



Iceland Renewable
Energy Cluster

10 YEARS

Overview

Rósbjörg Jónsdóttir
managing director

2023

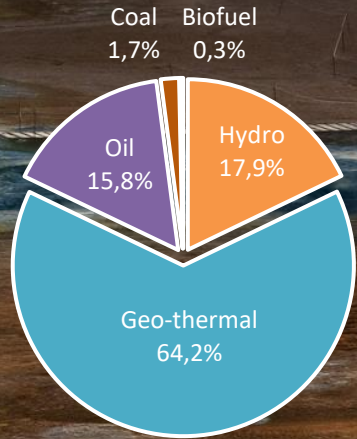
PRIMARY ENERGY CONSUMPTION IN ICELAND 2019

Primary energy consumption 745 GJ/capita

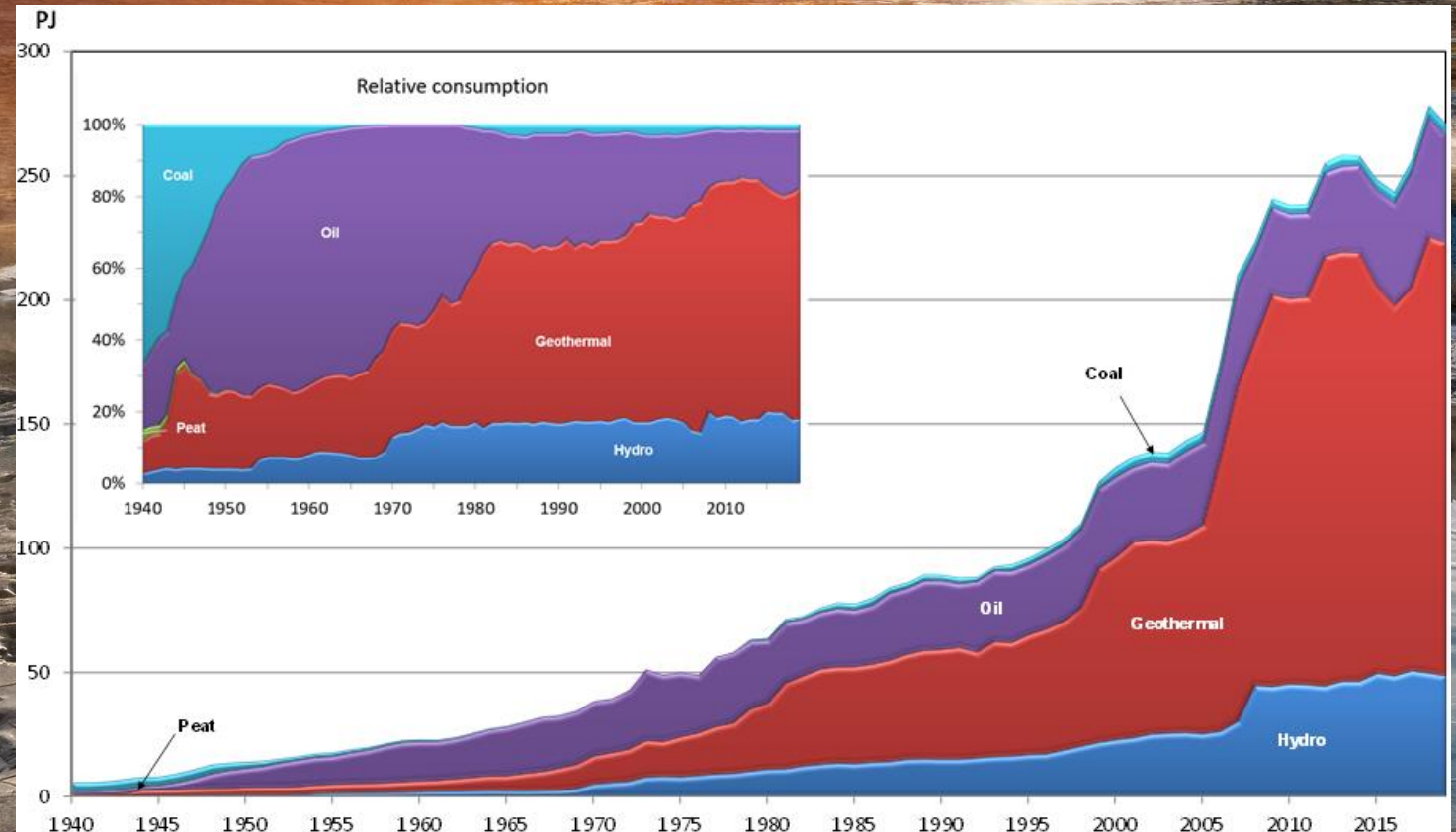
1 PJ = 1000 TJ = 1,000,000 GJ

1kWh = 3,600 kJ

1 toe = 41.868 GJ



	PJ	Ktoe	%
Hydropower	48.5	1,158	17.9
Geothermal	174.5	4,168	64.2
Oil	43.0	1,027	15.8
Coal	4.7	112	1.7
Biofuels	0.9	21	0.3
Total	271.6	6,486	100



Cluster Organisation HISTORY

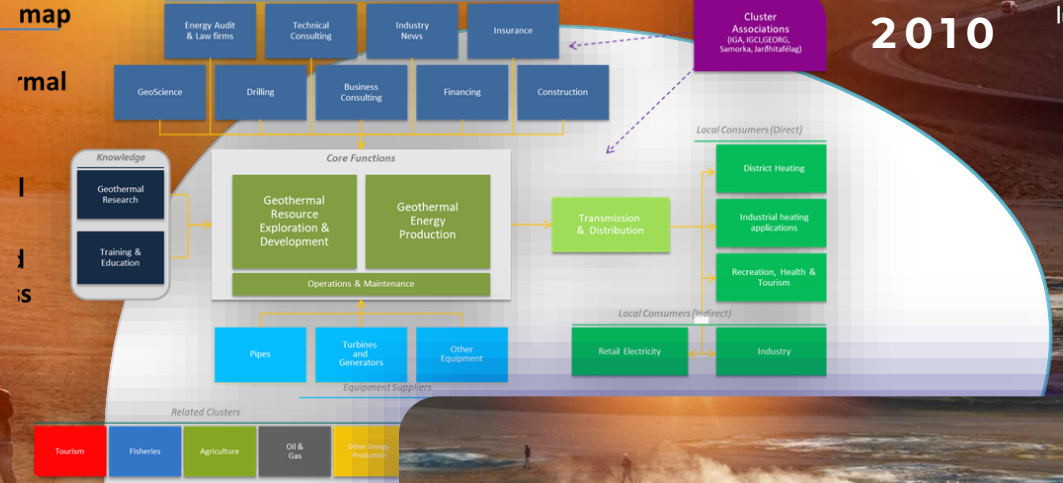
IREC was founded formally in February 2013 first as a geothermal cluster after 3 years of mapping and implementation.

2018 it changed into IREC and is focusing on all energy sources in Iceland;



Iceland Renewable Energy Cluster
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2010



- Hydropower**: With 70% of electricity generated, hydropower is an elementary part of the Icelandic energy market.
- Geothermal**: Geothermal energy is a crucial element of the energy mix of Iceland with about 30% of electricity and more than 90% of homes heated by.
- Wind Power**: With good resources and potential, wind energy could become an important element for Iceland's energy future.
- Power-to-X**: To reach climate goals, Iceland has to look at a future with e-fuels, such as hydrogen, methanol, ammonia etc. for transportation.

