










**Opportunities for Professional Development:  
UP-RES Project**

Robin Wiltshire  
Sustainable Development Group  
13 September 2011





Part of the BRE Trust



**Urban Planners – Renewable Energy Skills (UP-RES)**

- Supported by European Commission Intelligent Energy Europe programme
- (Also relies on securing sponsors!)
- Focuses on implementation of renewable heat through district heating networks
- Target audience primarily planners but also all those who liaise with planners for renewable energy/district heating system development.

**Why urban planning benefits from district heating and renewables**





- CHP (combined heat and power) is the most efficient way to use any renewable fuel to generate heat, power and cooling
- Centralised heating and cooling load is vital to CHP and RES: there is no CHP without heat load
- The heating and cooling load depends on urban structure: heat density and load level
- DHC (district heating and cooling) enables a variety of different fuels and waste energies to be used for the urban energy supply in a sustainable way.










**UP-RES Project Partners**

- Finland: (1) Aalto University with various departments and its AALTO PRO Life-long Learning Institute (as leader)
- Germany: (2) District Heating Association - AGFW, Frankfurt, (3) University of Augsburg - UA and (4) Munich University of Technology, Munich – TUM
- UK: (5) Building Research Establishment Ltd. - BRE, Watford
- Spain: (6) Association of Architecture and Sustainability in Catalonia, Barcelona - SaAS
- Hungary: (7) University of Debrecen





**Principal BRE role**

- Development of 3-day course
- Delivery of the 3-day course
- Several courses already delivered: Coventry, Bournemouth, Swansea, Truro
- More courses to follow, 2 in London





**Who should attend an UP-RES course?**

- Primary audience is planners
- District heating schemes involve many disciplines who liaise with planners: all are invited...
- including Energy and Environmental staff at LAs and RSLs; Architects; Engineers; Developers; *all those interested in taking forward district heating with integrated renewables*
- CPD accreditation is available for this course.





### UP-RES Course Programme Day 1

- Why do we need a transition to an alternative energy system?
- Environmental Impacts of buildings
- EU and UK energy policy drivers and incentives for renewable and GHG mitigation
- Environmental standards in the building sector
- Reducing Heating and Cooling Demands
- Decarbonising energy supply for heating and cooling buildings
- Introduction to District Heating – what is it?
- WORKSHOP - Your experience of DH
- Introduction to District Heating – why to do it/where to apply it/who has done it?
- Planning for DH for new build developments – what is needed?
- Planning for DH across a Local Authority
- WORKSHOP - How to identify potential sites
- Summary of District Energy issues?
- Liaising with developers - Interactive workshop – development of scenario





### UP-RES Course Programme Day 2

- Recap on heating cooling demands
- WORKSHOP - Why is your LA interested in developing policy ?
- WORKSHOP - What is your LA already doing?
- Sustainable Urban energy Planning – introduction
- Integrating SUEP into planning policy
- Creating an evidence base for SUEP
- Examples of policies in other LA / London Plan
- Developing energy planning policies
- Assessing the energy aspects of planning applications
- WORKSHOP – worked example
- Enabling low carbon urbanism

### UP-RES Course Programme Day 3

- Recap of policy and its importance for development (reminder of SUEP)
- Liaising with developers
- WORKSHOP – liaising with developers
- Heat sources for District Heating
- Integrating low carbon and renewable into district energy networks
- Examples of how a district energy network can evolve from fossil fuels to renewable energy sources
- FINAL WORKSHOP
- Wrap up of the three days/ further training ideas/needs
- Q&A/discussion

### How to register your interest

- There will be 2 events held in London...
- As well as elsewhere across the UK
- There will be one event at BRE November 5 – 7
- Details and registration at [www.bre.co.uk/upres](http://www.bre.co.uk/upres)
- Leave your business card with me
- Email me at [wiltshirer@bre.co.uk](mailto:wiltshirer@bre.co.uk)