User4GeoEnergy – Verkís Company Profile
Geothermal utilization

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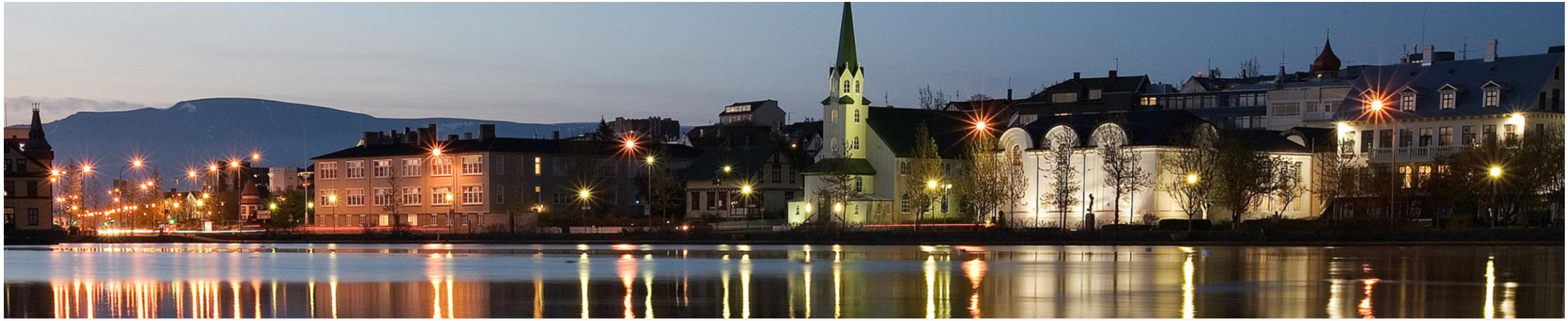


Verkís Consulting Engineers

- Verkís was established in 2008 through the merger of five Icelandic consultancy firms
- Verkís' roots date back to 1932, making it the oldest engineering consultancy in Iceland
- About 300 employees

5 GENDER EQUALITY

7 AFFORDABLE AND CLEAN ENERGY

11 SUSTAINABLE CITIES AND COMMUNITIES

bsi. ISO 9001:2015 Quality Management

bsi. ISO 14001:2015 Environmental Management

bsi. ISO 45001 Occupational Health and Safety Management

bsi. ÍST 85:2012 Equal pay management system

UN GLOBAL COMPACT COMMUNICATION ON PROGRESS

VERKÍS

Services

- Environmental consulting
- Assessment of environmental impact
- Planning
- Landscape design
- Risk, health and safety
- Preparatory work
- Feasibility studies and conceptual design
- Due diligence studies
- Project planning design
- Cost estimate and project schedules
- Tender design and tender documents
- Project management
- Project supervision
- Testing and commissioning
- Operational services
- Consultancy on energy legislation

