEwidi8Hw->

of AD, we will not at this time consider implementing the additional sustainability requirement for the sustainable procurement of timber.

148. We recognise that the proposed sustainability criteria are taken from the Renewables Obligations regime and were designed more for woody biomass than crops typically used in AD. Since we recognise the multiple benefits of waste-fed AD, there is a risk that the criteria do not present a sufficient sustainability bar for other feedstocks and might lead to an unsustainable growth in crop-fed systems with consequent biodiversity and land use impacts where this is not suitably managed. We would be interested in views on this proposal and on what additional criteria might be necessary to achieve the desired outcome to harness the multiple benefits of waste-fed AD.

## Reporting

149. We consider that sustainability criteria should be underpinned by a robust reporting system. It is also clear, however, that additional reporting requirements create administrative burden for generators, suppliers and Ofgem. In line with the RO and RHI, we propose that generators over 1MW will be required to submit an independent audit report verifying that feedstock consignments have met the criteria or are exempt from meeting them.

150. We will not require generators of under 1MW to conduct an independent audit, but they may be subject to audits already undertaken by Ofgem. A greenhouse gas calculator is already available to help generators calculate their greenhouse gas savings,<sup>29</sup> along with a user guide. Reporting will take place on a quarterly basis, following the same consignment and mass balance rules as the RHI.

## Questions

### Consultation Question

23. Do you agree or disagree that payments to newly accredited AD installations, at all scales, are conditional on meeting the proposed sustainability criteria? Please provide your reasoning.

### Consultation Question

24. Do you agree or disagree that the proposed criteria and GHG trajectories set out above would set the necessary bar to meet our objective to incentivise the multiple benefits from waste-fed AD? Can you suggest alternative criteria which would help to achieve this goal? Please provide reasoning and evidence for your answer.

### Consultation Question

25. Do you agree or disagree with the proposed reporting system to underpin sustainability criteria? Please provide your reasoning.

[5PGAhUGchQKHjYqjANM&url=http%3A%2F%2Feur-lex.europa.eu%2Flegal-content%2FEN%2FTXT%2F%3Furi%3Dcelex%3A32009L0028&ei=Y\\_Vd3NCYbkUYrHgpgN&usq=AFQjCNGOjqeSICSfMIAIZ87a2ENQ4SgCLw&bvm=bv.96041959,d.d24](http://5PGAhUGchQKHjYqjANM&url=http%3A%2F%2Feur-lex.europa.eu%2Flegal-content%2FEN%2FTXT%2F%3Furi%3Dcelex%3A32009L0028&ei=Y_Vd3NCYbkUYrHgpgN&usq=AFQjCNGOjqeSICSfMIAIZ87a2ENQ4SgCLw&bvm=bv.96041959,d.d24)

<sup>29</sup> UK Solid and Gaseous Biomass Carbon Calculator: <https://www.ofgem.gov.uk/environmental-programmes/renewables-obligation-ro/information-generators/biomass-sustainability>

## 7. Administrative changes to the Feed-in Tariff scheme

This chapter proposes **changes to administrative elements of the scheme**, specifically to:

- restrict the use of imported renewable electricity by suppliers to reduce their obligations under the FITs levelisation process
- end the sub-delegation of the power to determine standards to the Microgeneration Certification Scheme (MCS)
- give Ofgem the power to use interest accrued on the levelisation fund to part-fund administrative changes necessary to deliver elements of the FITs Review.

### FITs levelisation process exemptions

#### Proposal

151. We propose to limit the type and amount of overseas renewable electricity that can be used for the purposes of claiming an exemption from suppliers' share of the costs of the FITs, in that same way as has been implemented for the Contract for Difference Supplier Obligation (CFD SO)<sup>30</sup>, notably:

- Restricting eligible imports to renewable electricity generated in other EU Member States.** Only renewable electricity generated in other EU Member States would be eligible for the exemption.
- Limiting eligible imports to those from generating stations that, had they been commissioned in the UK, would have been eligible to apply for the FITs scheme.** This would limit eligibility to electricity imported from overseas renewable generators:
  - i. less than or equal to 5MW in capacity, *and*
  - ii. that commissioned on or after 1st April 2010.

To administer this, Ofgem would check the Guarantee of Origin (GoO) associated with the electricity that details both the capacity and commissioning date of the generating station.

