Renewable Heat Incentive Scheme

Q&A Index

General

1. What is the Renewable Heat Incentive?

- The Renewable Heat Incentive (RHI) is a Government scheme that provides financial support to non-domestic renewable heat generators and producers of biomethane.

2. When does the RHI launch?

- The scheme will open for applications on Monday 28 November 2011. Please see the section on 'Scheme Details and Eligibility' for further information on how to apply.

3. What technologies are included in the scheme?

- Biomass boilers (Including CHP biomass boilers)
- Solar Thermal
- Ground Source Heat Pumps
- Water Source Heat Pumps
- On-Site Biogas combustion
- Deep Geothermal
- Energy from Municipal Solid Waste
- Injection of biomethane into the grid

4. Key principles of this policy/scheme:

- The RHI provides a continuous income stream for twenty years to any organisation that installs an eligible renewable heating system, ensuring that renewable heat is commercially attractive when compared to fossil fuel alternatives. The RHI is important because it will help increase significantly the level of renewable heat produced in the UK, which is key to the UK meeting its renewable energy targets, reducing carbon emissions, ensuring energy security and helping to build a low carbon economy. The RHI will accelerate deployment by providing a financial incentive to generate heat from renewables instead of fossil fuels.

5. What is it trying to do?

- The key objective of the scheme is to increase significantly the level of heat generated from renewable energy sources in Great Britain and thereby enable the UK to meet its binding targets to generate 15% of our energy from renewable sources by 2020.

- The Government is committed to the ambition that by 2020, 12 per cent of heating can come from renewable sources.

- We estimate that the RHI could save up to 44 million tonnes of carbon (MtCO2) by 2020 (37 MtCO2 outside the EU(ETS) and 7 MtCO2 inside the EU(ETS). This works out as a saving of one million tonnes of carbon in the first carbon budget period (2008-2012), 14 million tonnes in the second carbon budget period (2013-2017) and 52 million tonnes in the third budget period (2018-2022).

6. What is renewable heat?

- Renewable heat is a term used to mean any heat that is generated using a renewable technology or source. For example, equipment that uses the sun, ground, or water as a means to generate heat. Also included are renewable fuels such as sustainably-harvested wood and other plants, biogas and the biomass content of eligible waste streams.

- For the RHI, we will only support heat from renewable sources which is defined as renewable in the Renewable Energy Directive (RED).

7. What do you expect the benefits of the RHI to be for non-domestic installations?

- By 2020, we estimate the RHI support levels are expected to bring forwards around:
    - 14,000 installations in industry; and
    - 112,000 installations in the commercial and public sector.

  These installations are expected to generate around 57TWh of renewable heat.

8. And what about domestic installations. Don't you need those too to meet your target?

- YES, and we expect the RHI to deliver those too. But we cannot give estimates of numbers as we have not determined how the RHI is going to operate for domestic installations. Ahead of the introduction of support for domestic installations under Phase 2 of the RHI we will be providing a simple one-off payment through the Renewable Heat Premium Payment scheme to cover part of the installation costs for domestic installations.

9. What benefits will the RHI have for British jobs?

- We are already seeing the evidence of an increase in the number of jobs coming forward in the renewables sector. In the case of wind and marine renewable industries there has been a significant increase in jobs with now over 10,000 (full-

time equivalent) working in 2010 compared to 6,000 in 2008, with this expected to increase even further in the future. We would hope to see a similar push in the renewable heat sector once the RHI is established. We expect to see 500,000 jobs created by the end of the decade in the renewables industry with the RHI stimulating £4.5 billion of capital investment.

10. How much renewable heat can this funding deliver?

- We have estimated that by 2020 across all sectors, a contribution of 57TWh of renewable heat is expected as a result of the RHI scheme. This is expected to result in 12% of the UK's energy demand coming from renewable heat by 2020. The Government remains committed to the ambition that by 2020, 12% of heating can come from renewable sources.

11. How will the RHI trigger an increase in renewable heat generation?

- The RHI aims to provide compensation for the additional cost of renewable heating technology compared with the cost of conventional fossil fuel equivalents. The RHI therefore removes the barrier of the additional cost, helping to create a level playing field between renewable and conventional heating technologies and widen the choice of heating options.

- It is expected that over time, the cost of renewable heating technologies will fall as technologies enter the mainstream and the benefits from economies of scale become more efficient.

- Ultimately, renewable heat needs to be able to compete on its own without Government support.

Eligible Technologies Tariff Table

- The level of support varies depending on the type and size of technology. In order to calculate support, the appropriate tariff is multiplied by the eligible heat used.