2018



2023

Cluster Organisation Members of IREC

Private driven cluster organization of the whole energy sector
 Nonprofit organization with over 50 members, from both public and private sector.
 All who want to improve its role and impact in the society

ABILDARFÉLAGAR ORKUKLASANS - MEMBER OF IREC MAY 2023

The grid contains the following logos:

- HS ORKA, LANDSNET, Arion banki, Landsvirkjun, ARCTICGREEN ENERGY CORPORATION, OR Orkuveita Reykjavíkur
- KPMG, HD, MANNVIT, advania, Alvarr Drilling & Engineering, BBA // FJELDCO
- LOGOS, EFLA, VHE, ÍSOR, on, STÁLSMÍÐJAN FRAMTAK, ICELAND DRILLING
- NORÐURORKA, TBL architects, RARIK, VATNASKIL CONSULTING ENGINEERS, VSÓ RÁÐGJÖF, VERKÍS
- VELVIK www.VEVIK.IS, Reykjavíkurborg, Nýsköpunarsjóður, SI Samtök iðnaðarins, GEG, LEX
- GRÖ • GTP Geothermal Training Programme, ÍSLANDSSTOFA PROMOTE ICELAND, GEORG, Akademias. Menntun fyrir tækifæri framtíðarinnar, Grænvangur, Green by Iceland
- JARÐHITAFÉLAG ÍSLANDS The Geothermal Association of Iceland, rannís, SAMORKA, Keilir Atlantic Center of Excellence, HÁSKÓLINN Í REYKJAVÍK REYKJAVÍK UNIVERSITY, Háskólinn á Akureyri University of Akureyri, UNIVERSITY OF ICELAND

2023



MISSION

Increase competitiveness of
the industry and society



VISION

Responsible management of
our nature resources is the
key to Iceland's wellbeing



VALUES

Collaboration
Knowledge
Development

Cluster ROLE

- Be a visible and common advocate for the Icelandic energy sector domestically and abroad.
- Communicate the image that the members of the co-operation support at any given time.
- Work with the government on transformations related to the nation's climate commitments.
- Maintain knowledge and the development of knowledge in the energy sector.
- Draw attention to the country's uniqueness and the importance of the interaction of different energy sources to meet the challenges of the future.
- Lead large-scale projects with the government.

CORE VALUES



Collaboration



Knowledge



Development
and progress



Collaboration

Collaboration is a fundamental issue in all action we take on and we work with both private and public bodies



Knowledge



Development Progress



Knowledge

Improve knowledge of each link in the whole value chain
Share Knowledge between players and partners
Vital to make any progress



Development and progress



knowledge



Development and progress

The action we are taken are all having impact in one or another way and we work together with members on issues which improve the whole industry



Knowledge



Collaboration



Cluster Organisation Achievement

- Startup programs
- International conferences
- Workshops
- Workgroups
- Assessment and reports
- Innovation programs & initiatives
- Investment fund in the making

Orkuklasinn

Successful startups

Startup Energy Reykjavik

IDUNNHz
 GeoSilica ICELAND
 DTE
 ALOR GREEN ENERGY STORAGE
 CARBON RECYCLING INTERNATIONAL
 KEY not UFO
 LAKI POWER
 Qair
 Atmonia
 ARCTIC SEA MINERALS
 Carbfix
 gerosion
 EIMUR
 GREEN FUEL
 Carbon Iceland

2023



GLOBAL PRESENCE AND TALENTS

Icelandic expertise

Energy related projects in ~30 locations

Offers Worldwide services all around the globe.



