The Shallow Geothermal Resource Energy Project: Guidance and Best Practice

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GSI
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Presentation outline

- Specific need for guidance in an Irish context
- Regulation
- Training
Need for guidance

- Of fundamental importance for the future development of the industry
- Lack of legislation and regulation is allowing systems to be completed on an ‘adhoc’ basis
- Lack of (national) guidance has the potential to lead to:
  - Bad design,
  - The development of inefficient systems and
  - Potentially negatively impact subsurface environmental conditions.
Aim of guidance

- Educate and train key stakeholders (designers, installers, drillers)
- Improve subsurface resource management
- Develop sustainable geothermal heating and cooling system design and construction
- Create public awareness
Target audience

• Designers, drillers, installers, regulators and academic institutions:
  – Should be aware of best practice information for installing geothermal systems – manufacturers, educational bodies, etc.

• Home-owners:
  – to educate themselves on the uses of geothermal energy
  – so they can make informed decisions on the geothermal system they may implement.
Guidance Development

• Review International and European best practice guidelines for GSHP
  – Wealth of international guidelines available
  – Liaise with UK counterparts for GTR-H project about their experiences
  – Need to focus on an Irish context

• Consider existing relevant guidelines:
  – IGI groundwater well drilling guidelines
  – Proposed IGI Geothermal drilling guidelines
Guidance Development

• Review of existing Regulations/Government action plans:
  – National Renewable Energy Action Plan
  – Water Framework Directive
  – Planning & Development Act
  – EIS requirements
  – Buildings Regulations

• Consider proposed regulations:
  – Draft Geothermal Energy Developments Bill
Deliverables

• Specific deliverables:
  – Technical manual for Shallow Geothermal Energy Resources (open and closed loop systems) for Designers, Drillers, Installers
  – Home-owner’s manual

• Guidelines for certification

• Public Education and Dissemination.

• All documents to be dealt with in an Irish context
Deliverables

GEOTRAINET TRAINING MANUAL FOR DESIGNERS OF SHALLOW GEOTHERMAL SYSTEMS

Geo-Education for a sustainable geothermal heating and cooling market
Project: IEE/07/581/SI2.499061
www.geotrainet.eu

GEOTRAINET TRAINING MANUAL FOR DRILLERS OF SHALLOW GEOTHERMAL SYSTEMS

Geo-Education for a sustainable geothermal heating and cooling market
Project: IEE/07/581/SI2.499061
www.geotrainet.eu
Training & Certification

European Education Committee

European Training Board

European Certification Board

National Training Coordinator/Board

National certification coordinator

National Certification Body

NTI  NTI  NTI
Quality Incentives & Players

GAI Installation of the Year

Academics
SEAI
Co.Co.s

Irish Drillers
Irish Installers

John Burgess GAI Chair, with Brian & Noreen Mooney, and the successful installers:
Mike Cotter Alternative Heating & Cooling, Daryl Duffy Eurotech Renewables, Padraig Murphy Green Renewables Heating, Gerry Cunnane Wind Water Solar Energy Systems
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Thank You

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