

Exceptional service in the national interest



Research-to-Power: The sCO₂ Future

Coordination and contributions to component research and system demonstrations by Sandia National Laboratories

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Research Progress to the sCO₂ Future



ECHOGEN
power systems

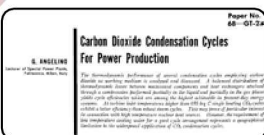
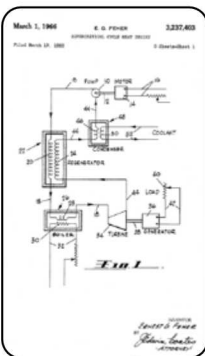


Theory

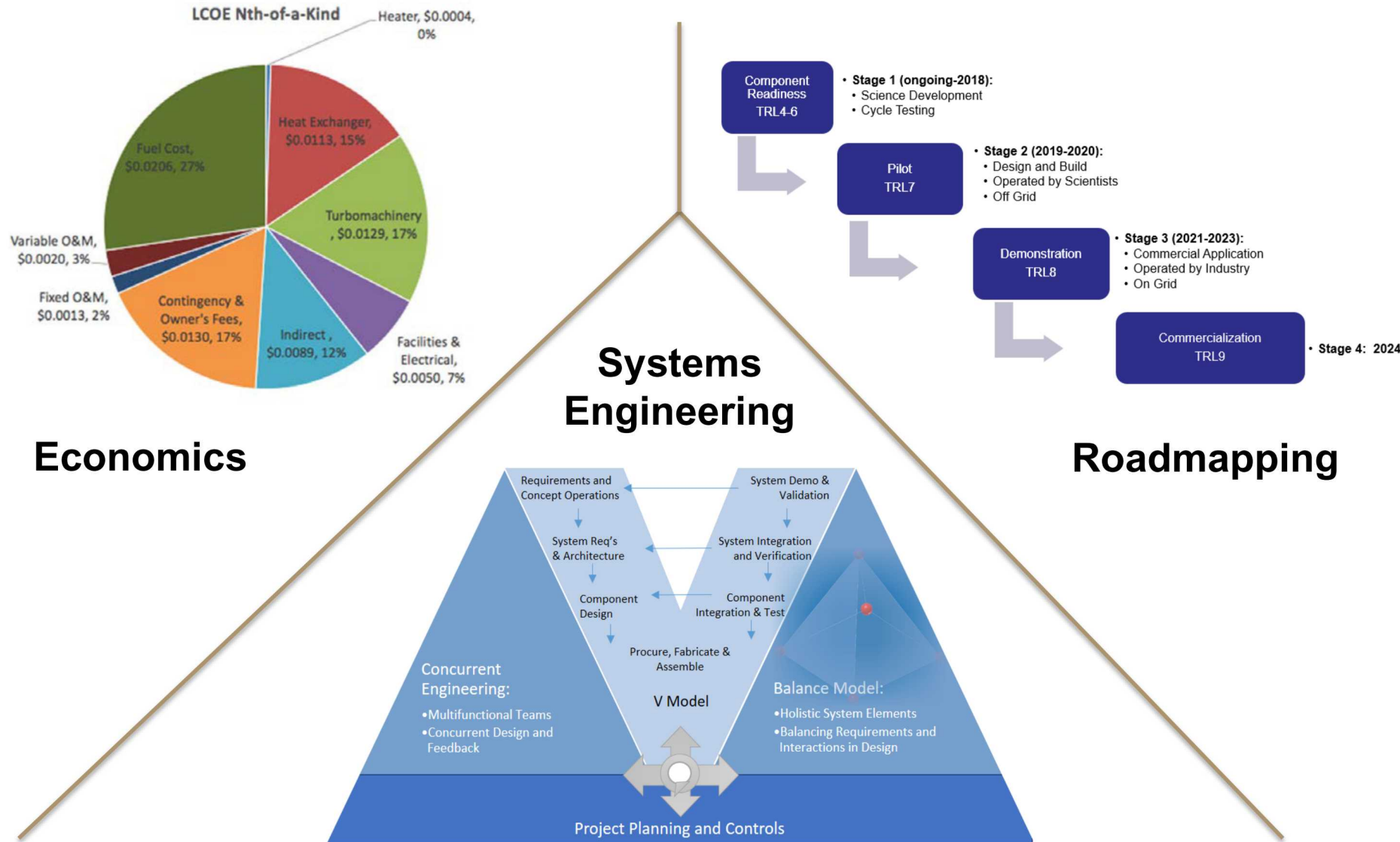
Exploration

Development

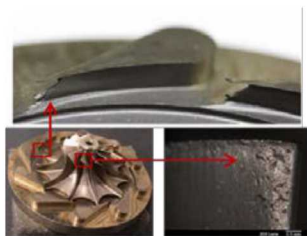
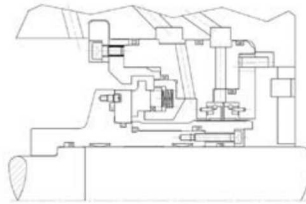
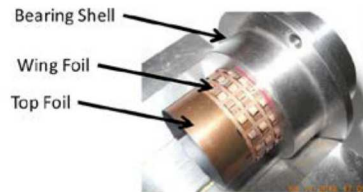
Demonstration