<table>
<tr><td colspan="6">Levels of support</td></tr>
<tr><td>Tariff name</td><td>Eligible technology</td><td>Eligible sizes</td><td>Tariff rate (pence/ kWh)</td><td>Tariff duration (Years)</td><td>Support calculation</td></tr>
<tr><td rowspan="2">Small commercial biomass</td><td rowspan="3">Solid biomass including solid biomass contained in Municipal Solid Waste and CHP</td><td rowspan="2">Less than 200 kWth</td><td>Tier 1: 7.9</td><td rowspan="4">20</td><td rowspan="3">Metering.
Tier 1 applies annually up to the Tier Break, Tier 2 above the Tier Break. The Tier Break is: installed capacity x 1,314 peak load hours, i.e.:
kWth x 1,314</td></tr>
<tr><td>Tier 2: 2.0</td></tr>
<tr><td rowspan="2">Medium commercial biomass</td><td rowspan="2">200 kWth and above; less than 1000 kWth</td><td>Tier 1: 4.9</td></tr>
<tr><td>Tier 2: 2.0</td><td></td></tr>
<tr><td>Large commercial biomass</td><td>1000 kWth and above</td><td>1.0</td><td>Metering</td></tr>
<tr><td>Small commercial heat pumps</td><td rowspan="2">Ground-source heat pumps; Water-source heat pumps; deep geothermal</td><td>Less than 100 kWth</td><td>4.5</td><td rowspan="2">20</td><td rowspan="2">Metering</td></tr>
<tr><td>Large commercial heat pumps</td><td>100 kWth and above</td><td>3.2</td></tr>
<tr><td>Solar collectors</td><td>Solar collectors</td><td>Less than 200 kWth</td><td>8.5</td><td>20</td><td>Metering</td></tr>
<tr><td>Biomethane and biogas combustion</td><td>Biomethane injection and biogas combustion</td><td>Biomethane all scales, biogas combustion less than 200 kWth</td><td>6.8</td><td>20</td><td>Metering</td></tr>
</table>

Scheme Details and Eligibility

12. Who/Where does it apply?

- The RHI scheme is available to generators of heat and producers of biomethane that meet the eligibility criteria, that are based in Great Britain i.e. England, Scotland and Wales.

- At the start of the scheme only non-domestic sectors will be supported.

- We intend to introduce a second phase of support which will establish support for the domestic sector as well as a number of other technologies and fuel uses that we are unable to support from the outset.

- The non-domestic segment includes businesses; public sector; charities and not-for-profit organisations; and industry.

13. What is the duration of the scheme?

- RHI support for the first phase is guaranteed for 20 years.

14. How is the RHI being funded?

- £860million has been made available from central Government funding to support the RHI over the period 2011-2015. The Government has decided not to take forward the previous administration's proposals for an RHI levy.

15. What do you mean by a non-domestic installation?

- **A non-domestic installation** is a renewable heat unit that supplies heat to anything from large-scale industrial heating to small business and community heating projects. This includes small businesses, hospitals, schools etc as well as district heating schemes (e.g. one boiler serving multiple homes).

16. What criteria determines a domestic installation?

- A domestic unit is defined as being a single renewable heat installation serving a single domestic premises (single house or flat). So for example, a social landlord installing individual heat pumps in multiple homes would also be considered as a domestic installation but a single installation serving two or more homes would be considered as non-domestic.

17. How will I know if I am eligible for the scheme?

- Ofgem, who are administering the scheme, have published guidance setting out all the eligibility criteria. This is available on their website at www.ofgem.gov.uk/RHI. You need to apply to Ofgem for support under the scheme.

18. I've already built/incorporated renewable heat technology in my business/community centre. Am I eligible for the RHI?

- Eligible equipment installed after 15 July 2009 (when we published our decision to introduce the RHI) is supported under the RHI.

19. I've received a grant for my installations can I still get the RHI?

- You cannot receive a grant which contributed to the direct costs of an installation and receive the RHI.

- However, if you installed equipment between 15 July 2009 and the date when the RHI Regulations come into force then you will be given the option to pay back your grant and instead receive support under the RHI. Examples of public funding typically would be the Low Carbon Building Programme 2 and Bio Energy Capital Grants (and Scottish equivalents) but also include public funding made by Local and Regional Authorities, and European schemes.

- This option only applies for equipment installed up to the time the RHI Regulations come into force; after that time if you receive public funding for the costs of purchasing or installing your renewable heat installation you are not eligible to apply to the RHI.

20. Will the RHI support District Heating schemes?

- YES. District heating is eligible for the RHI, where the heat is produced by an RHI-eligible installation. District heating is treated in the same way as an installation for that technology and fuel type providing heat for on-site use.

- The renewable heat for this type of heating can be produced using any of the RHI eligible technologies, though biomass boilers and large heat pumps are most commonly used.

- There is no extra support/uplift for district heating installations; for costs incurred in constructing a network of pipe work etc.

21. I already receive support under the RO for my CHP installation – am I eligible for the RHI?

- For biomass CHP plants completed after 15 July 2009, if you are or have been claiming the RO plus the 0.5 ROC CHP uplift at any time, you are not eligible to apply for the RHI. From April 2013, it is proposed that new biomass CHP stations will have a one-off choice to claim the RO + uplift, or the RO (minus uplift) plus the RHI. The transition period will run from 1 April 2013 to 31 March 2015 and will be available only to new accreditations and new additional capacity added between those dates. This will give developers and investors time to understand the support available under the RHI, and the interaction with the RO, while preventing them from receiving a double subsidy of CHP uplift and RHI. Generating capacity which chooses to receive the CHP uplift will be ineligible for the RHI.

