

Financing renewable energy in Iceland

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(Halli)

Iceland is very special energy-country

- Iceland is already 100% carbon free in heat- and electricity production.
- The renewable energy produced is competitive with all energy sources, without special subsidies.
- Enough of places left to be harnessed

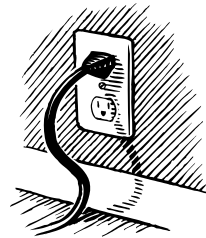


Energy – 3 sectors

- Heat



- Electricity



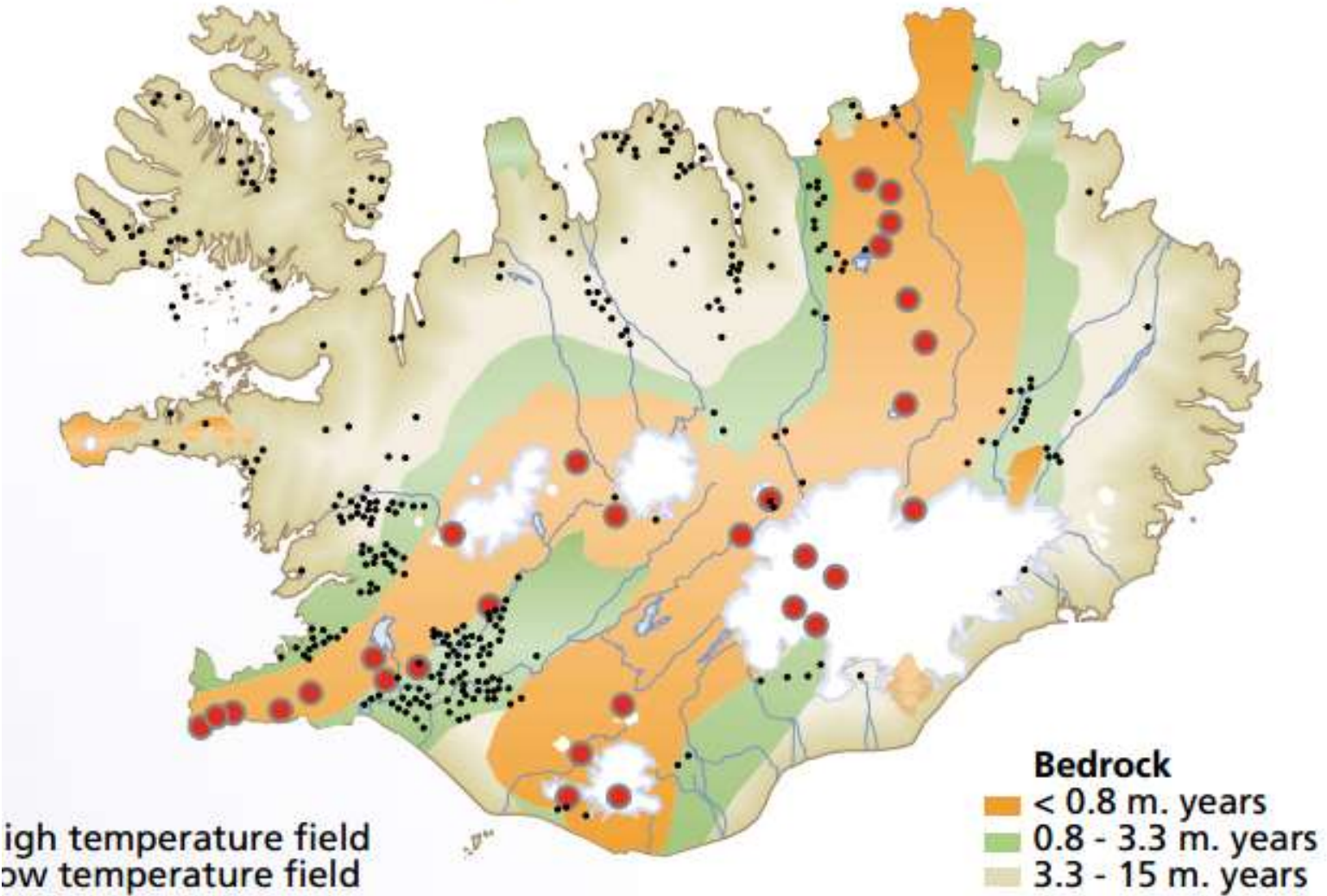
