

EavorTM

National Association of State Trust Lands Annual Conference

July 12, 2022

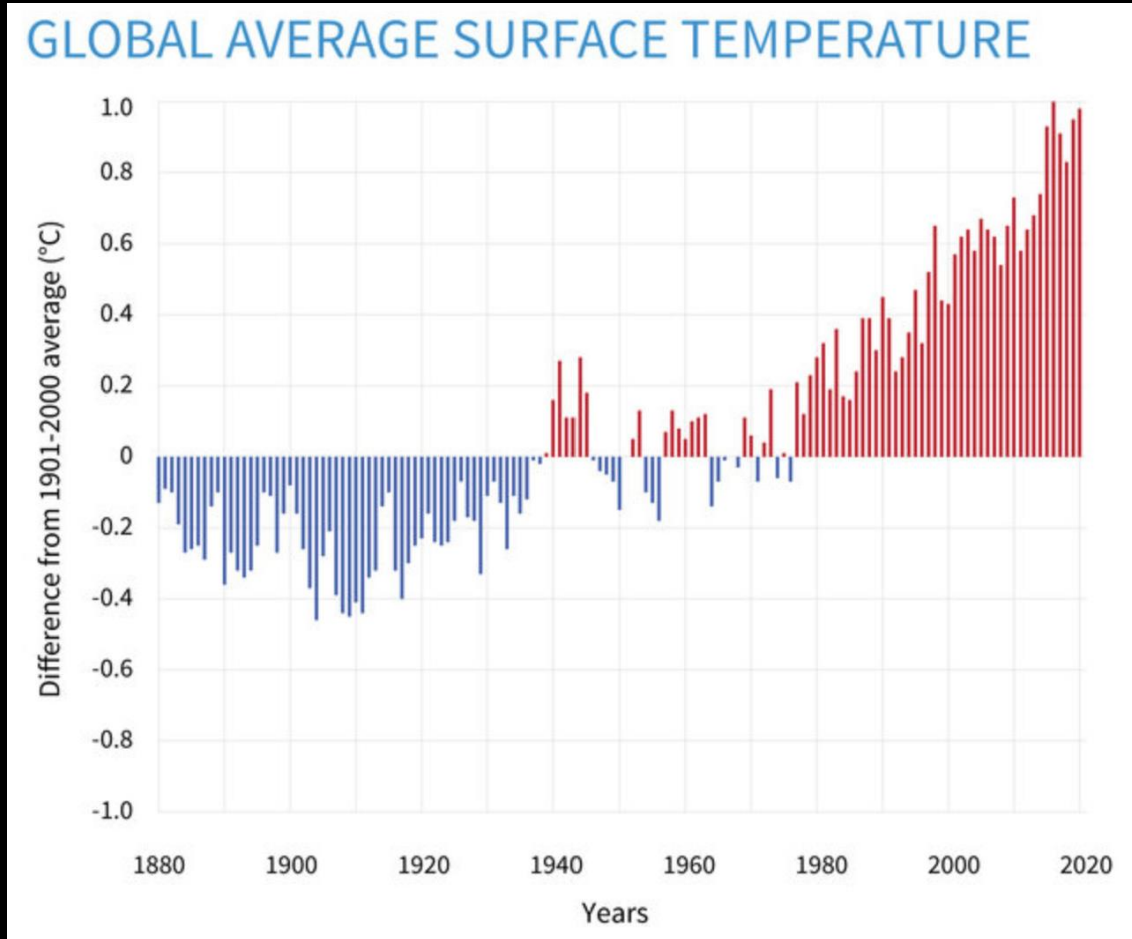




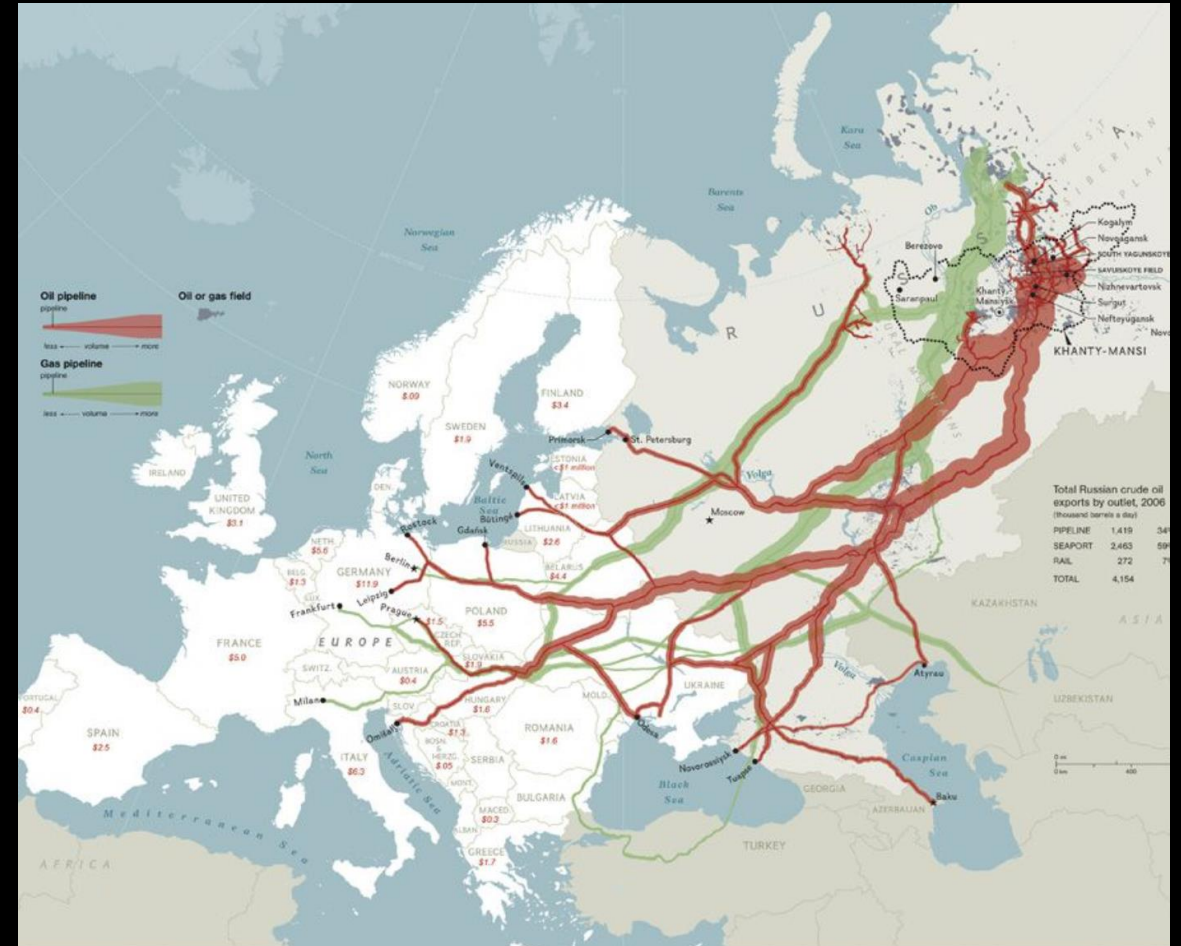
Enabling Local Clean Energy Autonomy. Everywhere.

