

DEEP GEOTHERMAL ENERGY IN THE UK: WHERE COULD WE BE IN 2020?

THE FOURTH LONDON GEOTHERMAL SYMPOSIUM

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What questions should we ask?

What is our sector's vision for the medium-term future?

What can we say now about factors that will affect the deep geothermal sector out to 2020?

What are the biggest uncertainties?

What can we do about them, if anything?

What actions could we ask national and local Government to take?





ADVICE I WILL BE IGNORING...

"Never make predictions, especially about the future."

Casey Stengel



A VISION FOR UK DEEP GEOTHERMAL IN 2020

Several deep geothermal projects have been rolled out in the UK, for heat and power.

A healthy pipeline of future projects make the sector economically sustainable.

Reducing costs make a decreasing future trend in subsidy levels plausible.

Heat networks are becoming more common, and understanding of the importance of renewable heat - and its associated technologies - is increasing in Whitehall and at local Government level.



Hearts and minds: deep geothermal energy has become a recognised (even if still relatively uncommon) renewable energy option. Decision makers consider it a realistic and commercially attractive heat option for their projects.



What can we guess about the next 5 years... In the UK?

Very hard to make predictions about renewable energy policy. Obviously there is scope for dramatic change.

Can we assume that Government(s) will remain committed to renewable energy, and renewable heat in particular?



What predictions can be made with confidence?

- Squeeze on public finances likely to continue into medium term
- Issue of energy affordability will not go away, and public focus on the cost of green subsidy schemes will rise as those costs go up
- Concern over security of supply is likely to continue and renewables will continue to offer an attractive solution



What can we guess about the next 5 years... outside the UK?

U.S. Energy Information Administration projects world energy consumption will increase by 56% from 2010 from 2040 - whatever happens in UK, will be against international background of more consumers competing for energy resources.

World Energy Council Survey 2013 expected renewable energy to meet 16% of world demand in 2019, up from 11% in 2011 – an absolute increase of around 75%.



Both these issues could impact strongly on UK domestic energy sectors and Government policy.



What are the things we really <u>Don't</u> know?

In the UK?

Green energy policy package could range from adopting challenging targets for individual renewable technologies to... leaving EU post a 2017 referendum and having no green targets at all.

Are we sure that the roll out of heat networks (assuming that happens) will benefit the geothermal sector?



Outside the UK?

World-wide agreement on carbon emission reductions post Paris 2015? A new, effective version of the EU ETS? Or a move away from tackling climate change?

Breakthroughs in technology? Significantly reduced drilling costs?



WHAT CAN WE DO, OR ASK FOR, NOW?

Focus on the benefit of deep geothermal for the UK's security of supply. Even climate change sceptics recognise this problem.

On heat, encourage the roll-out of heat networks, which is a 'no regrets' measure.

Explore possible sources of public sector funding beyond Whitehall. Can we tap into EU funding?



Prepare a constructive line on the issue of public subsidy. We should be able to offer a strong justification for why our technology should receive it.

A framework of strong 'green' policies in the UK is not guaranteed. Be prepared!



And a short update...



Screenshot from BBC website: http://www.bbc.co.uk/news/uk-england-tees-29252283

