

NORTH LINCOLNSHIRE COUNCIL

**HIGHWAYS AND PLANNING
CABINET MEMBER**

RENEWABLE HEAT INCENTIVE CONSULTATION DOCUMENT

1. OBJECT AND KEY POINTS IN THIS REPORT

- 1.1 To authorise the attached consultation responses to the Renewable Heat Incentive.

2. BACKGROUND INFORMATION

- 2.1 Tackling Climate Change is the key challenge facing our generation. Maintaining security of energy supply is a closely related imperative.
- 2.2 The UK Low Carbon Transition plan sets out the government's overall strategy for reducing carbon dioxide emissions while at the same time exploiting the opportunities that the green economy presents.
- 2.3 The Renewable Energy Strategy is the government's action plan for delivering on renewable energy. A key challenge within this is to increase significantly the amount of renewable heat generation.
- 2.4 Heating accounts for approximately half of the UK's carbon dioxide emissions and more than half of the average domestic energy bills.
- 2.5 Currently only 1% of the country's heating comes from renewable sources.
- 2.6 The Renewable Heat Incentive (RHI) will provide the necessary financial support to increase significantly the level of renewable heat generation.

3. OPTIONS FOR CONSIDERATION

- 3.1 There are no decision options to be considered

4. ANALYSIS OF OPTIONS

- 4.1 A summary of the RHI is given in Appendix 1.

- 4.2 The scheme's aim is to provide financial support to encourage individuals, communities and businesses to switch from using fossil fuel for heating to renewable technologies and sources.
- 4.3 It is designed to support the following technologies:
- Air/ground and water source heat pump
 - Solar thermal
 - Biogas, bio liquids and bio methane in the gas grid
 - Renewable combined heat and power (CHP)
 - Biomass boilers
 - Renewable district/community heating schemes
- 4.4 Government are currently looking into funding options for the scheme but this will not impact upon their deadline for introduction (1 April 2011).
- 4.5 The government foresees individual householders playing a large role in the success of the RHI scheme. Householders who currently use conventional fossil fuels e.g. gas, coal or oil will be able to claim RHI payments if they switch to renewable technologies.
- 4.6 Under the RHI scheme, individual householders, communities, social landlords or businesses will be able to claim annual payments for 20 years following the installation of renewable heating technology.
- 4.7 The government has designed different tariff payments for different technologies as they recognise that the market value of energy does not yet encourage generation from renewables.
- 4.8 In the case of renewable electricity, support already comes from the Renewable Obligation (RO) for large scale installations and for small scale installations through the new feed in tariffs (FIT) from April 2010.
- 4.9 The RHI tariffs, as designed, aim to provide several benefits to those joining the scheme.
- Compensation is to be provided for the financial costs associated with renewable heat and the tariffs aim to do so by covering the difference in upfront capital and ongoing costs between renewable and conventional heat.
 - Compensation is also to be provided for some non financial barriers such as disruption of digging up gardens etc.
 - The tariff should also pay an investment return, proposed at 12% across all technologies, with 6% for solar thermal.
- 4.10 The proposed tariffs are outlined in Appendix 2.
- 4.11 The scheme as it stands at the moment will be a significant step forward in promoting renewable energy.

- 4.12 The council has just approved its Carbon Management plan, which will commit the council to reducing its emissions by 33% over the next 5 years.
- 4.13 The council is in the process of establishing an energy efficiency fund jointly with the Salix Scheme, which will invest in carbon reduction schemes.
- 4.14 The addition of the new RHI funding stream, that will reward investment in renewable energy will ease the role out of the council's low carbon programme and should be supported.
- 4.15 At the same time as the RHI the government also announced that it was introducing a series of new feed in tariff for renewable electricity generation.
- 4.16 The new tariffs will also reward renewable energies such as photo voltaics or wind turbines by providing home owners, schools and communities with a guaranteed sum of money per KWH they produce and consume. A further allowance is also given for each KWH of excess energy produced that is pumped into the National Grid. The tariffs are given in Appendix 3.
- 4.17 When considered as a package, the RHI and the new feed in tariffs will provide an additional boost to the council's Carbon reduction programme.
- 4.18 In order to capitalise on the RHI, feed in tariffs, North Lincolnshire Council/SALIX recycling scheme and forthcoming CRC payments it suggested that all of the above is coordinated through the Carbon Programme board.
- 4.19 The consultation document has thirty detailed questions. These are given in Appendix 4.