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<sup>30</sup> The Contract for Difference (CFD) is a private law contract between a low carbon electricity generator and the Low Carbon Contracts Company (LCCC), a government-owned company. Generally the CFD is designed to support low-carbon generators of 5MW and above. The CFD Supplier Obligation (CFD SO) was designed to collect money from electricity suppliers in order to pay generators under the scheme. Suppliers' share of these costs depends on their market share, though any electricity supplied from renewable generators in other EU member states is deducted when calculating that market share. The total amount of exempt electricity is capped in each financial year, and eligibility restricted to generators that commissioned on or after 1 April 2015 – the earliest that a generator could have begun its CFD.

- c. **Capping the amount of electricity that is eligible for the exemption in any one FITs year from 2016/17.** Under the CFD SO, the cap that applied at the start of the scheme was set at a level 10% above the total amount of renewable imports in the most recent financial year for which data was available, with the cap then increasing by 10% at the start of each subsequent financial year. Renewable imports are measured by the number of GoOs recognised for Fuel Mix Disclosure (FMD). We propose adopting the same approach for the FITs, implementing a cap on the number of recognised GoO for each FITs year that can qualify for an exemption from FITs costs, and increasing the level of the cap by 10% each subsequent FITs year.

To align with the approach to the one adopted for the CFD SO, we propose to use the most recently published data on renewable imports from other EU Member States as the starting point for the cap. This is the figure for imports in 2013/14<sup>31</sup>. We propose to increase this amount by 10% as was the case for the CFD SO, then increase this by a further 10% in order to account for the fact that the cap would come into effect a year later. For the 2016/17 FITs year, the cap would be 8,117,254 MWh. There would then be a further 10% increase for each subsequent FITs year. This would mean the cap for 2016/17 (and each year after) would be the same under both the FITs and the CFD SO.

We propose that the cap will apply when Ofgem assess each supplier's market share FITs contribution for the annual levelisation process. When assessing the market share of a supplier, the total amount of electricity imported by all the GB suppliers from eligible renewables from other EU Member States that can be subtracted will be capped. If the eligible electricity supplied in any FITs year exceeds the annual cap, the amount that can be subtracted from each supplier's market share would be prorated according to each supplier's share of total eligible imported renewable electricity for the year.

As at present, Ofgem would administer the exemption, collecting the evidence required through recognised GoOs and any proof of supply to the UK, and applying the cap if necessary.

## Background

152. Section 2.9.1, clause 46 of the 2010 State aid approval (N 94/2010) for the FITs scheme states that:

*“Suppliers will be required to deduct the amount of imported renewable electricity from the reported supplied amounts that will be used to allocate costs”.*<sup>32</sup>

153. To date, Ofgem have deducted renewable imports with an associated Guarantee of Origin (GoO) certificate and evidence of supply to the UK from a supplier's market share through the FITs levelisation process. This means that suppliers who are able to demonstrate a greater pro-rata supply of overseas renewable electricity than average are able to reduce their share of FITs costs. This has incentivised suppliers to source renewable imports to minimise their costs.

154. Such an increase in exempted volumes distorts the market by transferring extra costs onto small suppliers that can less easily contract with overseas generators. It also creates significant uncertainty over the final level of FITs costs that suppliers will face, since each

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<sup>31</sup> <https://www.ofgem.gov.uk/publications-and-updates/recognised-guarantees-origin-2014>

<sup>32</sup> [http://ec.europa.eu/competition/state\\_aid/cases/235526/235526\\_1104588\\_39\\_2.pdf](http://ec.europa.eu/competition/state_aid/cases/235526/235526_1104588_39_2.pdf), para 46

supplier needs to estimate both the total costs of the scheme and their eventual market share once the renewable imports have been taken into account. This additional burden and risk runs counter to government policy to encourage competition in the energy market and support challenger businesses. Since smaller companies also tend to have a greater proportion of domestic consumers in their customer base, this presents a further risk of disproportionate cost transfer onto domestic (as opposed to business) consumers through their electricity bills.

155. Further, Ofgem recently consulted on how suppliers should demonstrate supply to the UK under market coupling. Under market coupling, market participants do not explicitly book or nominate the interconnector capacity required for a particular cross-border trade of electricity. It is therefore unclear whether and how interconnector capacity would keep on acting as a limit to the overall quantity of renewable electricity notionally imported from the continent to GB. There is therefore risk of a rapid increase in the volume of electricity that could be considered exempt from policy costs.
156. These proposals therefore seek to implement a more proportionate interpretation of the FITs State aid approval: aligning the scope of the exemption to generators in other EU Member states that would have been eligible for the exemption, in line with the Commission's view of the potential market distortion; and limiting the extent of the exemption through the introduction of a cap, in order to prevent the overall impact becoming distortive as a result of a large and sudden increase of imported renewable electricity.