Two Existential Threats – One Simple Solution

Climate Change

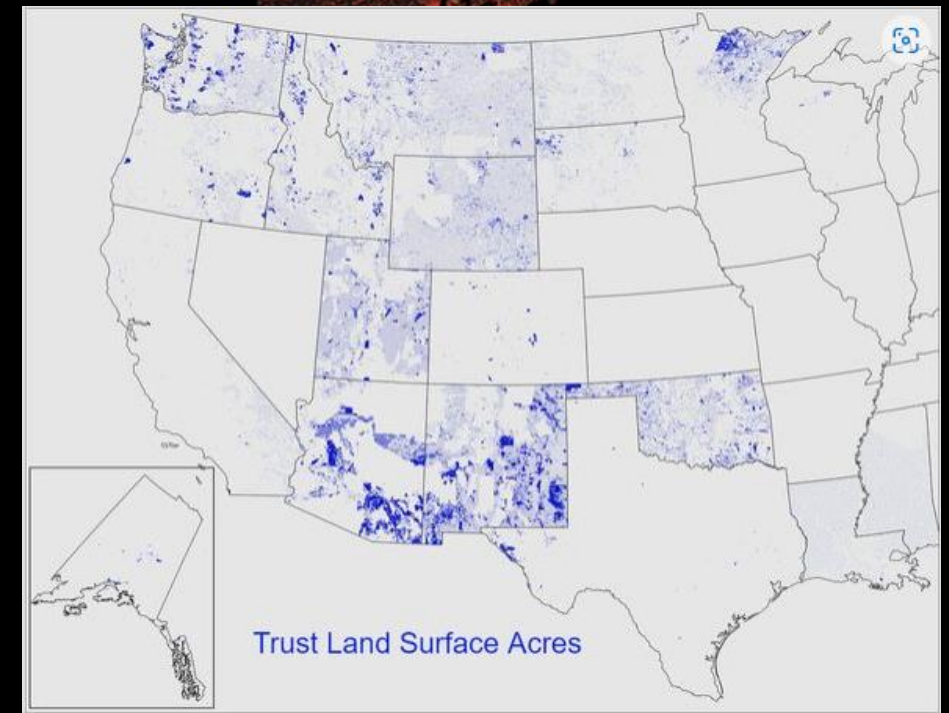


Energy Security

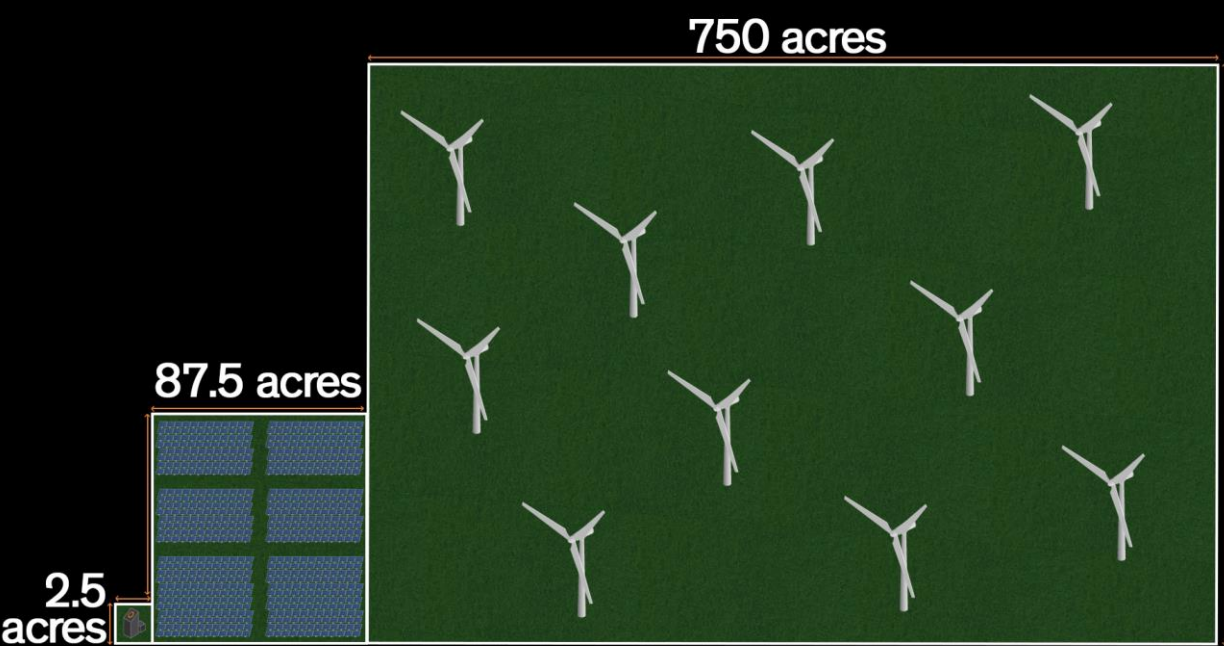


Benefits to State Trust Land Holders

- Royalty payments from revenue generated from a previously unrecognized/unscalable income source
- Maximize the earnings potential of the Trust Lands
- Construction of an Eavor-Loop™ creates up to 100 direct jobs and 300 indirect jobs
- Built with American Personnel – high paying, domestic jobs
- Hardening grid and resiliency by placing supply near demand
- Resource and Water Management
 - Lowest Land Footprint – can be co-located with other renewables
 - Lowest GHG emitting power source
 - Minimal to no continual water use for operations
- Tax Revenue coming into local jurisdictions
- Opportunity to move to energy autonomy



Eavor-Loop™ Footprint vs Wind & Solar



	Land Use Capacity (MW _{peak} / ha)	Capacity Factor	Land Use Generated (MW / ha)
Wind – USA	0.03 ¹	0.35 ²	0.01
Solar – USA	0.32 ³	0.29 ³	0.09
Eavor-Loop™ (sedimentary, average gradient)	3.23	0.98	3.17

1. Land-Use Requirements of Modern Wind Power Plants in the United States; NREL, 2009 <https://www.nrel.gov/docs/fy09osti/45834.pdf>
2. EIA, 2021: https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_6_07_b
3. 2018 generation of top 35 largest US solar plants, <https://www.freeingenergy.com/math/solar-pv-land-acres-hectares-miles-m118/>

Reliable Baseload / Firm Power

- The Eavor-Loop™ capacity factor is essentially 100% when operating to produce baseload / firm power

Therefore...