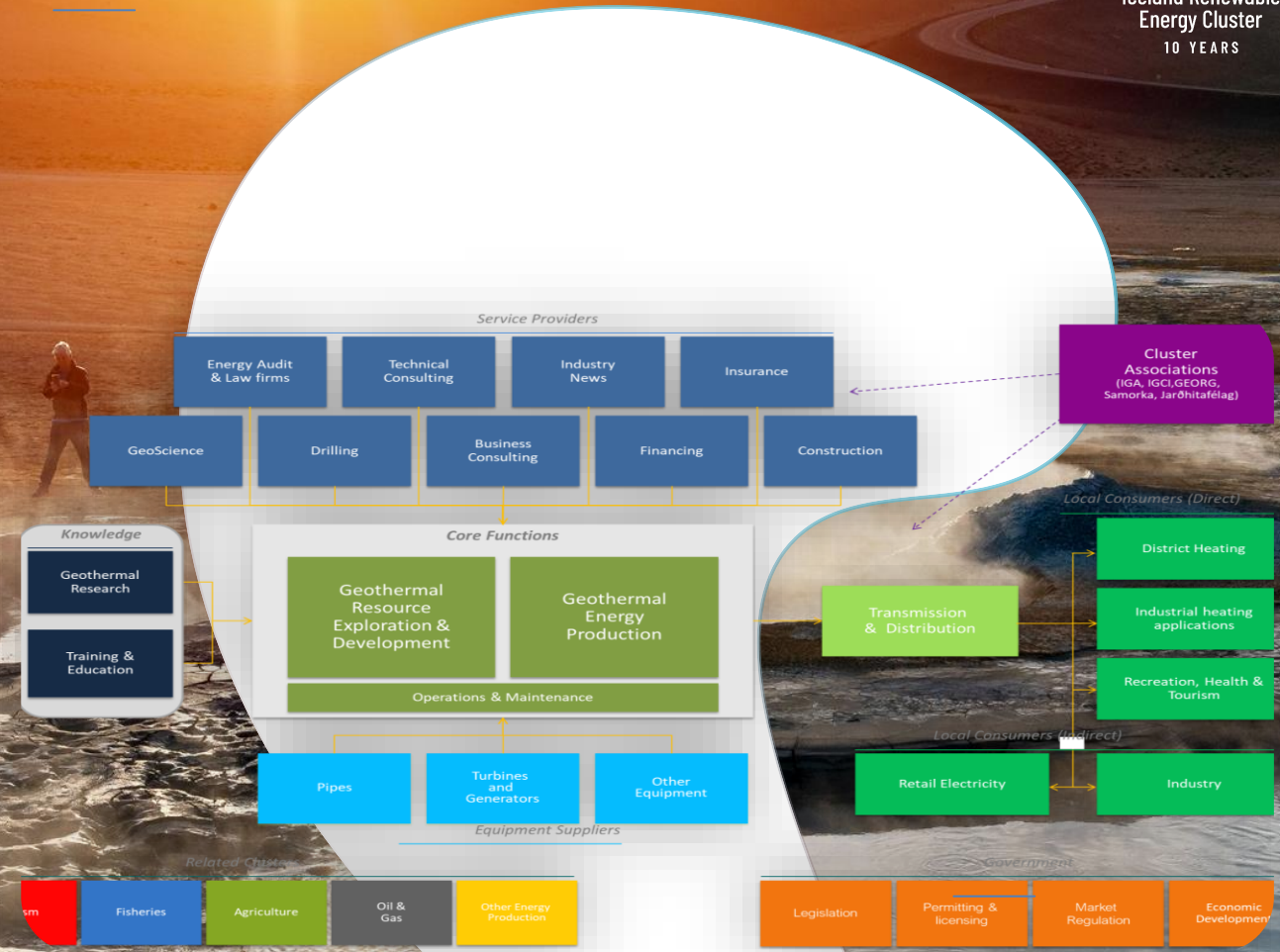
● Power transmission system

● Geothermal Energy

● Hydropower

Where is the need?

It is important to know where where the need is and what you can learn and work together with our expertise, partly or wholisticly.

