

The energy big picture:

How E.ON is working within this backdrop to assist the housing sector

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Delivering a cleaner, better energy system will demand a complex interaction of 'drivers' and 'enablers'



Drivers and enablers of energy system transformation

Energy system transformation





Enablers



Customer behaviour



But how does this all relate to a developer's challenge which is building homes to the 2016 zero carbon homes standard?



Considering energy solutions at the <u>end</u> of the development process



A missed opportunity, and a <u>higher</u> <u>cost</u>end product



Case Study 1: Cranbrook and Skypark Energy Solution



Energy Centre to comprise:

- 1 x 1.4 mWe Gas CHP
- 2 x Advanced Thermal Gasification (ATG) units linked to 2 x 1.4 mWe CHP
- 5 x 4 mWth Natural Gas boilers
- Thermal Stores

Connected to Cranbrook and Skypark properties via c75KM of heat network

Output Capacity:

- Heat Capacity 25.4 mW
- Power Capacity 4.2 mW
- Development will save c13,000 tonnes of CO₂ per year
- Heat provided for 3500 homes + 1.5msqft commercial space



Case Study 2: Colindale Location: Colindale, NW London

Size of Development:

Re-development of the site of the former Colindale Hospital to provide 1065 residential units, a college building and hotel.





Energy Centre Plant:

600kWe CHP, 500 kW Biomass boiler, 3 x 2mW gas boilers

CO2 Savings:

c1,600 tonnes CO2 per year [>60% on site carbon reduction]

Energy from Renewables: 20%



Summary: Our proposition to Developers

E.ON will design, build, fund and operate a development wide low carbon energy solution

- E.ON take technology risk
- E.ON take regulatory risk
- E.ON take demand and bad debt risk
- In return E.ON require exclusive operating rights for {x} years

E.ON provide developers a one stop shop, which lets developers do what they do best