- For the same surface land use, Eavor-Loop™ is expected to generate at least 35x more power than solar and 300x more than wind

Why Eavor?

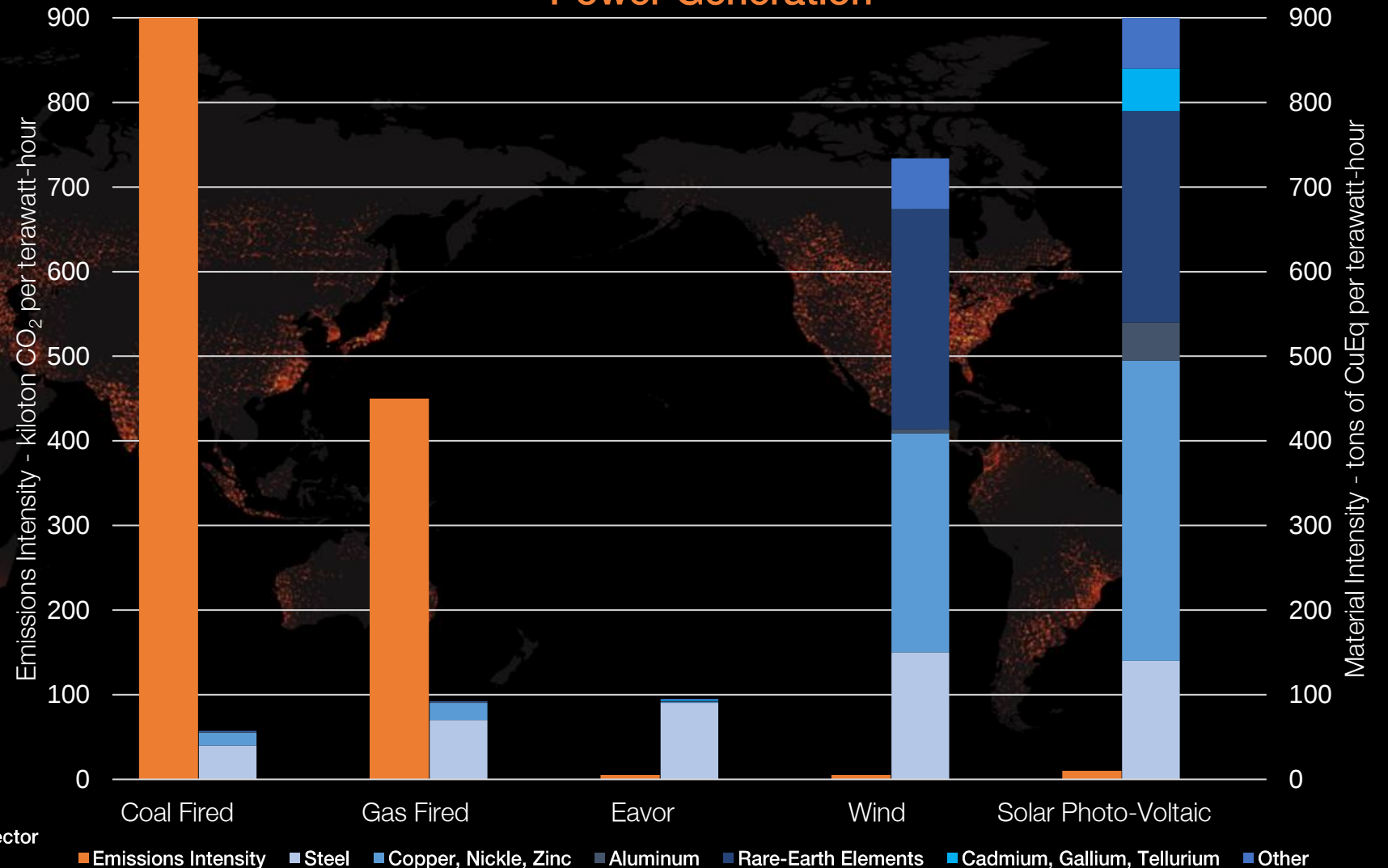
Eavor is Clean and:

- Scalable
- Firm
- Lossless-Load-Following
- Distributable / DER
- Predictable
- Low Footprint
- Heat, Cooling & Power
- No Mining Tail

Only Eavor Enables:

- Decarbonization of direct heat, direct cooling & electricity
- Local energy resilience, independence, security & autonomy

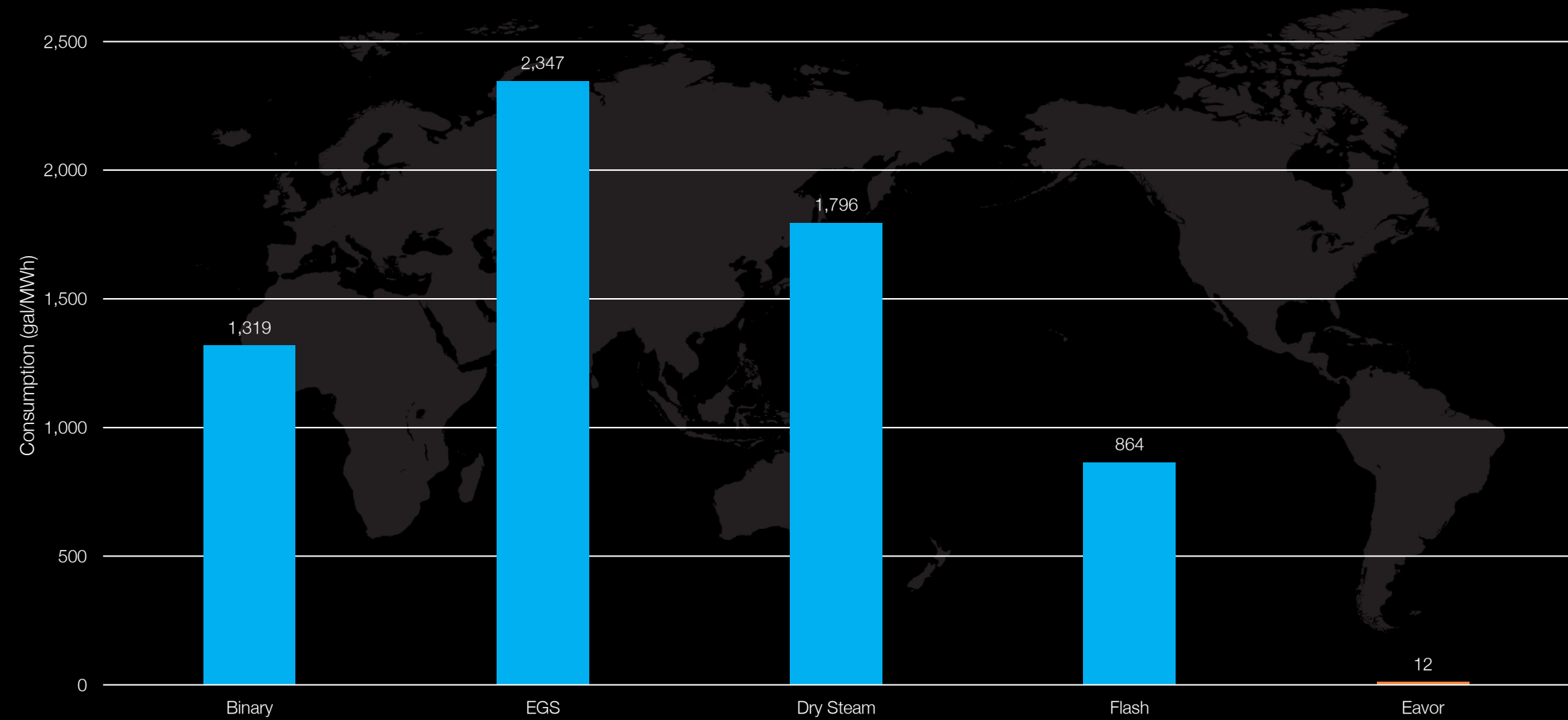
Only Eavor Delivers Low Emissions & Materials Intensity for Power Generation