## Microgeneration Certification Scheme (MCS) certification

### Proposal

157. The current wording of the FITs legislation needs to be amended to ensure that it does not sub-delegate power to MCS so that they can determine which standards to certify installations of relevant plant against. We propose that the legislation is changed to refer to specific versions of relevant MCS standards (the proposed amendments are included at Annex B).
158. Depending on when the implementing legislation is made to introduce this change, the references shown in Annex B may be updated so that they refer to whichever are the latest versions of the standards applicable at that time. Furthermore, if the versions referred to in the implementing legislation are superseded in the future, new amending legislation will be introduced where necessary to reflect this.

### Background

159. The FITs scheme requires certification by the Microgeneration Certification Scheme (MCS) or an equivalent scheme for installations of:
- PV up to 50kW
  - Wind up to 50kW
  - Micro-CHP up to 2kW
160. MCS certification sets minimum industry standards for products and installations and provides resolution processes, primarily through Certification Bodies and the Trading Standards Institute approved consumer codes, to consumers if they are needed. This scheme helps to build consumer confidence in installations of small-scale renewable plant.

161. The circumstances in which FITs payments are to be made (including the eligibility criteria) must be set out in modifications to the Standard Conditions of Electricity Supply Licences (the Licence Mods) and the administrative arrangements must be set out in the FITs Order 2012 (the FITs Order) (together referred to as the FITs legislation).
162. Article 2 of the FITs Order says that: ““MCS” means the Microgeneration Certification Scheme or equivalent schemes accredited under EN 45011 which certify microgeneration products and installers in accordance with consistent standards;”
163. The Order also refers to “MCS-certified Installation” as defined in Schedule A to Standard Licence Conditions 33: “MCS-certified Installation means an Eligible Installation using an MCS-FIT Technology which has been recognised by MCS or equivalent as *satisfying relevant equipment and installation standards;*” (italics added).
164. The current wording of the FITs legislation needs to be amended to ensure that it does not sub-delegate power to MCS so that they can determine which standards to certify installations of relevant plant against.

## Part-funding FITs Review implementation through interest accrued on the Levelisation Fund

### Proposal

165. We propose to give Ofgem the legal powers to use the interest accrued on the Levelisation Fund to part-fund administrative changes (largely IT) to Ofgem’s systems

### Background

166. FITs payments are paid to generators on a quarterly basis from the Levelisation Fund. This is an account held by Ofgem where FITs Licensees pay into the fund based on a proportion of their market share, although levelisation payments are ultimately collected by FITs Licensees from their customers.
167. Over the five years of the scheme, interest has accrued on the Levelisation Fund to the value of around £66,000 at the time of consultation. Although this is small compared to the Levelisation Fund, we expect this to rise in value as the Levelisation Fund grows.
168. Implementing some of the changes being consulted on this FITs Review will lead to costs from necessary administrative changes, mostly to Ofgem’s IT systems used to run FITs. We propose to give Ofgem the powers to use the interest on the Levelisation Fund to part-fund these changes. Public funding will otherwise be needed.
169. Whilst we recognise that there is a case for redistributing the accrued interest to the Licensees, we believe that this is likely to result in small sums of money returned to Licensees which will be made smaller through administrative costs incurred by Ofgem and Licensees to process. Within this context, we think it offers better value for money for the electricity consumers to put this sum of money to use in funding changes.

