The importance of a policy response to industrial heat demand

Paul Gardiner, Policy Advisor CHPA

A Heating and Cooling Strategy for Europe
24 June 2014
Power generation
Input 78, Use 32, Losses 46

Industrial heat 15
Industrial power 8

Heat use is much higher than power. Generation wastes energy

Domestic heat 33
Domestic power 10

Organised by:
Policy Review

Organised by:

SAP = Standard Assessment Procedure
MCS = Micro generation Certification Scheme
RHI = Renewable Heat Incentive
Policy solutions to reduce emissions from provision of heat in industry

• Encourage Industrial Energy Efficiency
  – Reduced consumption = reduced emissions

• Encourage Industry to adopt CHP
  – An efficiency measure to dive competitiveness - and
  – Primary energy savings = reduced emissions

• Encourage Heat from renewable sources
  – Particularly in CHP
  – Renewable fuel = reduced emissions

Ensure that the solutions are investible, workable and simple to understand

Organised by:
Annex
A1 How to encourage uptake of CHP in Industry

• Recognise that CHP is designed to meet heat load
  – Provides electricity as a valuable co-product
    • Electricity from CHP is typically lower carbon intensity than grid
    – Must have access to electricity system and market
    – Can provide valuable services to electricity system if adequately rewarded (e.g. Capacity, flexible supply)
• Recognise that CHP reduces Primary Energy demand
  – reduce carbon taxes applied to CHP operators
• Recognise that CHP has higher Capex
  – Develop a bespoke policy to support
• Recognise that CHP can use renewable fuels
  – Develop preferential support mechanisms for heat from CHP
A2 UK Policy Review
Industrial Heat demand by sector

Projected growth in renewable CHP by sector

New bespoke policy for new gas Fired CHP is being developed

Heat demand that could be met by networks TWh/y

Heat Network Delivery Unit
Gas Demand Side Response
Anaerobic digestion & Biomethane injection

Organised by:
A2 UK Policy Review