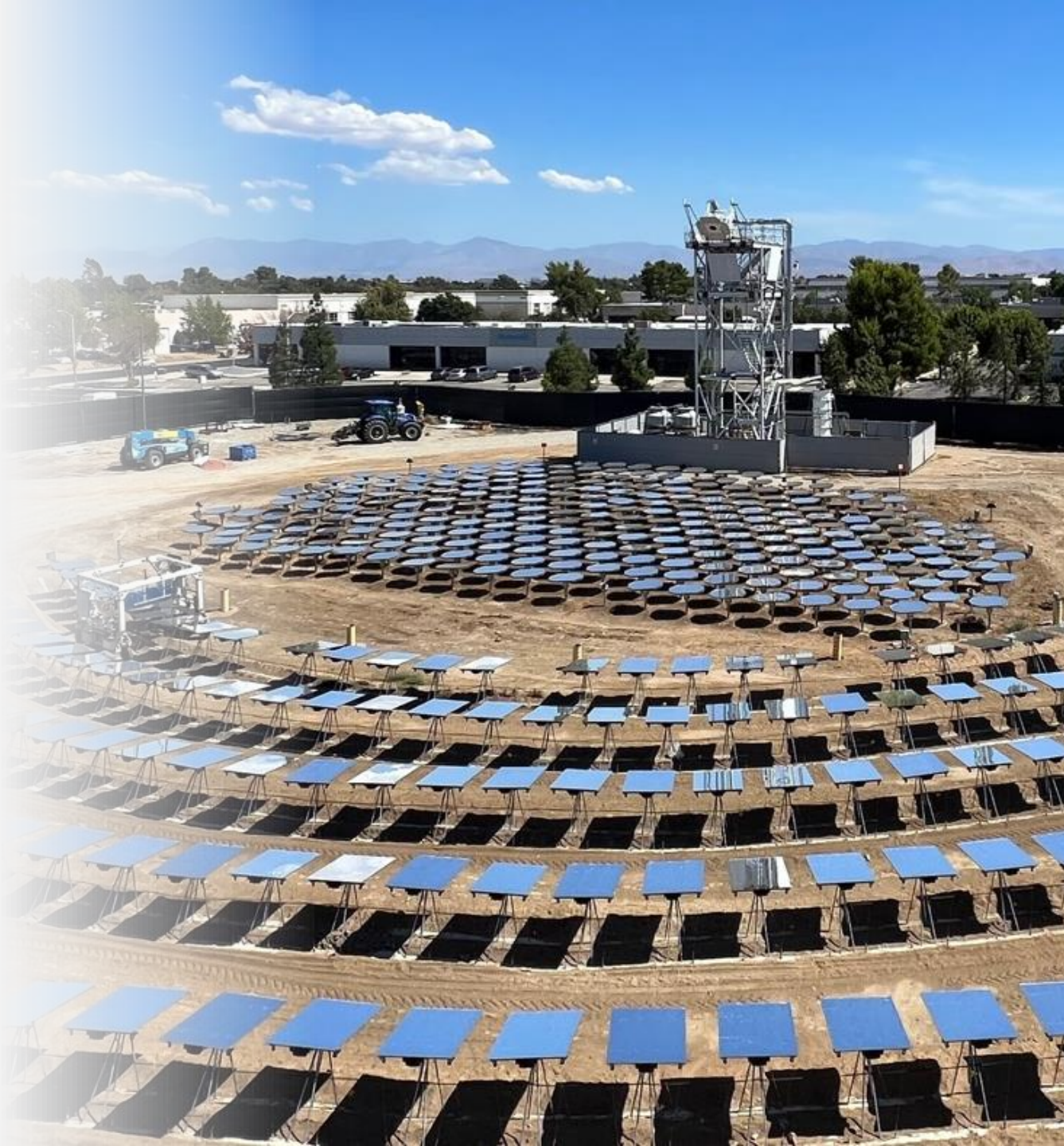
Shaping the Future of Concentrating Solar: Renewable Power and Industrial Heat Innovations in the Capella Project

Steve Schell – *Chief Scientist, Heliogen*
Jason Crusan – *VP New Energy Solutions, Woodside Energy*
Matthew Bauer, Ph.D. – *Program Manager, Solar Energy Technologies Office (SETO)*

October 2023



Acknowledgements/Disclaimers

This material is based upon work supported by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) under the Solar Energy Technologies Office (SETO) Award Number DE-EE0009343.

