

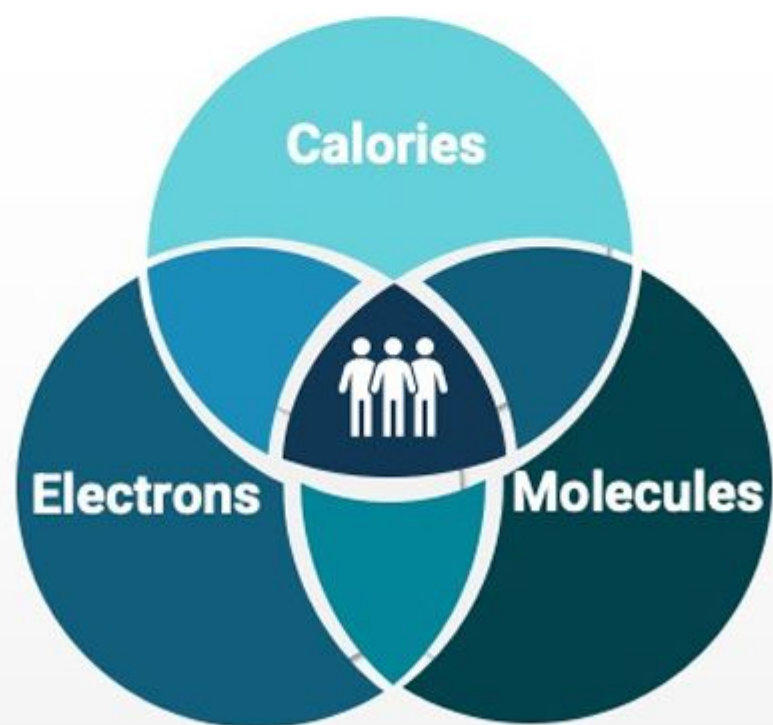


UTAH OFFICE OF  
**ENERGY DEVELOPMENT**

# Emerging Energy Policy Framework and Considerations



# HUMAN-CENTRIC ENERGY POLICY FRAMEWORK



# PRINCIPLE-BASED STRATEGIC FRAMEWORK





### Energy Cost/MWh vs Systemic Costs

Levelized Costs (Lazard)



# Energy Cost/MWh vs Systemic Costs



# Strategic Energy Framework



01	Preserve Existing Supply	<ul style="list-style-type: none"><li>• Defending Utah's Energy Security</li><li>• Technological Improvements</li><li>• Improving Political Certainty</li></ul>
02	Develop New Supply	<ul style="list-style-type: none"><li>• Targeting Proven Technologies</li><li>• Enabling Infrastructure Development</li><li>• Evaluate &amp; Streamlining Regulatory Process</li></ul>
03	Adopt Emerging Technologies	<ul style="list-style-type: none"><li>• Data Driven, Policy Considerations</li><li>• Targeted Development Process</li><li>• Utah Competitiveness</li></ul>





