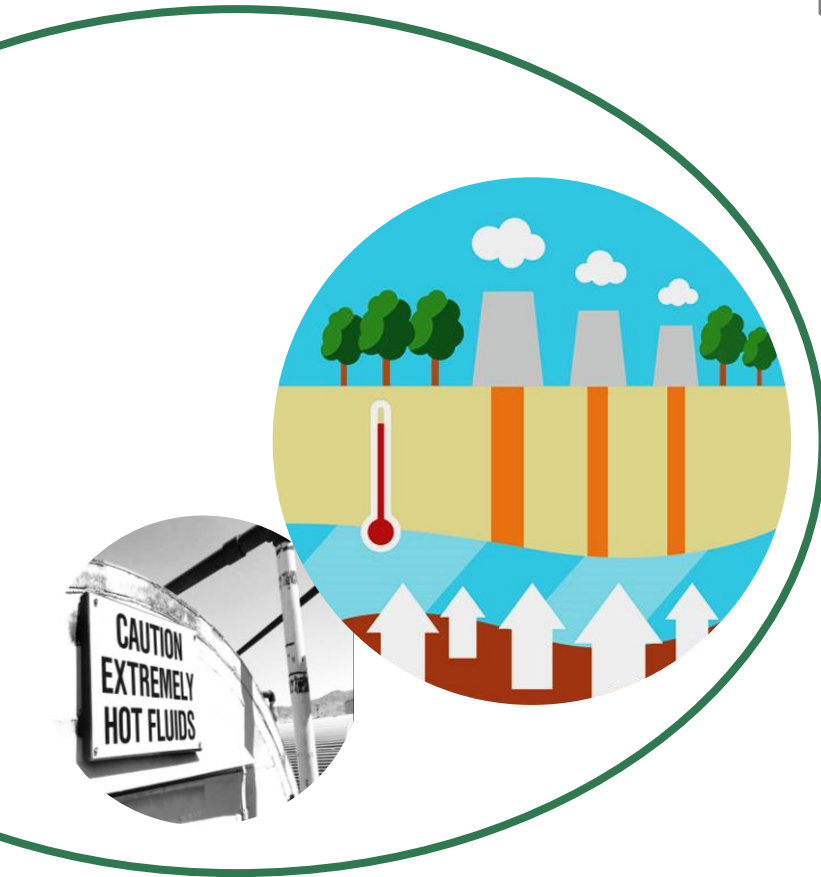


Bridging the Energy Gap

Geothermal Energy from Oil and Gas Wells

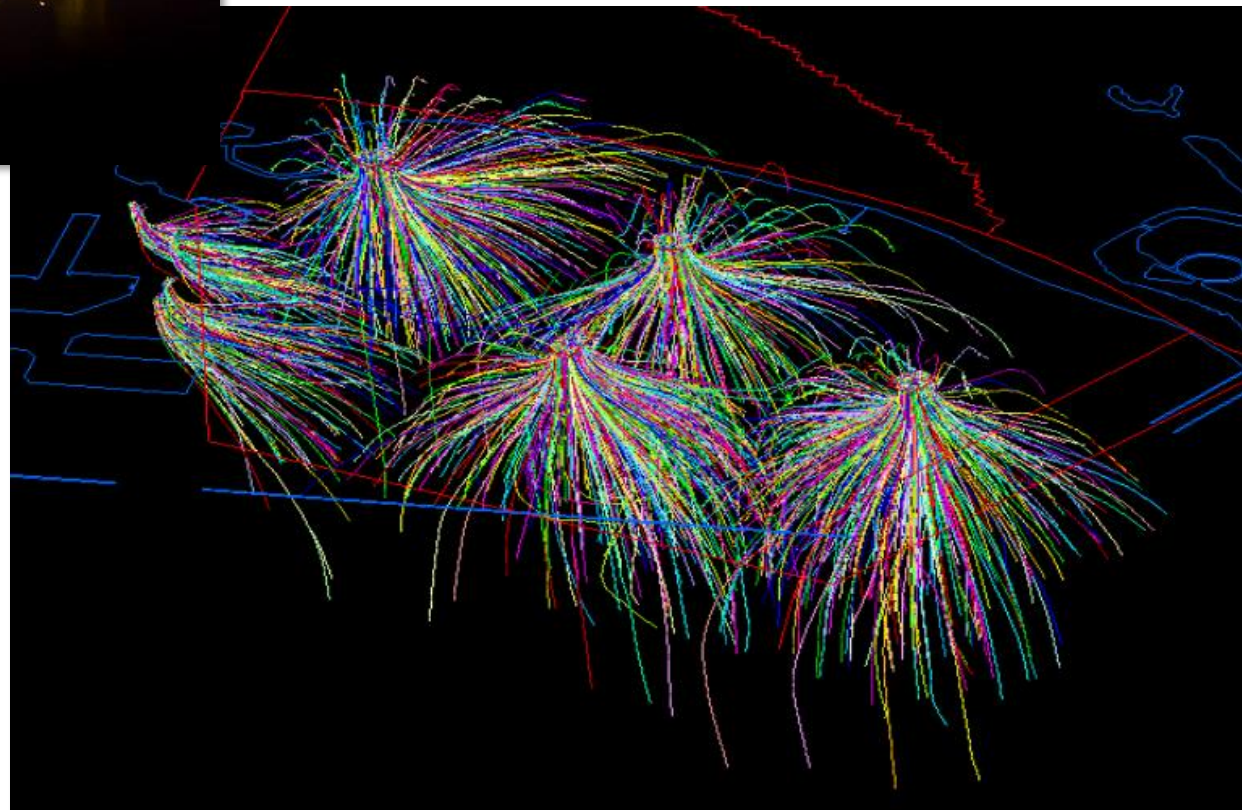


Salina J. Derichsweiler, CEO of Transitional Energy
RMEHSPG Q4 2021



THUMS Oil Islands
Long Beach, CA

ADAM BENWELL



Big Oil Race to Reduce GHG Emissions

