



RGEC

Rotary Geothermal Energy Converter

Conceptual Rotary Expansion Technology for Geothermal Energy
Conversion (TRL 1)

Call for Collaboration



Enabling distributed geothermal power through rotary expansion physics

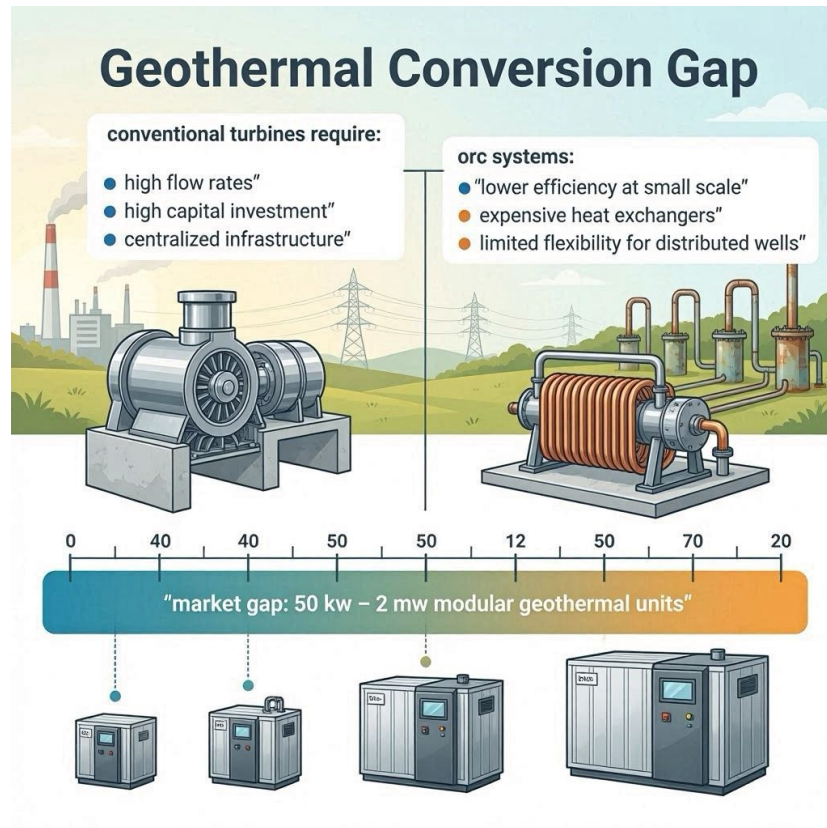
Geothermal energy remains underutilized due to:

- High CAPEX of conventional turbines
- Limited efficiency at small scale
- Complexity in low-to-medium enthalpy wells

Vision:

- Develop a **new class of rotary positive-displacement energy converters** inspired by Wankel kinematics

PROBLEM STATEMENT



- 📌 Market gap: 50 kW – 2 MW modular geothermal units

POTENTIAL APPLICATIONS

- POTENTIAL APPLICATIONS

- Small & medium geothermal plants (50 kW – 2 MW)
- Repurposed oil & gas wells
- Distributed energy systems
- Remote/off-grid industrial power
- Hybrid ORC geothermal systems



PARTNERSHIP OPPORTUNITY (CETP)

- **We are seeking collaboration with:**
 - Universities (CFD, thermodynamics, materials science)
 - Turbomachinery manufacturers
 - Geothermal operators
 - Advanced manufacturing partners
 - EU innovation funding stakeholders
- **Open innovation approach**
 - RamRei Energy offers:
 - Subsurface and geothermal system expertise
 - Well engineering and field integration knowledge
 - Conceptual IP development leadership
 - Partners contribute:
 - Simulation & validation
 - Mechanical design optimization
 - Prototype fabrication
 - Materials testing

Building the next generation of geothermal conversion systems

If successful, rotary expansion technology could redefine distributed geothermal power generation.

Join us in validating a new class of geothermal energy conversion systems under CET Partnership collaboration.

Reinaldo Ramírez

CEO & Founder – RamRei Energy

 info@ramrei-energy.com

EU Projects – CET Partnership Engagement