



IGC 2024  
PROGRAM

# REDEFINE TOMORROW WITH GEOTHERMAL

SECURITY, OPPORTUNITY, VIABILITY

**I** CELAND  
**G** EOTHERMAL  
**C** ONFERENCE

Reykjavík · Harpa · 28–30 May, 2024



# IGC 2024



**Iceland Renewable  
Energy Cluster**

## **Event Management**

Iceland Renewable Energy Cluster  
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energycluster.is  
#IGC2024Iceland  
#Geothermal4All

**KOMUM**  
CONFERENCES

## **Professional Conference Organizer**

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komum.is

Appstore



Google Play



## **IGC2024 APP**

All updated information  
about the conference in  
your smartphone

Wifi in Harpa: igc2024



The Iceland Geothermal Conference (IGC) is a renowned international event that brings together industry and policy leaders in geothermal energy from around the world. Hosted by the Iceland Renewable Energy Cluster, IGC2024 marks its 5th edition.

This prestigious event explores new opportunities and diverse developments in the geothermal sector, emphasizing its role in achieving a sustainable future with a net-zero carbon footprint and reshaping urban landscapes. Join the discussion to help pave the way for a cleaner and more efficient future in heating, cooling, and urban living.

Organized by experts from the cluster, the conference offers breakout sessions, plenary sessions, exhibitions, field trips, B2match, and more. Iceland's unique setting provides access to six geothermal power plants, showcasing various installations, turbine setups, and direct utilization technologies.

# Welcome

## Welcome to Iceland – Home of Geothermal

IGC 2024

On behalf of the Government of Iceland I sincerely welcome you to the Iceland Geothermal Conference 2024.

Sustainable geothermal utilisation has been an important part of Icelandic energy policy for decades and we are grateful to the pioneers in Iceland who started the shift from coal and oil to geothermal energy in the beginning of last century. As a result, over 90% of our houses are now heated with geothermal energy and around 30% of our electricity production comes from geothermal power plants.

Geothermal resources hold much more potential worldwide than is currently utilised, which provides both challenges and opportunities. For geothermal energy to remain a feasible option the industry must remain vigilant and innovative in order to find competitive and cost-effective solutions. The Iceland Geothermal Conference has become an important forum for experts to meet and share experiences of geothermal research and utilisation. We know that in countries with geothermal resources opportunities for heating and electricity production can make a significant difference for economic and social development, as well as reducing CO2 emissions. We have a great opportunity here at IGC 2024 to share knowledge and discuss how we can make that happen.

I hope that your participation in the IGC 2024 will give you valuable insight into current trends in the geothermal world and inspire you to promote the benefits of geothermal utilisation worldwide.



**Guðlaugur Þór Þórðarson**

Minister of the Environment, Energy and Climate.

## Welcome to the 5th Iceland Geothermal Conference 2024

We are thrilled to welcome you to our 5th Iceland Geothermal Conference 2024, an event dedicated to advancing the global dialogue on geothermal energy.

Iceland has made significant progress in utilizing geothermal energy, tapping into the earth's natural heat to offer a clean, renewable energy source. It is fitting that we convene here, in a country where geothermal energy is not only a cornerstone of the national energy strategy but also a testament to what can be achieved through commitment and ingenuity when building up a sustainable society.

This year's conference is designed to inspire, educate, and connect. Our comprehensive program includes keynote speeches from leading experts, interactive workshops, and ample networking opportunities. Whether you are here to deepen your technical knowledge, explore new business opportunities, or understand the policy landscape, the Iceland Geothermal Conference 2024 offers a platform for meaningful engagement and growth.

As we gather to discuss the future of geothermal energy, we are reminded of the critical role this sustainable resource plays in addressing global energy challenges. The insights and collaborations forged during this conference will help shape the path towards a cleaner, more sustainable future. Thank you for joining us at the Iceland Geothermal Conference 2024. Together, let us ignite the future of sustainable energy.

### The Conference Committee of IGC 2024:

Vala Hjörleifsdóttir phd, chair  
Alma Stefánsdóttir, Arna Pálsdóttir phd, Birta Kristín Helgadóttir,  
Bjarni Gautason, Bjarni Richter, Carine Chatney, Friðrik Ómarsson,  
Hörður Harðarson, Katrín Ragnarsdóttir



**Rósbjörg Jónsdóttir**

CEO Iceland Renewable Energy Cluster

# Program

DAY 1

## SIDE EVENTS

9:00-13:00	Bridging the Gaps: Advancing Superhot Rock Energy. At Björtuloft, Harpa Concert Hall
	Geothermal Energy: Empowering Development Beyond Electricity Generation. At Silfurberg, Harpa Concert Hall
13:00-17:00	Geosmart meets Stakeholders in Reykjavik The event is free of charge, open to the public, and will take place Ríma, Harpa, Reykjavik. Limited seats, first come, first served.
14:00-16:00	Presentation of International Geothermal Association at Sky bar