## Questions

### Consultation Question

- |     |                                                                                                                                                                                                                                                           |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 26. | Do you agree or disagree that only imported renewable electricity produced by generators in other EU Member States that are under 5MW and commission on or after 1 April 2010 should be used to offset levelisation costs? Please provide your reasoning. |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Consultation Question

- |     |                                                                                                                                                                                                                                                                                                                                                             |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 27. | Do you agree or disagree that we should introduce a cap on the amount of overseas generated renewable electricity that can be exempt from the costs of the scheme? Do you agree that the cap for 2016/17 should be calculated based on the number of GoOs recognised in 2013/14, increased by 10% twice to match the cap under the CFD Supplier Obligation? |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Consultation Question

- |     |                                                                                                                                                                   |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 28. | Do you agree or disagree with the proposed change to the FITs legislation to refer to specific versions of relevant MCS standards? Please provide your reasoning? |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Consultation Question

- |     |                                                                                                                                                                                                                                                       |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 29. | Do you agree or disagree with the Government's proposal to use interest accrued on the FITs Levelisation Fund to part-fund administrative changes to the scheme which would otherwise be borne through public funding? Please provide your reasoning. |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 8. Energy efficiency criteria

This chapter looks at potential **changes to the energy efficiency criteria** which currently apply to some solar PV installations.

We propose introducing after this consultation a change to when the EPC should be obtained:

- Require that the EPC showing the banding needed to obtain the higher tariff (currently band D) is obtained prior to the commissioning date of the solar PV installation.

We also set out measures that we do not intend to implement immediately, but which are under consideration for the future. These include:

- Raising the energy efficiency requirement for the higher tariff band from EPC band D to band C.
- Providing exceptions to this band C requirement for schools, community groups and fuel poor households.

### Proposal

170. We propose that the Energy Performance Certificate must be obtained before the commissioning date of the PV installation. Beyond that, we are not proposing at this point to change the energy efficiency criteria for the FITs scheme, but are seeking stakeholders' views on potential additional future measures to increase the stringency of the FITs energy efficiency criteria.

### Background

171. As well as offering a way to reduce carbon emissions cost-effectively, energy efficiency also has a key role to play in helping consumers keep the cost of their energy bills down; supporting secure, sustainable energy systems; and driving economic growth and supporting jobs in local labour markets. The 2007 EU climate and energy package established a non-binding target on Member States to reduce primary energy consumption by 20% by 2020, compared to a 2007 business as usual (BAU) projection. The FITs scheme already contributes towards reduced energy demand through minimum EPC requirements, but it could do more.

172. The FITs scheme's current energy efficiency requirements were introduced in 2012. They apply only to certain solar PV installations. An Energy Performance Certificate (EPC) for a building is required where a solar PV installation with a total installed capacity of up to and including 250kW, including extensions, is wired to provide electricity to that building. If the EPC is band D or higher, the higher PV tariff rate is paid. If the band is E or lower, the lower PV tariff rate is paid.

173. Community groups and schools applying to the scheme in relation to non-domestic properties have to provide an EPC in order to obtain the higher tariff, although the EPC can

have the lowest band available - band G. However, extensions to existing community or school installations need to achieve a band D in order to get the higher tariff.

### Rationale for change

174. Figures to the end of March 2015 indicate that 99% of FITs generators (99% of domestic generators and 96% non-domestic) who have had to comply with the current energy efficiency criteria are being paid the higher PV tariff. In other words, they are meeting the EPC band D threshold:

Number of installations subject to the energy efficiency requirement	Lower tariff (EPC E or below)		Higher tariff (EPC A-D)		Grand Total
	Count	Percentage	Count	Percentage	
Community	47	5.9%	747	94.1%	794
Domestic	1,907	0.7%	286,275	99.3%	288,182
Non Domestic (Commercial)	174	2.5%	6,845	97.5%	7,019
Non Domestic (Industrial)	13	3.0%	427	97.0%	440
<b>Grand Total</b>	<b>2,141</b>	<b>0.7%</b>	<b>294,294</b>	<b>99.3%</b>	<b>296,435</b>

175. Data for England, Scotland and Wales<sup>33</sup> indicates that, on average, about 75% of all homes already fall within bands A-D, with about 25-30% of all homes falling within bands A-C. Average energy efficiency ratings for dwellings also appear to be improving year-on-year. Available data for non-domestic properties across Britain also suggest a similar percentage of properties fall within the range of bands A-D and the range of A-C.

176. Currently, the installation of a PV panel can itself be counted towards whether a property has achieved the EPC band D threshold. This is not the intention of the criteria which is meant to encourage improvements more generally in the energy efficiency of properties.

177. Given all of this, it is rational to reassess the FITs scheme's energy efficiency thresholds and criteria to ensure they continue to offer the right level of impetus in helping the country reduce energy demand whilst making sure that consumers are still able to access the scheme.

### Measures under consideration

#### Meet the EPC criteria before commissioning the PV panel

178. As set out in the section on caps in chapter 3 above, we propose requiring that the EPC showing the banding needed to obtain the higher tariff (currently band D) is obtained prior to the commissioning of the solar PV installation.