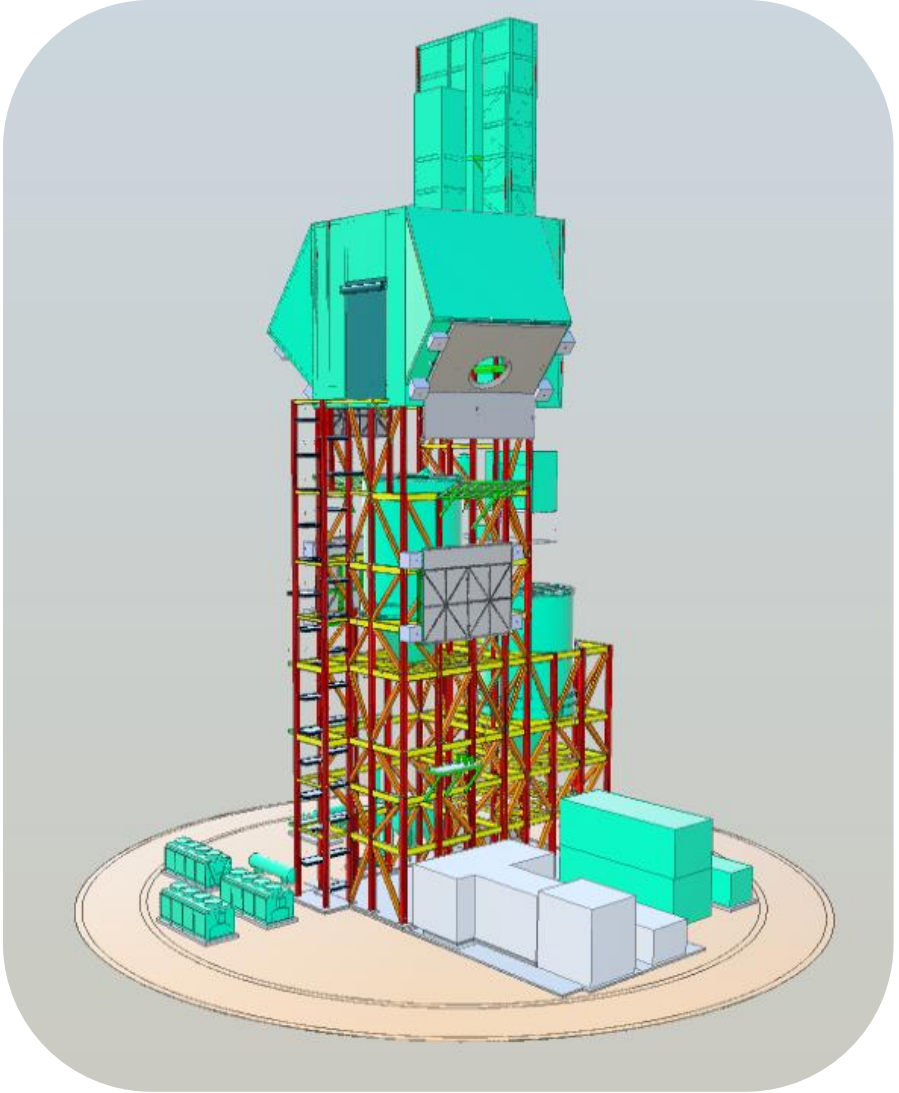
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Overview

Project Name	Capella
Location	Kern County, USA
Technology	Particle Power Tower and sCO_2 Power Block (Gen 3)
Nominal Capacity	5 MWe
Status	FEED
Break Ground	Q3 2024 (Forecasted)
Key Stakeholder	Woodside Heliogen U.S Department of Energy
Offtake Agreement	No Export (Test Facility)



