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REPUBLIC OF SLOVENIA
MINISTRY OF THE ENVIRONMENT,
CLIMATE AND ENERGY

Arctic Green Energy

Harnessing Geothermal Energy to Transform Cities

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Regional Managing Director - Central and East
Europe

Arctic Green Energy

Arctic Green and its JVs form the world's largest and fastest growing geothermal heating & cooling consortium, providing clean, profitable heating & cooling to cities across the world



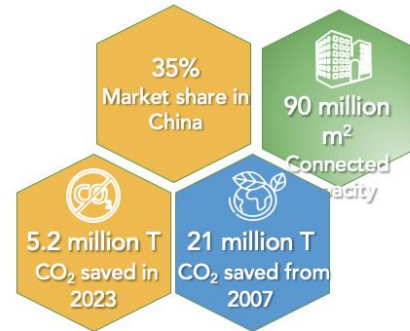
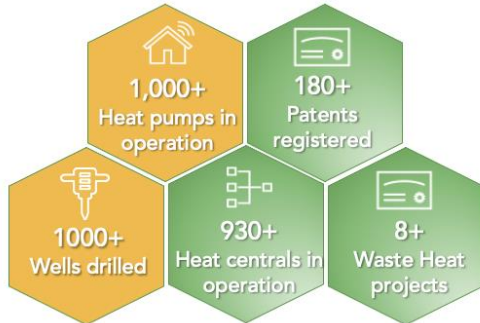
DEVELOPER, OWNER AND OPERATOR, unbroken chain from resource to end user



INDUSTRY LEADER with #1 market share in China and proven track record of developing profitable geothermal projects



ENERGY TRANSITION PIONEER having proved on a massive scale that geothermal is the most environmentally friendly and profitable method of providing cities with clean heat



Our Approach

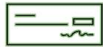
We are a one-stop-shop for developing geothermal projects.

Develop



Arctic Green Energy is a **full-service provider** for geothermal projects. With a highly experienced team, we have successfully developed well over 1000 geothermal projects worldwide. **We oversee every step of the project until fully operational.**

Invest



We actively invest in all the projects we engage in and mitigate risk by collaborating **with local partners**. Our primary focus lies in projects that present expansion opportunities.

Operate



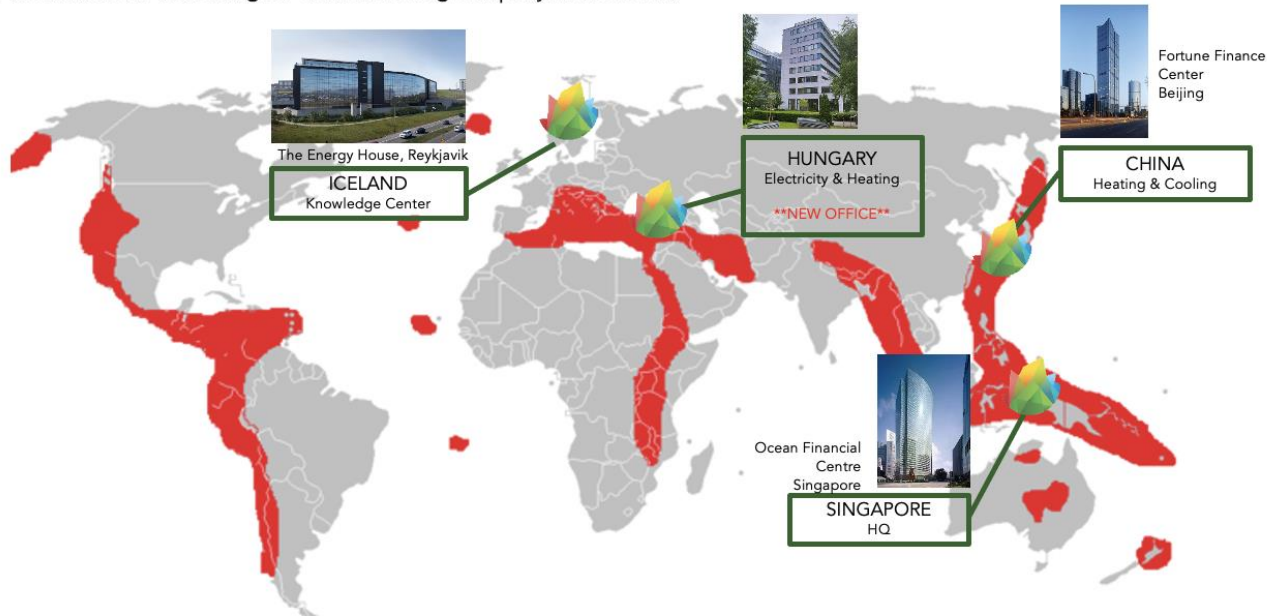
Our goal is to deliver fully operational geothermal projects, ensuring efficiency and success. We provide our customers with baseload energy all year round.