<sup>33</sup> See:

- <https://www.gov.uk/government/collections/english-housing-survey#2013-to-2014>
- <https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-buildings-certificates>
- <http://www.gov.scot/Publications/2014/12/6903/downloads#res465628>

179. This would be evidenced by the date of the EPC compared to the commissioning date of the panel.

### **Raising the EPC criteria to band C**

180. We are also considering additional revisions to the energy efficiency criteria and are seeking views on them. Following the closure of this consultation, we intend to undertake further analysis and put together more formal proposals on them in the future. The package of revisions being considered is set out in the following paragraphs.

181. For both domestic and non-domestic properties, we are considering the energy efficiency requirements for new applicants would be as follows:

- An EPC for a building will be required where a solar PV installation with a total installed capacity of up to and including 250kW, including extensions, is wired to provide electricity to that building;
- The energy efficiency eligibility threshold for the FITs scheme will be set at EPC band C;
- Those eligible for the scheme (i.e. able to achieve band C or above) will receive the higher PV tariff;
- Any property requiring an EPC that cannot achieve an EPC band C or above will no longer be eligible for the scheme, including for the lower tariff (subject to the exceptions set out below);

182. These revisions would apply to multi-site installations where applicable, but would not affect the existing tariff approach to such installations (i.e. the application of the middle tariff).

183. As part of these additional revisions, we would also consider exceptions to the EPC band C requirement for communities, schools and fuel poor homes, as set out below.

### **Communities and schools**

184. We recognise the importance of community energy groups in empowering people and giving them a direct stake in the transition to a low carbon economy and assisting in behavioural changes important to reducing carbon emissions. We are committed to ensuring that communities will continue to gain access to income streams for renewable energy projects consistent with the outcomes of this consultation.

185. Therefore, we are considering keeping the current exception in place for community groups and schools. Applications for new installations in non-domestic properties by such entities would have to provide an EPC, but this can have the lowest band available (band G). As set out in chapter 3 above, we also propose putting in place a rule to prevent new extensions claiming support under FITs. This would be applicable to community groups and schools too.

### **Fuel poor homes**

186. Although not as cost-effective as measures such as basic insulation, installing PV panels can have benefits for fuel poor households by displacing expensive electricity. This both increases the ability of fuel poor homes to affordably heat their homes and also moves them up the energy efficiency scale. Fuel poor homes typically lack the resources to invest in household energy efficiency measures, including PV, so they are most likely to participate in the FITs scheme through a third party, such as a rent-a-roof scheme, or by accessing low interest loans. This lack of resources also means that raising the energy

efficiency requirement to an EPC band C risks excluding the majority of fuel poor households and being incompatible with the fuel poverty approach of supporting those experiencing the worst levels of fuel poverty first.

187. The Affordable Warmth (AW) Obligation (also known as the Home Heating Cost Reduction Obligation (HHCRO)) within the Energy Company Obligation (ECO) is aimed at helping low income and vulnerable households which are in or at risk of fuel poverty. It places an obligation on the largest energy suppliers to help private tenure households at risk of fuel poverty to improve the energy efficiency of their homes with heating and insulation measures. Eligible households are identified as those individuals that receive one or more of a certain type of means tested benefits which are specified on a list<sup>34</sup>.
188. Given these factors, we are considering an exception to the EPC band C requirement for fuel poor households. This would be aligned with the ECO-AW/HHCRO eligibility criteria.<sup>35</sup> For households deemed to be at risk of fuel poverty using this approach, the following requirements would apply:
- Where possible, install loft and cavity wall insulation where they would otherwise be recommended in an EPC;
  - Provide, as part of the FITs application, an EPC as evidence to show that those measures have been installed (i.e. they do not show up on the EPC as recommended measures).<sup>36</sup>
189. Using the ECO-AW criteria has the advantage of offering a support mechanism for households at risk of fuel poverty to have basic insulation measures installed. We would look to ensure that it would be possible to keep the FITs exception aligned with available support for households at risk of fuel poverty. ECO is currently scheduled to run until March 2017 and its longer-term future will be part of discussions around a new, better-integrated home energy efficiency policy.

