Iceland Renewable Energy Cluster

April 2023

Rósbjörg Jónsdóttir, managing director

OUR VISION

Iceland Renewable Energy Cluster
10 YEARS

The basis of the Icelandic welfare is energy-based activities and development. With responsible management, the profession maintains and improves the quality of life in the country and ensures economic, societal and environmental progress.

FOUNDED 2013 – 10 YEARS EXPERIENCE

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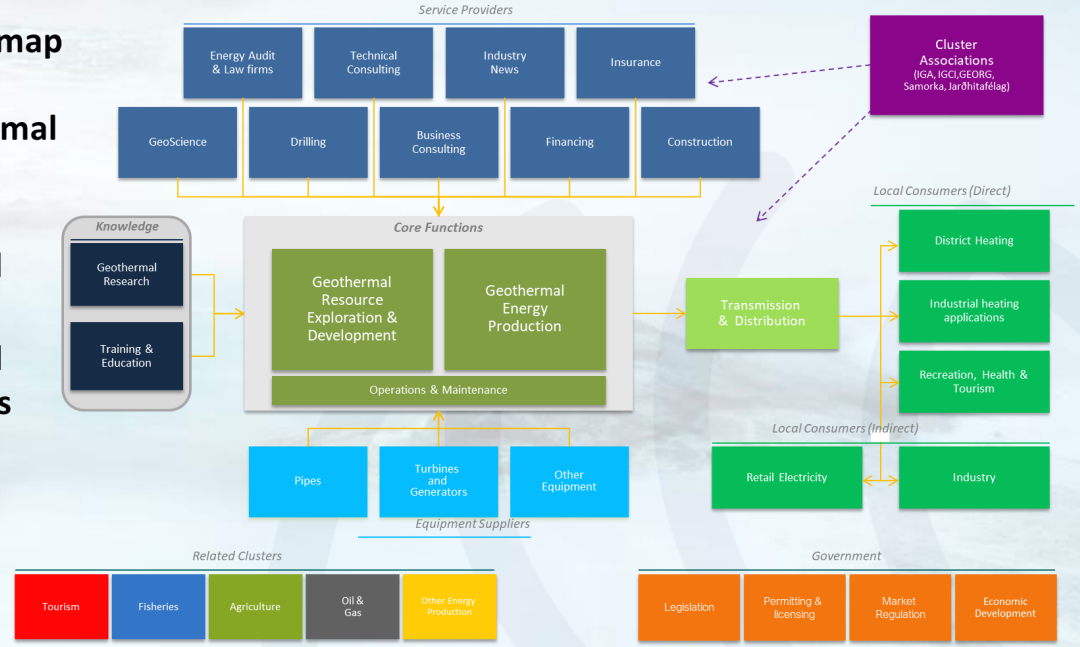
- After 3 years of mapping and implementation the cluster organization was founded 2013 as geothermal energy cluster – Iceland Geothermal

- 2018-2019 the organization was expanded to Iceland Renewable Energy Cluster
    - Focusing on all energy sources in Iceland for the entire energy sector

Cluster map of the geothermal energy @ Prof. Michael Porter Harvard Business School 2016



WHAT IS THE ICELAND RENEWABLE ENERGY CLUSTER ?

Iceland Renewable Energy Cluster
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- Private driven cluster organization of the whole energy sector
  - Formally founded 2013, first focusing on geothermal.
- Nonprofit organization with over 50 members, from both public and private sector. All who want to improve its role and impact in the society

ICELAND RENEWABLE ENERGY CLUSTER

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- The main objective of the cluster organization is to strengthen competitiveness, innovation and increase value creation within the Icelandic energy industry and society.

- IREC is a project driven platform, operating as umbrella organization for the whole value chain of the Icelandic energy industry and related industries.

  We work together with public and private bodies, facilitating collaboration of cluster members with partners and stakeholders in Iceland and internationally. Cluster to Cluster

- The core emphasis is thereby to support and create cooperation of different stakeholders, with a focus on innovation and value creation for our members and the sector.