Geothermal utilization

District heating – Downtown Reykjavik

Geothermal Power Plants - Reykjanes Steam Field

Spas, Cascaded Use - Nauthólsvík, Iceland

Greenhouses

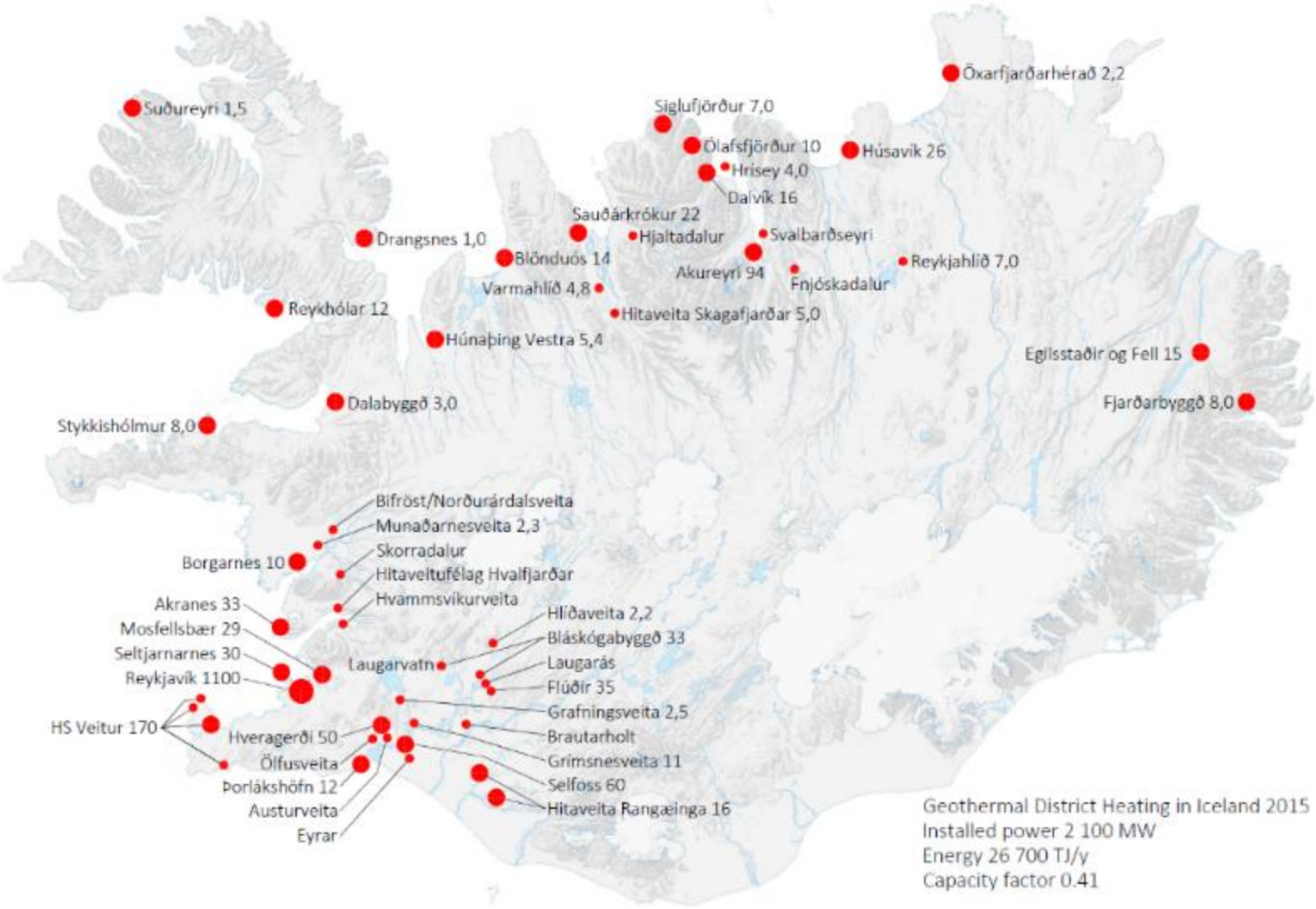
Food processing

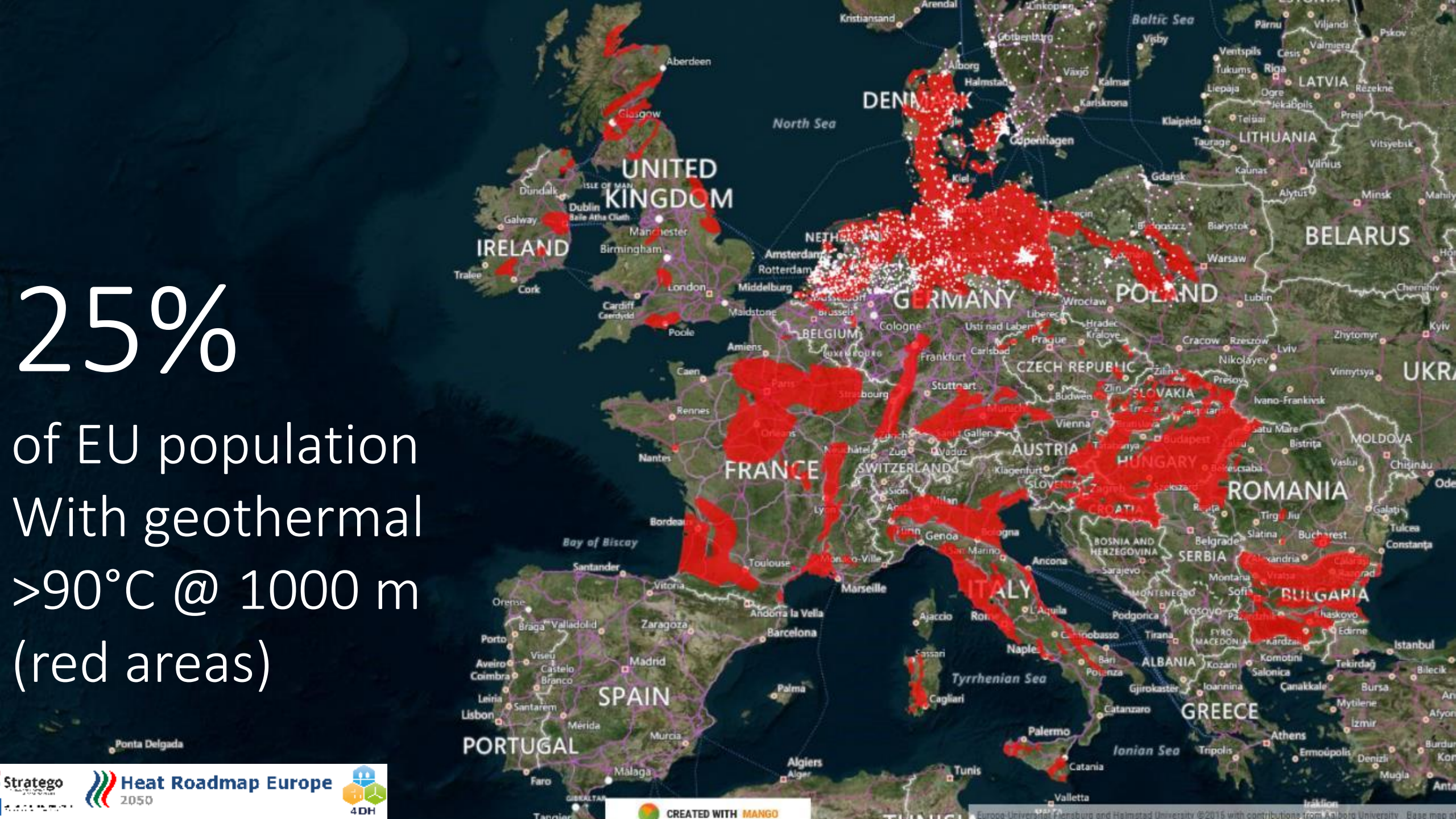
Fish farming

Benefits and other uses

- Benefits:
  - CO_2 emissions reduced
  - Reduced energy dependency
  - Well-being...and wealth, it is estimated that each household saves 1.800 €/year on its energy bill in Iceland
- Other uses
  - SPAs, swimming pools
  - Greenhouses
  - Fish farming
  - Food conservation
  - Snow melting

Geothermal district heating in Iceland




25%
of EU population
With geothermal
>90°C @ 1000 m
(red areas)
UNITED KINGDOM
IRELAND
FRANCE
GERMANY
POLAND
BELARUS
SPAIN
PORTUGAL
ITALY
ROMANIA
GREECE
BULGARIA
SERBIA
HUNGARY
AUSTRIA
SWITZERLAND
BELGIUM
CZECH REPUBLIC
SLOVAKIA
LATVIA
LITHUANIA
North Sea
Baltic Sea
Bay of Biscay
Tyrrhenian Sea
Ionian Sea
Stratego
Heat Roadmap Europe 2050
4DH
CREATED WITH MANGO

Examples of Verkís Geothermal Projects

- Low Temperature Heating in Klaipėda, Lithuania
  - Pre-feasibility study
  - 40°C geothermal reservoir, re-injection at 10-20°C
  - Holiday resort and spa – Buildings, swimming pool
  - Heated w/ heat pumps and peak load boilers
- Snow Melting in Iceland
  - Uses return water from geothermal heating, approx. 30°C
  - Streets, pavements, parking lots, etc. kept snow-free during winter
  - Used extensively in the Reykjavik downtown area
  - Both privately owned and run by municipalities
  - Hundreds of thousands of m^2 installed in the last 2-3 decades

Thank you / Dziękuję

VERKÍS

Integrity
Ambition
Initiative