### Other measures considered

190. Other measures that we have considered are set out below. We do not currently propose to take them forward, but may seek stakeholder views on them in a future consultation.
- Extend the energy efficiency criteria to non-solar PV technologies. Although less common than solar PV installations, we are aware of examples of other technologies supplying electricity direct to buildings (that are able to have assessments for EPCs) on the same site. However, given the prevalence of solar PV installations in FITs, extending the criteria is unlikely to have much impact on overall energy efficiency levels within the scheme.
  - Raise the installation size limit to higher than 250kW. This could mean more buildings become subject to the energy efficiency criteria. However, given larger scale developments tend to be standalone (i.e. not wired to a building), the impact on energy efficiency under FITs of this requirement could be relatively small.

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<sup>34</sup> <https://www.gov.uk/energy-company-obligation>

<sup>35</sup> We would keep the reference to the ECO-AW criteria under review to ensure that the FITs exception is correctly aligned with available support for households at risk of fuel poverty.

<sup>36</sup> Although ECO-AW only requires energy suppliers to undertake SAP or RdSAP assessments, we understand that EPCs are typically produced to meet this requirement.

## Questions

### Consultation Question

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.

### Consultation Question

31. Do you agree or disagree with the revision being considered to remove FITs eligibility from anyone with an installation to which the criteria apply who does not have at least an EPC band C? Please provide your reasoning.

### Consultation Question

32. Do you agree or disagree with the exceptions for community groups, schools and fuel poor households to the revision to the energy efficiency criteria being considered? Please provide your reasoning.

## Annex A: Full list of consultation questions

Consultation Question	
1.	Do you agree or disagree with the proposed generation tariff rates set out above? Please provide reasons to support your answer.
Consultation Question	
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.
Consultation Question	
3.	Do you consider the proposed default degression pathways fairly reflect future cost and bill savings assumptions in your sector? Please provide your reasoning, supported by appropriate evidence where possible.
Consultation Question	
4.	Do you consider it appropriate to harmonise the triggers for contingent degression across all technologies, and do you consider the proposed triggers will ensure tariffs reflect falling deployment costs? Please provide your reasoning, supported by appropriate evidence where possible.
Consultation Question	
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.
Consultation Question	
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.
Consultation Question	
7.	Do you agree or disagree with the proposal not to include any additional technologies in the FITs scheme? Please provide reasons for your response.
Consultation Question	
8.	Do you agree or disagree with the proposal to introduce deployment caps under the FITs scheme? Please provide your reasoning.
Consultation Question	
9.	Do you agree or disagree with the proposed design of the system of caps (i.e. quarterly deployment caps broken down by technology and degression band)? If you disagree, are there any alternative approaches? Please provide your reasoning, making clear if

your answer is different for different technologies or sectors.

### Consultation Question

10. Do you agree or disagree with the proposed approach to implementing caps? If you disagree, are there any alternative approaches that you'd suggest? Please provide your reasoning, making clear if your answer is different for different technologies or sectors and provide any views on what should happen to applications for FITs for installations which miss out on a cap.

### Consultation Question

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.

### Consultation Question

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.

### Consultation Question

13. What would be the impact if FITs continued as an export-only tariff for new generators on reaching the cap of £75-100m additional expenditure? Please provide your reasoning.

### Consultation Question

14. Do you have any views on the use of competition to prioritise applications within a system of caps? What do you think are the advantages and disadvantages of this approach? What forms of competition may be appropriate and is this different for different sorts of installations? Please provide your reasoning.

### Consultation Question

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

### Consultation Question

16. Do you agree or disagree with the proposal to remove the ability of new installations to extend their capacity under the FITs scheme? Please provide your reasoning

### Consultation Question

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.

