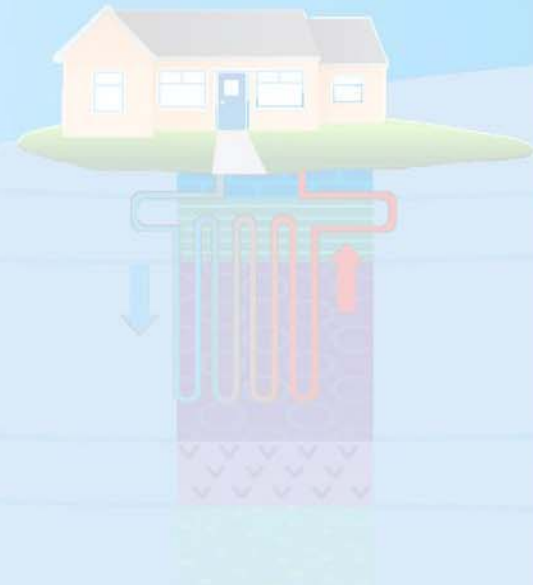


The Shallow Geothermal Resource Energy Project:

Project Introduction

Monica Lee and Taly Hunter Williams
GSI



Geoscience Initiative



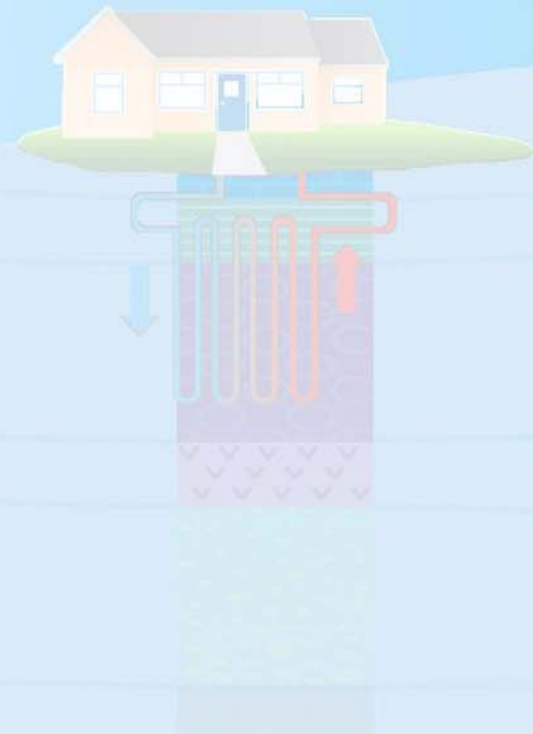
National Development Plan 2007 - 2013



Department of Communications, Energy and Natural Resources
Roinn Cumarsáide, Fuinnimh agus Acmhainní Nádirtha

