

# Organising District Heating

Jan Webb, University of Edinburgh,  
Principal Investigator, RC-UK *Heat and the City* Project

Edinburgh Community Energy Co-op Day  
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# RC-UK *Heat and the City* Research

- Multi-disciplinary, *collaborative* research, funded by UK Research Councils' *Energy and Communities* programme
  - Focus on potential for urban district heating
  - Socio-technical innovation and capacity-building for a sustainable, affordable and resilient energy future
- Year 1 - 'what works'
- Next - Glasgow and Edinburgh: councils, public, private and community sectors



# Heat and the City - Research Perspective

- Who has responsibility for transition to low carbon energy? Focus has been on
  - Government legislation
  - Investment by major utilities
  - Domestic technologies and individual behaviour change
- H&C examines the idea that major change at municipal community level is key

# Year One Findings

- Limited UK policy focus on heat, but new interest in heat networks – UK DECC and SG
- Action by significant number of LAs, within their sphere of control, on low carbon energy and affordable warmth
- Complexities of district energy pose challenges
- Leading practitioners sharing knowledge and learning from practice



# Local Authority is Key

- locally-committed actor
- statutory powers
- local knowledge
- capital investment
- borrowing powers
- long-term contracts
- loan guarantor
- proxy-regulator



# Local Energy Governance and Organisation (LEGO)

- Energy Services Company?
  - A shell for project development, finance and management; focuses and stabilises the project
- Form depends on local objectives/priorities
  - Social, economic, environmental
- PPP
  - Birmingham District Energy Company
- Not for profit – public & community sectors
  - Aberdeen Heat and Power
- Community-driven and owned
  - Comrie Development Trust



# Aberdeen Heat and Power Ltd

‘for the benefit of the citizens of Aberdeen’



# Aberdeen Heat and Power Ltd

- Three energy centres with gas-fired CHP generators
- Supplies heat and hot water to
  - Housing tenants and owners in flats in Seaton, Hazlehead and Stockethill
  - Council and community buildings
  - Hazlehead Academy
  - Aberdeen Sports Village
- Sells electricity to Academy (private wire) and consolidator Green Energy
- Phased development since 2002 continues with extension of heat main to Marischal College/city centre



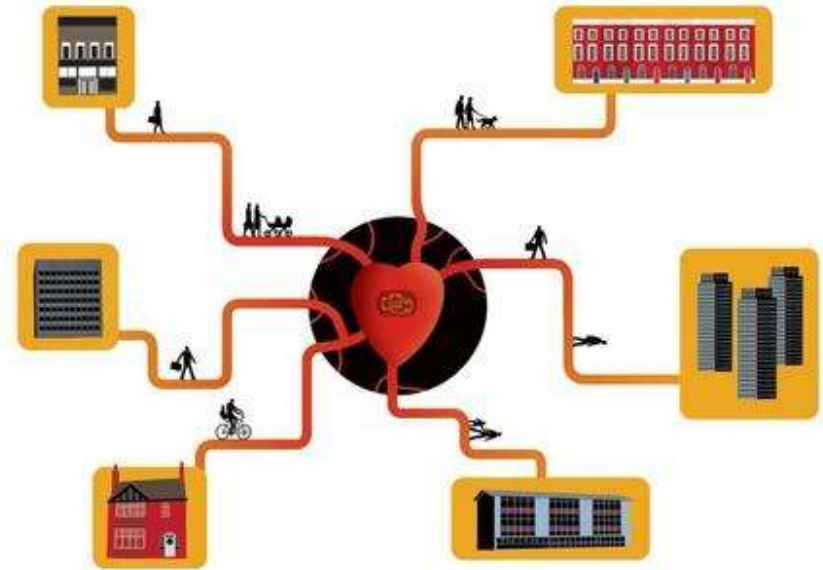
# Aberdeen Heat and Power Ltd - Finance

- Carbon Trust, EST, EEC, CESP
- ACC housing regeneration capital, plus education and community budgets
- ACC prudential borrowing
- Community Energy Programme grants
- Co-op bank loan and overdraft facility
- Scottish Government



# Prospects for Community Heat Networks?

- Public investment in infrastructure?
- RHI?
- Green Investment Bank?
- EU?
- Scottish Government DH Loan Fund?
- Policy measures?
- Local political action.



Research Councils UK Energy and Communities

# HEAT

October 2010 – September 2014

and the

# CITY

Exploring affordable, low carbon community heating in cold climate cities

[www.heatandthecity.org.uk](http://www.heatandthecity.org.uk)



A research collaboration between the Universities of Edinburgh and Strathclyde



# Contact us!