Source: McKinsey

The raw materials challenge: how the metals and mining sector will be at the core of enabling the energy transition, 2022

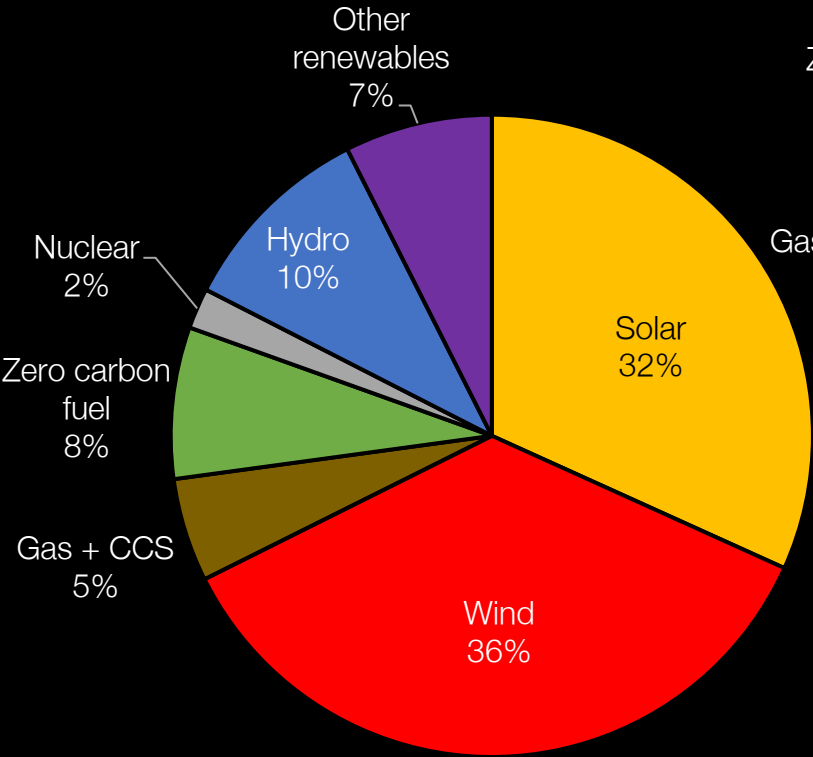
Geothermal Lifecycle Water Consumption Comparison



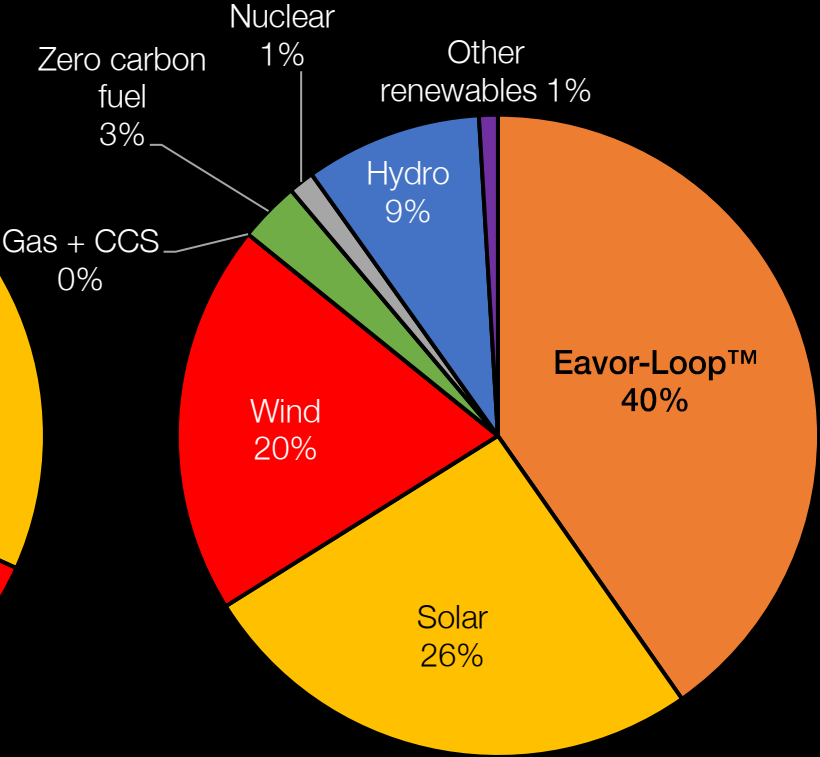
1. Non-Eavor geothermal values are averaged median data from NREL [Review of Operational Water Consumption and Withdrawal Factors for Electricity Generating Technologies \(nrel.gov\)](https://www.nrel.gov/docs/2018/04/64747.pdf)
2. Eavor data assuming an 8 MW_e facility using Eavor-Loop™ Hard Rock geometry, including water consumption for drilling and system setup