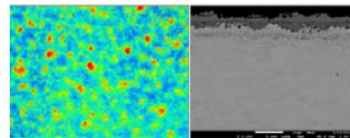
Coordination of Research Activities



Support of Component Development

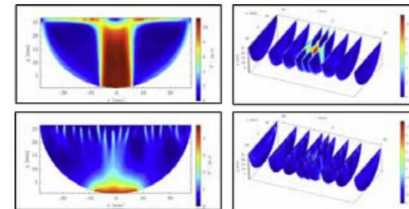
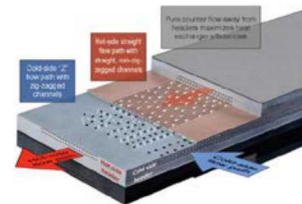


Turbine Degradation RCA



Gas Foil Bearing Behavior in CO₂

Turbomachinery

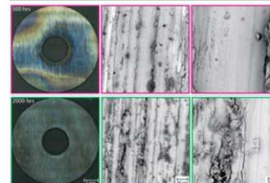


Heat Exchangers

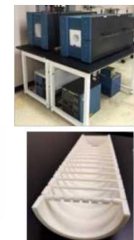
Materials



In Situ Corrosion/Erosion Monitoring

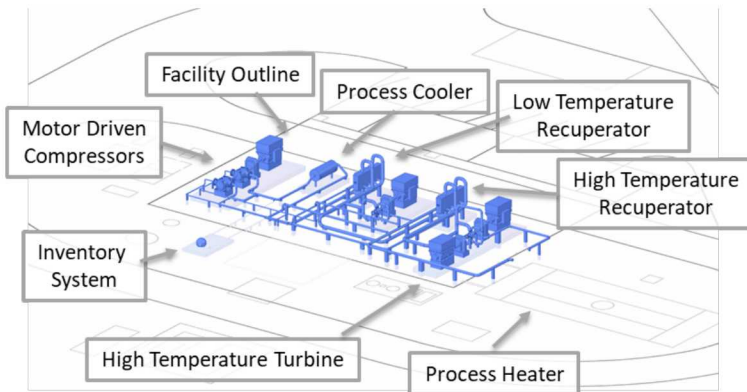


Alloy Corrosion Experiments

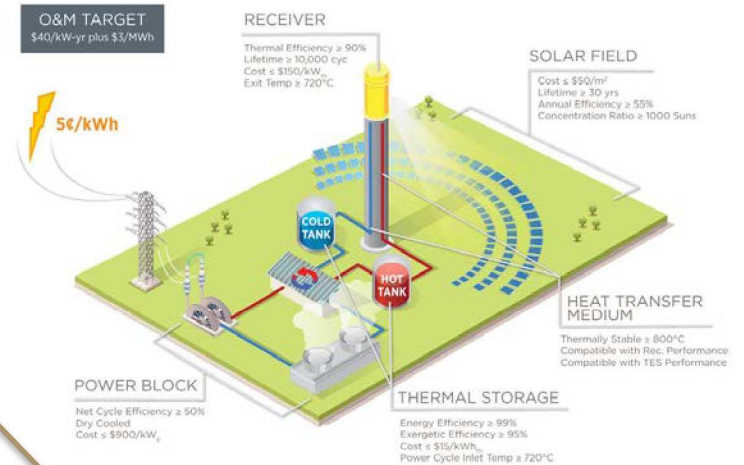
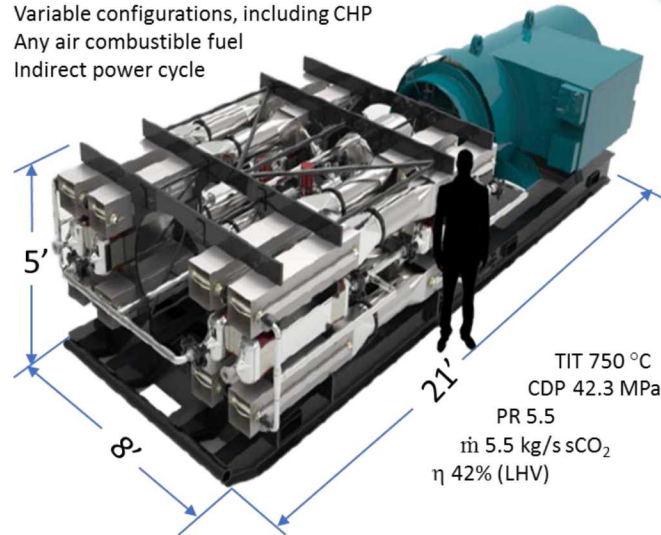


EC Structural Materials Consortium

Support of Demonstration Efforts



1 MWe Merlin Power cycle, by Peregrine Turbine Technologies
 Variable configurations, including CHP
 Any air combustible fuel
 Indirect power cycle



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