The Shallow Geothermal Resource Energy Project:

Project Introduction

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GSI
Presentation outline

- Background to GSI involvement
- Project objectives
- Deliverables
- Asking the stakeholder
Background - GSI

- Groundwater Section interest in the 1960s
- Groundwater Protection and mapping
- Last 2 years renewed interest:
  - Sustainable energy
  - Similarities to/implications for groundwater
  - Departmental interest
- GAI
  - Insights into what may help/promote industry (enquiries, discussions)
  
Environmental considerations
Background - GSI

• 2011 – NDP funding through DCENR
• Acquired consultants to undertake work:

![SLR](SLR) ![ARUP](ARUP)

• Project Team:
  – GSI: Taly Hunter Williams, Monica Lee
  – Ric Pasquali (SLR), Gareth LI Jones (Conodate), Roisin Goodman (SLR), Catherine Buckley (Arup), Tom Moore (SLR)
Project Objectives

• Increase awareness of geothermal energy
  – promote
  – inform decisions

• Systems are working
  – environmental impacts
  – support the growing sector

• Compile information on existing systems
  – understand the geological/resource – MAPS!
  – Understand why systems work or fail
  – Provide advice
Deliverables: Guidance

• Best practice guidance:
  – End users/you:
    • home-owners
    • designers, drillers, installers, architects
    • local authorities
  – Based on international best practice
  – Awareness of legislation

• User Friendly!
Deliverables: Database

- **Geothermal Energy Installations Database**
  - Why?
    - Inform maps (resource)
    - Cross reference with groundwater
    - Future research
    - Identify potential resource issues
  - What type?
    - Geological (incl. location)
    - Installation-related
  - Where from/how?
    - You/ other stakeholders
    - On-going mechanism to submit data
Deliverables: Maps

• Type:
  – SHALLOW Geothermal Energy Resource
  – Collector Suitability Maps
    • Open/closed loop?
    • Horizontal systems?

• GIS/Website
Asking the Stakeholder

• Currently – some brief discussions + our ideas + international examples

• Input to guidelines:
  – What and why for your group?

• Providing data for database and map:
  – Your data will provide useful maps
  – Who to contact?
    • On-going communication peers and colleagues
    • On-going communication with GSI and consultants
Website:
www.gsi.ie/Programmes/Groundwater/Geothermal.htm

Email:
shallowgeothermal@gsi.ie

Additionally:
www.geothermalassociation.ie