Smart Heliostats

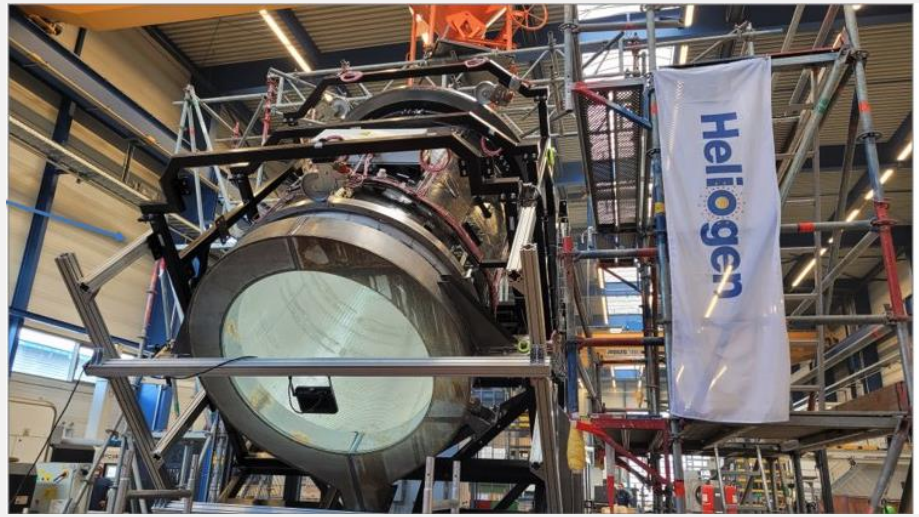
AI- enabled performance

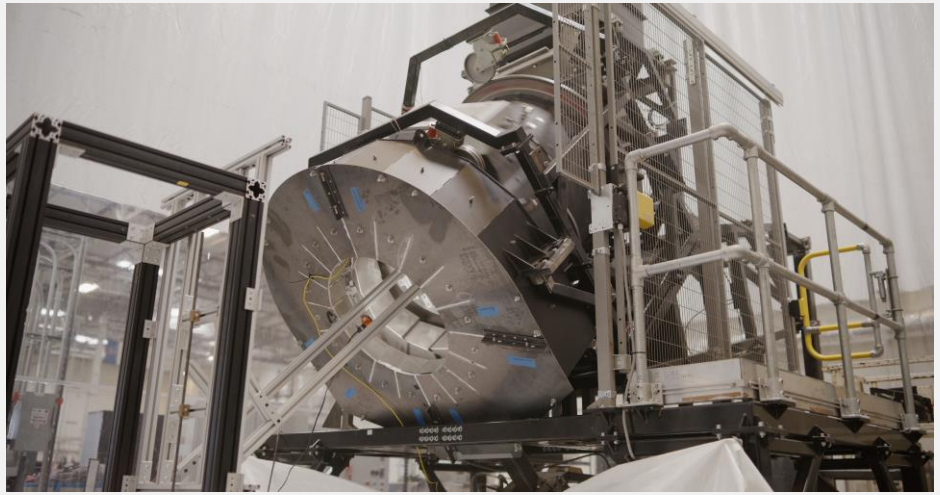




Particle Receiver

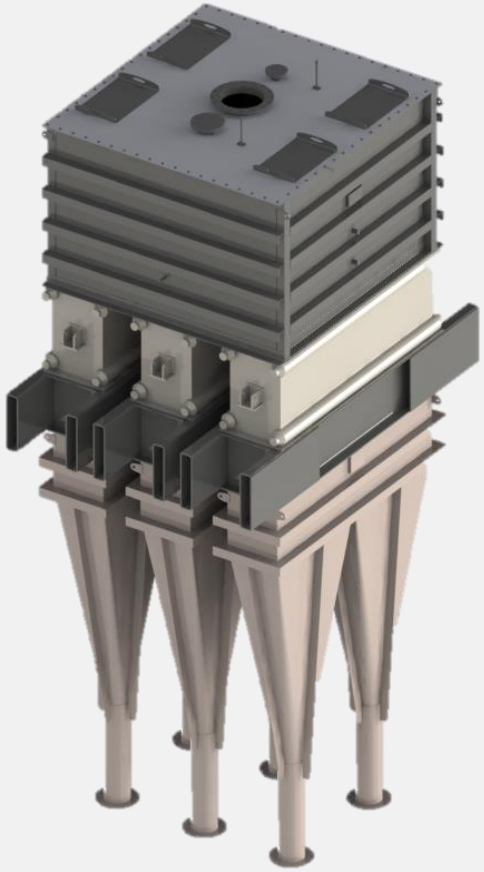
Breakthrough high-temperature particle receiver