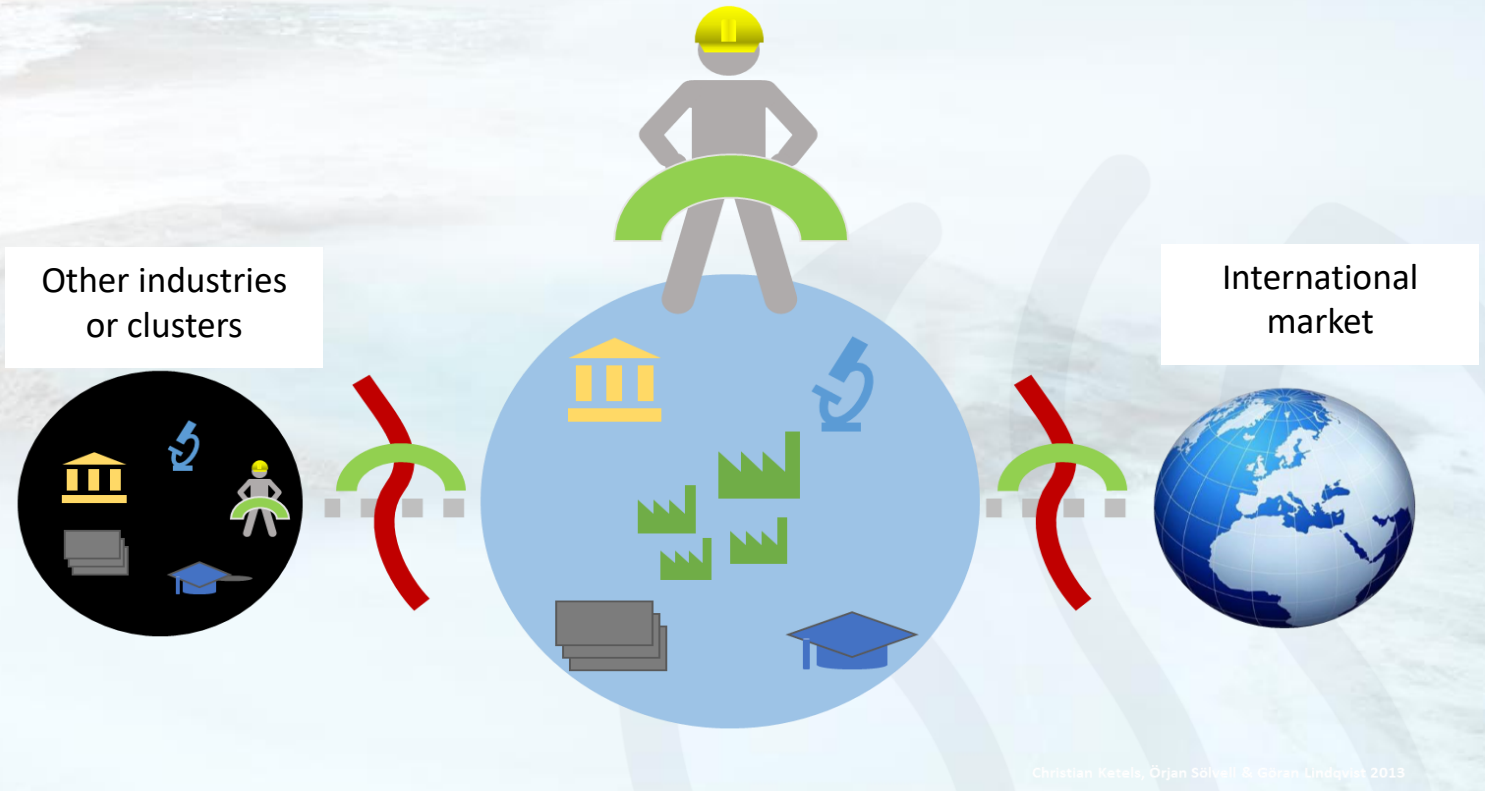
KEY ACTIVITIES

Iceland Renewable Energy Cluster
10 YEARS

By focusing on **Colloboration; Knowledge Sharing and Development, we are setting** up programs, projects and actions for:

- Innovation and Progress
  - Workshops, analyzes and assessments
- Internationalization and Cooperation
  - Cluster to clusters, grant calls and symposium, workshops, webinars
- Education and Training
  - Webinars both locally and internationally
  - International conferences

The cluster is the bridge builder



THEMATIC FOCUS OF THE CLUSTER ON ICELAND'S ENERGY SOURCES

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 geothermal.

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

ICELANDIC EXPERTISE AROUND THE GLOBE

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Icelandic expertise are working energy projects around the globe and are building on great experience

- Geothermal Energy
- Hydropower
- Power Transmission systems

WHAT DID WE LEARN TODAY?