22. How does the RO decision on co-firing affect RHI?

- The RHI requires that where a generating station generates heat from both biomass and fossil fuel, the biomass fuel must only be burned in a dedicated biomass boiler. This ensures that the RHI only rewards the renewable heat output. The requirement under the RO that stations co-firing fossil fuel and biomass with CHP must do so in separate boilers to allow the energy produced from the separate fuels to be measured is consistent with this.

Domestic support

23. Why are you delaying the scheme for the Domestic Sector?

- We are phasing the RHI to target the bigger emitting sectors first: the industrial, business and public sectors which contributes a significant 38% of the UK's carbon emissions.

- Targeting the non-domestic sector will provide the vast majority of the renewable heat needed to meet our targets and in the most cost-effective way. The Government therefore wants to introduce support from 2011 in the non-domestic sector so installations can start being built.

24. When will you provide RHI support for the Domestic Sector?

- A second phase of support will be introduced for those areas that won't be supported from the outset, including domestic installations. There are a number of important factors, specific to the domestic sector, that we need to consider further before we can launch a full RHI scheme for domestic buildings and ensure we pursue the most cost-effective way of increasing renewable heat at this scale. These include issues about how renewable heating systems operate in various types of homes and in combination with solar thermal panels; what the impact of changing the heating system is on the householder in terms of different behaviour; how long the RHI payback period should be, given the frequency with which people move house and the ways in which households raise and pay back finance; lessons learned from the Feed-in-Tariff programme in terms of getting a good spread of technology take-up; and how renewable heat installations can align with Green Deal measures on energy efficiency.

- In light of the later than expected launch of Phase 1, as a result of changes required by the European Commission, we are reviewing the timetable for introducing Phase 2. We will be able to confirm the exact timing for Phase 2 early in the New Year.

25. Will there be any support available before Phase 2 of the RHI?

- The RHPP is a short-term, targeted support scheme intended to incentivise uptake of renewable technologies by homeowners. This scheme is aimed at domestic properties off the gas grid who currently rely on more expensive forms of fossil fuel heating. There is some funding available for solar thermal installations in homes on the gas grid. It provides upfront payments to help with equipment and installation costs. For those installations who receive support through these interim measures, support will still be available to them through the RHI once introduced, provided all other eligibility criteria are also satisfied. The Energy Saving Trust are administering the scheme on behalf of Government.

Further information on the RHPP can be found at www.energysavingtrust.org.uk/rhpp.

26. The exclusion of the domestic sector at this stage will seriously affect this industry.

- We anticipate that the demand from the first phase of the RHI programme will provide the stimulus and the incentives necessary for the renewables industry to establish and strengthen their supply chains and systems. The domestic sector will also be supported through the RHPP ahead of the introduction of Phase 2.

- The RHI should help stimulate the British renewables industry – in terms of R&D, manufacturing, installation and the supply chain. It also has the potential to encourage further innovation and bring down the cost of renewable heating technology.

RHI Scheme Administration

27. Who is administering the scheme?

- The RHI scheme is being administered by Ofgem.

- Details of the scheme, including eligibility criteria, tariff levels and technologies supported, along with other information, are set out in the RHI Policy Document published in March 2011 which is available on the DECC website: www.decc.gov.uk/RHI.

- Ofgem has also produced detailed guidance on the scheme including eligibility criteria, how to apply and ongoing obligations participants must comply with. This is available at www.ofgem.gov.uk/RHI.

28. Who can I ask about whether my installation is or would be RHI eligible?

- Eligibility for RHI support is a matter for Ofgem, who administer the RHI scheme in accordance with the RHI Regulations. DECC cannot comment on eligibility matters in individual cases.

- Please refer to the detailed guidance Ofgem has published (available on their website at www.ofgem.gov.uk/RHI), or contact their accreditation enquiries line on 0845 200 2122.

29. How do I apply for support?

- Applications for support must be made to Ofgem. Details of the application process are available on their website at www.ofgem.gov.uk/RHI.

30. What is accreditation?

- The RHI will only be paid when a heat installation has been accredited by Ofgem. Accreditation is the process of assessing whether an installation meets the eligibility criteria, for example whether the technology is eligible for support and whether the correct metering arrangements are in place.

31. How will the 'Accreditation Process' work?

- Ofgem has published guidance on the accreditation process which is available at www.ofgem.gov.uk/RHI.

32. Are generators charged when they apply for accreditation?

- No there will be no charge to generators.

33. What obligations form part of accreditation to the RHI scheme?

- Once Ofgem is satisfied that all eligibility criteria are being met and that the applicant has agreed to comply with the obligations of the scheme, Ofgem can then accredit the installation and the applicant then becomes a participant in the RHI scheme and hence eligible for support.

- The obligations that fall to the participant are as follows:
    - Particular issues re use of equipment;
    - Maintenance requirements
    - Measurement and reporting on their fuel use, where appropriate
    - To submit regular meter readings to Ofgem
    - To co-operate with Ofgem.