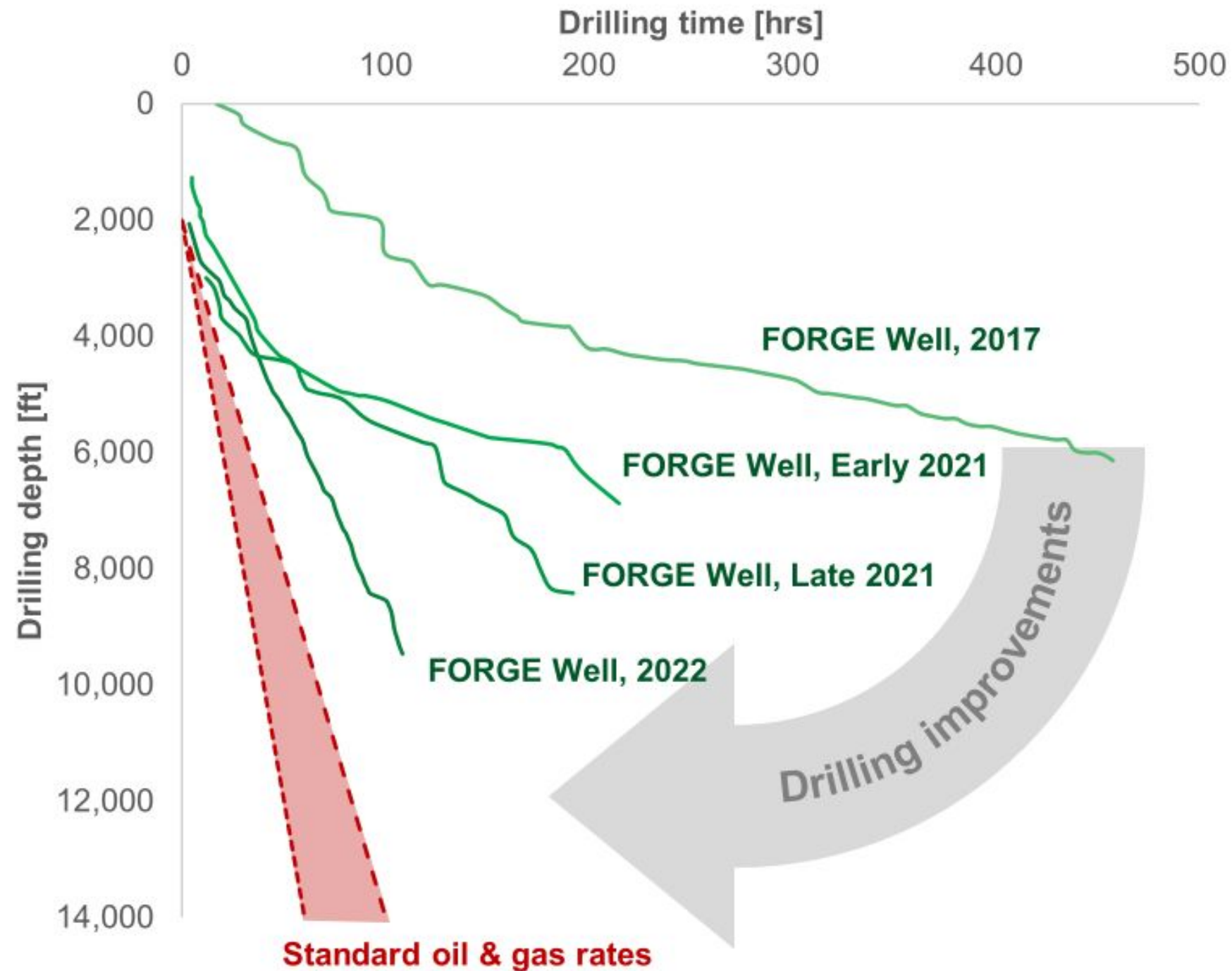
# 9 Step Emerging Technology Framework

1. Assign Development Specialists
2. Conduct Stakeholder Outreach
3. Identify Viable Sites
4. Determine Gaps
5. Leverage Data Collection and Analysis
6. Secure supportive Grants and Other Funding
7. Consult with Industry and Regulatory Experts
8. Monitor and Evaluate Project Implementation
9. Continue Improvement

