



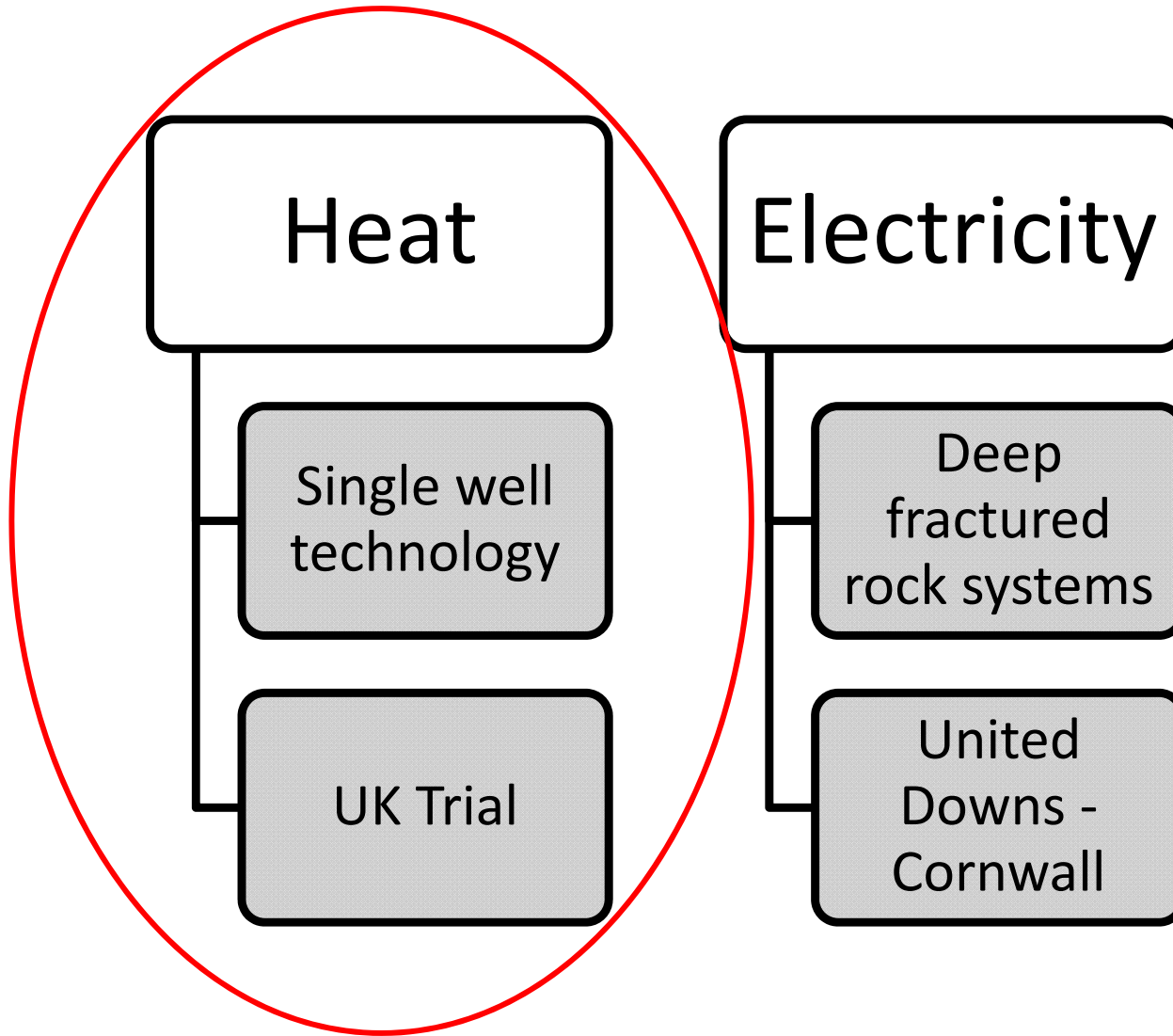
DEEP GEOTHERMAL HEAT PRODUCTION – SINGLE WELL TRIAL

