Optimizing Licensing Procedures for Geothermal Energy
Are Geothermal Regulatory Frameworks harmonized?

- Regulatory framework in respect of geothermal licensing procedures (terms of application, information on the applicant, criteria for granting a license etc.) is in many respects similar between countries
- Structure of public decision making varies considerably
- Technical regulatory requirements and lack of legal clarity are making geothermal projects less bankable
IS IT IMPORTANT AND/OR POSSIBLE TO DEVELOP BEST PRACTICE?

Resources
Licenses
Surveillance
Resource ownership

• In the vast majority of cases, the resource is state owned. In some cases (Iceland, Japan, US) private landowners can hold ownership of resource on their land. In Germany the resource is ownerless

• Access to geothermal resources is in most cases granted only by the state
Types of permits required

- Generally private parties cannot harness the resource without a license. Iceland, Japan and Germany allow landowners a limited exploitation of the reservoir.

- Exploration licenses have a short life span (1 - 4 years). Holders of exploration licenses have either an exclusivity or a pre-emptive right to obtain exploitation licenses.

- Duration of exploitation licenses is 10 – 65 years. Generally, extensions are available, sometimes on several occasions with however a long stop date in most instances.

- Power Plant Licenses are separate from exploitation licenses.
Incentives

• Most countries provide for some form of incentives related to exploration, exploitation and production

• The incentives vary from being feed-in tariffs (Germany, Italy, Japan, Kenya, Turkey), tax rebates, tax holidays, deduction of import/export duties, guarantees and direct financial support
Fees, rentals, royalties and guarantees

- The application of fees, rentals, royalties and guarantees for the extraction of geothermal resources is often unclear in the licensing procedure.
- State and/or municipal authorities are provided with the authority to impose fees and require guarantees during the development of the resource.
- Uncertainty as concerns fees and guarantees reduces substantially the bankability of geothermal development projects.
Criteria for granting and revoking licenses

- Applicants must submit information relating to their technical and financial capability, as well as a description of the reservoir and an analysis of the development project.
- Landowner’s consent is generally required.
- Licenses can generally be revoked if (i) fees are not paid; (ii) general conditions of the license are not met; (iii) laws, including environmental regulations, are not followed; and (iv) only in certain cases if works have not commenced within a certain period from the issuing of the license.
Power Purchase Agreements and grid connection

• General terms and duration of Power Purchase Agreements are rarely regulated but highly standardized and must comply with local law

• The price of power acquired by public entities is however in certain cases regulated. In France the price has now moved from FiT to CfD and the terms of the premium contracts are regulated

• The grid connection is generally subject to a separate agreement. Allocation of risk is a major aspect of any grid connection agreement
Surveillance

- Exploitation License holders are generally subject to periodical (annual, semi-annual or quarterly) reporting obligations.

- Governmental authorities have in many instances a unilateral right to perform site visits and inspections.

- In certain cases, peer review is required, which transfers decision making from public authorities to other market participants or scholars.
Taxation

- Taxation of companies engaged in geothermal activities follows in most cases general corporate income tax of each country.

- VAT is applicable to power sale, with few exceptions - US has for example no VAT.
Environmental aspects

- An environmental impact assessment is generally required for exploitation licenses
- The framework for environmental assessment is by and large similar between countries, whereas the administrative procedures, timelines etc. may vary somewhat
Need for harmonization?
Are regulatory issues delaying projects or making them less bankable?

• Yes! The way to optimize the licensing procedure in geothermal projects is

➢ to clarify all technical regulatory requirements in the application process

• We need to understand which technical regulatory requirements have an impact on the bankability of development projects and decrease any lack of transparency

• Transparency is key
Geothermal Transparency Center

- Database with information on regulatory issues
- The aim is to provide information on regulatory issues in all GGA countries
- Annual updates of rules/regulations
- Statistical information
Countries already involved:

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<td>Iceland</td>
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<td>Canada</td>
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Japan  Latham & Watkins
Kenya  Anjarwalla & Khanna
Mexico  Hogan Lovells
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Philippines  SyCip Salazar Hernandez & Gatmaitan
Turkey  Bezen and Partners
United States  Van Ness Feldman LLP
Vietnam  Baker & McKenzie
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THANK YOU !