***Dutch Court Rules Oil
Giant Shell Must Cut
Carbon Emissions by 45%
by 2030***

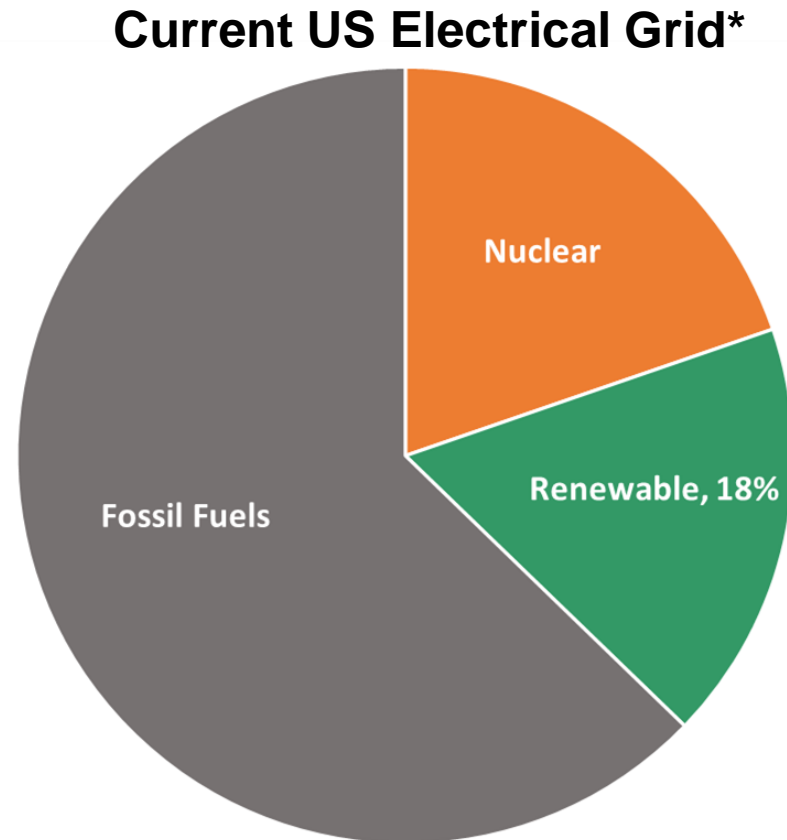
-CNBC, May 26, 2021

Exxon Lost a Climate Proxy Fight

Bloomberg.com

Reduce Carbon Emissions

- Affordable, Abundant Energy with the Least Environmental Impact
- Just Energy Transition from Fossil Fuels to Renewable Energy