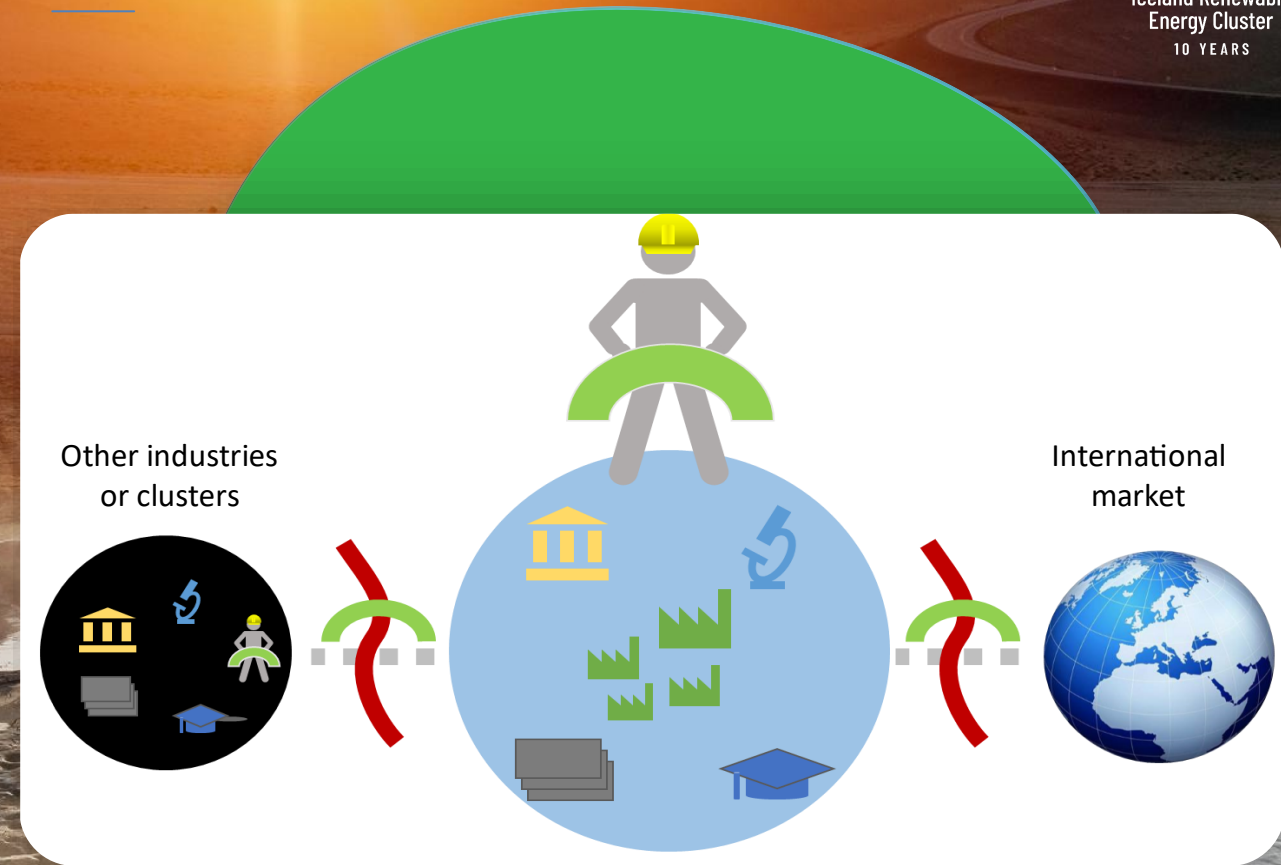


Cluster Organisation

The Bridge Builder

Through our values we can build bridges both internally and internationally by

- Building up collaboration between those who need to be on board
- Knowledge sharing and educate
- the you will be seeing the progress & development required.