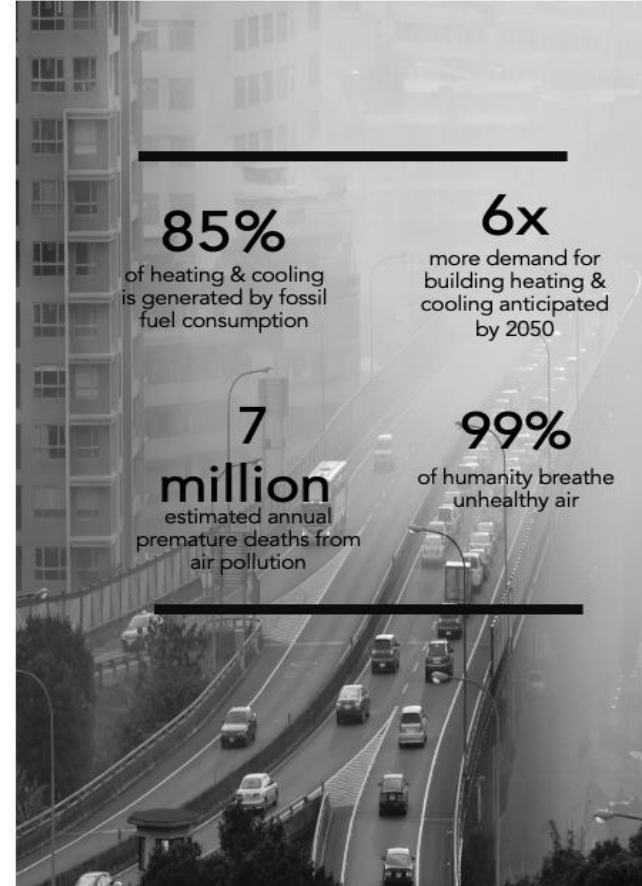
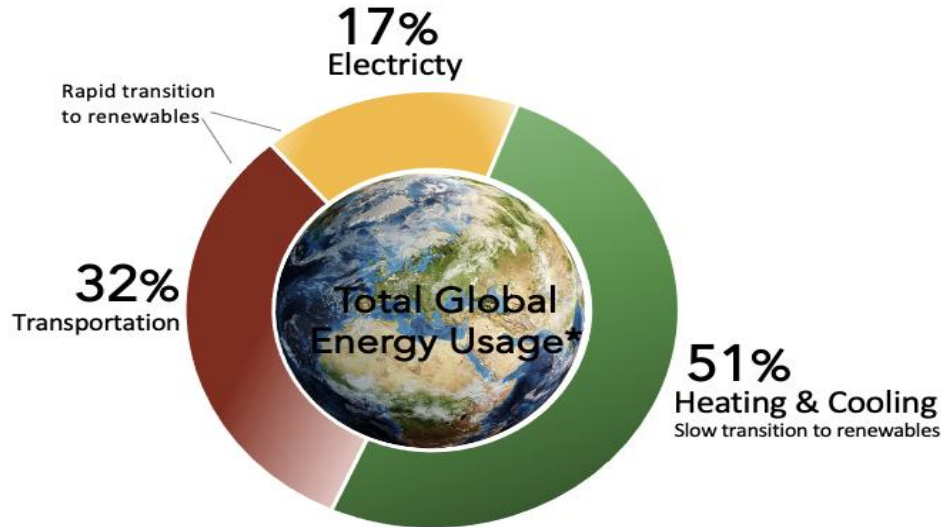
Arctic Green Energy around the world

Global operations covering Asia and Europe with a Knowledge Center in Iceland

- Arctic Green is developing or operating over **850 geothermal projects**, most of which are in **geothermal heating and cooling**.
- Other projects range from **geothermal electricity** to **waste heat, heat pumps, solar PV** to **AI driven energy management systems** that **seamlessly integrate geothermal** with other renewables and **constantly monitor and adapt** our geothermal systems.
- Our JV in China is the **world largest district heating company** in the world,



Without Transition to Clean Heating & Cooling the World will not reach declared Net Zero Goals



We transform **Suffering Cities** into **Breathing Cities** with clean air and healthier ecosystems one block and one neighborhood at a time

HOW WE DO IT



We **drill typically 2 km** into the ground, a **pair of wells**, one for **extraction** and the other for **re injection** of the used brine



Within the closed loop we extract the heat through **heat exchangers** or **absorption chillers** for heating & cooling



Our **district heating** or **cooling systems** then deliver heated or cooled water to the communities



Our **decentralized solutions** can be implemented in **new construction** or in **existing infrastructure** woven into the urban landscape

Ultimate Proof of Concept

XIONG'AN IN CHINA - The new Deputy Capital of China



- Geothermal proven on a massive scale
- Temperatures below 50°C
- It has a mix of heating, cooling, energy storage, photovoltaic power generation and more applications under development.
- 128 wells, shallow to deep

CHALLENGE

- A city in China that was dealing with heavy air pollution due to burning coal for house heating
- Population of 1.1 million suffered

SOLUTION

- In just six years geothermal district heating replaced the coal fired system
- Home to 1.8 million people and now the whole city is heated with geothermal
- Higher quality of life, cleaner air and cheaper energy
- Declared China's "First smog free city" and a "National showcase" in 2014
- Selected by IRENA as global showcase in energy transition in 2021



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**THANK
YOU!**

