



Renewable Heat Initiative UKERC Consultation Response on Expanding the Non Domestic Scheme

7th December 2012

Submitted on behalf of UKERC by Robert Sansom, Imperial College London, SW7 2AZ
Email: r.sansom10@imperial.ac.uk

THE UK ENERGY RESEARCH CENTRE

The UK Energy Research Centre, which is funded by Research Councils UK, carries out world-class research into sustainable future energy systems.

It is the hub of UK energy research and the gateway between the UK and the international energy research communities. Our interdisciplinary, whole systems research informs UK policy development and research strategy.

www.ukerc.ac.uk

The Meeting Place – hosting events for the whole of the UK research community –

www.ukerc.ac.uk/support/TheMeetingPlace

National Energy Research Network – a weekly newsletter containing news, jobs, event, opportunities and developments across the energy field – www.ukerc.ac.uk/support/NERN

Research Atlas – the definitive information resource for current and past UK energy research and development activity – <http://ukerc.rl.ac.uk/>

UKERC Publications Catalogue – all UKERC publications and articles available online, via www.ukerc.ac.uk

Follow us on Twitter @UKERCHQ

UKERC Response

This document sets out a response of the UK Energy Research Centre (UKERC) to the Department of Energy and Climate Change's consultation 'Renewable Heat Incentive: Expanding the Non Domestic Scheme'.

The submission is under the control of Mr Robert Sansom from Imperial College London. Mr Sansom is undertaking a research project on *Accelerating deployment of renewable heat*, which is being funded by UKERC. This submission is based on that project.

Air to air heat pumps

2. Question: Do you think that heating only air to air heat pumps should be supported by the RHI? Can you supply any further evidence to support your view?

Answer: The subsidy proposed will reduced running costs by 20 to 25%. Although this is significant the attractions of both heating and cooling for the same capital outlay would still seem very tempting. As a consequence there is a risk that providing a subsidy to heating only appliances would create a false market. In addition with the prospects of more extreme weather conditions, cooling may become more of a necessity as opposed to a "nice to have", particularly for vulnerable people such as the elderly. Unless there is evidence to the contrary we do not believe that heating only air to air heat pumps should be supported.

Biomass and bioliquid HP

22. Question: Do you agree that a separate tariff should be introduced to support biomass combined heat and power?

Answer: Yes this is an important renewable heat technology that needs support.

25. Question: Do you agree with the proposal to limit the amount of bioliquid qualifying for the RHI? Please provide reasons to support your answer.

Answer: This seems sensible for the reasons given in the consultation.

26. Question: Is an enforced link to the Renewables Obligation or a lower tariff the best mechanism for providing this limit? What alternatives do you suggest?

Answer: The link to RO is sensible and ensures consistency.

Deep geothermal

27. Question: Do you agree that there should be a separate tariff to properly incentivise deep geothermal heat?

Answer: Yes. This is an important renewable heat technology with large scale deployment potential and where specific support is justified.

District heating

32. Question: Do you think that we should be consistent with the domestic RHI and introduce a requirement based on 'green ticks' for small scale district heating networks?

Answer: Yes. Consistency is important to avoid perverse incentives.

33. Question: How do you think we should define as a 'small scale heat network'?

Answer: 5 MW seems very small. However, we would question whether there is any need to have such a definition for the purposes of energy efficiency initiatives.

34. Question: Do you think that energy efficiency measures should be introduced as eligibility criteria of RHI for large scale district heating networks?

Answer: Yes. Although energy efficiency may be less important for some district heating schemes this is effectively accommodated within Green Deal scheme whereby energy efficiency support must fulfil the self-funding criteria.

35. Question: Do you think that a sliding scale approach is suitable for district heating networks?

Answer: The retrofitting of district heating will involve some disruption to households with gas boilers removed or wet radiator systems installed, for example. It therefore seems reasonable to expect the beneficiaries of the subsidy to fully comply with the energy efficiency criteria. If not presumably a household could choose to opt out or be opted out of the district heating scheme.

36. Question: What do you suggest the correct proportion of green deal tick compliance should be for each district heating size banding?

Answer: Full compliance.

37. Question: Do you agree that we should require energy efficiency measures to be installed before the renewable heating system is able to receive RHI payments? If not, what do you propose?

Answer: Yes.