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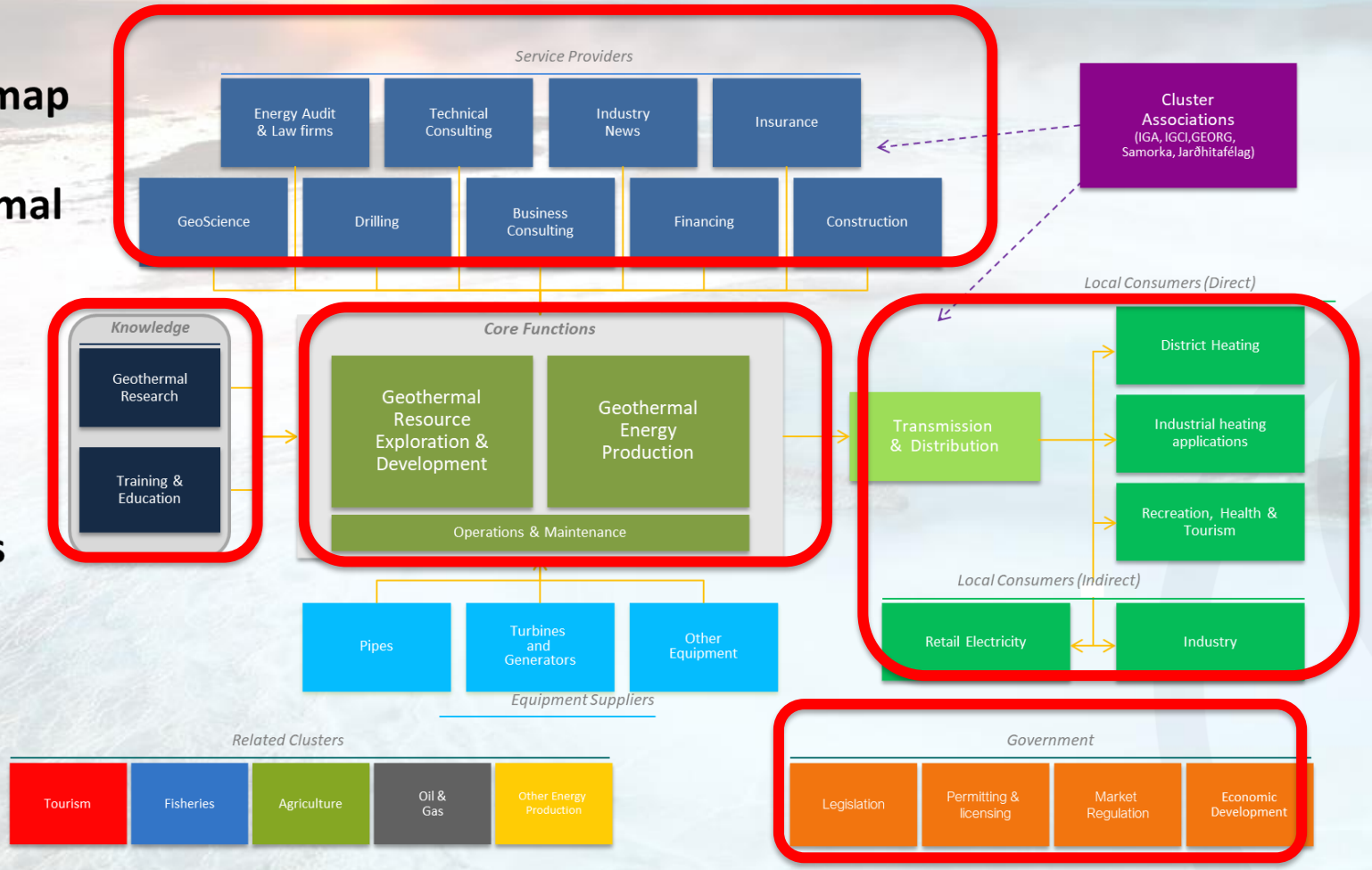
Cluster map of the geothermal energy @ Prof. Michael Porter Harvard Business School 2016



IREC´s Cornerstone – Knowledge Sharing

Iceland Geothermal Conference 2010

IGC 2010

1. Nov 2010
Iceland Geothermal
Háskólabio
980 delegates
Prof. Porter
launching the map
of the Iceland
Geothermal cluster

Iceland Geothermal Conference 2013

IGC 2013

5.-8. 3. 2013 in Harpa
The Value Chain
600 delegates,
40 nationalities,
54 presentation
from 25 nations

Iceland Geothermal Conference 2016

IGC 2016

26. – 29.4 2016
Harpa Reykjavik, Iceland
Direct usage
725 delegates
46 nationalities

Iceland Geothermal Conference 2018

IGC 2018

Áhersla á fjármál og fjármögnun jarðvarmaverkefna scheduled April 2018

ICELAND GEOTHERMAL CONFERENCE
Reykjavik · Harpa
2010-2013-2016-2018-2024-2026-2028 -2030

5th IGC - End of May 2024

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

Iceland Renewable Energy Cluster

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www.energycluster.is
rosbjorg@energycluster.is