## 16:00 - REGISTRATION & EXHIBITION OPENS

## WELCOME RECEPTION

17:00-19:00	<p>Flói - Welcome to the opening of the 5th International Iceland Geothermal Conference in Reykjavik!</p> <p>We are delighted to host you at Harpa, our iconic conference hall, where Reykjavik's Mayor, Mr. Einar Þorsteinsson, will address our distinguished guests.</p> <p>Join us at the Welcome Reception amidst our exhibitors in the business showcase area. We wish you a successful and enriching conference.</p>
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DAY 2	SECURITY & STABILITY		SUSTAINABILITY & INNOVATION	VIABILITY & PROFITABILITY	GEOTHERMAL FOR ALL
8:30-10:00	<div>PLENARY SESSION - OPENING</div> <div>Opening Speech, Dr. Guðni Th. Jóhannesson, President of Iceland, Sævar Freyr Þráinsson, CEO of Reykjavik Energy, GUO Xusheng, Chief Geologist, Sinopec Corp, Dr. Marit Brommer, CEO of International Geothermal Association,</div>				
10:00-10:30	<div>COFFEE BREAK - EXHIBITION</div> <div>BLUESPARK® Technology Demonstration - Removing Wellbore Scale at 10:00</div> <div>Location in front of the main entrance at Harpa conference venue -</div>				
10:30-12:00	<div>A1 - Policy &amp; Regulator Framework</div> <div>Elizabeth Torio Henriquez Senior Geologist - GTG Delegate LAGEO Prof. Sven Teske Institute For Sustainable Futures Ms. Pauline Lucas Policy Director Euroheat &amp; Power, Harnessing Earth's Heat Dr. Heimir Tryggvason Specialist National Energy Authority of Iceland Ágústa Ýr Þorbergsdóttir Fortescue Moderator: Harpa Pétursdóttir</div>	<div>B1 - Enhance Geothermal System</div> <div>Dr. Mariane Peter-Borie Geothermal Technical Specialist CGG Incube Mr. Rob Klenner Director, Geothermal Technology And Innovation - Baker Hughes Prof. Anna Sowizdzał Prof. AGH University of Krakow Mr. Riccardo Pezzoni Proposal Department Manager Exergy International Srl Moderator: Bjarni Richter</div>	<div>C1 - Geothermal Urban Planning</div> <div>Susan Sun CTO Arctic Green China &amp; Sinopec Green Energy Daði Þorbjörnsson - ISOR Ph.d. Egill Maron Þorbergsson R&amp;d Lead For District Heating, Veitur Mr. Vlatko Kovačić Director - City Of Karlovac Ms. Taylor (Alex) Martin Engineer Egg Geo LLC University of Reykjavik  Moderator: Einar Þorsteinsson Mayor of Reykjavik</div>	<div>D1 - Empowering the Energy Transition</div> <div>Mr. Guðni Axelsson - Director Jarðhitaskóli GRÓ / ÍSOR Juliet Newson Iceland School of Energy Ms. Charlotte Barlow Senior Analyst Aurora Energy Research Mr. Patrick Muanza Kant PhD-student University of Iceland / GRÓ GTP Dr. Mohd Hariri Arifin Assoc. Prof. Universiti Kebangsaan Malaysia  Moderator: Ása Björg Jónsdóttir</div>	
12:00-13:30	<div>LUNCH - EXHIBITION</div>				
14:00-19:00	<div>FIELD TRIPS</div> <div>Attendees of IGC 2024 can select one field trip. Kindly be aware that space is limited. Information about booking will be sent out to registered participants soon.</div>				
	<div>FT 1</div> <div>GEOTHERMAL PARK</div>	<div>FT 2</div> <div>CASCADING USE OF GEOTHERMAL</div>	<div>FT 3</div> <div>REYKJANES RESOURCE PARK</div>	<div>FT 4</div> <div>EDUCATING THE FUTURE</div>	<div>FT 7</div> <div>RENEWABLE ENERGY</div>
19:00-22:00	<div>GEOTHERMAL GARDEN PARTY</div> <div></div>				