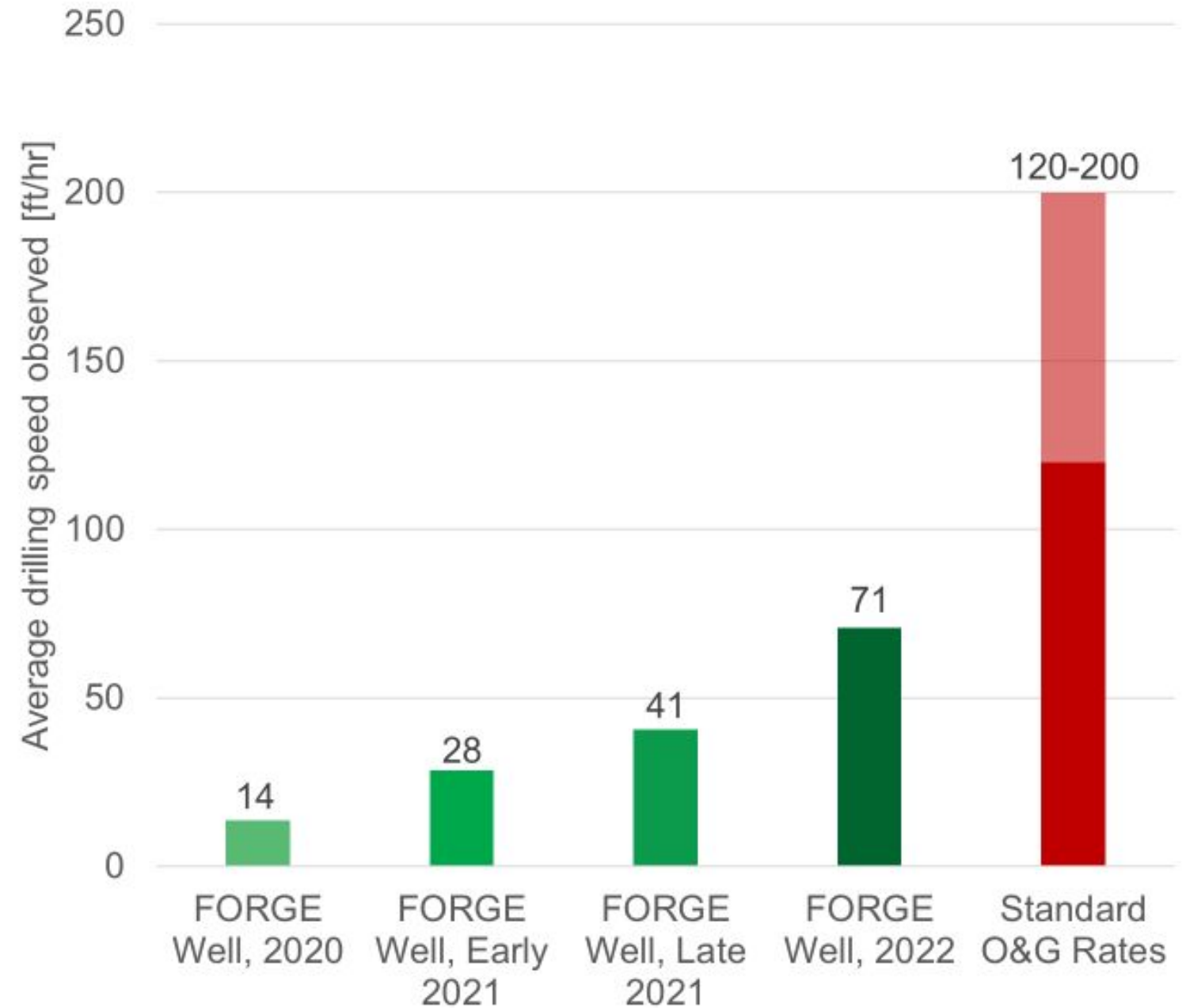


# Drilling timelines have shown remarkable improvement in 3 years, driving cost reductions

Drilling timelines at DOE FORGE demonstration site



Average drilling times at DOE FORGE demonstration site



Potential reduction in national average overnight capital costs for Enhanced Geothermal Systems, \$/kW