Dr. Ryan Law – Managing Director

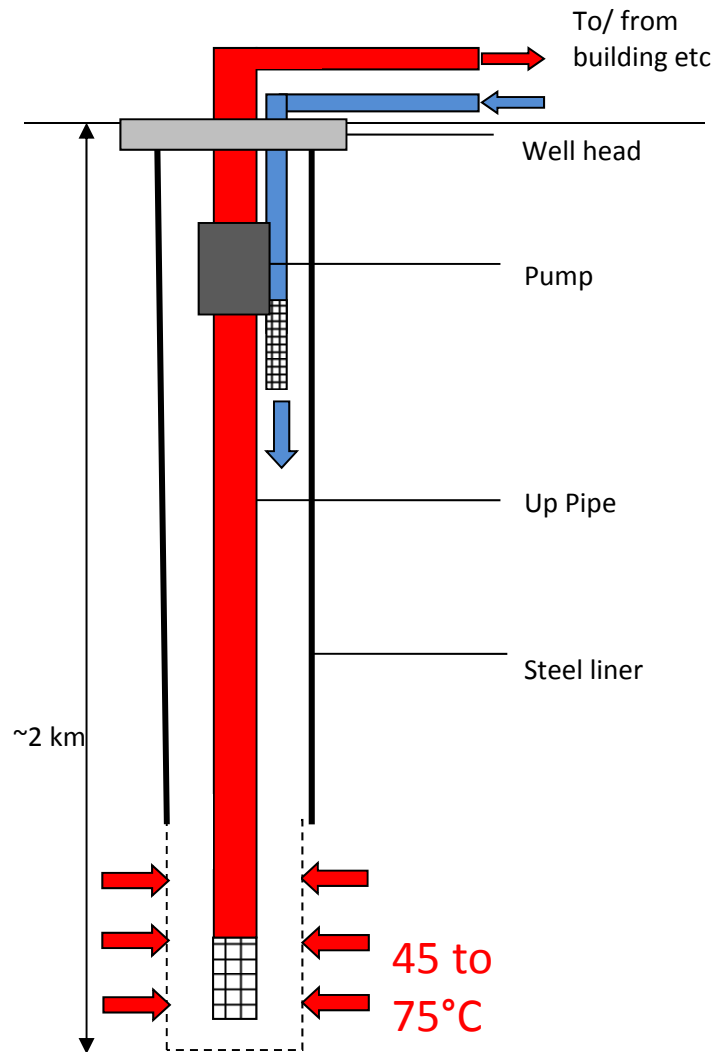
GSHP Seminar, 2014

GEL *Heat and Power from the Earth*
GEOTHERMAL ENGINEERING LTD.