Geothermal is Baseload and Dispatchable

**Grid Reliability
with
Extreme Weather**

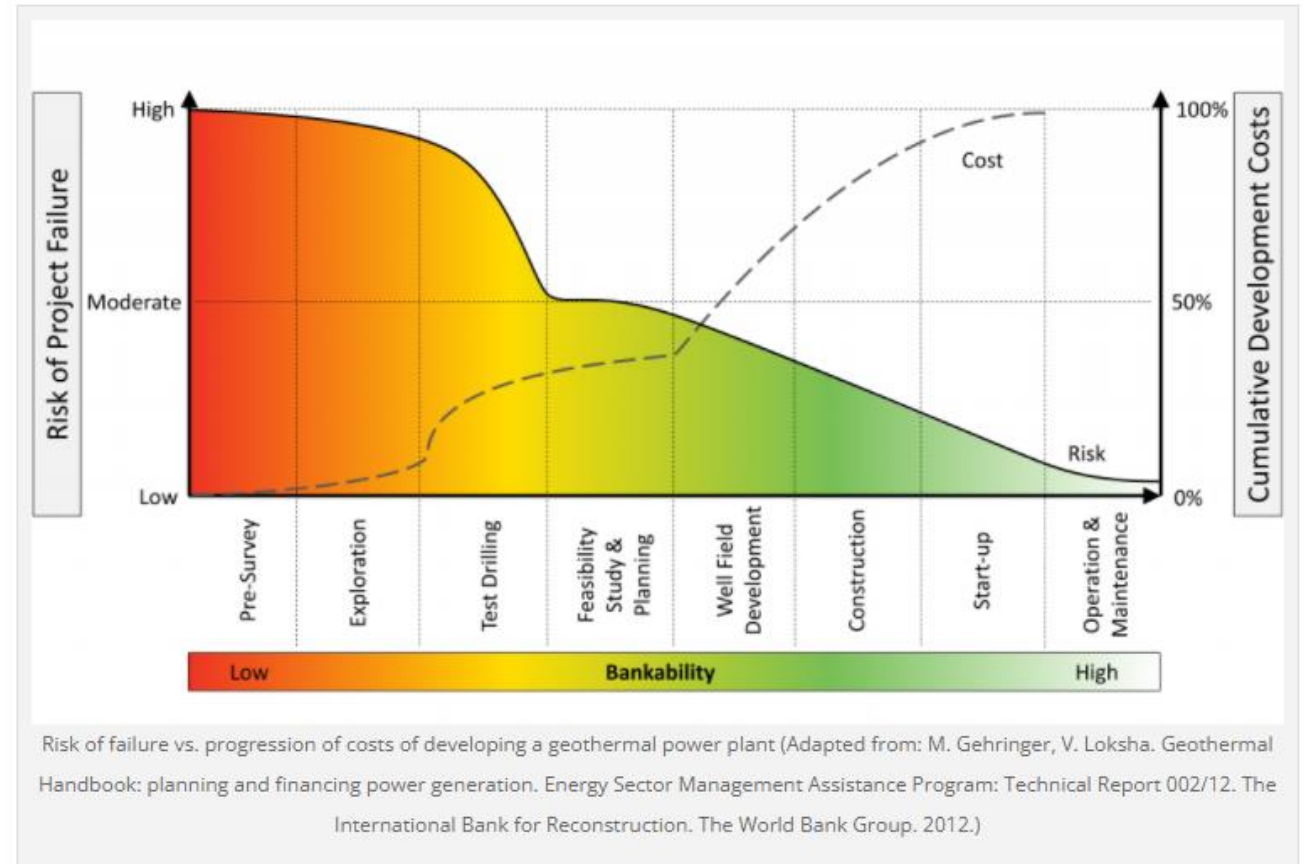


Wind and Solar are Intermittent and Non-Dispatchable

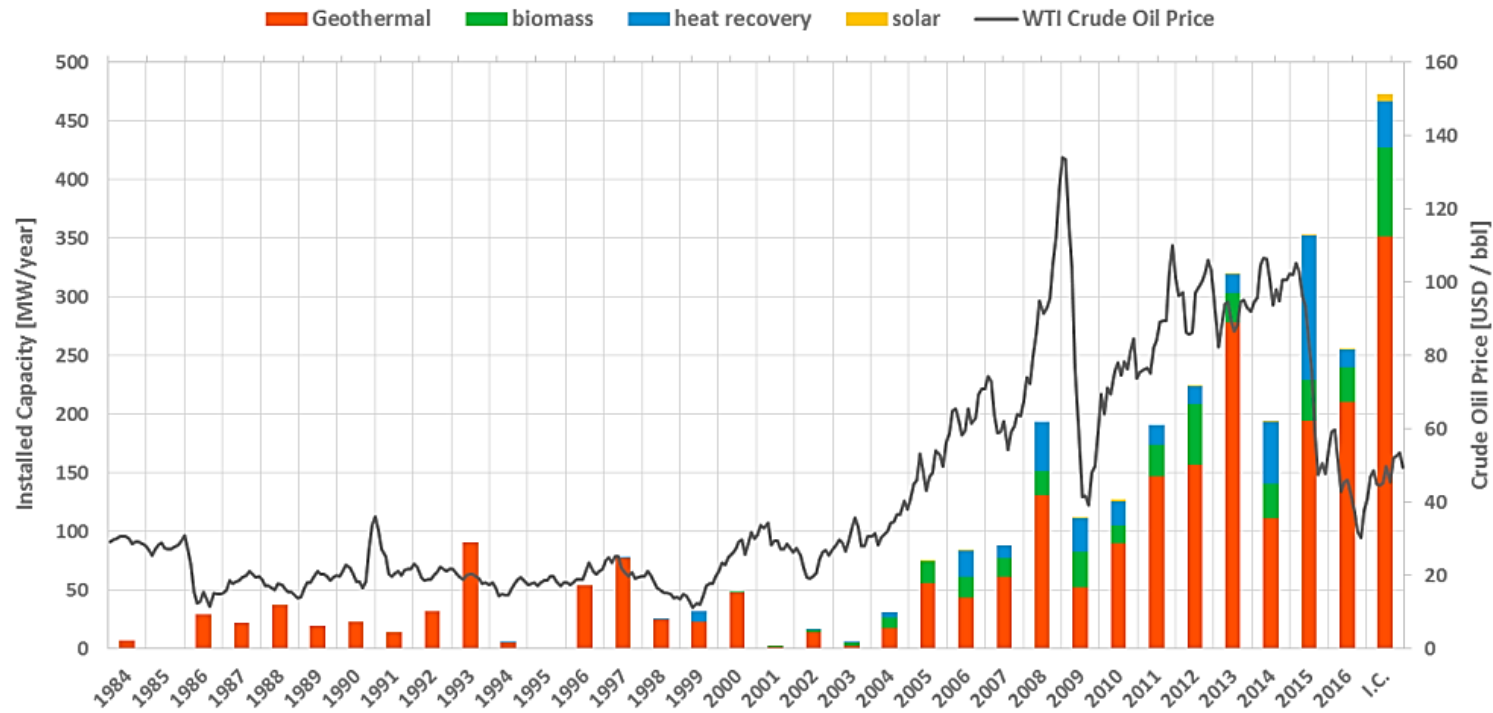


High Temperature Geothermal

- Temperature Range: $\gg 400^{\circ}\text{F}$
- High development cost due to exploration and drilling
- 7-year project development timeframe