Eavor-Loop™ Market Potential

US Western Interconnection Grid Case Study



No Eavor



With Eavor

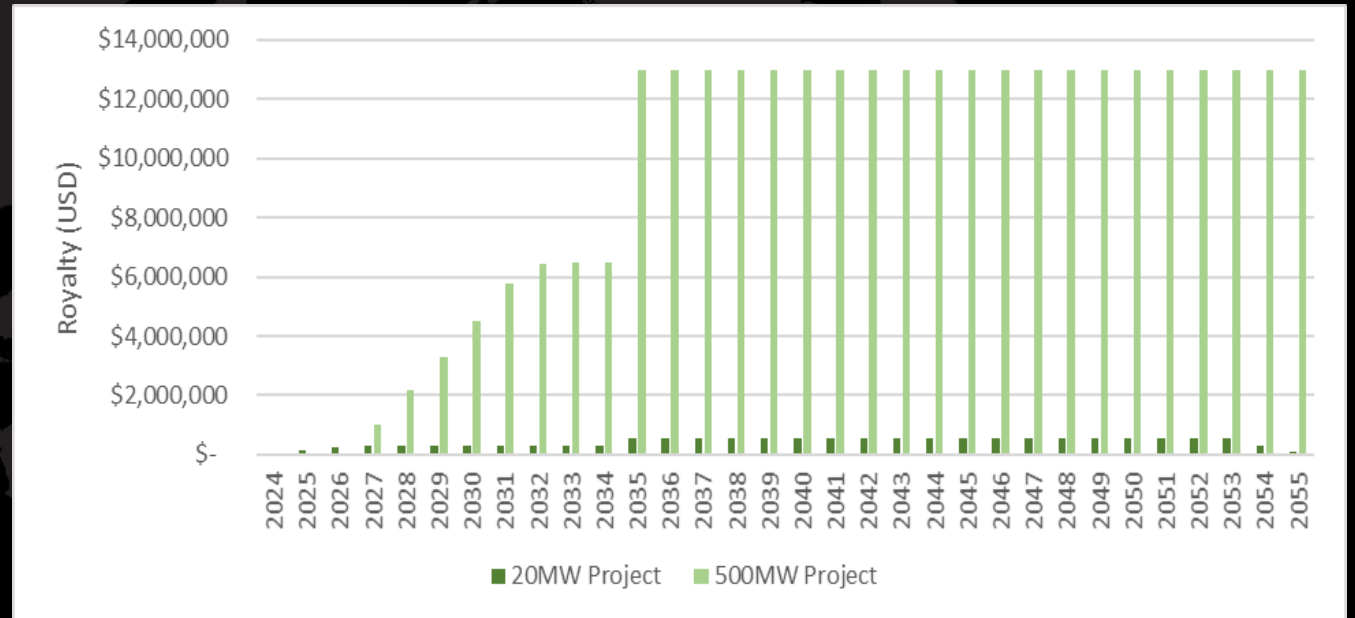
Electricity Resource Capacity Expansion Model

	No Eavor	With Eavor
Annual system cost (US \$B)	\$95.6	\$75.4 (-21%)
Total system capacity (GW)	504	394 (-22%)
Land requirement (million acres)	5.2	3.0 (-43%)

Potential Royalty Income

- Assumptions of \$90/MWh
- Royalty rate of 1.75% for first 10 years, 3.5% afterwards
- 30 years
- Cumulative royalties at the end of the 30-year project life are
- \$13.6 million for the 20MW project
- \$337.4 million for the 500MW project

Annual Royalty Payments to Trust Lands



Eavor Overview

Founded in 2017 on one a simple bet:

- 1) *The Future of Energy is Geothermal!*
- 2) *The Future of Geothermal is Eavor (aka closed-loop)*

Eavor went “all in” on this bet 5 years ago,

- *That decision is looking more prophetic every day...*

- CAD \$115 million raised to date (led by SG Inc)
- Assembled a world class R&D team
- Eavor-Lite™ demonstration running since 2019
- Partners: bp, Chevron, Temasek, BHP, H&P, BDC
- Current project portfolio proves the market