DAY 3	SECURITY & STABILITY	SUSTAINABILITY & INNOVATION	VIABILITY & PROFITABILITY	GEOTHERMAL FOR ALL
8:30-10:00	A2 - Direct Utilization - Diversification	B2 - Zero Waste Geothermal - Circular Economy	C2 - Derisking Geothermal - From Exploration to Funding & Operation	D3 - Geothermal Operation
	<b>Dr. Marta Rós Karlsdóttir</b> Managing Director Baseload Power Iceland <b>Hlín Vala Aðalsteinsdóttir</b> Mechanical Engineer - Verkís <b>Ms. Anyela Murillo Arroyo</b> Instituto Costarricense de Electricidad <b>Helga Kristín Jóhannsdóttir</b> Business Development Manager Geothermal Park - ON <b>Ms. Nor Binti Ismail</b> Workstream Leader (Energy Transition Solutions) Petroliam Nasional Berhad  <i>Moderator: Haraldur Hallgrímsson</i>	<b>Mr. Aron Óttarsson</b> - Efla <b>Baldur Brynjarsson</b> Research Project Mangager Reykjavik Energy <b>Vigfús Arnar Jósefsson</b> Mechanical Engineer - Verkís <b>Fida Abu Libdeh</b> Founder & Ceo - GeoSilica Iceland <b>Mr. Davide Toselli</b> Sales Engineer - Turboden Spa <b>Giulia Cittadini</b> Policy Advisor - EGEC <b>Óli Torfason</b> International Carbon Registry <i>Moderator: Birta Kristín Helgadóttir</i>	<b>Antoine Lochet</b> Head of Elements by BBA BBA//Fjeldco <b>Hilal Kıvanç Ateş</b> Vice President - Türkiye Kalkınma Ve Yatırım Bankası A.ş. <b>Kristín Steinunnardóttir</b> Geothermal Specialist Cowi <b>Dr. Dave Waters</b> Director/geoscientist Paetoro Consulting UK Ltd  <i>Moderator: Elín Hallgrímsdóttir</i>	<b>Ms. Beata Kepinska</b> Mineral And Energy Economy Research Institute Pas <b>Sæunn Halldórsdóttir</b> - ÍSOR <b>Finnbogi Óskarsson</b> - ÍSOR <b>PhD. Eng. Maciej Miecznik</b> Mineral and Energy Economy Research Institute Polish Academy of Sciences  <i>Moderator: Guðni Axelsson</i>
10:00-10:30	COFFEE BREAK - EXHIBITION			
10:30-12:00	A3 - Food Security	B3 - Super Hot Geothermal	C3 - Energy Storage & Load Balancing	D3 - Geothermal Operation
	<b>Dr. Sveinn Aðalsteinsson</b> Managing Director - Orkídea <b>Sigurður Markússon</b> - VP Dev. & Scale UP - Abalone <b>Alexandra Kjeld</b> Environmental Engineer - EFLA <b>Ken Noda</b> - Ifarm <b>Justine Vanhalst</b> Iceland Eco Business Park <b>Engineer Martha Nyambura Mburu</b> General Manager, Strat., Res. & Innov. Geothermal Development Company <b>Laura Wendell Bermann</b> Senior Energy Specialist - World Bank <i>Moderator: Alma Stefánsdóttir</i>	<b>Ms. Terra Rogers</b> Director - Clean Air Task Force <b>Gunnar Skúlason</b> - ISOR <b>Kristinn Ingason</b> Group Lead, Geothermal Energy - COWI <b>Dr. Arna Pálsdóttir</b> Head Of Resource Innovation Reykjavik Energy <b>Hjalti Páll Ingólfsson</b> Director GEORG/Chair of KMT Funding Committee GEORG - Geothermal Research Cluster <i>Moderator: Ásdís Benediktsdóttir</i>	<b>Gunnar Thorsteinsson</b> Columbia University <b>Katrín Ragnarsdóttir</b> - COWI <b>Gabor Molnar</b> Geothermal Engineer, Civil Engineer M.Sc. - Arctic Green Engineering Services Ltd <b>Shiladitya Paul</b> - GeoSmart <b>Dr. Dirk Schaeer</b> Technical Manager Marketing and Sales Catalysts - Sasol Germany Gmbh <b>Dr. Helga Dögg Flosadóttir</b> CEO - Atmonia ehf <i>Moderator: Marta Rós Karlsdóttir</i>	<b>Dr. Guðjón Helgi Eggertsson</b> Specialist, Geothermal Operation Landsvirkjun <b>Li Ming</b> Geothermal Engineer Sinopec Green Energy <b>Dr. Jonathon Clearwater</b> Technical Domain Specialist, Reservoir Engineering Seequent <b>Donald Leger</b> Application Engineer EthosEnergy  <i>Moderator: Sunna Björg Helgadóttir</i>
12:00- 13:00	LUNCH - EXHIBITION			
13:00-14:30	A4 - Resilience - Natural Disasters	B4 - Zero Footprint Geothermal	C4 - Drilling, Well Completion & Workover	D4 - Heating & Cooling
	<b>Lárus Porvaldsson</b> Chief Reservoir Engineer - HS Orka <b>Fred John</b> Managing Director, Dominica Geothermal Development Company Ltd - Geo Dominica <b>Kristinn Harðarson</b> - HS Orka <b>Reynir Sævarsson</b> - Business Development Manager EFLA Consulting <b>Ármann E. Lund</b> - Verkís <b>Sigrún Tómasdóttir</b> Hydrogeologist - Reykjavik Energy  <i>Moderator: Carine Chateney</i>	<b>Mr. Kenneth McIntush</b> Engineer/President Trimeric Corporation <b>Elín Vignisdóttir</b> - Geographer Verkís <b>Sigurður R. Rúnarsson</b> Specialist Power Plant Operations - ON <b>Ásgerður K. Sigurðardóttir</b> Specialist, Geothermal Operation Landsvirkjun <b>Dr. Eylem Kaya</b> Senior Lecturer University Of Auckland  <i>Moderator: Hulda Kristín Helgadóttir</i>	<b>Rochelle Longval</b> Vice President, Geothermal Blue Spark Energy <b>Bruce Gatherer</b> - Jarðboranir <b>Prof. Ingo Sass</b> Helmholtz Centre Potsdam Gfz German Research Centre for Geosciences <b>Dicky Alamsyah</b> Mechanical Engineer Pt Rigsis Energi Indonesia <b>Steven Shanks</b> - Welltec <b>Erik Neumann</b> - Tu Dresden <b>Mr. Paul Ramsak</b> - Senior Advisor Netherlands Enterprise Agency RVO <i>Moderator: Sigurður Sigurðsson</i>	<b>Dr. Egill Júlíusson</b> CTO - Arctic Green Energy <b>Auður Agla Óladóttir</b> - ÍSOR <b>Ms. Pauline Lucas</b> Policy Director - Euroheat & Power Harnessing Earth's Heat <b>Mark Silberg</b> Special Advisor On Climate and Energy - Office Of Governor Jared Polis (Colorado) Colorado Governor's Office  <i>Moderator: Marit Brommer</i>
14:30-15:00	COFFEE BREAK - EXHIBITION			
15:00-16:30	<b>CLOSING - PLENARY</b>  Mr. Guðlaugur Þór Þórarson, Minister of Environment, Energy and Climate, Dr. Ólafur Ragnar Grímsson, former president of Iceland, Kristín Linda Árnadóttir - Deputy CEO of Landsvirkjun, National Power Company, Sigurður Atli Jónsson - CEO Arctic Green, Gauri Singh - Deputy Director, IRENA, Dr. Bjarni Pálsson - Designer of IGC			