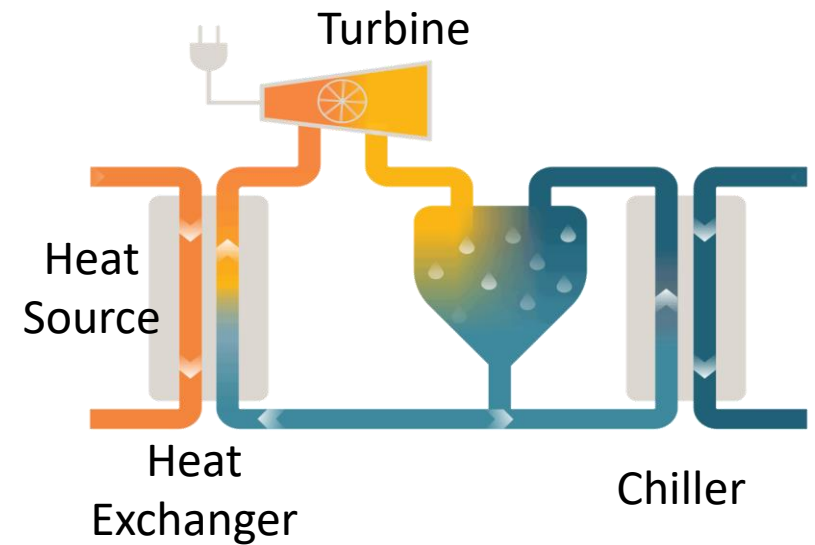


Geothermal Technology Advancements

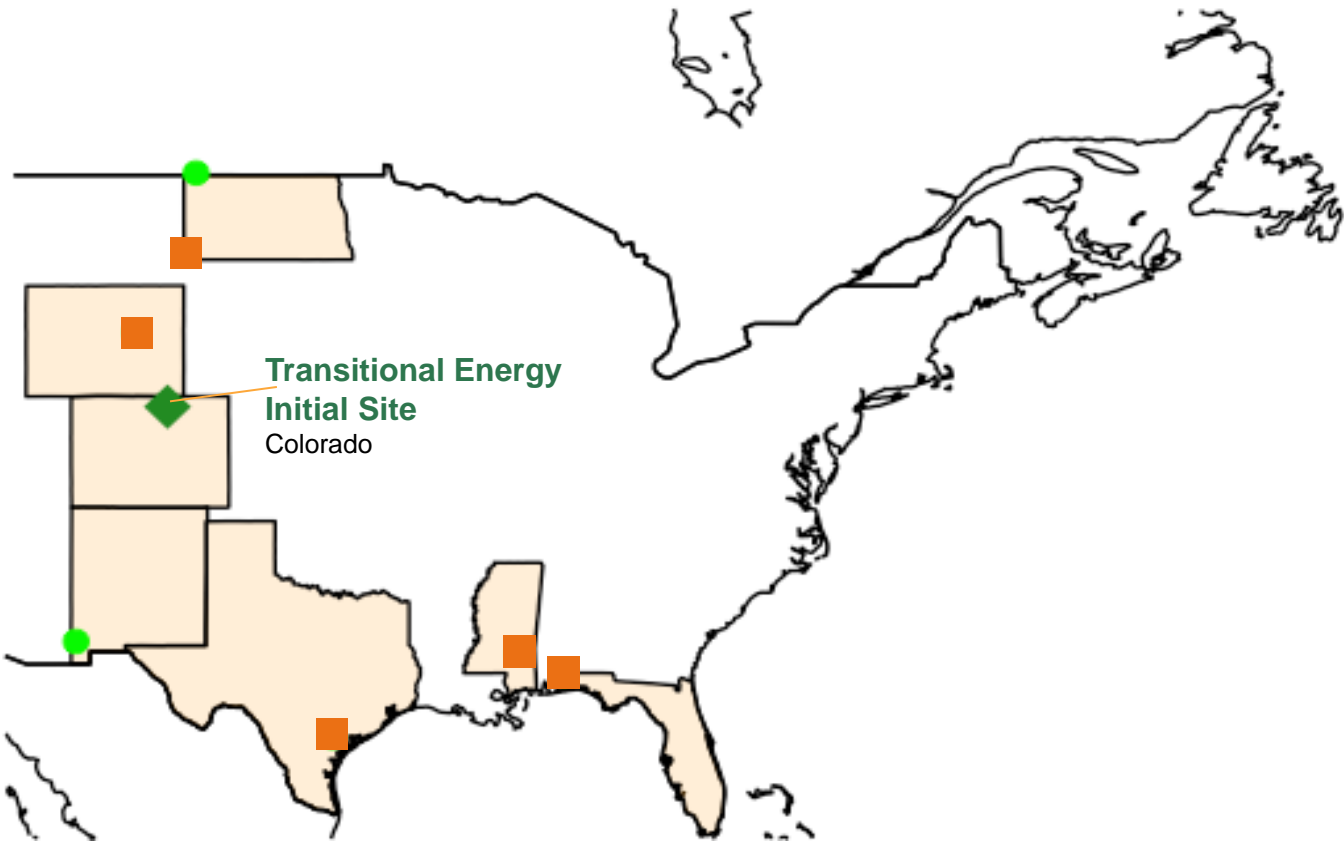


2.7 GW Installed Capacity from 1,754 ORC Plants

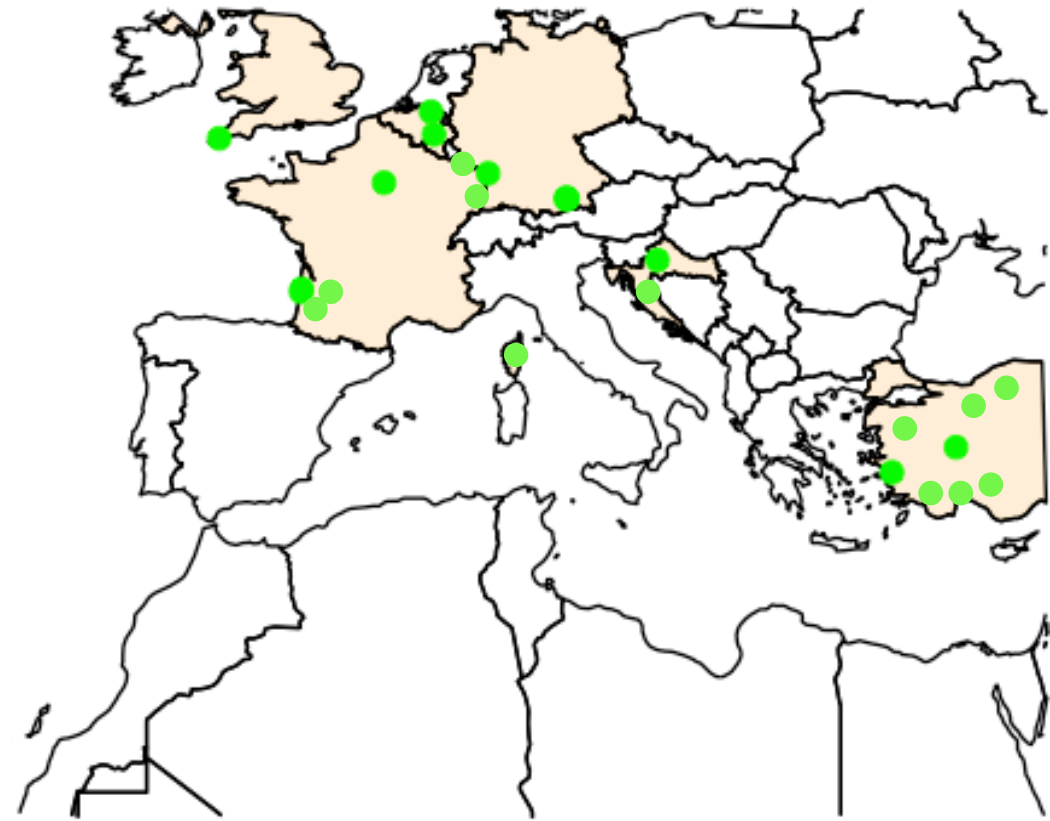
- Lower Temperature: 150°F to 300°F
- Modular in Size: 6 ft x 6 ft x 9 ft