5. RESOURCE IMPLICATIONS (FINANCIAL, STAFFING, PROPERTY, IT)

5.1 Financial

5.1.1 The RHI scheme and the new Feed in Tariff together with the Council/salix joint energy efficiency scheme will create a funding package which will significantly boost the options for introducing renewable heat and renewable energy generation into council properties.

5.2 Staffing

5.2.1 It is proposed that the Carbon Programme Board coordinate all issues around CRC and RHI to ensure a coordinated and joined up approach is taken.

5.3 IT

5.3.1 There are no IT implications arising from this report

5.4 Property

5.4.1 There are no accommodation issues arising from this report

6. **OTHER IMPLICATIONS (STATUTORY, ENVIRONMENTAL, DIVERSITY, SECTION 17 - CRIME AND DISORDER, RISK AND OTHER)**

6.1 Statutory

6.1.1 The Carbon Reduction Commitment (CRC) is a new mandatory emissions trading scheme set up by central government. It aims to improve energy efficiency and reduce the amount of carbon dioxide (CO₂) emitted in the UK.

6.1.2 Emissions from state-funded schools in Great Britain are included in the scheme through their local authority. This includes Foundation, Voluntary Aided, Voluntary Controlled, Academy and Trust.

- North Lincolnshire Council will be included in the scheme
- Schools accounts for 45% of the energy this Authority uses

6.1.3 Reducing the emissions from our schools will help to reduce the council's exposure to the CRC.

6.2 Environmental

6.2.1 The North Lincolnshire area sits at the bottom of the National Indicator 186 league table.

6.2.2 The council and its LSP partners have adopted NI186 as one of its key indicators within the Local Area Agreement (LAA). The target is to reduce the regions emissions by 12% over the life of the LAA.

6.2.3 In order to deliver the regional reductions by working with our partners the council must be seen as leading from the front and getting its own house in order. The Local Authority Carbon Management Programme is moving us in the right direction but more needs to be done.

6.3 Diversity

6.3.1 There are no diversity implications arising from this report.

6.4 Crime and Disorder

6.4.1 There are no issues arising from this report.

7. OUTCOMES OF CONSULTATION

- 7.1 Highways and Planning are coordinating a councilwide response to this and the documents and questions have been sent to the relevant sections of the council, requesting comment.
- 7.2 In discussion with Asset Management and Culture, it was recognised that the RHI and feed in tariffs are likely to make the introduction of renewal technologies into council properties in accordance with the Carbon Management Plan, considerably easier and more cost effective.
- 7.3 It is suggested that the cabinet member for Highway Planning and Energy be authorised to sign off the responses as part of his portfolio responsibilities.

8. RECOMMENDATIONS

- 8.1 That Cabinet Member authorises the attached responses to the consultation document on the Renewable heat Incentive.
- 8.2 That the report be forwarded to the Leader and Cabinet Member for Regeneration, Marketing and Strategic Finance and to the Internal Programme board for information.
- 8.3 That the Carbon Programme Board take on the role of coordinating schemes to capitalise on the RHI, Feed In Tariffs, and other external grants to maximise the role out of renewable heat and energy initiatives across the council's portfolio of buildings.

SERVICE DIRECTOR HIGHWAYS AND PLANNING

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Background Papers used in the preparation of this report: Nil

Summary Of the Renewable Heat Incentive

Renewable energy, as part of our wider switch to a low carbon economy, plays a vital part in our work to tackle climate change and maintain secure energy supplies.

Our Renewable Energy Strategy (RES), published on 15 July 2009, sets out the path towards achieving our target of 15% of our overall energy consumption to come from renewable sources by 2020.

In order to enable individuals, communities and others who are not professionals in the energy business to play their part in bringing forward renewable energy, we are committed to introducing **clean energy cash-back** for renewable electricity and heat. We will deliver clean energy cash-back for renewable heat through the **Renewable Heat Incentive (RHI)**.

This consultation sets out the Government's proposals on the design and operation of the Renewable Heat Incentive, with the aim of providing financial support that encourages individuals, communities and businesses to switch from using fossil fuel for heating, to renewable technologies and sources.