34. What guarantee is there that my newly planned plant will qualify for the RHI? Why should I even consider thinking about using renewable heat for my future plants?

- Ofgem has produced detailed guidance on the eligibility criteria. This outlines all the conditions that generators will have to meet in order to receive support under the scheme. This is available on their website at www.ofgem.gov.uk/RHI.

- Preliminary accreditation is available for the more complex renewable systems

- This allows potential generators to submit plans for a renewable heat installation, demonstrating that once built, it will meet the eligibility criteria. Where Ofgem is satisfied that the criteria will be met, it will grant 'preliminary accreditation'. This should help provide a greater degree of certainty to developers that once built an installation will be eligible for the RHI. Further details on preliminary accreditation can be found in the guidance for the scheme available on Ofgem's website.

35. At what point can an application for pre-accreditation be submitted?

- Please see the RHI Guidance document available at www.ofgem.gov.uk/RHI.

36. If only 'owners' qualify for RHI, how can housing associations etc deliver holistic low carbon housing schemes? Are Social landlords able to receive support?

- A local authority can receive support through the RHI providing it owns the installation, that the installation meets the eligibility criteria and it is installed in a

non-domestic premises or community heating with one installation serving more two or more houses.

- Social landlords and housing associations installing renewable heating equipment in individual households will not be supported under Phase 1 of the RHI, as this would constitute a domestic installation. However, we intend to introduce support for the domestic sector in the second phase of the scheme, for which we are currently developing proposals which we will consult on in due course.

- In the meantime, social landlords are being supported under the RHPP Social Landlords Competition which was launched in August 2011. 34 projects have been successful in being selected for RHPP support with £4.22m secured for their support.

37. How will payments be calculated?

- Payments are calculated by multiplying the appropriate tariff, depending on the technology and size of the installation by the metered amount of eligible renewable heat generated.

- For steam boilers, CHP and systems supplying heat to premises or processes located on different sites, metering is also required at the point of usage and payments are calculated according to the individual contribution of each renewable heat installation to ensure that payments are not made for heat that is wasted.

- Payments will be made over a period of 20 years and adjusted annually in line with inflation.

38. How often will RHI payments be made?

- Payments will be made quarterly for Phase 1 non-domestic participants based on metered generation.

39. Is it possible to assign and transfer payments to an appointed individual such as a lender?

- No, the current legislation only allows payment to the owner of the equipment. To enable any changes in the payment system, the primary legislation would need to be amended which would result in delays in implementing the legislation.

- Additionally, the RHI payments cover the cost of running the equipment (maintenance, fuel) which the operator would wish to retain. However, participants are free to enter into private contractual agreements to address this issue.

40. Surely the lack of upfront payments will prevent many organisations and businesses from even applying for this scheme?

- It is a commercial calculation – the income from the RHI is designed to cover both the installation and running costs differential between conventional heating systems and renewable energy heating systems.

- We expect financing options to be offered by various players, eg: Energy Suppliers, Banks and other commercial lenders, Energy Services Companies and possibly public sector financing facilities.

Technologies and fuels

41. Are there any technologies that may be included in a later phase of the RHI?

- Yes, as part of Phase 2 we are considering including:
    - Air Source Heat Pumps
    - Direct air heating (e.g. kilns)
    - Large solar thermal (above 200 kW)
    - Large biogas (above 200 kW)
    - Bioliquids
    - Separate tariff for deep geothermal (currently treated like ground source heat pumps)
- There are a number of complex issues around these technologies which still remain to be resolved and our focus will be on resolving these issues going forward.

42. What technologies are excluded from the scheme?

    - Co-firing of biomass with fossil fuel
    - Exhaust air heat pumps
    - Transpired solar thermal panels
    - Fossil fuel fired CHP
    - Waste heat from fossil fuel
- These do not constitute ‘renewable’ heat sources.

43. What technical information has been collected to inform the tariffs?

- We commissioned several consultants to research the economic and technological characteristics of the technologies included in the RHI. In addition, we have listened to the views of stakeholders from the previous consultation.

- The consultancy reports are available on the RHI page on the DECC website.

44. Why aren’t bioliquids covered from the start?

- We are not supporting bioliquids in 2011. We recognise there are valuable uses of bioliquids in renewable heat generation and combined heat and power, including those developed from wastes such as used cooking oil and those made from advanced technologies.

- However, there are complex issues we want to better understand and be able to address. These include potential competition for feedstocks with other sectors

and sustainability reporting commitments under the Renewable Energy Directive (RED). We will consider supporting bioliquids under Phase 2 of the scheme.

45. Is energy from waste covered?

- Yes. Under Phase 1 of the scheme all wastes used to create biogas through anaerobic digestion will be eligible for the RHI. Eligible waste feedstock for combustion, gasification and pyrolysis is limited to solid biomass from municipal solid waste (MSW), including solid recovered fuel (SRF) from MSW. We will be tracking ongoing technological developments in this area, with a view to allowing other waste streams into the RHI for Phase 2. We need to ascertain a more reliable fuel measurement methodology for ascertaining the renewable content in mixed waste streams, such as solid recovered fuel.

