



# Renewable energy and district heating

## The situation

Since its introduction in 2002, the Renewables Obligation has had some success in encouraging renewable energy in the UK. However, it's clear that it has suited wind, solar and wave energy solutions best. To meet EU and national targets, we need to generate considerably more renewable energy - and the means to make it happen must be cost effective.

Transforming waste fuel sources into energy provides a valuable resource that is recognised by Government as being low carbon. In fact, 50 - 60% of household waste is biomass, a renewable fuel that also produces lower emissions of pollutants per kWh than most fossil fuels. Energy from waste can make a significant contribution to renewable energy generation. It has the potential to contribute up to 10% of renewable electricity supplies – about 3% of our total electricity demand. What's more, it doesn't suffer from the sustainability issues associated with traditional biomass, such as ring-fencing agricultural land to grow fuel crops.

#### The seven key issues

1. Food waste collection and processing
2. Mixed material (co-mingled) collections
3. Mixed plastics collections
4. Management of hazardous waste
5. Energy efficiency and incineration
- 6. Renewable energy and district heating**
7. The End of Waste criteria

## Renewable subsidies will not deliver district heating to meet the UK's needs.

We need a system that pays for the pipes.

Despite all that, energy produced from waste only receives renewable energy incentives if thermal treatment technology such as gasification or pyrolysis are used (or if the facility is connected to a district heating or similar Combined Heat and Power (CHP) scheme). Even then, the heating scheme must qualify as Good Quality CHP, which reduces the incentive to generate heat beyond a certain point.

To put it simply, the subsidy is applied to the electricity that is generated, depending on how much heat is diverted away from the generation of electricity, which is somewhat counterproductive. The complexity of the rules means that, in effect, there is little incentive to use the waste heat.

The new Renewable Heat Incentive (RHI) does partly address this, applying directly to the heat used. However, the subsidy level is not sufficient to encourage significant growth in the UK's district heating capacity.



### Where do you stand?

Join the debate at:

[www.veolia.co.uk/manifesto](http://www.veolia.co.uk/manifesto)

## Where we Stand.



Although the **new RHI scheme** has some merit, in its current form it won't radically transform district heating on the scale demanded by **sustainable cities**.

The RHI was devised to encourage the use of heat from renewable sources. The trouble is, it only really subsidises the cost of capturing and exporting the waste heat. The scheme does nothing to help with the investment in urban piping infrastructure that will be required if district heating is to be expanded.

We believe that renewable energy must be actively encouraged, regardless of the technology behind it and based on efficiency. We'd also like to see the heat incentives reframed to finance the development of piping infrastructure.

In our opinion, the Government should also apply a similar scheme to the capture of waste heat – a resource that is currently just released into the atmosphere.

Whether this is from a renewable source or otherwise, it will lead to a further reduction in energy use for sustainable cities, without the need for any major new infrastructure.