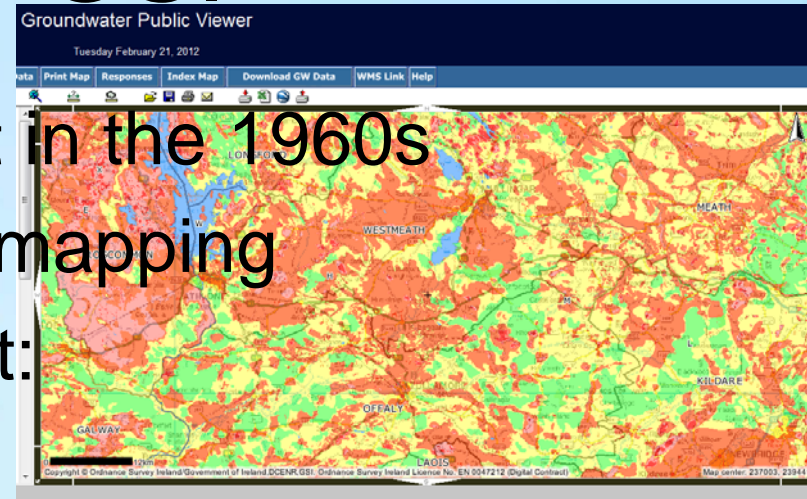
Presentation outline

- 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



The screenshot shows the homepage of the Geothermal Association of Ireland (GAI). The header includes the GAI logo and the text 'Geothermal Association Of Ireland'. A navigation menu at the top lists: Home, About, News, Events, Membership, Projects, Awards, Library, Links, Contact. The main content area features an 'EVENTS' section with a red header. Under 'EVENTS', there is a sub-section for '28th October 2011' which states: 'Eurotech Renewables Ltd wins the Inaugural Breccan Mooney Award for Geothermal Installation of the Year 2011. Refer to News and Awards pages.' Below this, there is a date '16 Jun 2011 : Presentations/Photos From Conference Now Online.' To the right of the events section is a 'Welcome to the Geothermal Association of Ireland' section. It contains the following text: 'The Geothermal Association of Ireland (GAI) was formed as a not for profit association in 1998 to promote the development of geothermal energy in all its forms in Ireland. GAI is committed to education and awareness building to promote the use of geothermal as a sustainable energy system in Ireland. This website is a resource for GAI members and others interested in the development of geothermal energy in Ireland. The GAI is affiliated to the European Geothermal Energy Council and the International Geothermal Association.' There are also small images of a geothermal installation and a handshake.

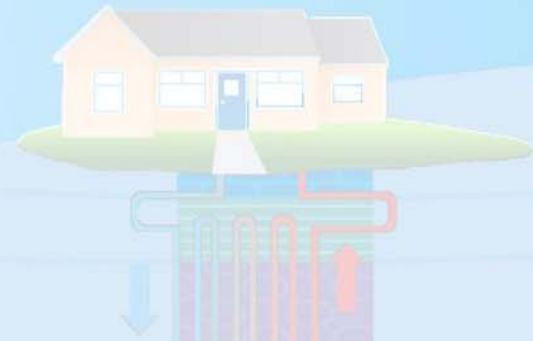
Background - GSI

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



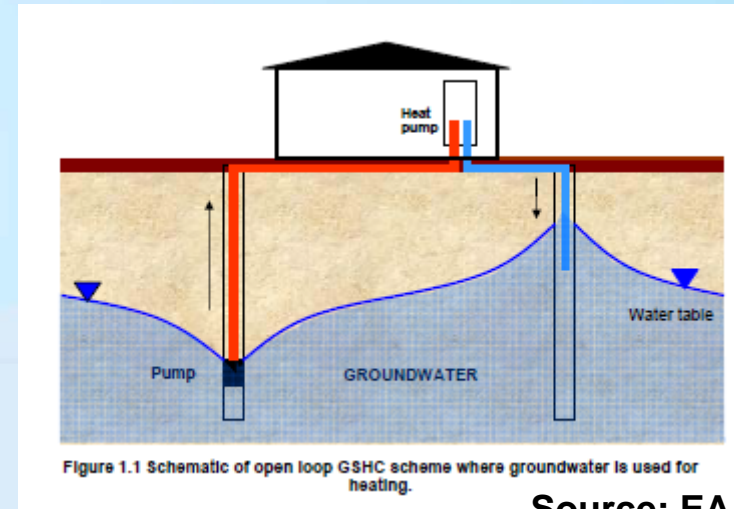
- Project Team:

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



Project Objectives

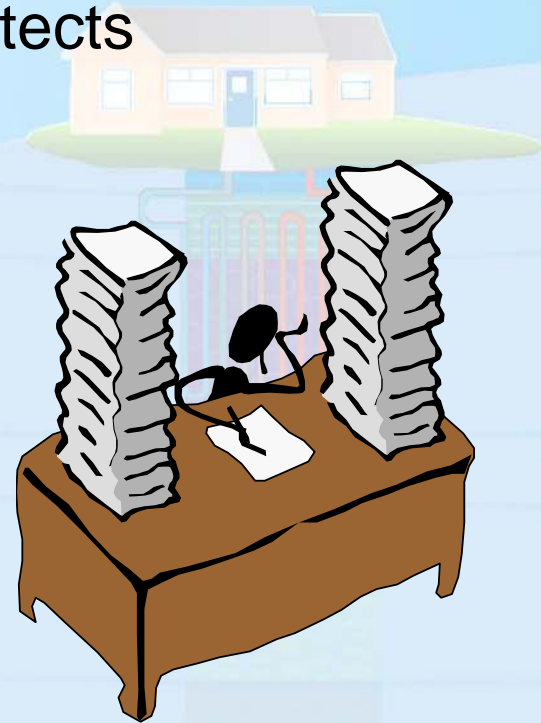
- Increase awareness of geothermal energy
 - promote
 - inform decisions
- Systems are working
 - environmental impacts
 - support the growing sector
- Compile information on existing systems
 - understand the geological/resource – MAPS!
 - Understand why systems work or fail
 - Provide advice



Source: EA

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?