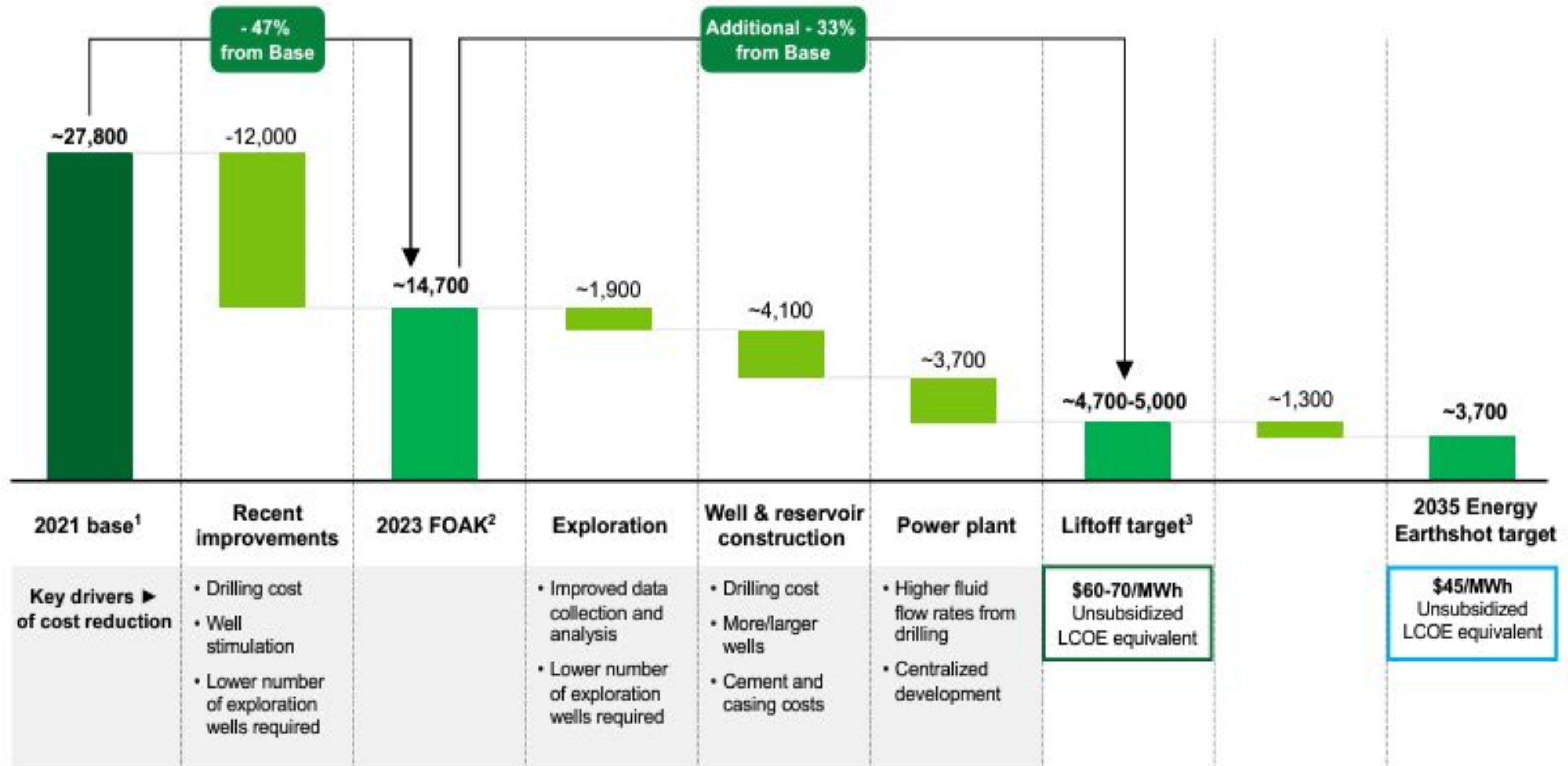