USA 2010-2020: Shale Boom



Europe 2010-2020: Renewable Portfolio Standards



- Active ORC Generation
- Prior ORC Testing Sites

Modular Geothermal Application

Repurposing

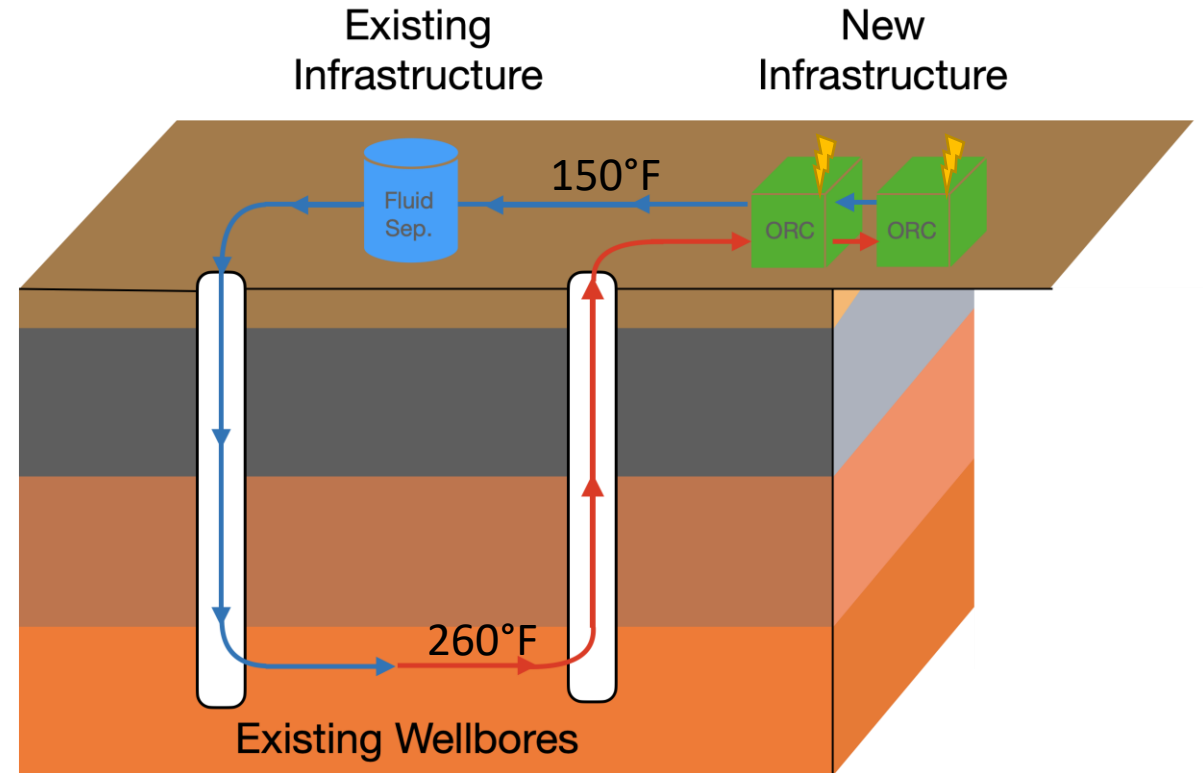
oil & gas to long-lived renewable assets