2023

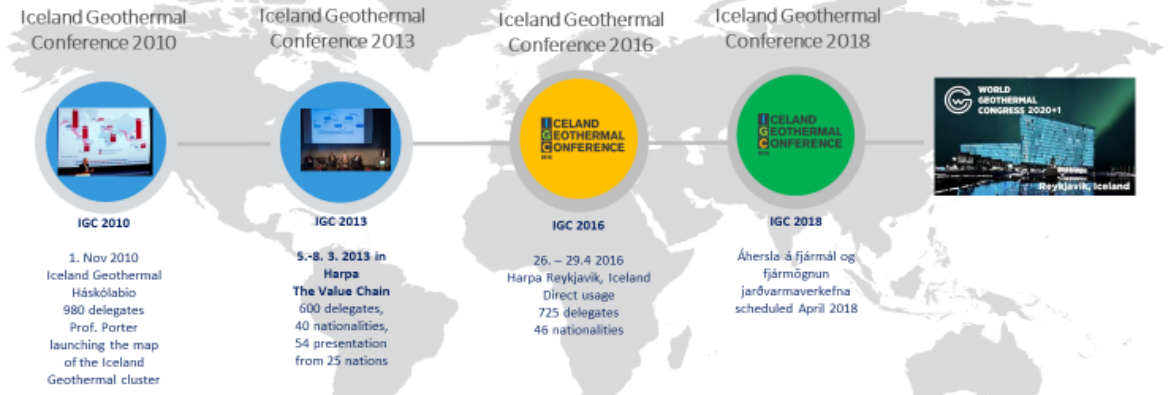
IREC's

Cornerstone

Through our values we can build bridges both internally and internationally by

- Collaboration
- Knowledge sharing
- Progress And development

IREC's Cornerstone – Knowledge Sharing



Our event strategy, shows a unique success has been achieved, making Iceland a show case for discussion about geothermal energy and its utilization, as well as how to contribute to increased well-being in communities where it is found

2023

5th IGC Reykjavík 2024

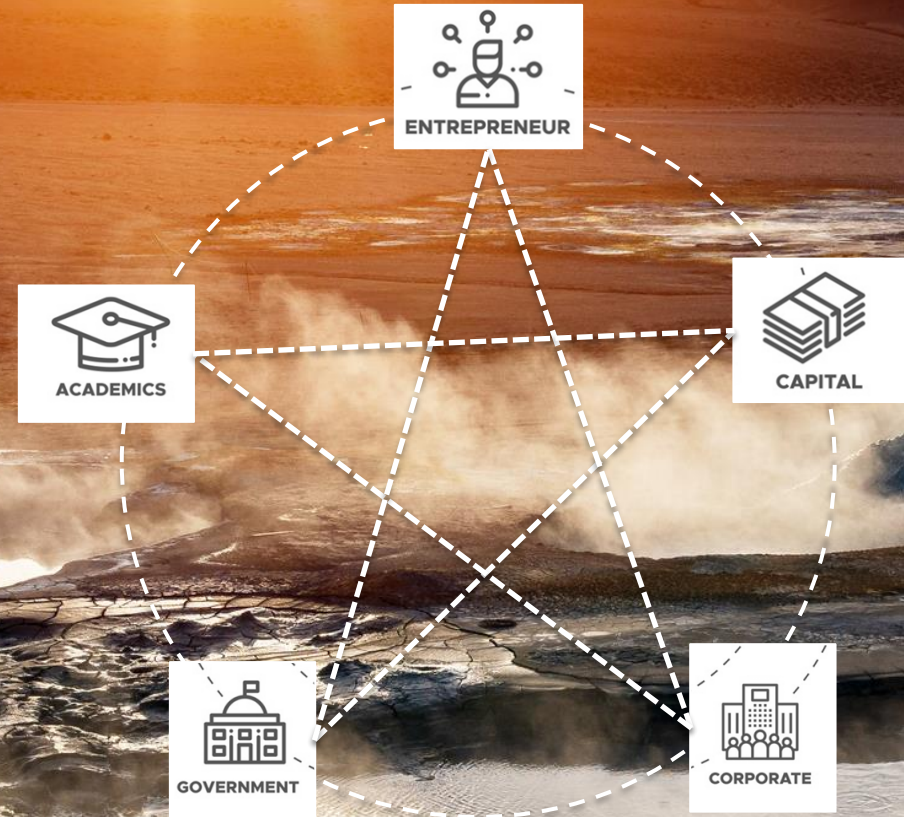
Aim to share the importance of geothermal energy sources when it comes to the energy transition.

I CELAND G EOTHERMAL C ONFERENCE

Reykjavík • Harpa • 28–30 May, 2024

Coming together is
the beginning.
Keeping together is
progress. Working
together is success.”

Henry Ford



- www.energycluster.is
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THANK YOU