



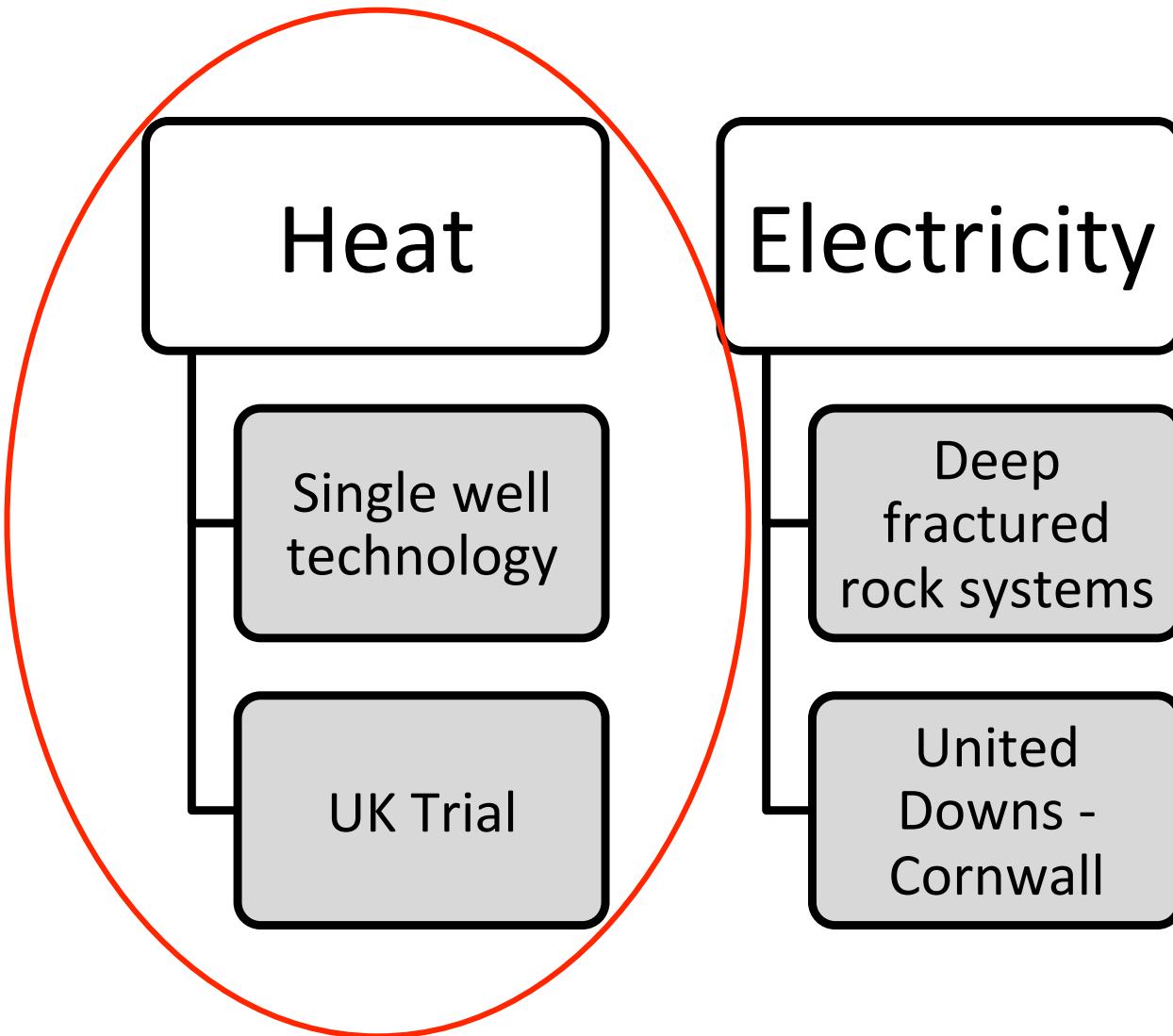
## DEEP GEOTHERMAL HEAT PRODUCTION FROM SINGLE WELLS

