

SAG briefing note on the Renewable Heat Incentive

Summary of views discussed in meeting 15 July 2011

Monitoring and evaluation for the RHI

The RHI should aim to get renewable heat technologies installed and working effectively for the future. Incentives should be performance based and sufficient installations should be monitored to gain experience on performance.

Smart meters could have a role to play in understanding heat loss from buildings and evaluating the performance of RHI installations, including heat pumps. This would require smart meters to gather data on household energy use both before and after an RHI installation.

Another option would be to regulate for suppliers to include monitoring systems as a compulsory part of some or all RHI installations. Digitally automated monitoring technology could be an affordable option for technologies such as solar thermal and heat pumps. Further investigation would be needed to determine whether 100% monitoring is necessarily cost-effective.

Learning from the Premium Payment Scheme could usefully be fed into the revised Phase 2 of the domestic Renewable Heat Incentive. The current plan appears to allow insufficient time for learning to be fed into Phase 2. The SAG advises DECC to explore ways to capture this learning if possible (e.g. by driving for earlier findings from the Premium Payment Scheme).

Avoiding perverse incentives in the RHI

RHI policy design needs to avoid incentivising renewable heat installations where there is no commensurate heat demand, and to avoid large scale heat suppliers from reaping unaffordable profits from the government.

Heat pumps payments could be based on meeting a COP, but any decision on this should take into account the link between COP and customer behaviour (as this is an important determining factor for COP alongside heat-pump design, installation and theoretical performance). By conditioning payments on performance you could make heat pumps more attractive to low energy users like single people and childless couples and much less attractive to those that need to heat their homes and hot water more, like families, part-time workers or the elderly.

The future of the domestic gas network

Heat pumps may require a top-up energy source to provide additional heating quickly during periods of temporary high domestic heat demand. In the medium term, the SAG

believes the existing domestic gas network will usually be the most sensible option for top-up supply. Therefore there should be a presumption in favour of retaining domestic gas boilers and supporting infrastructure during retro-fit of the UK housing stock under the Renewable Heat Incentive.

The SAG acknowledges that the costs of maintaining the gas network in future should be assessed against alternative options for ensuring reliable domestic heat supply, to assess whether gas really is the most cost-effective option. It should be noted that the gas network may be retained anyway in many cases for use in domestic cooking, and because renewable heat may not gain 100% share.

It will be important to ensure renewable heat tariffs are sufficiently generous that consumers use their gas boiler as top-up supply rather than the primary heat source. The high up-front costs of heat pumps present a risk that continued gas boiler use could displace heat pump installation.