A World Class Team

Founders & Leadership



Board of Directors



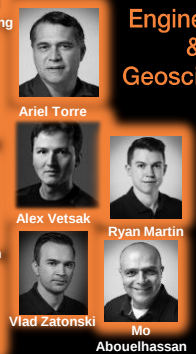
Advisors



Area Representatives & Business Development



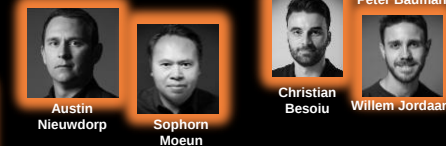
Engineering & Geosciences



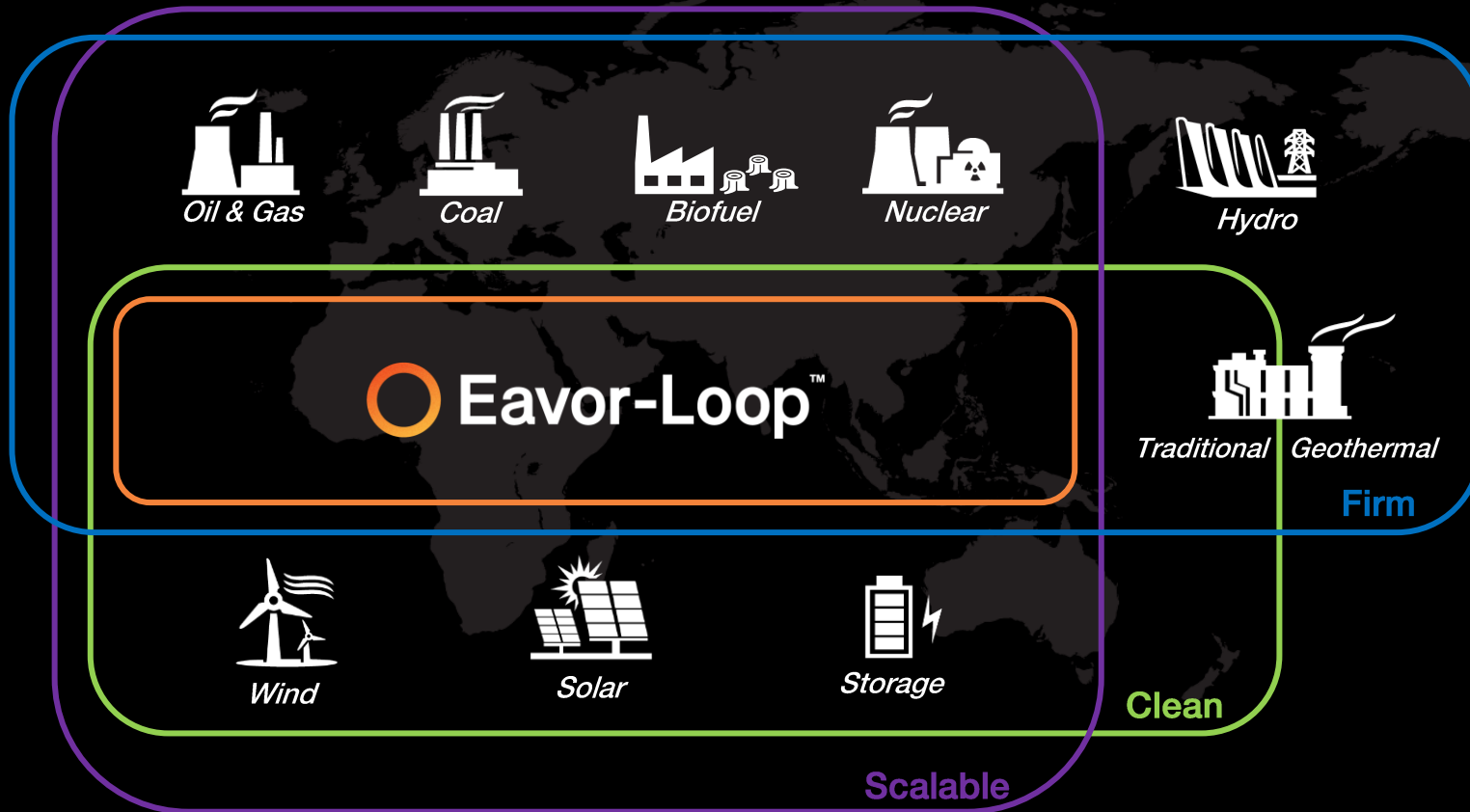
Germany



Finance

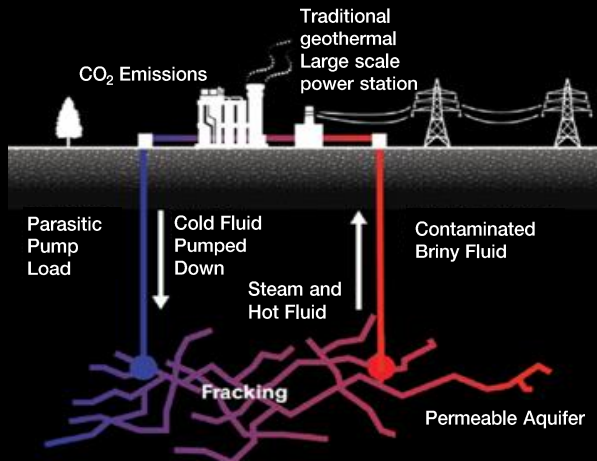


Eavor-Loop™ : A New Energy Category

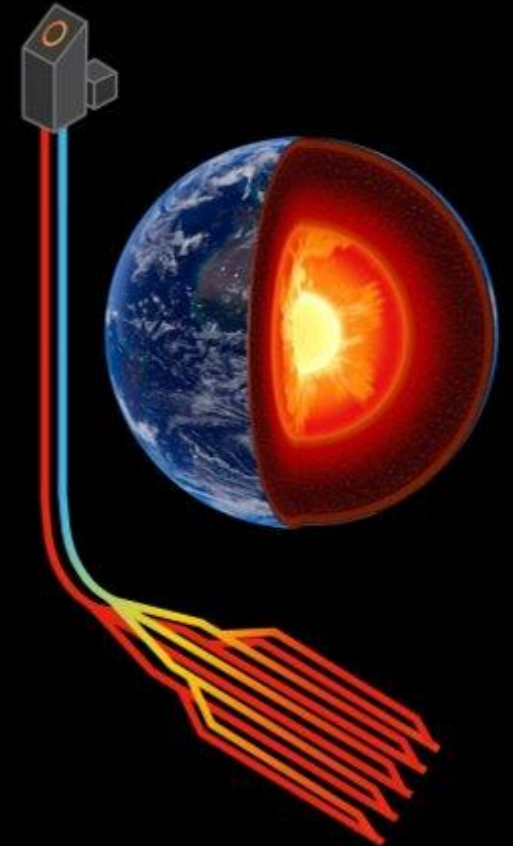


The world's first & only viable form of **firm, clean, lossless-load-following & scalable** energy

Eavor-Loop™ vs Traditional Geothermal



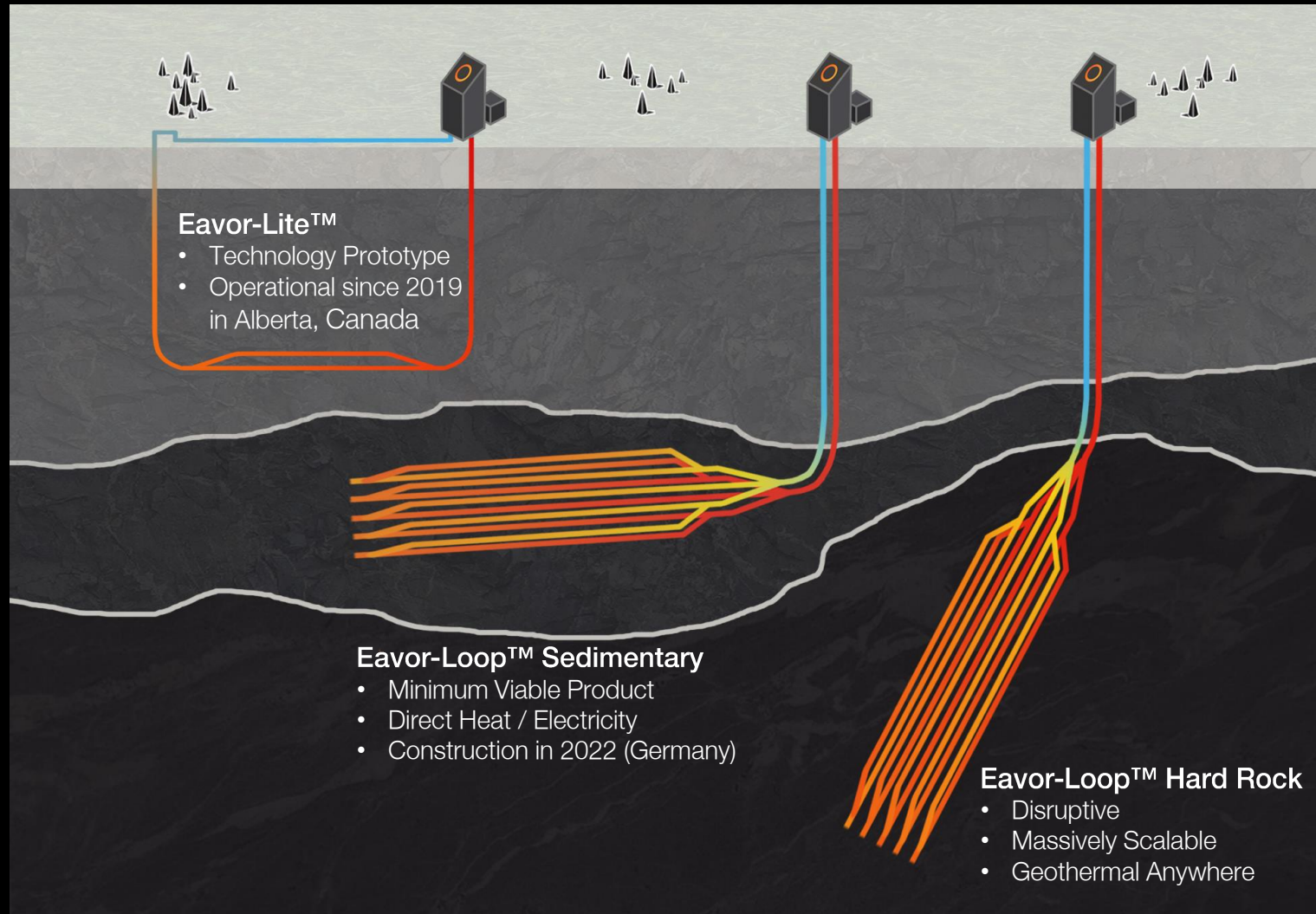
Traditional Geothermal	Eavor-Loop™
Open System: water flows through reservoir, fluid exchange between system & reservoir	Closed System: Working fluid circulates in isolation from reservoir, no fluid exchange
Requires a permeable aquifer & hot convective zone	No need for permeable aquifer
Requires an electric pump to circulate brine; parasitic load	Driven by natural thermosiphon, no pumping required
Can require fracking to increase flow	No fracking required, no induced seismicity
Can produce GHGs & CO ₂ with produced brine	No GHGs or CO ₂
Continuous water use & ongoing treatment required	Minimal continual water use, no production brine requiring treatment
OPEX can be greater than CAPEX over life of project	OPEX is ~80% less than traditional geothermal
Large uncertainty in thermal output	Low thermal output risk or uncertainty
Project cycle time typically 5-10+ years	Project cycle time ~2 years
Firm	Firm & lossless-load-following