- In addition, other wastes where at least 90 per cent of their energy content is comprised of solid biomass will receive support. Examples of such wastes include waste wood and residues from the paper manufacturing industry.

46. What are the arrangements for using municipal solid waste?

- Participants who burn municipal waste will receive the biomass tariff, adjusted pro-rata for the solid biomass content of their waste. Unless participants prove a higher percentage of biomass content, the pro-rata content will be deemed at 50 per cent. This is in line with the arrangements for deeming MSW under the Renewables Obligation.

47. Why aren't all types of mixed wastes and SRF eligible for combustion, gasification and pyrolysis ?

- In due course we would like to extend eligibility to mixed wastes and SRF from waste streams other than municipal solid waste. We have noted industry's concerns regarding the need for a more reliable and cost-effective methodology for establishing the renewable content of mixed wastes and work is underway to address this issue.

48. Why isn't landfill gas included at the start of the scheme ?

- Work is still underway to consider the costs of biogas or biomethane injection from landfill gas. In many cases this regards landfill gas sites which are already producing electricity, and would likely have lower costs of switching to heat or biomethane than other biogas options. It would therefore not be appropriate to include landfill gas within the general tariff for biomethane; pending the outcome of our work on landfill gas.

49. Why are you restricting Anaerobic Digestion to waste?

- Our policy on AD is focussed on the use of waste, to reduce the amount going to landfill (and so reduce greenhouse gas emissions) and to reduce problems associated with the spreading of manures and slurries on land.

- However, we do recognise that some crops may need to be added to manure-based AD to ensure efficient operation.

50. Why can't we operate AD plants the way they do in Germany (i.e, using crops)?

- It is not our policy to encourage farm-grown feedstocks but we do not object if they are grown as part of a normal agricultural rotation or on land which is not suitable for the production of food crops. We do recognise that some farm-grown feedstocks may need to be added to manure-based AD to ensure efficient operation.

51. What are you doing to remove the other barriers to AD?

- Government, in conjunction with industry, has drawn up an AD Strategy which was published in June 2011. This sets out a joint programme of work for Government and industry to tackle the barriers to deployment.

52. Is combined heat and power covered?

- Yes, we want to ensure that useful renewable heat is supported both where generated in dedicated heat installations or in combined heat and power. The proposed tariffs apply to both situations. As part of Phase 2 we will be considering how best to incentivise CHP in the future.

53. Is injection of biogas into the gas grid covered?

- Yes, we believe injection of biomethane into the gas grid can play an important part in increasing renewable heat generation.

54. Why are air source heat pumps not being supported?

- We need to better understand the costs of air to water heat pumps at the commercial scale before committing long-term support for it. We have already worked with industry to gather this date. Subject to the outcome of this work we would look to extend eligibility for air to water source heat pumps in Phase 2. Air source heat pumps will be supported under the Renewable Heat Premium Payment for homes which do not have gas heating.

- For air to air heat pumps we also have to overcome the practical problems of measuring the heat they generate and ensure we do not incentivise the installation of air conditioners.

Biomass and Bioliquids

55. What are you doing to ensure that biomass used for heat is sustainable/ why is your initial approach so weak?

- Our initial requirement is for generators of 1MWth and above to provide quarterly reports on the biomass they have used including quantity, type and form, country of origin, and whether an environmental accreditation has been met.

- This will provide valuable information to help us develop an efficient and effective set of sustainability criteria for biomass heat.

- We expect to consult on mandatory sustainability criteria for introduction in the RHI from 2013 onwards.

56. Will you take the exact same approach for biomass used under the RHI as being introduced for the Renewables Obligation (RO)?

- For simplicity and clarity, it is sensible to take a complementary approach where possible; some generating companies may claim both the RHI and RO. However, we recognise that there are some differences in the biomass heat compared to the biomass electricity market. In particular we expect a large number of small biomass heat generators will come forward.

- We are monitoring the effect of the introduction of reporting on Greenhouse Gas savings and compliance with land use criteria for bioliquids under the Renewables Obligation (RO) in April 2011 and will be able to use what we learn from that.

- As part of the consultation on Phase 2 of the RHI we will consult on mandatory sustainability criteria for introduction in the RHI from 2013 onwards.

57. Your 1MWth threshold for the quarterly biomass reporting requirement is much too low/too high?

- The 1MWth threshold was a compromise between setting it high reflecting the excellent energy conversion efficiency for heat and hence reduced sustainability concerns, with setting it low as small heat plants may come forward in a significant number collectively consuming a large amount of biomass.

- We also sought to balanced these sustainability considerations against the cost and administrative burdens involved in demonstrating the use of sustainable fuels for our small scale heat generators.

58. Why are you restricting the type of wood that can be used / What will you do to stop quality timber being burnt for energy?

- We do not expect high quality timber to be used for energy. The market pays a premium for high quality wood – i.e. wide, straight and with minimal knots. We have set the RHI support at the level we considered is needed to bring forward new biomass heat fuelled with lower quality, lower cost wood.

- If evidence shows high grade timber is being diverted into heat with adverse sustainability impacts, then measures will be introduced to prevent this.