We propose the following key aspects of the RHI:

- The scheme should support a range of technologies, including air, water and ground-source heat pumps (and other geothermal energy), solar thermal, biomass boilers, renewable combined heat and power, use of biogas and bioliquids and the injection of biomethane into the natural gas grid.
- RHI payments to be claimed by, and paid to, the owner of the equipment.
- In small and medium-sized installations, both installers and equipment to be certified under the Microgeneration Certification Scheme (MCS) or equivalent standard, helping to ensure quality assurance and consumer protection.
- We propose payments will be paid over a number of years; annually for installations below 45 kW and quarterly for those above this level; and always subject to conditions such as continuing to operate and maintain the equipment.
- Tariff levels have been calculated to bridge the financial gap between the cost of conventional and renewable heat systems at all scales, with additional compensation for certain technologies for an element of the non-financial cost (eg the inconvenience of digging up a garden to install a ground-source heat pump). Tariff levels are proposed to provide a rate of return of 12% on the additional capital cost of renewables, with a lower rate of return of 6% given to solar thermal.
- Payments to be calculated on the annual amount of heat output, expressed in kilowatt hours (kWh). At the small and medium scale, the amount of heat generated by the equipment is proposed to be estimated (or "deemed") when installed in most cases. This will allow the beneficiary of the incentive to receive a

set amount based on the deemed output, to encourage low energy consumption and discourage wasting heat.

- For large installations and process-heating, heat output to be metered, and the total annual support calculated from the actual energy generated, multiplied by the tariff level.
- We have already committed that the RHI will remain open to new projects until at least 2020. Its design and tariff levels will be reviewed from time to time for new projects, so as to adapt to changes in technology costs and other circumstances.
- As announced in the RES, we will also allow eligible installations completed after 15 July 2009, but before the start of the RHI, to benefit from the scheme as if they had been installed on the date of its introduction.
- Ofgem will administer the RHI, making incentive payments to recipients and taking responsibility for auditing and enforcing the scheme. We will work with Ofgem to devise a simple process for accrediting smaller installations. This is to ensure that standards are met and payments can be made.
- The Energy Act 2008 provides the statutory powers for a renewable heat incentive scheme to be introduced across England, Wales and Scotland. The detailed legal framework will be set out in secondary legislation.

RENEWABLE HEAT INCENTIVE TARIFFS

SMALL INSTALLATIONS

Technology	Scale	Proposed tariff (pence/kWh) (2)	Deemed or metered (3)	Tariff lifetime (years)
Solid biomass	Up to 45 kW	9	Deemed	15
Bioliqids (7)	Up to 45 kW	6.5	Deemed	15
Biogas on-site combustion (5)	Up to 45 kW	5.5	Deemed	10
Ground source heat pumps (8) (9)	Up to 45 kW	7	Deemed	23
Air source heat pumps (9)	Up to 45 kW	7.5	Deemed	18
Solar thermal	Up to 20 kW	18	Deemed	20

MEDIUM INSTALLATIONS

Technology	Scale	Proposed tariff (pence/kWh) (2)	Deemed or metered (3)	Tariff lifetime (years)
Solid biomass	45-500 kW	6.5	Deemed	15
		2 (fuel tariff)	Optional: for metered kWh above deemed number of kWh	15
Biogas on-site combustion (5)	45-200 kW	5.5	Deemed	10
Ground source heat pumps (8)(9)	45-350 kW	5.5	Deemed	20
Air source heat pumps (6)(9)	45-350 kW	2	Deemed	20
Solar thermal (6)	20-100 kW	17	Deemed	20

LARGE INSTALLATIONS

Technology	Scale	Proposed tariff (pence/kWh) (2)	Deemed or metered	Tariff lifetime (years)
Solid biomass (4)	500 kW and above	1.6 – 2.5	Metered	15
Ground source heat pumps (8)(9)	350 kW and above	1.5	Metered	20

BIOMETHANE INJECTION

Technology	Scale	Proposed tariff (pence/kWh) (2)	Deemed or metered	Tariff lifetime (years)
Biomethane injection	All scales	4	Metered	15

APPENDIX 3

FEED IN TARIFFS

Technology	Scale	Tariff level for new installations in period (p/kWh) [NB tariffs will be inflated annually]			Tariff lifetime (years)
		Year 1: 1/4/10 – 31/3/11	Year 2: 1/4/11 – 31/3/12	Year 3: 1/4/12 – 31/3/13	
Anaerobic digestion	≤500kW	11.5	11.5	11.5	20
Anaerobic digestion	>500kW	9.0	9.0	9.0	20
Hydro	≤15 kW	19.9	19.9	19.9	20
Hydro	>15-100 kW	17.8	17.8	17.8	20
Hydro	>100 kW-2 MW	11.0	11.0	11.0	20
Hydro	>2 MW – 5 MW	4.5	4.5	4.5	20
MicroCHP pilot*	<2 kW*	10*	10*	10*	10*
PV	≤4 kW (new build)	36.1	36.1	33.0	25
PV	≤4 kW (retrofit)	41.3	41.3	37.8	25
PV	>4-10 kW	36.1	36.1	33.0	25
PV	>10-100 kW	31.4	31.4	28.7	25
PV	>100kW-5MW	29.3	29.3	26.8	25
PV	Stand alone system	29.3	29.3	26.8	25
Wind	≤1.5kW	34.5	34.5	32.6	20
Wind	>1.5-15kW	26.7	26.7	25.5	20
Wind	>15-100kW	24.1	24.1	23.0	20
Wind	>100-500kW	18.8	18.8	18.8	20
Wind	>500kW-1.5MW	9.4	9.4	9.4	20
Wind	>1.5MW-5MW	4.5	4.5	4.5	20
Existing microgenerators transferred from the RO		9	9.0	9.0	to 2027

