Incumbent fear & doubt

Massive radiators, probably not!

Garden a disaster, yes, but worth it, or drill!

Re-plumb the whole house and UFH, just not necessary!

Installing central heating was a disruption, but stay with coal, really?

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Case Study : London Borough of Enfield

400 social housing apartments, in eight blocks, each with two shared borehole arrays. Tenants' energy costs down by 30-50%

Over 700t CO2 saved per annum

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Case Study : Retrofit social housing

15 retrofit detached bungalows, 5 shared borehole arrays under the common areas. Displacing night storage heaters

Energy costs down by 42%

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Case Study : Rural district heat scheme

9 new build detached houses, a single shared borehole array under the access road

Heat delivered by UFH. Comfort cooling delivered via fancoils

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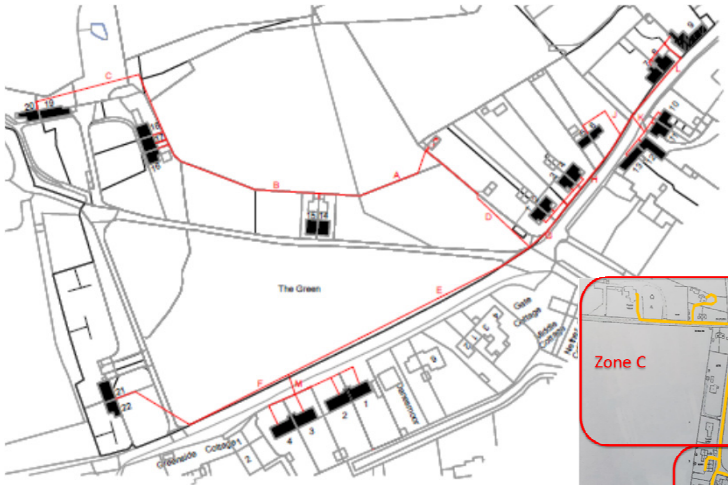
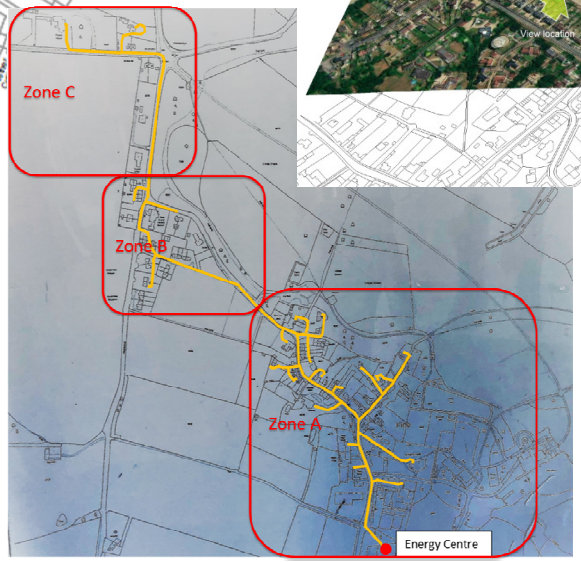
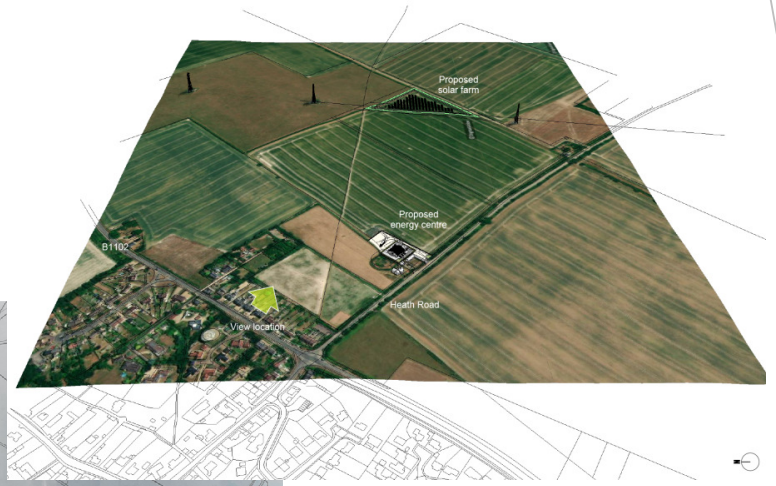
MEES & community decarbonisation







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Tenants & homeowners are key – what factors matter?