MATCHMAKING B2B 9:00-15:30

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# Program

DAY 4	
7:00-20:30	FIELD TRIP
	PEISTAREYKIR POST TOUR TWO-DAY TOUR TO NORTH -EASTERN ICELAND
	SIDE EVENTS
9:00-13:00	Volsung: Wellbore Modelling Workshop at Reykjavík University



# Platinum Partners



Reykjavik Energy is a power and utility company owned by three municipalities. Through four subsidiaries, resources are utilised in a sustainable and cost-effective manner to serve households, businesses and institutions in accordance with statutory obligations at fair and competitive prices



Arctic Green is the leading exporter of the Icelandic success in geothermal and renewable energies to markets around the globe. Clean heating and cooling projects in over 70 municipalities across Asia, Europe, and the Middle East, specializing in geothermal as an anchor energy source. Arctic Green and its JVs form the world's largest and fastest growing geothermal heating & cooling consortium with #1 Market Share in China and expanding projects across continents.



Landsvirkjun is the National Power Company of Iceland. Landsvirkjun operates fifteen hydropower stations, three geothermal power stations and two wind turbines for research purposes in five operating areas in Iceland. In operating power stations, emphasis is placed on a holistic vision, where prudence, reliability and harmony of the operations with environment and society are the guiding principles.

# Exhibitors

- 01 HS Orka
- 02 Verkís
- 03 EthosEnergy
- 04 Voestalpine Tubulars
- 05 BBA//Fjeldco
- 06 Hephæ Energy Technology
- 07 Corona Control
- 8A SLB
- 08 Fagerberg
- 09 DESMI
- 9A Interwell
- 10 HD
- 11 Endress-Hauser
- 12 Inco - Drilling
- 14 Sequent
- 15 Iceland Drilling
- 16 COWI
- 17 GeoSmart
- 18 Blue Spark Energy
- 19 Landsvirkjun
- 19B SET
- 20 Ísor
- 21 EFLA
- 22 Arctic Green
- 23 Reykjavík Energy
- 23A ON
- 24 Green Chemicals
- 25 Glinik Drilling Tools
- 30 The Iceland Renewable Energy Cluster





# Thank you!

The Iceland Renewable Energy Cluster appreciates the generous support and participation of the 5th Iceland Geothermal Conference