APPENDIX 4

Q1: Are there any issues relevant to the design or operation of the RHI that are not addressed in this consultation document? If so, how should we deal with them?

The issue of how to aid with the upfront costs needs to be addressed

Q2: Do you see any barriers to such financing schemes coming forward? In particular, are there any limitations in leasing and finance legislation that you feel inappropriately restrict the development of RHI financing models?

No

Q3: Do you agree with our proposed RHI registration and payment approach? If not, can you suggest how this approach can be improved?

We agree with the approach outlined in the document

Q4: Do you agree with our approach of requiring products and installers for installations up to 45kW within RHI to be accredited under MCS or equivalent?

Yes we agree although the cost for registration are high. It is also rather perverse that in order to get registration the contractor has had to have installed and had checked some type of renewable heat installation for which he or she is attempting to get accredited for. Home owners are not likely to want to take a chance on their installer getting MCS accredited by cutting their teeth on their scheme without some form of safeguard.

Q5: Where MCS is extended beyond the current limit, do you agree that we should require the use of MCS certified installers and equipment for eligibility for the RHI?

Yes but please note our comments above

Q6: Can you provide details of any UK or European standards that should count as equivalent to MCS? How should we recognise these standards for the RHI?

We are not aware of any other standards

Q7: Do you agree with our proposed approach to eligibility of energy sources, technologies and sites?

Yes we agree with the approach set out in the consultation documents

Q8: Do you agree with our proposed approach on bioliquids? Are you aware of bioliquids other than FAME that could be used in converted domestic heating oil boilers? If so, should we make them eligible for RHI support, and how could we assess the renewable proportion of such fuels to ensure RHI is only paid for the renewable content of fuels?

We agree with the approach outlined in the report on Bioliquids

Q9: Do you agree with the proposed emissions standards for biomass boilers below 20MW? If not, why, and do you have any evidence supporting different ones, in particular on how they safeguard air quality?

Air quality is a major issue in some areas of North Lincolnshire and we would support strict standards on emission being applied

Q10: Do you think the RHI should be structured to encourage energy efficiency through the tariff structure (in particular the use of deeming), or, additionally, require householders to install minimum energy efficiency standards as a condition for benefiting from RHI support?

It is essential that homeowners have to meet a certain standard of energy efficiency before benefiting from the RHI

Q11: Can you provide suggestions for how to ensure that developers do not build to lower energy efficiency standards as a result of the RHI in advance of 2013 and 2016 building regulations taking effect?

Other than through local policy development around the code for sustainable homes no.

Given the seriousness of the situation government could bring the dates forward in order to align its policy objectives

Q12: Do you agree with our proposals on where we should meter and where we should deem to determine an installation's entitlement to RHI compensation?

We agree with the proposals as set out in the consultation document

Q13: Do you agree that a process based on SAP or SBEM for existing buildings or the Energy Performance Certificate for new buildings is the best way of implementing deeming? Do you have any suggestions on the details of how this assessment process should work?

Yes we agree that SAP and SBEM are the most appropriate ways forward

Q14: Do you agree that at the large scale/in process heating, where we propose metering, the risk of metering resulting in a perverse incentive to overgenerate is low? How could we reduce it further within the constraints of using metering, to ensure only useful heat is compensated? Do you see any practical difficulties concerning use of heat meters (such as on availability, reliability or cost of heat meters) and, if so, how should we address them? Weather correcting could be used to avoid over generation and determine what is reasonable

Heat meters are not reliable and add to the cost of the scheme

Q15: What is the right incentive level required to bring forward renewable heat from large-scale biomass including in the form of CHP while minimizing costs to consumers?

We believe that the tariffs outlined in the report are set at the correct level. However, if large scale uptake is not achieved the levels may have to be reviewed under your proposed emergency procedures.

Q16: What is the right incentive level required to bring forward renewable heat from biogas combustion above 200 kW including in the form of CHP while minimising costs to consumers? Do you have any data or evidence supporting your view?