GEL IS PURSUING TWO STRANDS IN THE UK



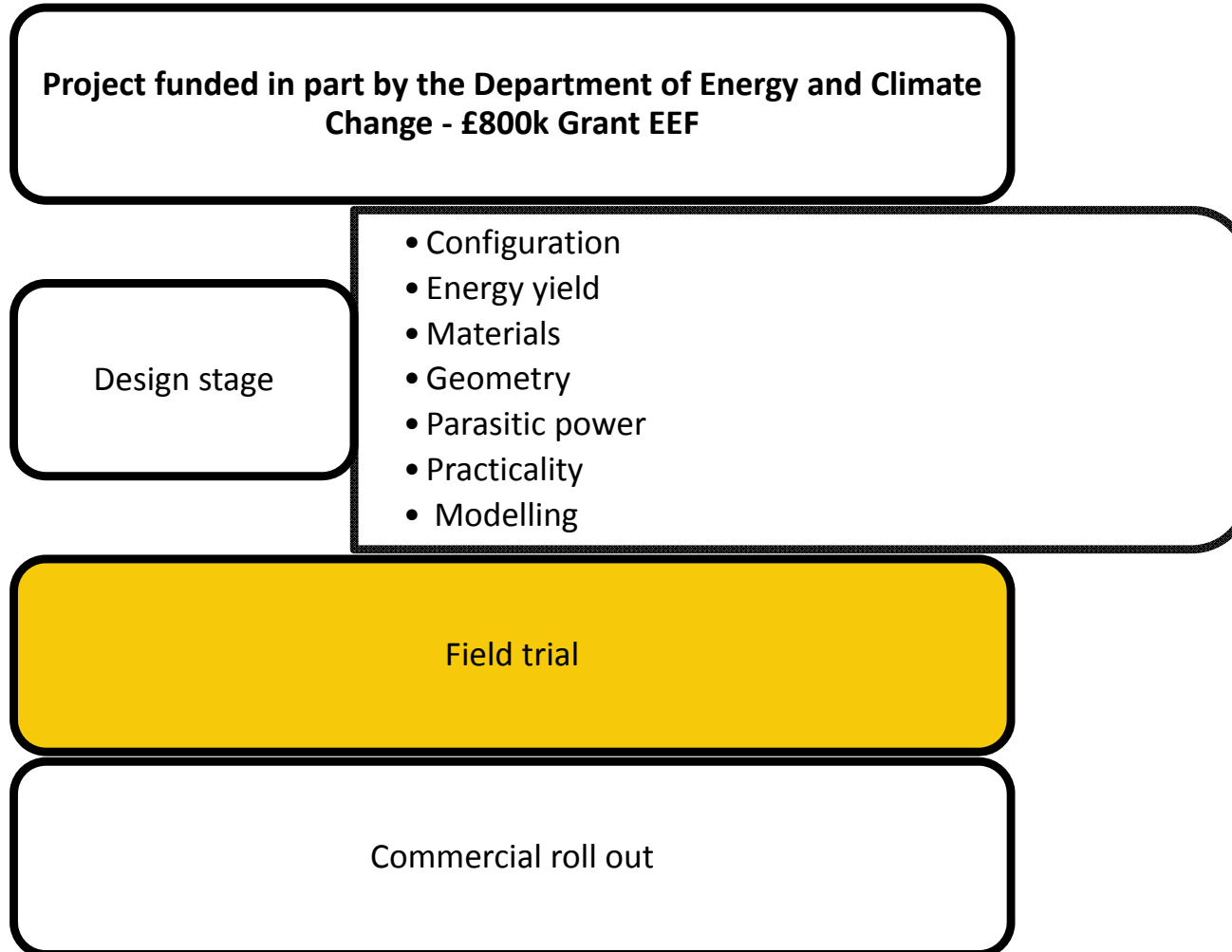
SINGLE WELL HEAT SYSTEMS



WHY ARE WE INTERESTED?

- Largely independent of geological formation – significant reduction of exploration risk
- Potential to ‘colonise’ wells drilled for other purposes
- No re-injection of fluid under pressure (no induced seismicity)
- No deviated wells therefore no ownership problems
- Lower heat delivery than doublet systems - **connect directly to buildings not large scale district heating networks**
- Deliver single well projects in short time frames
- Kick start the deep geothermal heat sector

SINGLE WELL TECHNOLOGY – PROGRESS TO DATE

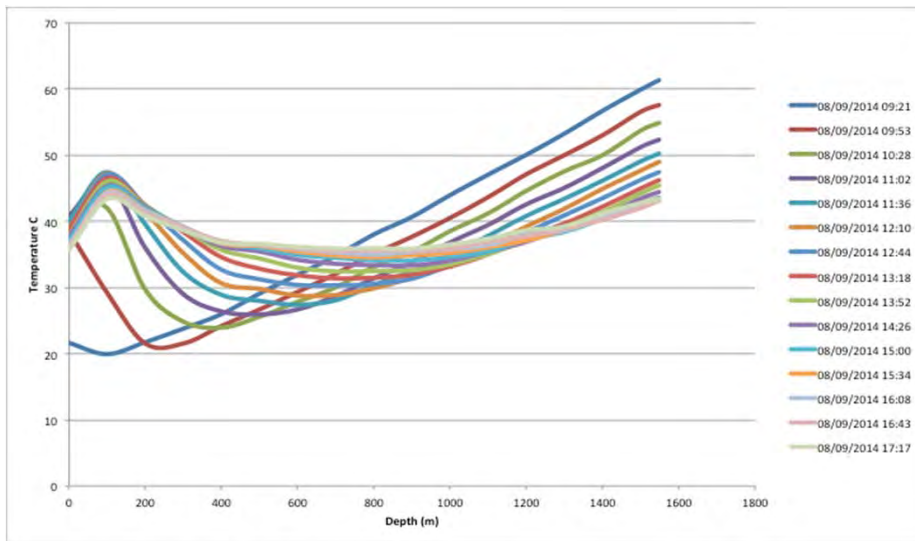


FIELD TRIAL – CORNWALL



GEOTHERMAL ENGINEERING LTD

RESULTS



- Equipment installed to 1.8km
- Peak delivery of 63C
- 'COP' of 50
- Peak energy delivery of 380kW
- 400kW TRT rig commissioned
- Multiple trials run on the well to include
 - Bleed flow
 - Constant energy abstraction
 - Variable demand
 - Recirculation
- Excellent data on well temperature from fibre optic cable
- Numerical model results calibrated

SINGLE WELL – WHAT NEXT?

Identification
of key
opportunities

- Acceptable temperature at 2km (South, South West, North East, North West)
- Heat demand already in place

Formation of
partnerships

- Heat Purchase Agreements
- Commercial relationships
- Ownership of systems

Roll out of
first sites in
2015

- Demonstration followed by commercial roll out
- Partners

THANK YOU



For more information:

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