*Dr. Ryan Law – Managing Director*

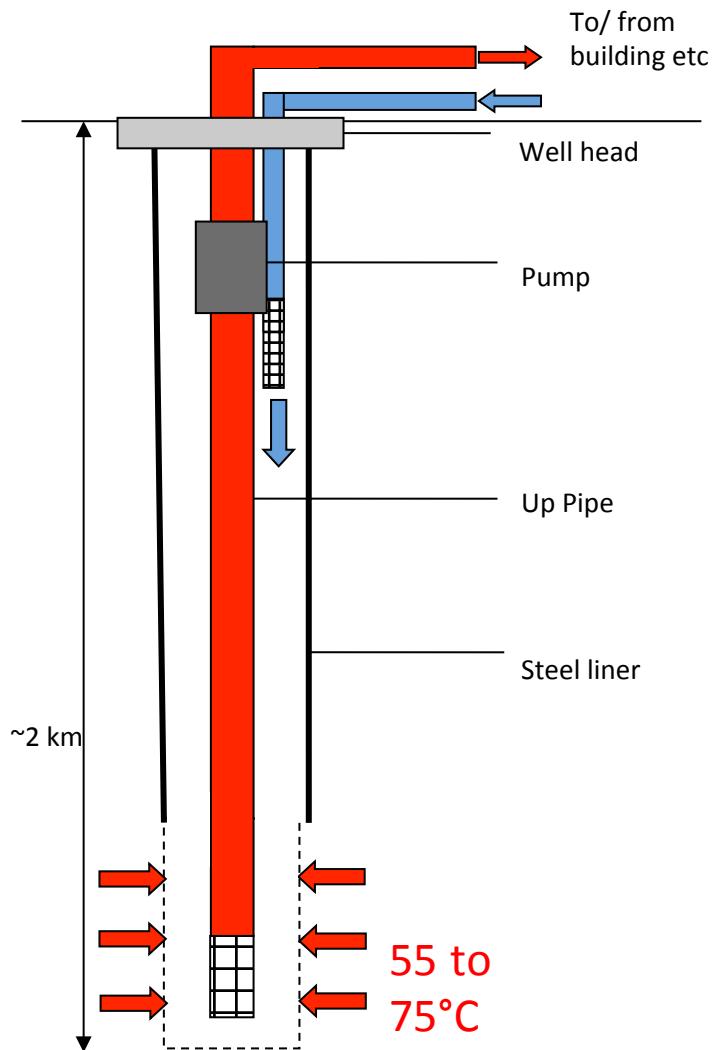
*UK Symposium 2014*

**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?

- No deviated wells - ownership
- Independent of geological formation – significant reduction of risk
- Potential to ‘colonise’ wells drilled for other purposes
- No re-injection of fluid under pressure (no seismic risk)
- Lower heat delivery than doublet systems - connect direct to buildings not large scale district heating networks
- **DELIVER single well projects in short time frames**
  - Multiple apartments/ dwellings
  - Schools
  - Swimming pools
  - Greenhouses
- Kick start the deep geothermal heat sector

## SINGLE WELL TECHNOLOGY – PROGRESS TO DATE

Project funded in part by the Department of Energy and Climate Change - £800k Grant EEF

Design stage

- Configuration
- Energy yield
- Materials
- Geometry
- Parasitic power
- Practicality
- Modelling

Field trial

Commercial roll out

## FIELD TRIAL – CORNWALL



## SUCCESS

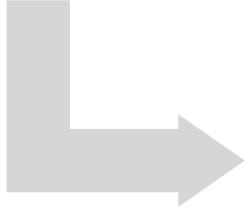


'We need a broad base of renewable energy in the UK and I am pleased to see that a deep geothermal heat project is finally producing energy. This nascent sector could make a real contribution to renewable heat supply in the UK. I am glad that DECC have been able to support this project via the Energy Entrepreneurs Fund. I wish GEL success for future projects.' – **Ed Davey, Secretary of State for Energy and Climate Change**

## SINGLE WELL – WHAT NEXT?

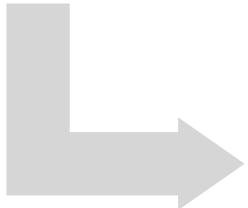
Identification  
of key  
opportunities

- Acceptable temperature at 2km (South, South West, North East, North West)
- Heat demand in place – Circa 2GWh/ 0.4MWth



Formation of  
partnerships

- Heat Purchase Agreements
- Commercial relationships
- Ownership of systems



Roll out of  
first sites in  
2015

- Delivery
- Partners

**READY TO DEPLOY**

