The problem with running heat pumps from renewables
CHOICES ‘timeshifts’ heat pump electricity use from winter to summer
Case study: the Owen Square microgrid

1. Planning
2. Construction
3. Operations
Traditional Model

- Central generation
- National Grid
- Corporate energy suppliers
- Customers

Community Microgrids

- Community owned networks for sharing locally generated renewable energy
- Customers
- Local generation and storage
- Community energy supplier
- National Grid
- Green generation
It's time to take the power back

Lockleaze
Size: 64.3 kW
Location: Lockleaze, Bristol
Installed: July 2012 - July 2013
Annual generation: 55,096 kWh

Clean power station here.
Yes, please.

Share Offer 2 • April 2014
www.bristolpower.coop
Local installers putting free solar on roofs in Lockleaze, 2012
Map of properties connected to the Owen Square substation:

- Bristol Spaceworks - Hosts the TWOS microgrid
- Easton Community Centre - Hosts the CHOICES microgrid
- Western Power substation (750kVA)
Bristol Spaceworks
Hosts the TWOS domestic microgrid and 170kWh Tesla Powerpack

Kilburn St substation
Hosts LV-CAP platform

Bristol City Academy
Hosts a 250kWp solar array

Easton Community Centre
Hosts the CHOICES hybrid ashp/gshp Energy Centre and microgrid

Homes connected to the Kilburn Street substation:

- VALUE tariff homes
- CHOICES tariff homes
- TWOS tariff homes
Replication partners

Supplier and industry partners

Community and dissemination partners

Technical team