

Pre-Conference Short Course, 9th African Rift Geothermal Conference
Djibouti Palace Kempinski, 1st November – 2nd November 2022



Geothermal Resource and Demand Mapping

Jack Kiruja/ 1 November 2022



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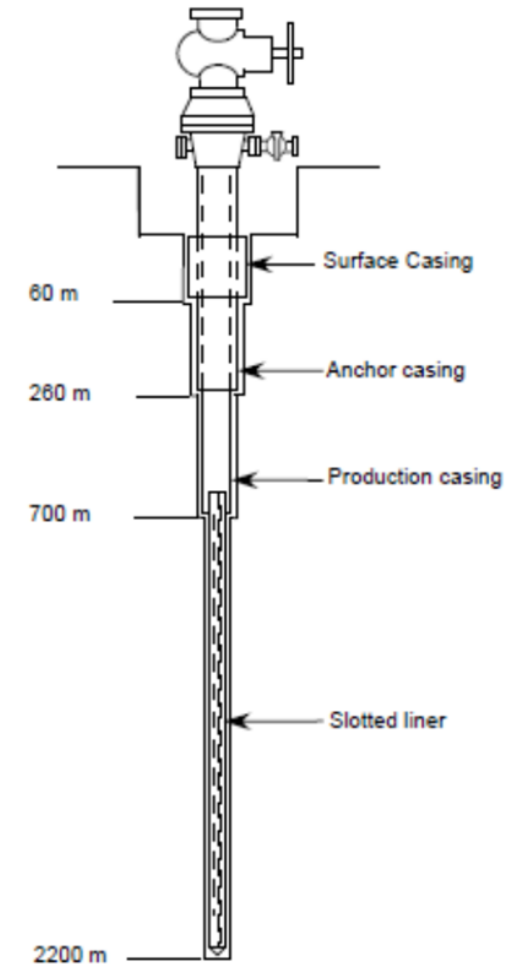
Geothermal Resource and Demand Mapping

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Resource Mapping

- ✓ Data collection
 - ✓ Costly, Specialised expertise, Copyrights
- ✓ Surface exploration (geological, geophysical, chemical, heat flow measurements)
 - ✓ Mapping of existing energy sources:
 - ✓ Power plants
 - ✓ Existing geothermal wells
 - ✓ Existing boreholes
 - ✓ Surface manifestations
- ✓ Identify temperature and depth ranges of geothermal resources
 - Temperature will to a large extent influence the choice of the direct use application
 - Geothermal resources at shallow depths can be developed more easily and at lower cost



Heat Demand Mapping

- ✓ Identify and map the needs that geo-heat can be used to meet
 - ✓ Applications in the agri-food sector
 - ✓ Proximity to the geothermal resource

Resource Push

Local technical assessment of the resource potential at a given location with existing demand for heat

Encourage the existing heat users to switch to geothermal energy

Industry Pull

Local assessment to identify sites with potential for geothermal energy

Assessment of the potential agri-food and attract them around the geothermal site



- ✓ Use maps and interactive online GIS platforms to show the co-location between geothermal energy resources and demand

Interactive Digital Geothermal Maps

- ✓ Use maps and interactive online GIS platforms to show the co-location between geothermal energy resources and demand



Hungarian geothermal system

Hungary



Canadian National Geothermal Database

Canada



Danube region geothermal information platform

Central Europe



ThermoGIS

Netherlands



Geologic database of Switzerland

Switzerland



National Inventory of Clean Energies

INEEL; Mexico

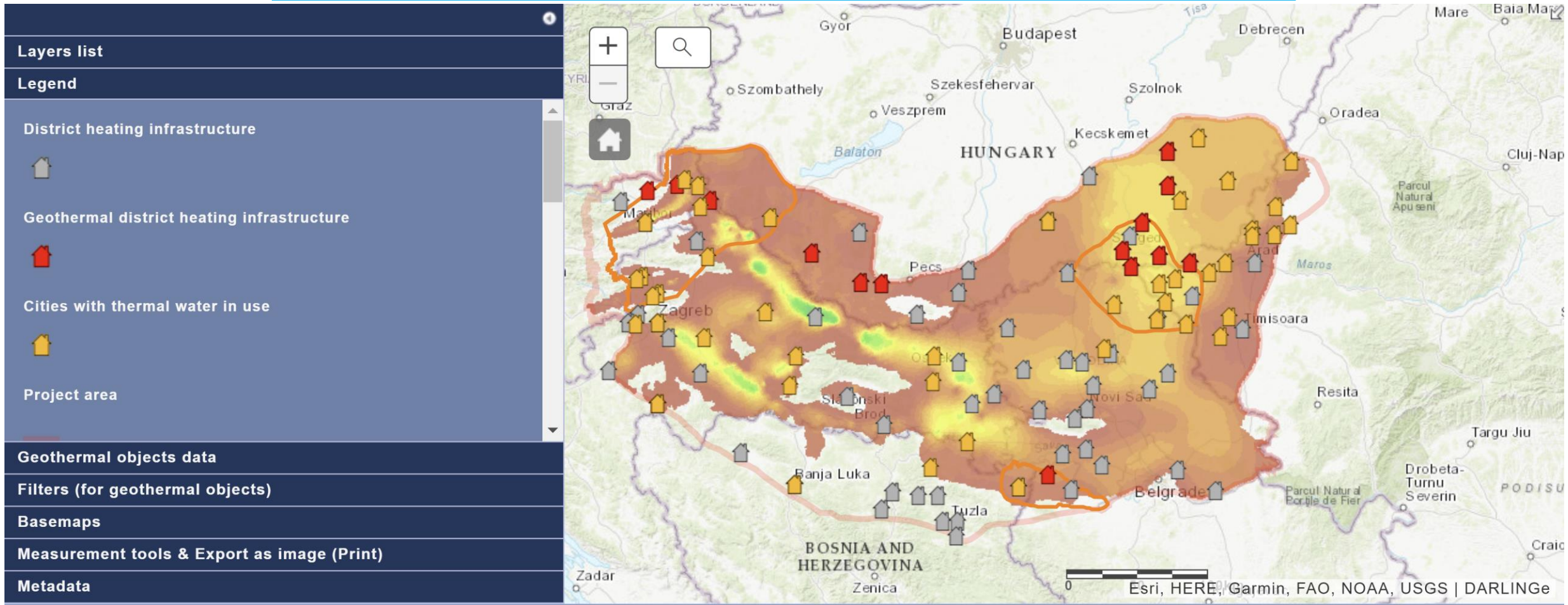


National Renewable Energy Laboratory Geothermal Prospector

NREL; United States



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Thank you



(Insert the below information if required)

Name of the presenter / division / unit / office

Address / email / contact information

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