Tariffs

59. Will the tariff levels change?

- Once an installation is accredited under the scheme they will receive a fixed level of support which will be adjusted annually in line with inflation. However, to ensure the scheme is cost effective the tariffs are likely to change over time and the new tariffs will be applied to anyone joining the scheme.

60. What is degression?

- Degression is where trigger levels are built into the RHI scheme which allows tariff levels to reduce automatically once a certain point is reached – for example, a certain level of installed capacity. Degression is one of a number of measures which could maintain the cost effectiveness of the scheme. We intend to introduce cost control measures as part of Phase 2 of the scheme.

61. What is the duration of the scheme?

- The scheme will remain open until at least 2020 with payments to non-domestic installations guaranteed for 20 years from entry to the scheme.

62. The tariffs aren't high enough to stimulate growth/ ensure take-up?

- The support levels provided under the RHI are based on data collected through extensive analysis and consultation with stakeholders. Based on this analysis we believe that the tariffs are sufficient to stimulate significant renewable growth in the commercial, industrial and public sectors, creating strong pathway towards the 12% renewable heat ambition by 2020.

- We will monitor actual deployment data renewable heat technologies once the RHI goes live and use the regular reviews to adjust support levels as deemed appropriate in order to allow us to deliver our overarching ambition.

63. Why are the RHI rates of return higher than FITs?

- The higher rate of return under RHI reflects the fact that renewable heat is still relatively unknown in the UK and that from this low starting position, the renewable heat market needs a kick-start to encourage rapid high growth.

- Renewable heat technologies also face more non-financial barriers associated with their installation and, in the majority of cases, do not have the potential to export heat as there is no national grid for heat.

64. How can you justify such generous tariffs?

- The types of renewable heating systems supported under the RHI are less well-known than their electricity counterparts.

- The RHI tariffs reflect our ambition to increase the amount of heat generated by renewables from 1% today to 12% by 2020.

- The Government has been promoting and supporting green electricity for many years through a number of mechanisms. This is our first and only mechanism for promoting renewable heat.

65. You said on the FITs that the rate of return is guaranteed. Is it the same for the RHI?

- Under the RHI installations that have entered the scheme are guaranteed the RHI tariff (adjusted by inflation) for 20 years provided they continue to meet the relevant eligibility criteria.

66. Will the tariffs be adjusted for inflation like in FITs?

- Yes.

67. Why does solar thermal get a lower rate of return?

- Solar thermal is a well-known technology, and it's relatively easy to install. In addition solar thermal heat is, at present, more costly per unit of energy than other technologies. In order to keep the costs of the scheme under control the Government has therefore concluded that the tariff for solar thermal installations will be set at 8.5p/kWh in line with what is considered to be the marginal cost effective technology required to deliver the UK's 15% renewable target.

68. Why is there no solar thermal tariff above 200 kWth?

- Cost data for larger solar thermal installations is sparse, making it difficult to set appropriate tariff levels. Work on larger-scale tariffs is ongoing, and subject to successful conclusion of this work, we will consider providing larger-scale solar thermal tariffs under Phase 2.

69. Are you providing an additional export tariff for biogas injection similar to the FITs export tariff?

- No – we will only pay the RHI for the injection of biomethane into the grid under the biomethane and biogas combustion tariff.

70. Why is there no tariff for heat from biogas combustion above 200 kW when there are FITs for electricity from biogas combustion at all scales?

- We are keen to ensure that biogas is encouraged and used in the most effective way, be it as electricity or heat from biogas, or both in the form of CHP, or biogas injection into the gas grid. However going forward we will be considering the possibility of including in the RHI biogas combustion plants greater than 200kW if evidence becomes available to support this.

71. What about technologies that aren't getting a specific tariff like deep geothermal, syngas, water source heat pumps?

- We are not providing individual tariffs for every eligible technology. We have based tariffs on the principle of cost based tariffs, where tariff levels vary depending on the cost of the technologies at different scales and with a focus on:
    - compensating for the additional cost of the renewable technology over fossil fuel heating
    - providing an incentive to overcome non-financial barriers, and
    - providing a return on the additional capital invested.

- Going forward, we will consider whether we need more specific treatment for innovative technologies and those which are not currently commercially deployed in GB and for which it is more difficult to develop a specific tariff.

Large Biomass Tariff Change

72. Why has the large biomass tariff changed?

- The European Commission, when granting state aid approval for the scheme, thought that the large biomass tariff was set at a level which could lead to high levels of over-compensation for some installations. In order for them to grant state aid approval for the scheme, they required the tariff to be reduced. This has meant reducing the large biomass tariff from 2.7p per kWh to 1p per kWh in order to comply with the Commission's decision.

73. Why did you use different a different methodology for the biomass tariff?

- Large biomass is the most cost-effective technology in the RHI in that it has the lowest average cost per unit of energy generated. It also has a large supply potential. Given these factors, we had decided that in order to improve the cost effectiveness of the scheme overall and to maximise its contribution to our renewable targets, the large scale biomass tariff should be set high enough to bring forward the entire identified supply potential.