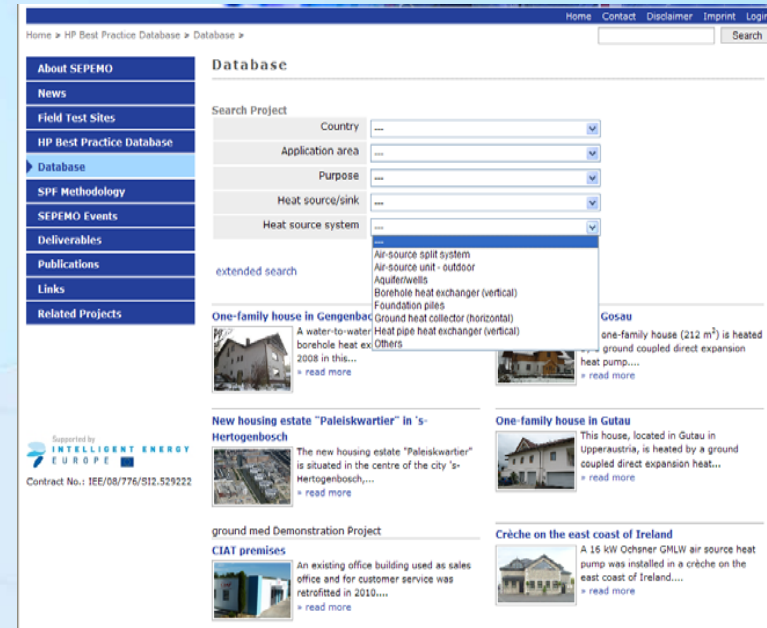
- Inform maps (resource)
 - Cross reference with groundwater
 - Future research
 - Identify potential resource issues

- What type?

- Geological (incl. location)
 - Installation-related

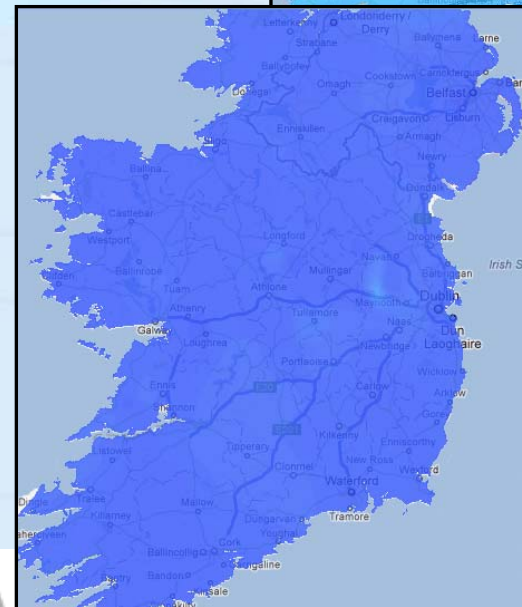
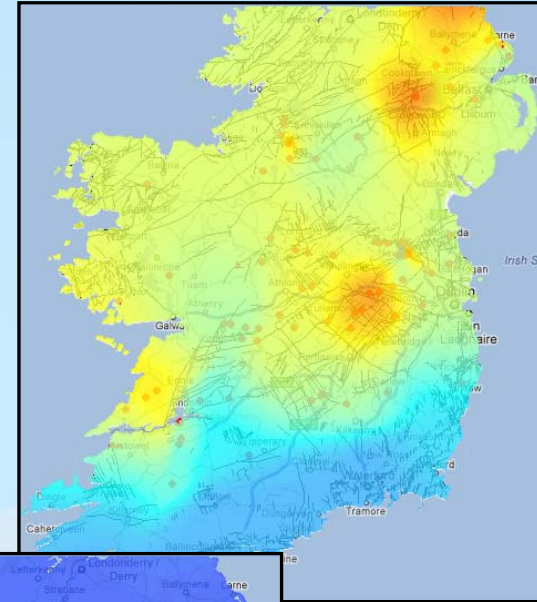
- Where from/how?

- 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

