



Cornwall's Deep Geothermal Vision

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Cornwall













off grid gas

fuel poverty

low investment

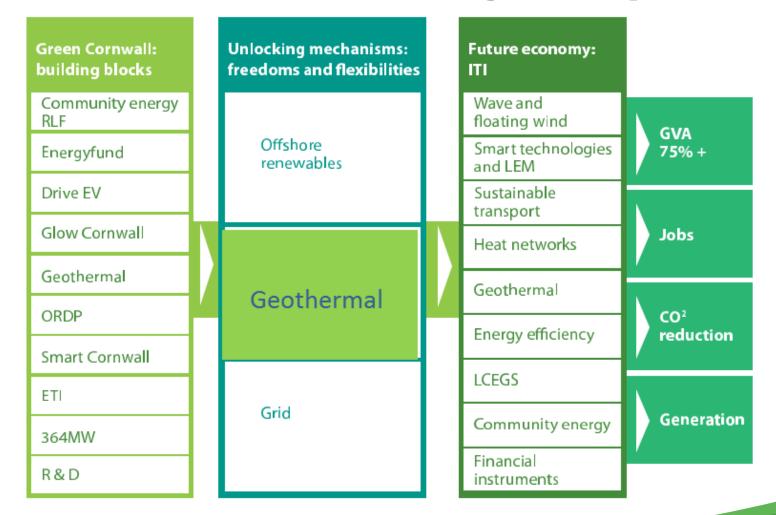
fuel security

465MW installed (sept 2014)

- 22% of electricity
- 7% of energy
- Additional 392MW with permission
 - 15% of energy

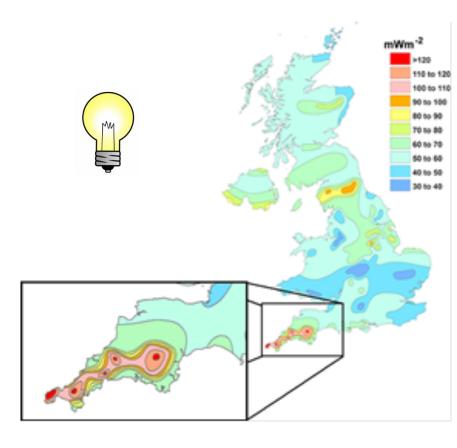


Cornwall's low carbon journey



Geothermal resource

- 'Hot Dry Rock's' test site
 - 1970-80's 2km boreholes 79°C
 - 2014 extracting 60°C from 1.8km
- At 4-5km expect 160-180°C
- 2012, REA (SKM) report
 - 4GWe
- 2013 DECC (Atkins) report
 - 100MWe based on heat load demand





Benefits and opportunities

- c. 20% 100% Cornwall's emissions
- Power to > ½ Cornish homes or exporters
- Cornish tariff
- Base load or flexible power
- Affordable warmth
 - Low carbon heat zones
 - District heating
 - Existing industry
- Jobs
- Research
- Small footprint on the landscape







2012



2014

- high front end costs
- risk/return ratio of a project
- insufficient returns for investors
- lack of public funding
- national political support
- local support

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The challenge



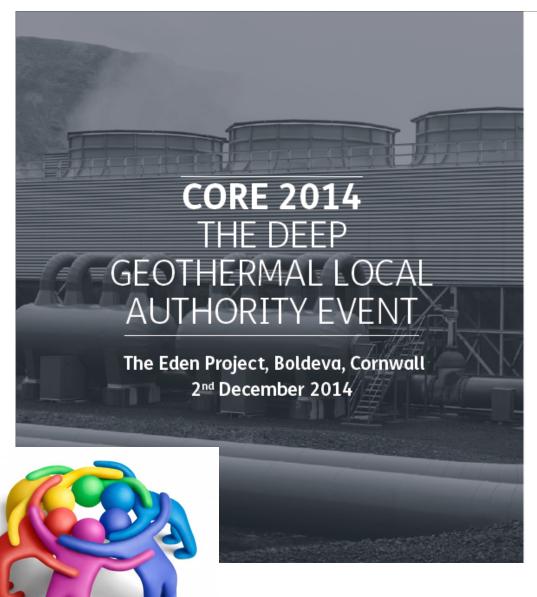
- 2 projects with planning permission
- Best use of public funding
 - Call for proposals Q2, 2015
- Overcome the immediate and longer term issues
- Local Growth Geothermal Working Group with DECC
- Private sector investor confidence
- Future plans
 - Heat mapping, spatial planning
 - Centre of Excellence
- Maximising the benefits to Cornwall











A growing number of Local Authorities are investigating the opportunities that geothermal offers.

In recent years a number of studies have identified the barriers faced by the industry and proposed solutions.

Cornwall Council, with support from other Local Authorities, is hosting an event to provide a forum for expert discussions; helping other Councils to overcome the challenges and realise their geothermal ambitions.

The event is being organised by energyshare. For more information or to discuss potential sponsorship opportunities, please contact geothermal@energyshare.com