- This approach contrasted with the tariffs set for heat pumps and small and medium scale biomass which have been set in order to incentive just 50% of the identified supply potential.

74. Why don't you ignore the Commission's view and launch the scheme?

- This would be a breach of EU law.

75. Why do our renewable heat regulations have to be approved by the European Commission in this way?

- The European Community Treaty generally forbids State Aid that would favour certain businesses or goods production. The European Commission is given very wide power and responsibility by the Member States to monitor and control State aid within the European Union and this applies to schemes such as the RHI.

76. Don't the changes made to the scheme as a result of the Commission's view require a consultation?

- Where possible, we have consulted on different aspects of the RHI either formally or informally. The reduction to the large biomass tariff was not consulted on as it must be reduced to satisfy the Commission and therefore further consultation on this would have simply delayed the scheme further and could not have any influence over the decision that has been made.

77. Are you negotiating with the Commission to try and change their view?

- Our priority was to launch the RHI as quickly as possible. We are reflecting further on the Commissions' direction that the biomass tariff should be reduced.

78. How will this change impact on our progress towards our renewables targets?

- We are committed to meeting our European renewables targets and we will consider what mix of technologies will best achieve this. The introduction of Phase 2 of the scheme and scheduled reviews will provide opportunities to introduce changes into the RHI scheme towards achieving this end.

79. Doesn't the change in tariff make biomass not worth it under the RHI?

- The biomass tariff should still provide sufficient incentive to make installing biomass installations an attractive option for a wide range of potential applications.

- Biomass CHP will also be affected by this change but we also expect that the tariff will provide sufficient incentive for a range of plants. However, we will carry out further work to establish the specific costs of heat from renewable CHP, to improve our evidence base in considering whether a CHP specific tariff is appropriate.

80. How have the RHI tariffs been calculated?

- The RHI aims to compensate investors for the additional costs of renewable heat compared to alternative fossil fuel systems. For each technology, we have taken into account all the various types of costs involved (including capital, financing, barrier, fuel and operating) to produce a pence per kWh cost figure – this is known as a levelised cost methodology.

- These technology costs have been combined with data on technical potential in the economy to produce supply curves. We have set our tariffs by selecting certain points on these supply curves in order to bring forward a specific proportion of the available technical potential.

- In deciding what proportion of this potential to bring forward, we have taken into account the cost effectiveness of different technologies and their potential contribution to achieving our renewables target, together with the need to balance the rates of returns achieved by investors and spreading risk over a number of technologies.

- The general tariff setting approach used was to incentivise 50% of potential installations across the range of technologies supported under the RHI. However, exceptions to this approach were made under the original proposals put to the Commission in order to improve the cost effectiveness of the scheme i.e. for large biomass and solar thermal.

81. In what kind of situations are biomass boilers usually used? Which industries are most likely to be affected by this change?

- Biomass boilers can be installed for a wide variety of uses ranging from small scale space and water heating to large industrial processes. Public sector and commercial users installing biomass boilers for space heating may include large schools, hospitals, prisons and large retail outlets. Costs vary widely and are site specific so the reduction will affect all these industries but some more than others.

82. Investors are being inconvenienced by this delay – will they receive compensation for having made investment decisions based on the tariff originally published?

- We have always been clear that the launch of the RHI scheme is subject to state aid approval. Decisions made ahead of the scheme launch will have been made in the knowledge that the scheme was not guaranteed to go ahead as proposed without the appropriate approval.

Public Sector, Communities and Local Authorities

Public Sector

83. Can public sector organisations claim the RHI and receive tariffs e.g. school, hospital?

- Yes, public sector organisations can claim the RHI providing they own the installed renewable heating equipment.

- Public sector buildings will often have greater potential, for example more space, for onsite renewables. Their size and location could lead them to play a critical role in the viability of community heat and energy networks.

84. How much renewable heat do you expect the public sector to deliver?

- We want the public sector to lead the way in the shift to renewables. For example, we are very keen to see schools take-up the incentive as we believe this would be an invaluable way of teaching and informing young people and local communities about the potential for local renewable generation and ensuring there is a real shift in the way we perceive heating our homes and buildings.

- It is difficult to estimate the precise level of renewable heat that this sector can deliver but public sector involvement is a key part to realising our ambition for renewable heat.

Communities

85. How can the RHI help communities?

- We believe the RHI presents a big opportunity for community schemes linking public sector buildings, such as a school or hospital, with housing and businesses.

- Local authorities and housing associations have an opportunity to consider the replacement of their uneconomical communal systems with more efficient systems supported by the RHI and tailored to local energy needs.

- The RHI scheme allows local authorities and social landlords to claim the RHI.

- The opportunities are wide, from setting up anaerobic digestion plants using local waste to establishing community-owned biomass cooperatives, sourcing fuel from sustainable local woodlands.

- In some situations of district and community renewable heating, whether in the form of a central boiler for an apartment building, or as a network of pipes delivering heat from a central installation to a number of local households or businesses, can be a useful and cost-effective alternative to installing individual heating systems in individual properties. Action such as this can also encourage investment by giving developers greater confidence of the ability to sell heat from the central plant.