Leveraging

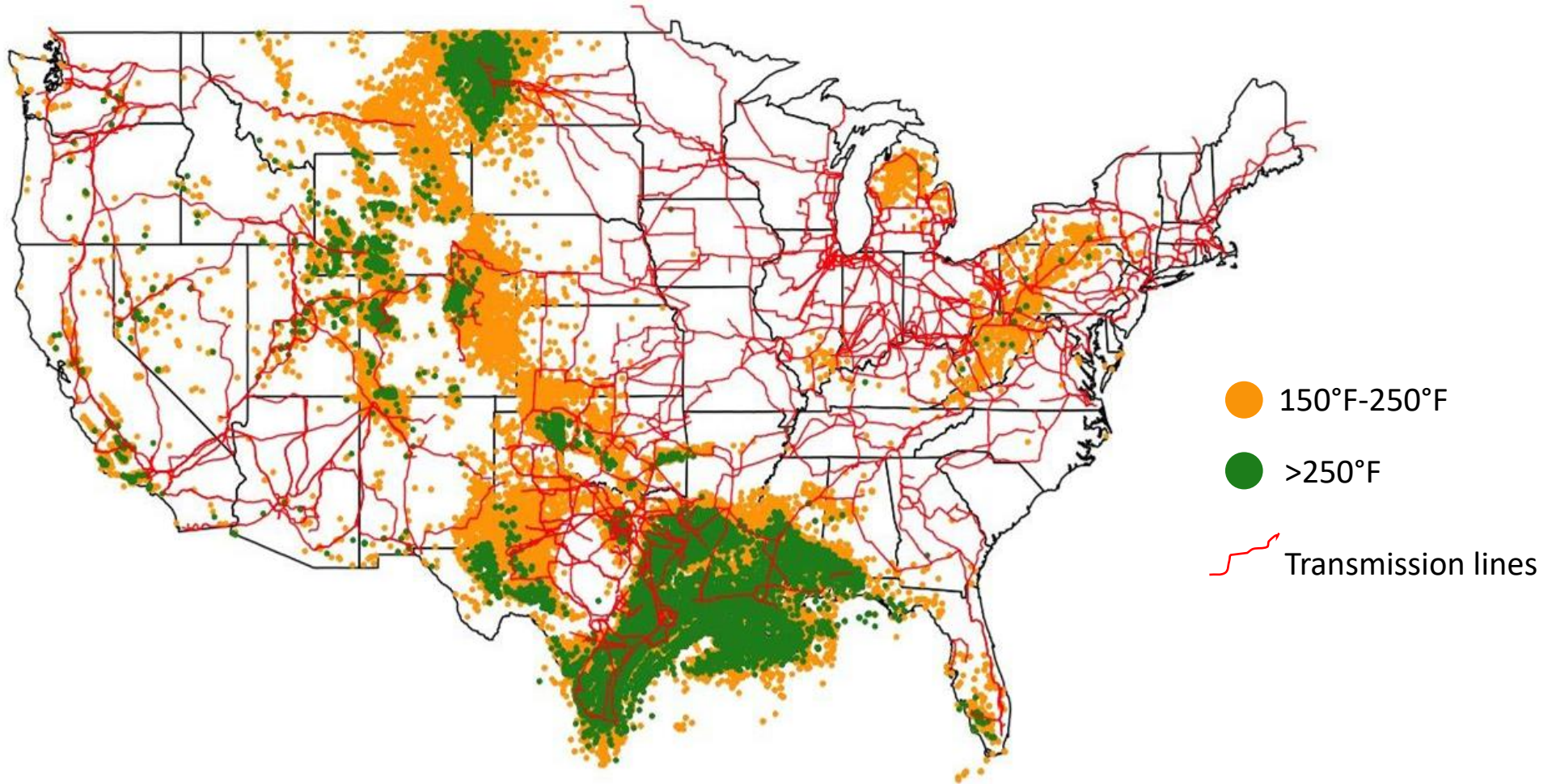
proven off-the-shelf ORC technology

Generating

cost-competitive renewable electricity



More than 1 Million Existing Wellbores with Requisite Temperature



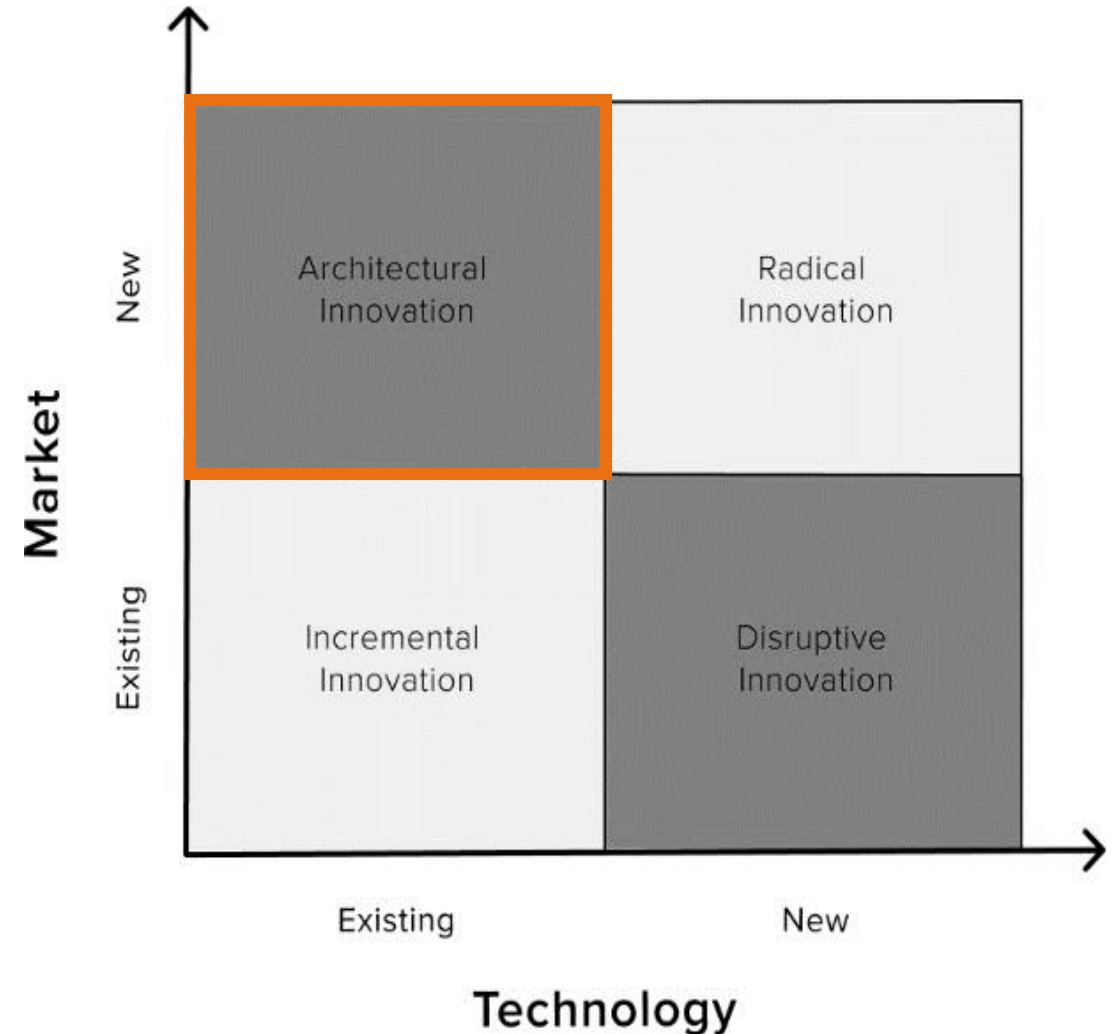
Opportunities for Oil and Gas Operators

- Modular Geothermal Solutions
 - Power equipment onsite with a carbon negative power solution
 - Cools fluids prior to entering pipelines
 - Opportunities for net metering with utility
- Greenhouse Gas Emissions Reduction
 - Replacing diesel generation and associated emissions
 - Reducing or eliminating utility power use on site and replacing with renewable energy
- Tax Credits
 - R&D Tax Credits
 - Dollar-for-dollar tax savings that directly reduces a company's tax liability
 - Renewable Energy Credits