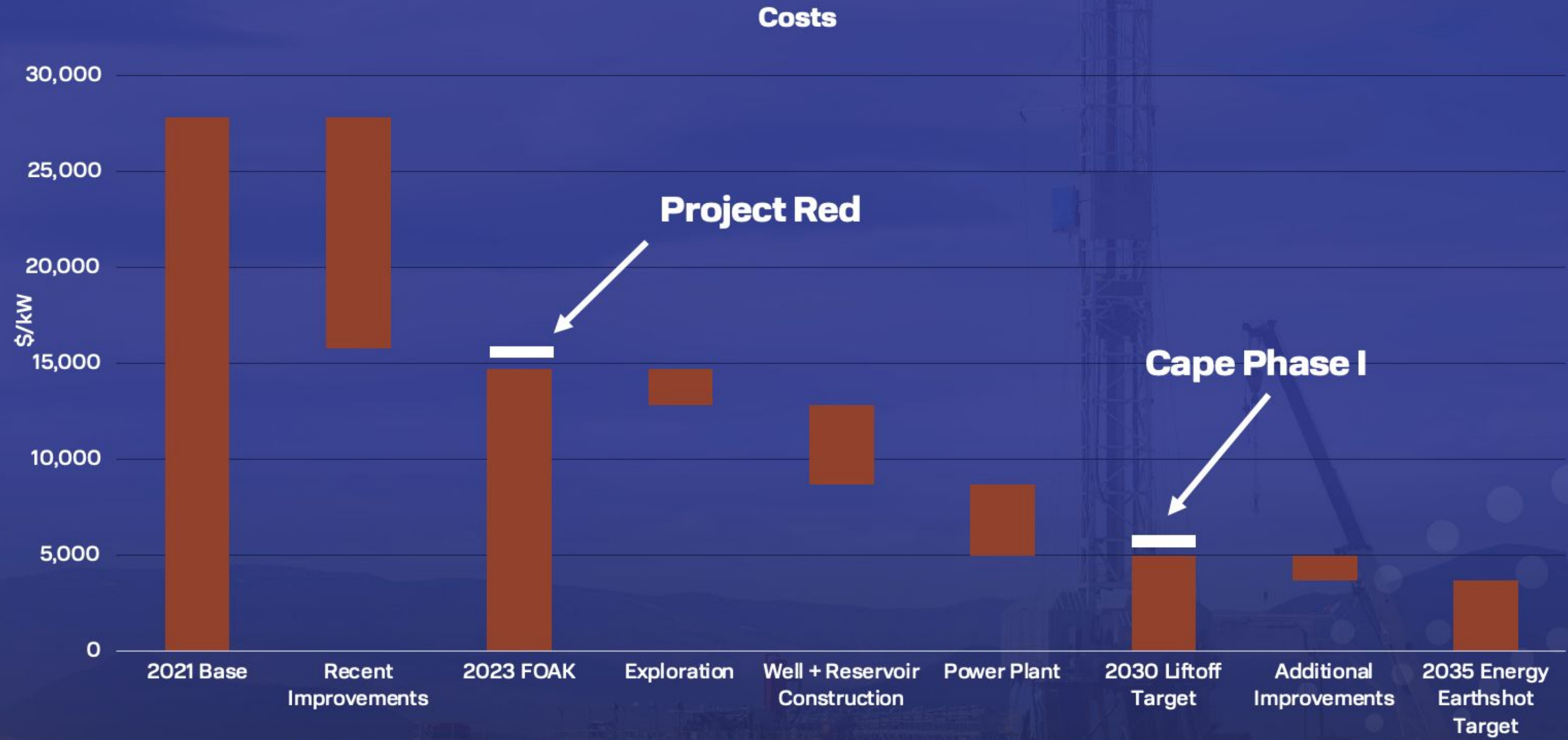