Eavor's Technology Advancement

Eavor-Loop™ is:

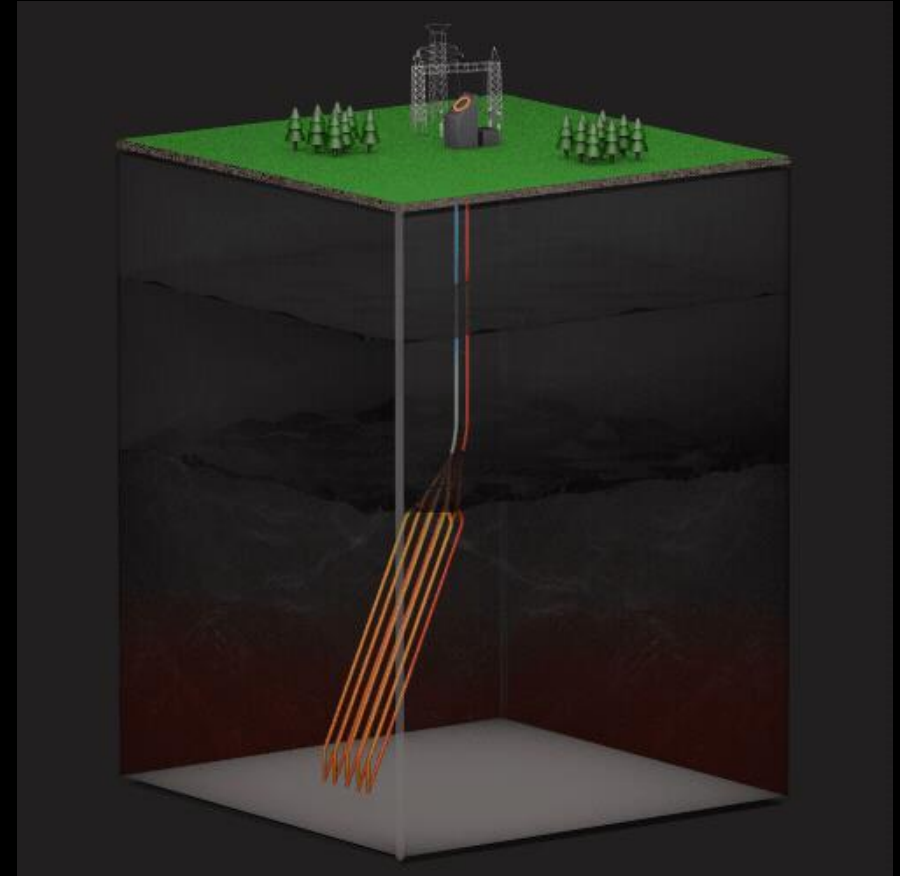
- Net Zero
- Carbon Free
- Firm
- Lossless-Load-Following
- Scalable



Eavor's IP-Centric Commercial Model

Eavor will enable Eavor Everywhere by Everyone!

- Eavor's **Patents** can ensure “freedom to operate” for All
 - Eavor will license this IP to any qualified operator
 - Developer or Operator biz model is more closed than Eavor's
 - We're open as need bp, Chevron, BHP, Temasek, etc to scale
- Eavor will also provide tools and services where needed
 - Proprietary Drilling and Construction Technology
 - Rock-Pipe™ to eliminate Casing
 - Insulated Drill Pipe for Shock Cooling
 - Enhanced Magnetic Ranging Tools
 - System and Surface Facilities
 - Optimized modular ORCs
 - Modelling software and control algorithms
 - Design Blueprints and Performance Guarantees
- **This is hard**, but we can provide the patents, services, tools assets and even land for Eavor Everywhere for Everyone

