Proposal for an European Regulatory Framework for Geothermal District Heating

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Background

- Operational DH systems in Europe in 2012: over 5,000 (10% of the heating market), of which 216 are geothermal DH
- Wide potential to develop more geothermal DHs

**WHY?**

**Main barriers:**
- Lack of adequate national and regional policies

- Lack of proper financial support schemes
- Lack of solid codes and legislation for geothermal energy and its uses in DHs
- Limited or non-existent inclusion of this technology into regional and local planning systems

One of the main objectives of the GeoDH Project is to propose the removal of regulatory barriers in order to promote the use of geothermal energy into DH systems
Objectives

The adoption by regional and local decision makers of recommendations contained into a *Regulatory Framework for Geothermal District Heating Systems*, in order to optimise and simplify regulations, procedures and planning, with the final goal to make the sector more attractive for new investments.
Preparation of the “Framework”

Basis for the drafting of the Framework

- Experiences and observations about current rules for geothermal heat uses
- Outcomes from 14 national workshops within the GeoDH Project
- Outcomes from the «Geothermal Regulatory Framework» of the IEE Project GTR-H
- Some findings of the IEE Project GEOELEC
- Screening of selected publications about these issues

Adapting by adding national specifications

- Each project partner commented and provided feedbacks to the draft regulatory framework, according to their own national point of view

National Consultations in 14 countries

- National ministries of energy & environment, geological surveys, national energy agencies, regional and local authorities
- DH and geothermal companies
Topics addressed in the “Regulatory Framework for Geothermal District Heating (geoDH) in Europe”

1. **Definition** of geothermal energy resources and related terms
2. Geothermal resources **ownership and regulations**
3. **Licensing systems for geothermal** exploration and development concerning geoDH systems (including simplification of procedures)
4. **Licensing for district heating** (DH)
5. Geothermal energy and the **licensing authority**
6. **Access to information** on geothermal resources suitable for geoDH systems
7. GeoDHs in national, regional and local **energy planning and management**
8. Role of **public and private stakeholders**
Key recommendations of the “Regulatory Framework for Geothermal District Heating in Europe”

- National and local rules must include a **definition of geothermal energy resources and related terms**, in line with Directive 2009/28/EC

- **Ownership rights** should be guaranteed

- **Administrative procedures for geothermal licensing** have to be **fit to purpose** – they should be streamlined wherever possible and the burden on the applicant should reflect the complexity, cost and potential impacts of the proposed geothermal energy development

- The rules concerning the authorisation and licensing procedures must be proportionate and simplified, and transferred to regional (or local if appropriate) administration level. **The administrative process must be reduced**
Key recommendations of the “Regulatory Framework for Geothermal District Heating in Europe”

- **Rules for district heating (DH) should be as decentralised as possible** in order to be adaptable to the local context, and stipulate a mandatory **minimum level of energy** from renewable sources, in line with Article 13 §3 of Directive 2009/28/EC.

- A **unique geothermal licensing authority** should be set up.

- **Information on geothermal resources** suitable for GeoDH systems should be **available and easily accessible**.

- GeoDH should be included in national, regional and local energy **planning and strategies**.
Key recommendations of the “Regulatory Framework for Geothermal District Heating in Europe”

• Policy-makers and civil servants should be well informed about geothermal

• **Technicians and Energy Service Companies should be** trained in geothermal technologies

• The public should be informed and consulted about Geothermal DH project development in order to **support public acceptance**

• Legislation should aim to **protect the environment and set priorities for the use of underground**: geothermal energy should be given priority over other uses such as for unconventional fossil fuels, CCS, and nuclear waste deposits.
Next steps

Present solutions to local authorities during meetings: minimum 5 municipalities per country

Local authorities will be asked to endorse recommendations of the Regulatory Framework

Expected results:
The implementation of these recommendations will facilitate the introduction of complementary and cohesive legislation provisions essential to create a long-term stable system for geothermal district heating development in Europe.
Thank you for your kind attention!

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