Figure 11: Cost reduction waterfall for EGS

j Notes: 1. NREL ATB 2021 Base Case 2. NREL ATB Advanced Case 3. 2030 target based on trajectory to Energy Earthshot 2035 target







Source: Department of Energy Geothermal Liftoff Report (2024)





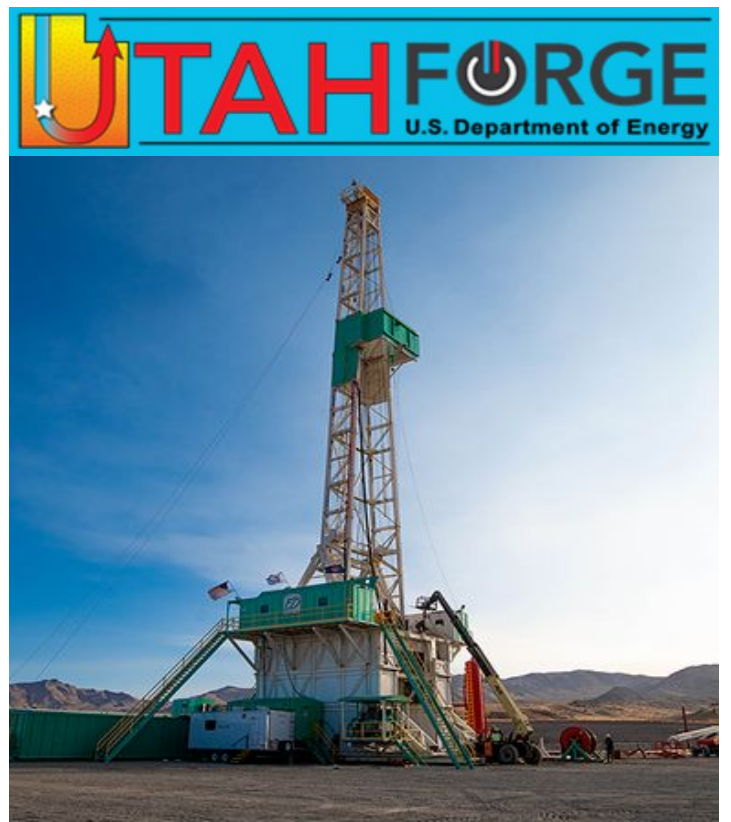
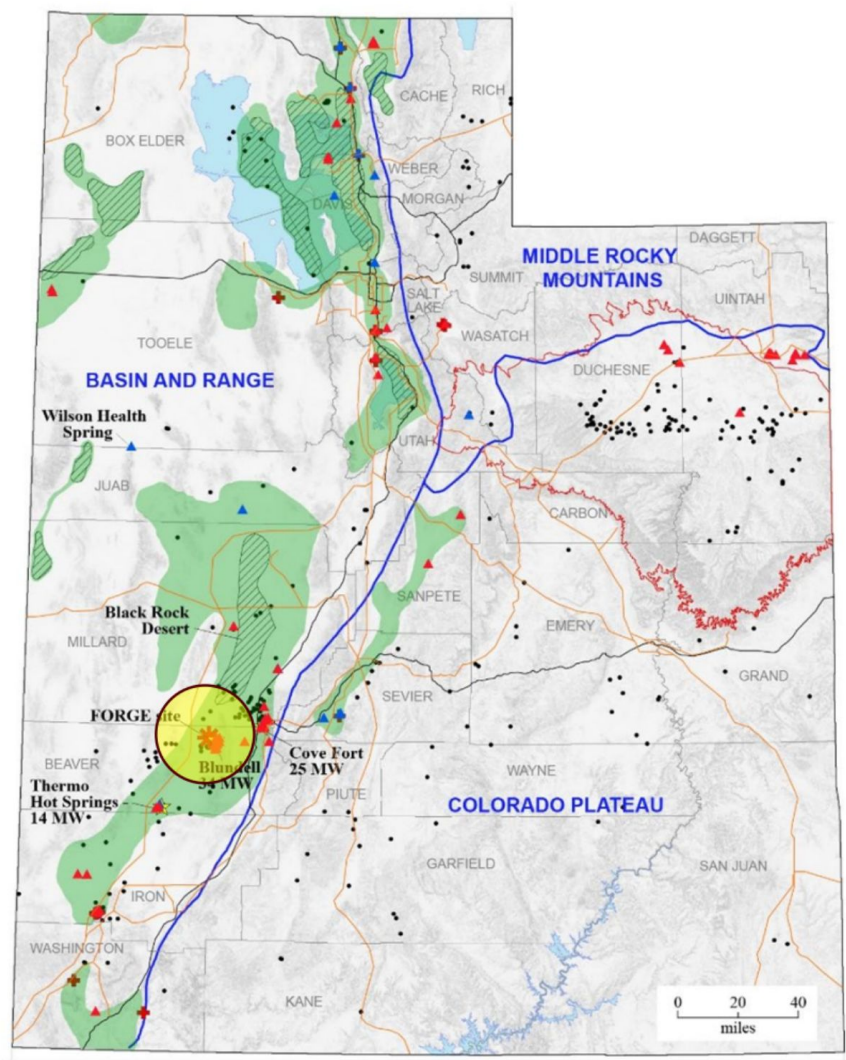
# Implementation