No comments to make

Q17: Do you have any data or evidence on the costs of air source heat pumps above 350 kW or solar thermal above 100 kW?

No

Q18: Do you agree with the proposed approach to setting the RHI tariffs, including tariff structure and rates of return? Do you agree with the resulting tariff levels and lifetimes? If not, what alternatives would you prefer, and on the basis of what evidence?

We agree with the tariffs and the rates of return outlined in the consultation document and are sure that they are set at right level to encourage investment in the scheme

Q19: Do you agree with our proposed approach on mixed fuels? Do you agree with our proposal that, at larger sites, with the exception of EfW, RHI will require the use of a dedicated boiler for the renewable fuel? Where our approach is to follow the Renewables Obligation, do any aspects need to be adapted to account for the different situation of renewable heat?

We agree with the proposals outlined in the consultation document and that a dedicated boiler will be required

Q20: Do you believe that we should provide an uplift for renewable district heating?

Yes we believe that there should be an uplift based upon the proportionally higher upfront costs

Q21: Do you believe that an uplift should be available to all eligible district heating networks, or that eligibility should be determined on a case-by-case basis depending on whether a network contributes to the objective of connecting hard-to-heat properties (and, if the latter, how should we determine this for each case)? Do you agree that situations of one or a small number of large external heat users should not be eligible for an uplift, and, if so, what should be the minimum eligibility requirement for an uplift (expressed for instance as a minimum number of external customers)?

We believe that an uplift should be available and that this could be based on hard to reach communities eg in super output areas . It is essential that uplift is based upon the boiler and network being installed at the same time or when an existing scheme is significantly expanded to bring in further communities

Q22: Do you agree that RHI tariffs should be fully fixed (other than to correct for inflation) for the duration of any project's entitlement to RHI support? Do you agree that we should include bio-energy tariffs, including the fuel part of those tariffs, in such a grandfathering commitment?

Yes we believe that tariffs should be fully fixed for the duration of the technologies lifespan. We also believe that bio energy tariff should be split as outlined in the consultation document.

Q23: Do you agree with our proposal not to introduce degeneration from the outset of the scheme but consider the case at the first review?

We believe that due to the continued cost uncertainty that Degeneration should not be introduced at the outset of the scheme. This should however be kept under review as more technologies are installed and prices begin to fall

Q24: Do you agree with our proposed approach on innovative and emerging technologies?

Yes we agree with the proposals for dealing with new technologies

Q25: Do you have any views on how we should encourage technology cost reductions through the RHI, particularly on solar thermal heat?

Government can do all the encouragement in the world but if industries costs are high then their product costs will be high. We believe that the public are more likely to chose such technologies if a loan scheme were available at a standard interest rate(not variable) to cover the costs. Government pressure needs to be applied to the banks and building societies

Q26: Do you agree with our proposed approach to reviews, and the timing and scope of the initial review?

We agree with the proposals outlined in the report for reviewing the scheme

Q27: Can you provide examples of situations that could be taken into consideration in determining criteria for an emergency review?

Where technology or fuel prices change an emergency review may be necessary in order to achieve value for money. We believe that an emergency review may become necessary against the background of poor take up of a specific technologies or against the background of poor carbon savings as we get closer to our 2020 and 2050 target dates

Q28: Do you agree with our proposed approach to allow access to RHI support to new projects where installation completed after 15 July 2009, but not before? Do you have any evidence showing that in particular situations RHI support for installations existing before this date would be needed and justifiable?

Unfortunately there has to be a cut off point. We are aware of some of our schools where technology has been installed before the cutoff date. Ongoing support to such projects would be desirable .

Q29: Are there any parts of the proposals set out in this consultation that in your view would allow for unacceptable abuse of RHI support, or other unintended consequences? If so, how could we tighten the rules while keeping the scheme workable, and avoiding an overly high administrative burden?

We are not aware of any circumstances where the system could be abused

Q30: Do you agree with our proposed overall approach to setting the level of the uplift? Can you provide evidence that would help us to determine the level of uplift? In particular:

- **Can you describe typical district heating networks that would be appropriate as reference networks, and what are their network costs, heat loads, and customer numbers and characteristics?**

- **What proportion of the heat load of such networks is typically supplied to hard-to-treat properties? What proportion of the total network of the reference installation(s) supply heat to hard to treat properties?**
- **Should we choose one reference network and determine one uplift (in p/kWh) applicable to all sizes of networks, or should there be several based on a number of differently sized reference networks?**

We have no comments to make on this question