- Fuel



Domestic
Green
Renewable
Cheap

Imported
Nonrenewable
No energy security
Polluting
Climate effect

Geothermal fields



SOR 2007: KS/HJO

Geothermal energy in Iceland

- Our oil
- 7.823.000 barrels/year
- 21.500 barrels/day
- Green and cheap

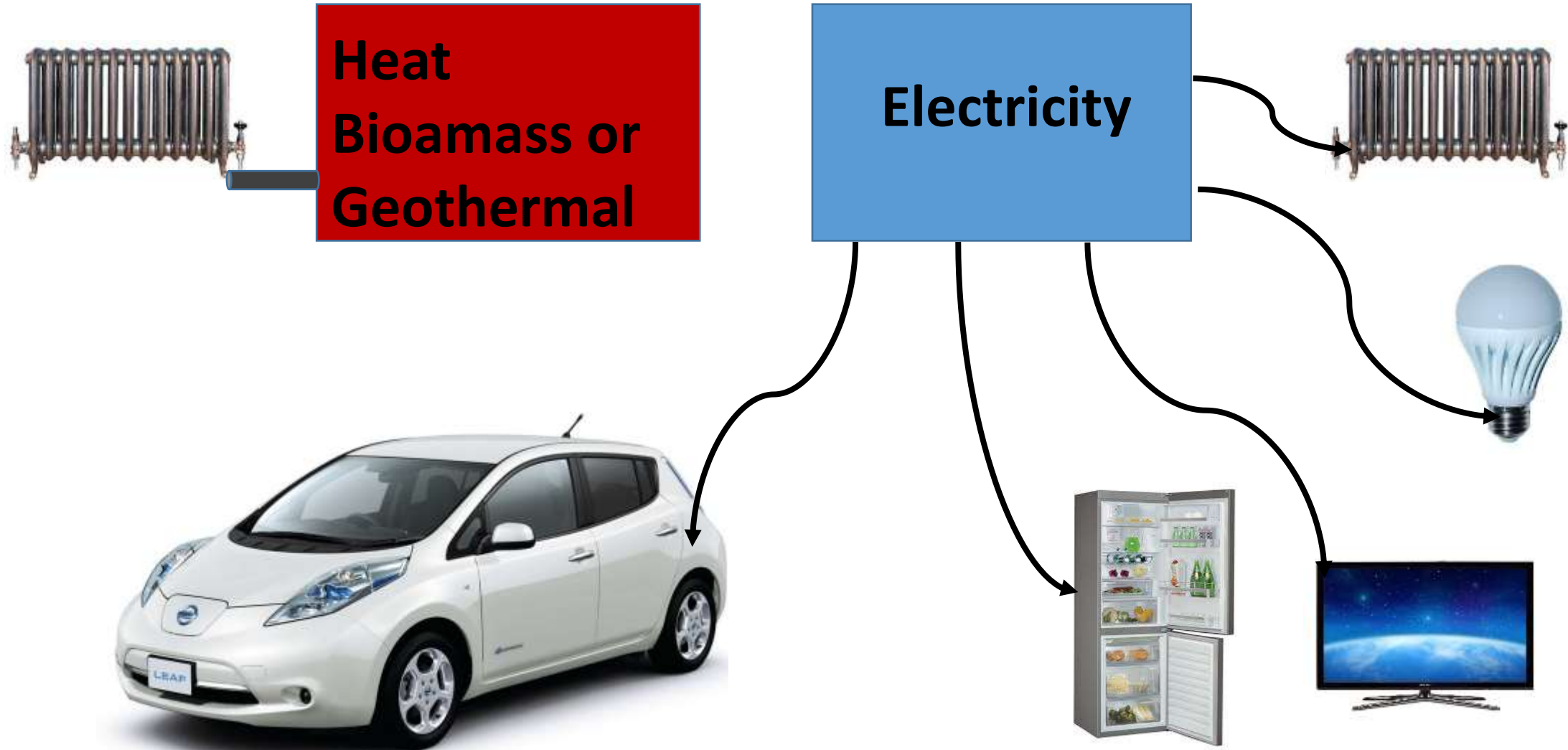


Electricity production

Iceland	= 53.300 kWh per person
Finland	= 13.600 kWh per person
Germany	= 6.600 kWh per person
Denmark	= 6.500 kWh per person
UK	= 6.100 kWh per person