## Nuclear Energy Pathways Series

- Direct result of pursuing solutions that meet the state energy plan
- Seek expert feedback, consult with stakeholders, drive to a utility-scale deployment
- Consider the entire nuclear picture, from siting to legislation to education to waste

## Advanced Geothermal

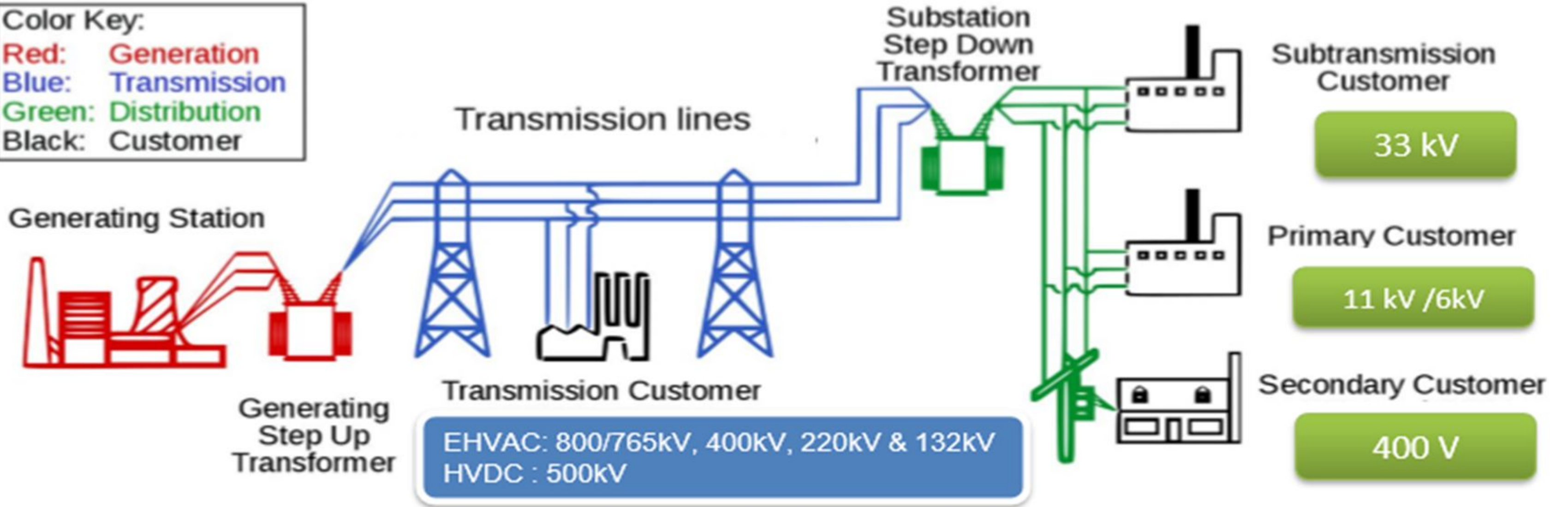
- Great potential to meet every state attribute and be widely deployed
- Working with UGS to quantify geothermal resource across Utah
  - Quantifying the subsurface characteristics for a better understanding of resource value



# Grid Integration



Color Key:  
Red: Generation  
Blue: Transmission  
Green: Distribution  
Black: Customer



# Thank you!



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