- Fossil fuels work, or do they?
- Resistance to, or fear of, change
- Very low valuation of energy (resistance to insulation)
- Capital cost of change
- Operational costs (spark gap)
- Knowledge & understanding
- Environmental attitudes (Sir David Attenborough, Greta) and increasing intergenerational pressure
- Regulations (MEES, Building Regulations)
- Government subsidy
- A better offer (controllability), transitional approaches (hybrids)

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New funding mechanisms required

- Improved application of “time of use” tariffs and thermal storage
- Government action on the spark gap – the polluter pays!
- Encouraged use of waste heat
- Active development of co-located heating and cooling demands
- Improved access to affordable capital
- Third party investment in in-ground assets
- Accessing the value of flexibility
  - Grid balancing
  - Dynamic Response, Primary Response, Secondary Response, Capacity Mechanism
- Co-location with low or zero emissions electricity generation & storage
- Long term government policy to enable all of the above

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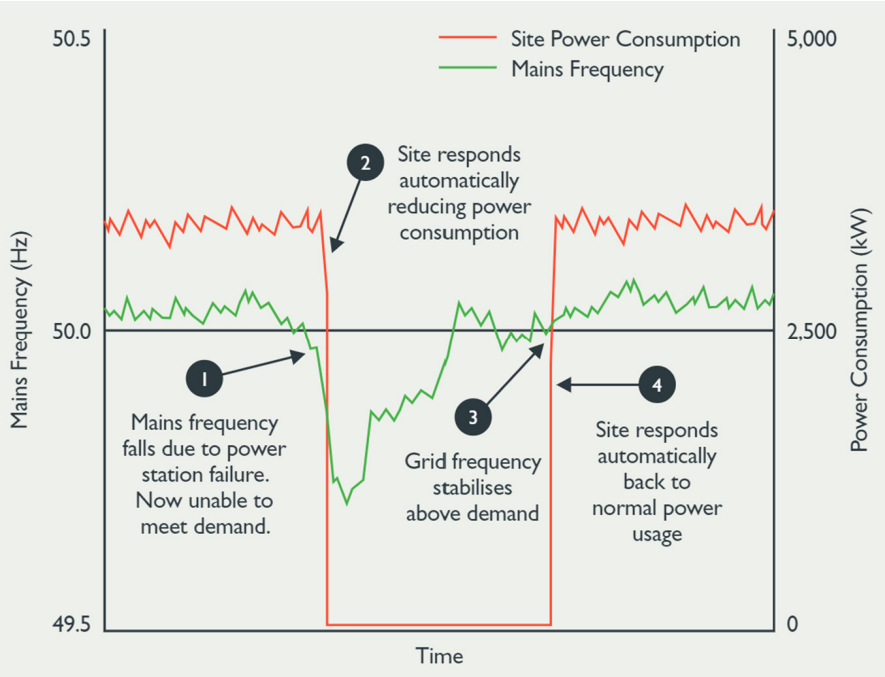
Potential: unlocking the value of flexibility



- Carbon Trust/Imperial College report on this has projected a value from flexibility of £16.7bn per annum by 2050 : https://www.carbontrust.com/news-and-events/news/groundbreaking-analysis-reveals-a-fully-flexible-energy-system-could-cut-the

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Government policy requirements

- Local government to lead by example – Public Building Decarbonisation Scheme
- Local plans to proactively seek out waste heat opportunities and easy the planning pathway for heat networks
- Central government to start tackling the spark gap
- MHCLG to revise Part L at the earliest opportunity, summer 2022?
- Adoption of Low Temperature Heating qualification
- Consider voucher funding for PAS 2035 home assessments

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Government policy status

- Public Building Decarbonisation Scheme – Phase 3 eagerly awaited
- Local plans for heat networks have some specific issues in London due to current GLA policy
- Central government to start tackling the spark gap, recently flagged to get attention mid-decade
- Building Regulations will be updated in July 2022 to include a maximum 55°C flow temperature
- Heat & Buildings Strategy, due now, but publication is highly political
- No firm long term policy currently under consultation. Treasury hopes for a compelling case from DBEIS for the Autumn Spending Review

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Potential: heat pump installers – building capacity & skills

- A minimum of 17,700 installer contactors will be needed to deliver 600,000 installations a year by 2028
- Training capacity is already available to scale up, but long term market visibility is required to drive take-up
- For many SME plumbing & heating contractors, migration into the heat pump segment is a business continuity plan for family-owned entities

- To build sector capacity, all of the areas described in the table below will need to be in place

Long term policy environment that encourages business investment in training, and individual career choices		
Transition of fossil fuel heating engineers	**Consumer confidence**	**Sector accessibility**
Training programmes Sales and marketing guidance to be able to promote Heat Pumps as fossil fuel boilers reach end of life	Improved access to advice and information (role for industry & central & local government) Tackle current concerns – running costs (spark gap), noise and disruption Access to affordable capital	MCS improvements and certification support Formalising of "Umbrella" schemes Design and technical support Sector specific apprenticeship(s)

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What actions should be taken now?

- Review any potential to access the last year of the Renewable Heat Incentive. The Clean Heat Grant is likely to be less generous
- Review existing energy assets – do you own generation assets where the electricity would have a higher value if used locally, rather than exported?
- Do your neighbours have energy assets which could be put to better use
- What residential developments are planned which touch your land?
- Is there potential for leasing thermal rights?
- Does access to thermal assets open up new employment opportunities?

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Thank you

www.hpf.org.uk
https://www.hpf.org.uk/advice/landlords-and-associations

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