Heat



Equalisation of energy prices

- Equalisation of energy prices is a decades old Icelandic policy. This policy has been carried out in various ways, such as by paying subsidies to those who heat their homes with oil. Families using electricity to heat their homes have also received government subsidies since 1982
- These subsidies amounted to about **951 million ISK** (6 million EUR) in 2008, and a small part of that contributes to lowering the cost of oil where no other means of heating homes are available.

Equalisation of energy prices

- The subsidy is paid through the energy company
 - Over 90% of houses in Iceland are heated by cheap, natural geothermal heat
- Very hard for the consumer to see what he is paying and what the government is paying
-  • It is fair to equalize the energy cost when only 10% of the nation uses much more expensive electric heat
 - This group counts for about 13.000 households both farms and small towns and villages.
-  • The system reduces the feasibility of improvements towards more efficient use of energy

Financing renewable energy in Iceland

- Start-up energy
- Loan
- Supports and funds
 - Energy Agency in Iceland
 - Energy fund
 - Innovation Center Iceland
 - Small scale – local projects
- Research



Start-up



- Investors day
- Seed capital
 - ISK 5,0million (EUR 32.000) for 10%
- Mentorship
- Workspace

<http://www.startupenergyreykjavik.com/>



Mentors



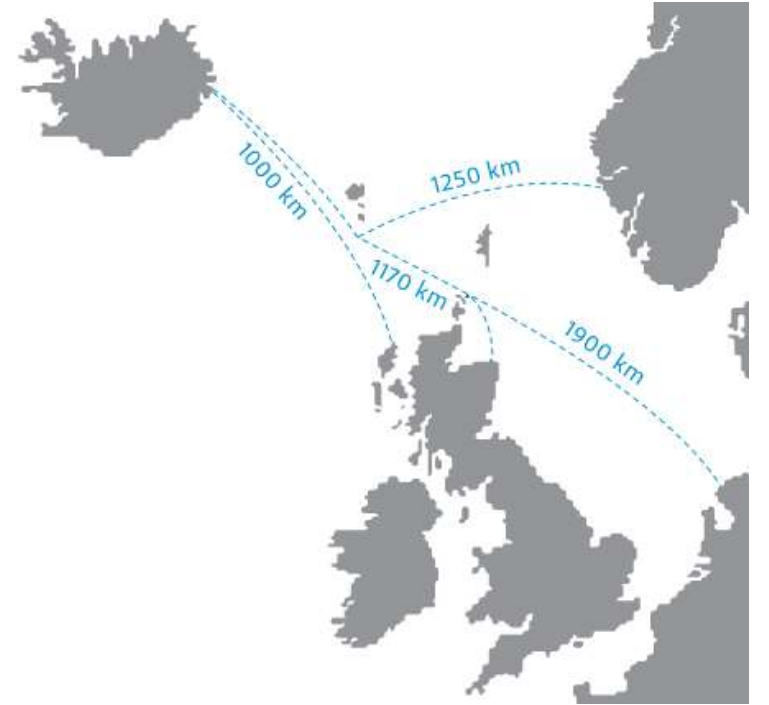
Loan

- High interest rates
 - Depends on size of project
- Usually 70% of project
- Business plan



The future

- 17.000GWh in use
 - Of possible est. 55.000-65.000 GWh
 - 14 projects ongoing (7.000GWh)
- 50-60 options (Hydro/geothermal)
- IceLink – between Iceland and UK (1.000km)
 - Est. 1,8-3,5 Billion EUR



Other options – my job now and next months

- Depends on your idea
 - More efficiency
 - Competing with hydro & geothermal
- WoodHeat
- Small scale hydro
- BioFuel
- Methane
- Wind
- Energy & Tourism
- Oil??????



- Take a tiny bit of green and sustainable energy from Iceland home with you!
- All electricity in Iceland is carbon free!
- Please charge your phone or laptop.....everything counts!

Energy from Iceland



Thank you

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