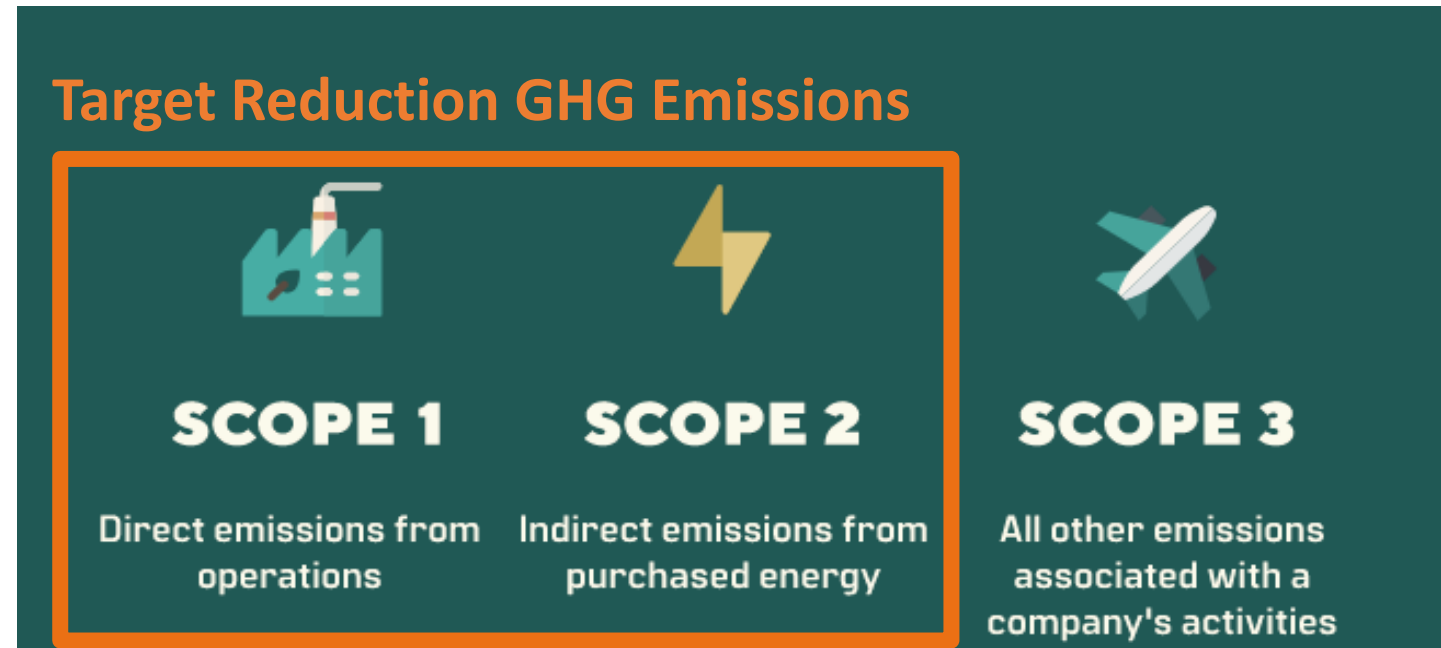
Just Energy Transition

- Reduce, Recycle, Reuse
 - Life cycle and environmental impact
- Convert waste streams to profit streams
 - Heat waste to power generation
 - Mining of geothermal brines
- Apply Solutions in Transitional Spaces by Combining:
 - Assets/Infrastructure
 - Knowledge
 - Technology
- Cross-train Energy Work Forces
- Stakeholders and Community Impact of Energy Transition



Geothermal Energy from Oil and Gas

- Modular Geothermal Solution
 - Convert Heat Waste to Energy
 - Reuse Infrastructure and Wellbores
 - Recycle Water in the Oilfield
 - Clean Power Generation Onsite and Net-Metered Back to the Grid
- Enhanced Energy Recovery
 - Conversion of Oilfields to Clean Geothermal Power Generation
 - Solution for Orphan Wells and End of Life Assets
 - Potential fund for P&A Liability?
- Just Energy Transition
 - Professionals and Communities



Bridging the Energy Gap



Transitional ENERGY



Converting Oilfields to Clean Power Generators

www.transitionalenergy.us
info@transitional.energy

Primarily Women Owned, 57 Years Combined

CEO



Salina Derichsweiler, MBA

- Energy Start-ups, Public, Private
- Water/Thermal Flooding and Operations
- Management and Business Development

CTO



Benjamin Burke, MBA, PhD

- Energy Start-ups, Environmental Consulting
- Geochemist and Data Scientist
- Management & Technical Leader

COO



Johanna Ostrum

- Regulatory & Government Relations
- Operations & Wellbore Integrity
- Reservoir Engineer & Geologist

Awards & Grants



2020 EMERGING CLEANTECH COMPANY



Awarded Advanced Industry
\$500,000
Energy & Infrastructure Grant

Transitional Energy Services

Geothermal Co-Production Package

- Thermal Resource Evaluation
 - Use Case Evaluation and Associated Economic Analysis
 - Applicable Tax Credits and Incentives
 - Project Carbon Accounting
- Fit for Purpose Design
 - Specific Design for Targeted Deployment
 - ORC Selection and Electrical Package
- Geothermal Commercialization
 - Direct Use and/or Power Generation
 - PPA Negotiation
 - Development of Strategic Take-away Partners
- ORC Installation and Monitoring
 - Regulatory and Permitting Assistance
 - Remote Monitoring