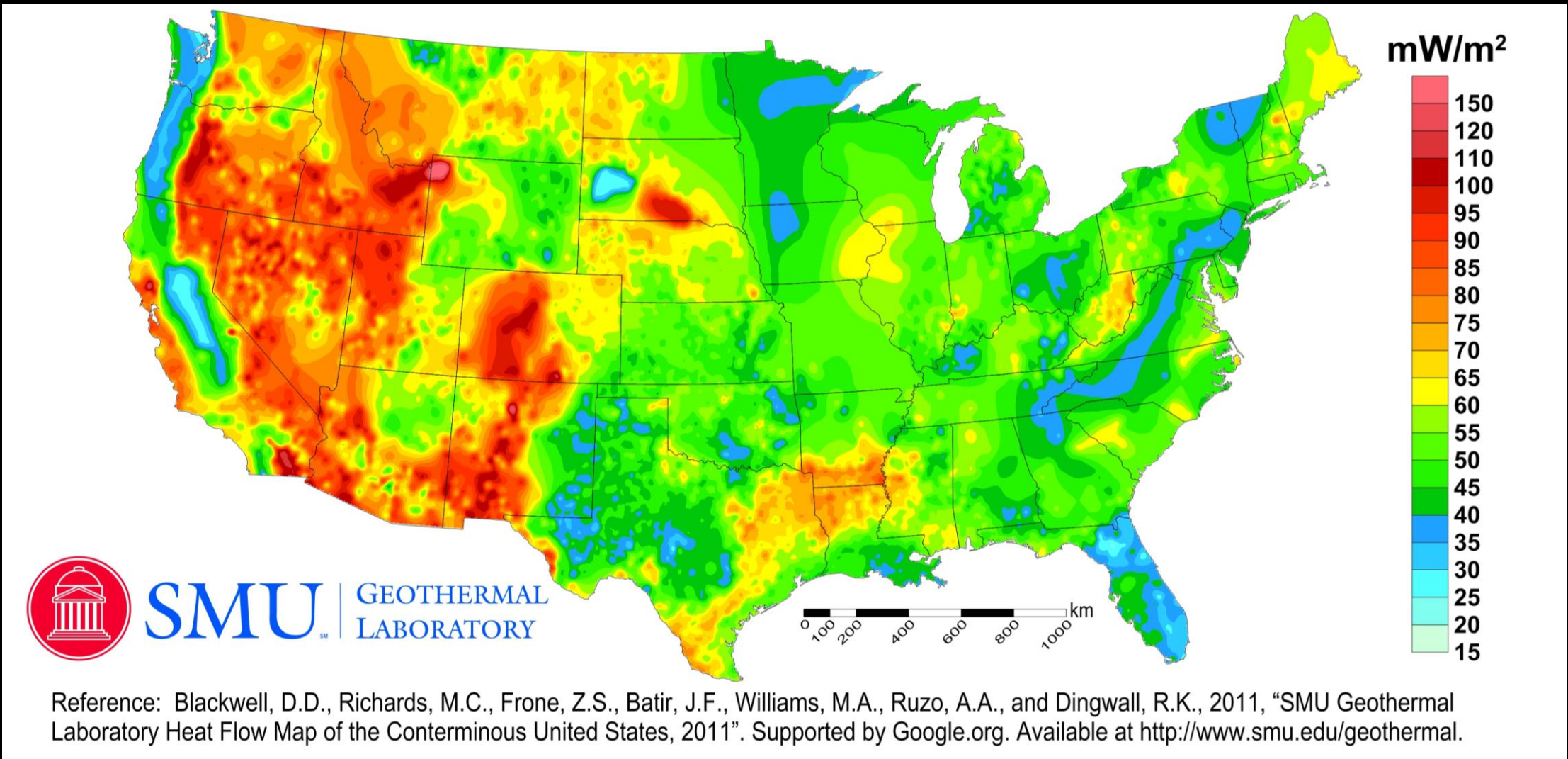


Eavor-Loop™ Applications

	Minimum Viable Application*	Preferred (Proactive) Application	1st Commercial
	2 MW _e electricity project	GW scale electricity projects with 20-year PPA or FIT	Any project where FID and well spud are possible by the end of 2023
	District heating in cities & towns with 100,000+ people	District heating in cities with 500,000+ people, where the district heating network already exists and is fed by a fossil fuel plant that is due for closure within 5 years	
	Combined heating and power (CHP) with 1 Eavor-Loop™ minimum	15 Eavor-Loop™ minimum upside	
	Combined cooling heating & power (CCHP) with 1 Eavor-Loop™ minimum		
	Agricultural & industrial heating with minimum demand of 15 MW _{th}	15 Eavor-Loop™ minimum upside including CHP with excess power going to the grid	

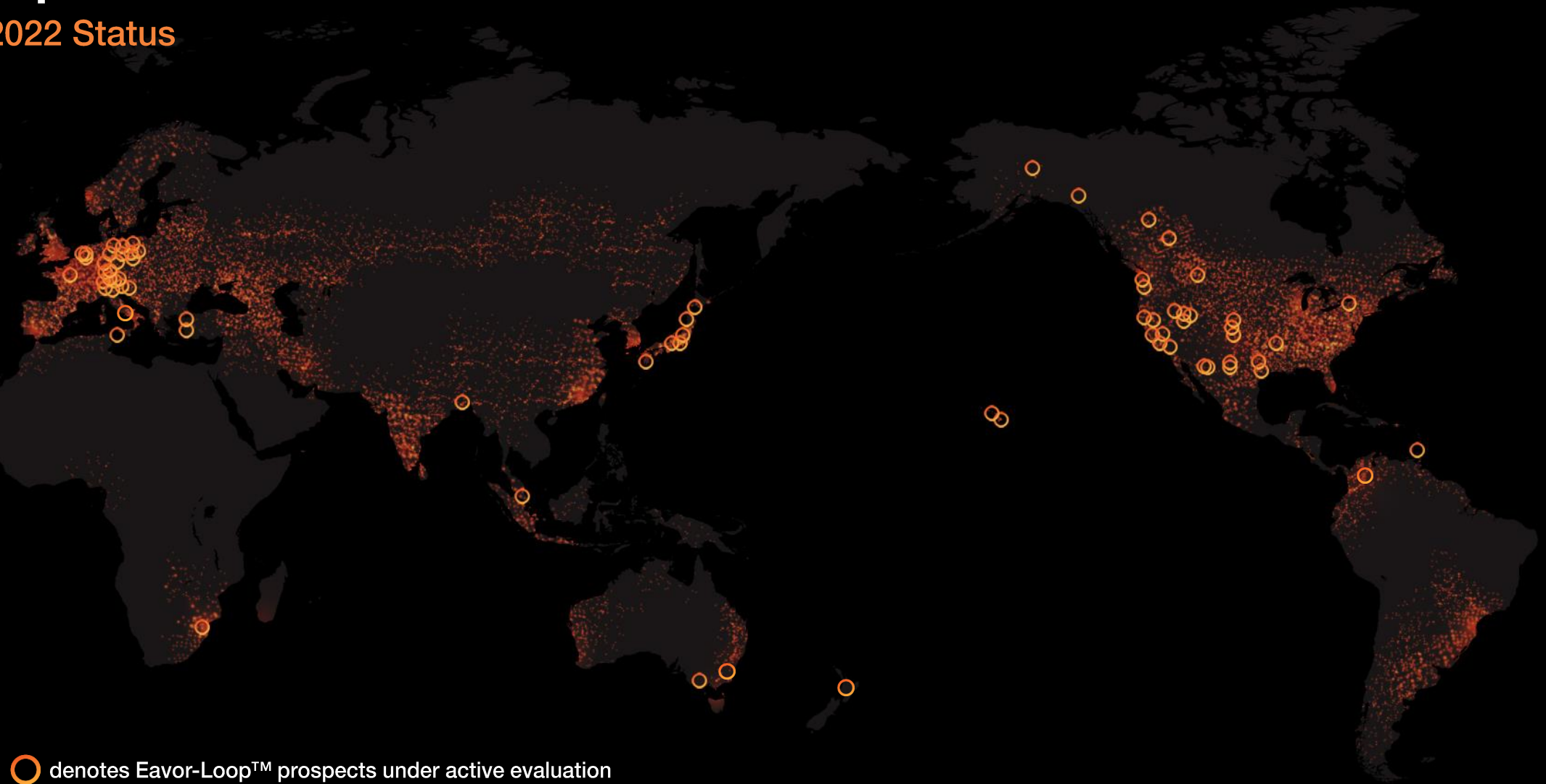
*Ideally a minimum of 3 Eavor-Loops to secure economies of scale on the first well pad

Heat Flow Map



Prospect Portfolio

2Q – 2022 Status



○ denotes Eavor-Loop™ prospects under active evaluation

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Energy For Eavor™