Role of Local Authorities

86. Can a local authority/ social landlords (e.g. housing associations) claim the RHI?

- A local authority can receive support through the RHI providing it owns the installation, that the installation meets the eligibility criteria and it is installed in a non-domestic premises.

- **Social landlords and housing associations** installing renewable heating equipment in individuals households will not be supported under Phase 1 of the scheme, as this would constitute a domestic installation. However, we intend to introduce support for the domestic sector under Phase 2 of the RHI, at which point they will be able to apply for support.

- The Government is also honouring the previous commitment that installations installed and first commissioned on or after the 15th July 2009 will be eligible for support once support is introduced, providing they meet the final eligibility criteria.

- Where a housing association installs a renewable district heating system, which meets the eligibility criteria, support through the RHI will be available from the outset.

- In order to receive support they will need to be the owner of the installation and retain the rights and liabilities of the equipment.

Grants and RHI support

87. What is the situation with respect to grants?

- State aid rules affect the treatment of grants under the RHI.
- Equipment installed on or after 15th July 2009 and before the date the RHI regulations come into force can still be eligible for the RHI if they repay any grants received for the direct costs of the installation.
- Equipment installed once the regulations come into force and in receipt of a grant for the direct costs of the installation cannot receive the RHI and will not be allowed to repay their grant and then apply for RHI.

MCS requirement under RHI

88. Why do you require MCS certification for installations under 45KWth when it so costly to secure and time intensive?

- MCS has an important role to play in creating a sustainable industry for microgeneration technologies. It has been recognised, from experience in other countries, that unsafe or poor quality installations can rapidly undermine the sustainability of these industries and undermine consumer confidence.

- Given the relatively immature renewable heating market, third party certification is important to address the risk that these technologies may be mis-sold, with some installers overpromising on energy outputs. MCS requires an accurate estimate of the likely energy output of an installation and is supported by a mandatory consumer code of practice, which meets OFT level requirements.

- We want to see the deployment of heat technologies at all scales and we fully understand communities' concerns about deploying technologies at a communal scale without the support of MCS.

- We have consulted on extending MCS to cover technologies above the statutory microgeneration limits in the Microgeneration Strategy consultation, which closed on 16 March 2011. This is primarily to support projects at a community scale, but we also need to consider implications for the commercial sector, particularly given the much larger capacities eligible for the Feed-In-Tariff and potential uncapped limit for the Renewable Heat Incentive.

89. What is MCS?

- MCS is a not-for-profit industry-led certification scheme, supported by a wide range of stakeholders operating in the microgeneration sector. Although there was financial support from central government during the scheme's development phase, it is now operating on a self-financing basis.

90. Are there enough MCS qualified installers to handle the increased numbers of microgeneration technologies being installed?

- As of 2 November 2011 there were over 3750 MCS certified installation companies, which equates to around 37500 installers and we expect see these numbers increase. The need for competent installation companies to install microgeneration technologies is important to the development of the microgeneration supply chain. We have looked at this issue in the Microgeneration Strategy and will continue to work with stakeholders to ensure the installer base grows in line with demand.

91. Are there any alternatives to the MCS scheme under the RHI?

- Yes. Equivalent schemes include Solar Keymark for solar thermal installations, or any other scheme accredited under European Standard EN45011 (which certifies microgeneration products and installers in accordance with consistent standards). When applying for support, applicants will be asked for details of MCS or equivalent scheme certification. If applicants intend to apply using an MCS 'equivalent' scheme, they must prove to Ofgem that both the **installer and technology** have been certified by a scheme which meets the definition.

- Currently all the devolved administrations are participating in the MCS scheme. There will be differences in building regulations across the devolved nations but this is adequately accounted for in MCS. In the event that one of the devolved authorities were to set up their own scheme, it would need to be MCS equivalent for the RHI.

92. The delay to the domestic scheme has affected business for small heating installation companies

- We have delayed the RHI scheme for the domestic sector as we need to ensure that a scheme which is fit for purpose for this sector is delivered. We will work with stakeholders while we develop this scheme.

- We understand that the delay for the domestic sector RHI will impact on the business plans of small heating installation companies, although they will still benefit from the likely increase in Microgeneration-scale non-domestic sector installations and from the interim domestic scheme.

IMPACT ASSESSMENT

Impact Assessment key figures:

93. How much will the RHI cost to the government?

- The cumulative costs of the RHI by 2020 are expected to be around £5.2bn. These are current estimated projections and the full costs of the scheme will depend on the actual profile and level of demand. Full details of the costs and benefits of the RHI can be found in the accompanying IA.

- What carbon savings are expected as a result of the RHI:

MtCO2 (NET)	**Total**	**In EU ETS**	**Outside EU ETS**
1st Carbon Budget Period (2008-2012)	**1**	**0**	**1**
2nd Carbon Budget Period (2013-2017)	**14**	**3**	**12**
3rd Carbon Budget Period (2018-2022)	**52**	**7**	**45**
Total policy lifetime	**239**	**31**	**208**
Cumulative to 2020	**44**	**7**	**37**