### Consultation Question

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.
<b>Consultation Question</b>	
19.	Do you have any views on possible approaches to introducing remote reading for generation meters? Please provide reasoning for your response.
<b>Consultation Question</b>	
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?
<b>Consultation Question</b>	
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 co-located with demand or storage?
<b>Consultation Question</b>	
22.	Do you agree or disagree that the FITs scheme or wider networks regime should be amended to ensure generators pick-up the costs they impose on the network?
<b>Consultation Question</b>	
23.	Do you agree or disagree that payments to newly accredited AD installations, at all scales, are conditional on meeting the proposed sustainability criteria? Please provide your reasoning.
<b>Consultation Question</b>	
24.	Do you agree or disagree that the proposed criteria and GHG trajectories set out above would set the necessary bar to meet our objective to incentivise the multiple benefits from waste-fed AD? Can you suggest alternative criteria which would help to achieve this goal? Please provide reasoning and evidence for your answer.
<b>Consultation Question</b>	
25.	Do you agree or disagree with the proposed reporting system to underpin sustainability criteria? Please provide your reasoning.
<b>Consultation Question</b>	
26.	Do you agree or disagree that only imported renewable electricity produced by generators in other EU Member States that are under 5MW and commission on or after 1 April 2010 should be used to offset levelisation costs? Please provide your reasoning.
<b>Consultation Question</b>	
27.	Do you agree or disagree that we should introduce a cap on the amount of overseas generated renewable electricity that can be exempt from the costs of the scheme? Do you agree that the cap for 2016/17 should be calculated based on the number of GoOs recognised in 2013/14, increased by 10% twice to match the cap under the CFD Supplier Obligation?
<b>Consultation Question</b>	
28.	Do you agree or disagree with the proposed change to the FITs legislation to refer to specific versions of relevant MCS standards? Please provide your reasoning?
<b>Consultation Question</b>	

29.	Do you agree or disagree with the Government's proposal to use interest accrued on the FITs Levelisation Fund to part-fund administrative changes to the scheme which would otherwise be borne through public funding? Please provide your reasoning.
<b>Consultation Question</b>	
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.
<b>Consultation Question</b>	
31.	Do you agree or disagree with the revision being considered to remove FITs eligibility from anyone with an installation to which the criteria apply who does not have at least an EPC band C? Please provide your reasoning.
<b>Consultation Question</b>	
32.	Do you agree or disagree with the exceptions for community groups, schools and fuel poor households to the revision to the energy efficiency criteria being considered? Please provide your reasoning.

# Annex B: Changes to the MCS accreditation scheme under the FITs Order

## Proposed amendments to the FITs Order

### **FITs Order**

Add a new Schedule:

#### **SCHEDULE A1**

1. An eligible installation is an MCS-certified installation if it is installed under—

(a) the MCS in accordance with the relevant installation standard in the scheme;  
or

(b) a scheme operating under European Standard EN ISO/IEC 17065 in accordance with the installation requirements applicable to the installation which apply under that scheme where—

(i) that scheme is equivalent to the MCS; and

(ii) the installation requirements are those which apply on the installation's eligibility date and which are equivalent to the relevant installation standard.

2. In paragraph 1, "relevant installation standard" means—

(a) if the eligibility date for the installation is on or after the relevant date, if the installation is—

(i) a solar photovoltaic installation, version 3.3 of the document entitled Microgeneration Installation Standard: MIS 3002 requirements for MCS contractors undertaking the supply, design, installation, set to work commissioning and handover of solar-photovoltaic (PV) microgeneration systems,

(ii) a wind installation, version 3.4 of the document entitled Microgeneration Installation Standard: MIS 3003 requirements for MCS contractors undertaking the supply, design, installation, set to work commissioning and handover of micro and small wind turbine systems;

(iii) a heat-led combined heat and power installation, version 3.2 of the document entitled Microgeneration Installation Standard: MIS 3007 requirements for MCS contractors undertaking the design, supply, installation, set to work, commissioning and handover of a heating system containing and micro-generation package; or

(iv) an electricity-led combined heat and power installation, version 2.3 of the document entitled Microgeneration Installation Standard: MIS

3007-2 requirements for MCS contractors undertaking the design, supply, installation, set to work, commissioning and handover of a domestic hot water system combining an electricity led micro-cogeneration package; or

(b) if the eligibility date for the installation is before the relevant date, any installation requirements applicable to the installation under the MCS on the installation's eligibility date.

3. In paragraph 2, "relevant date" means—

(a) for electricity-led combined heat and power installations, 6th May 2015; or

(b) for the other types of installation listed in paragraph 2, 1st May 2015.

### **Licence Mods**

Amend Schedule A:

Schedule A to Standard Condition 33 of the standard conditions of supply licences granted, or treated as granted, under section 6(1)(d) of the Electricity Act 1989 is, with effect from the relevant date, modified as follows –

In the definitions and interpretation, for the definition of "MCS-certified installation", substitute –

““MCS-certified installation” means an Eligible Installation using an MCS-FIT technology which meets the standards set out in Schedule [A1] of the FIT Order.”

In these licence modifications, "relevant date" means the day after the day these modifications are made.]

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