THANK YOU

PRIMARY ENERGY CONSUMPTION IN ICELAND 2019

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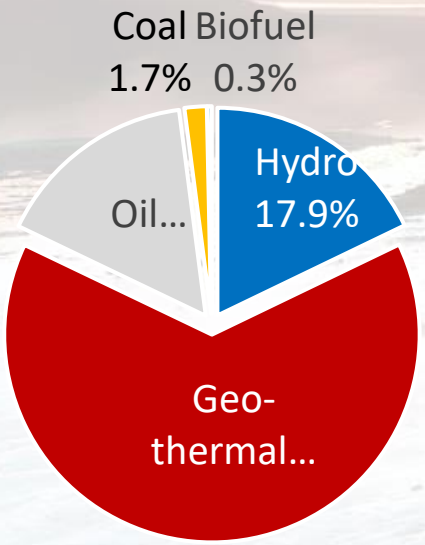
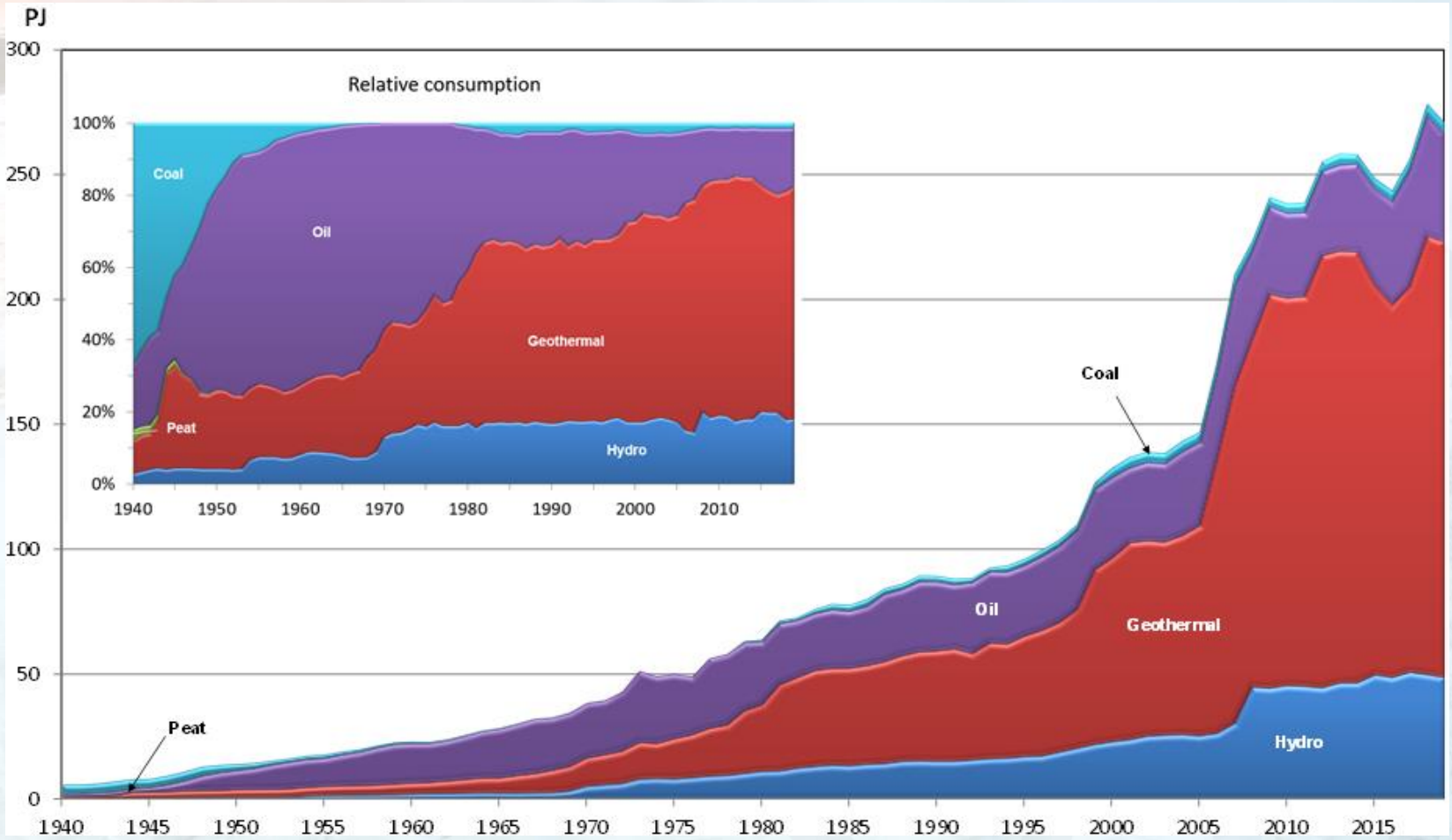


Primary energy consumption 745 GJ/capita
1 PJ = 1000 TJ = 1,000,000 GJ
1kWh = 3,600 kJ
1 toe = 41.868 GJ

	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



Source: Authority of Energy - Orkustofnun