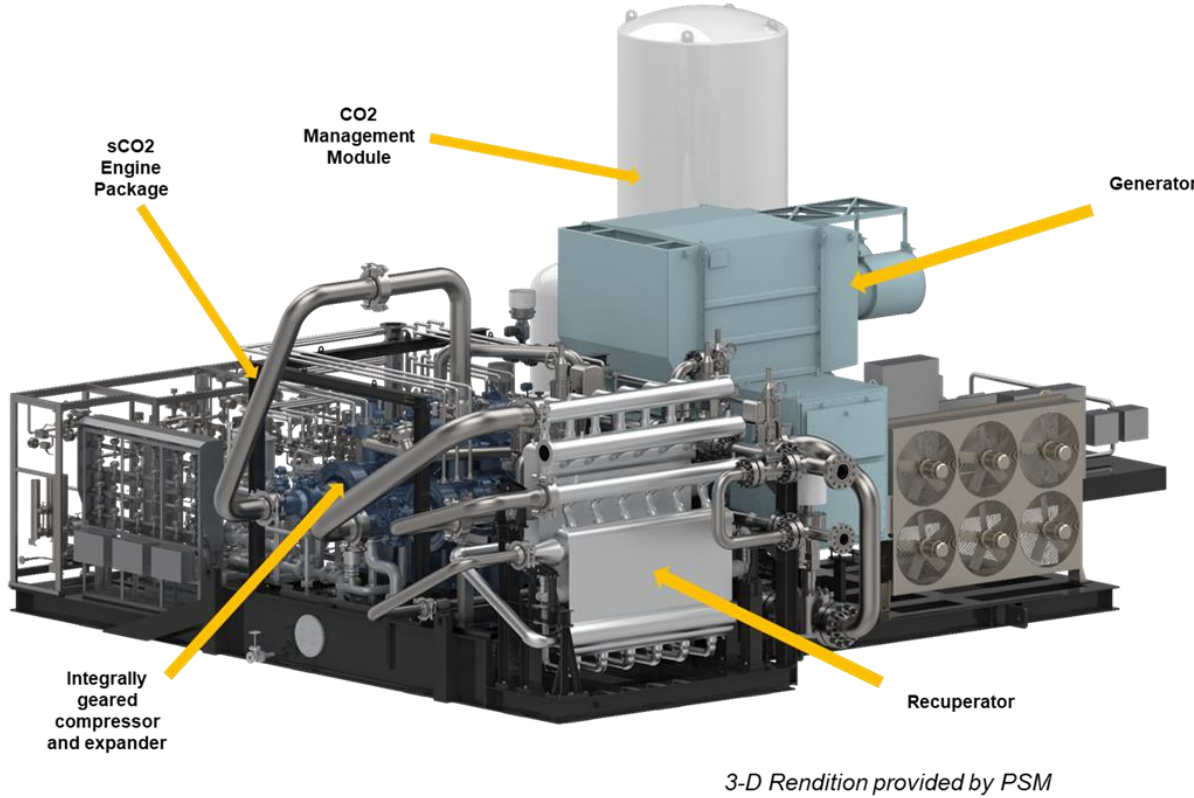
Particle-sCO_2 Heat Exchanger (PHX)

Largest unit ever fabricated



Supercritical CO_2 Power Block

Advanced power generation technology



3-D Rendition provided by PSM

Image courtesy of Hanwha Power Systems

Heliogen

Plant Configuration

RECEIVER UNITS 1 AND 2

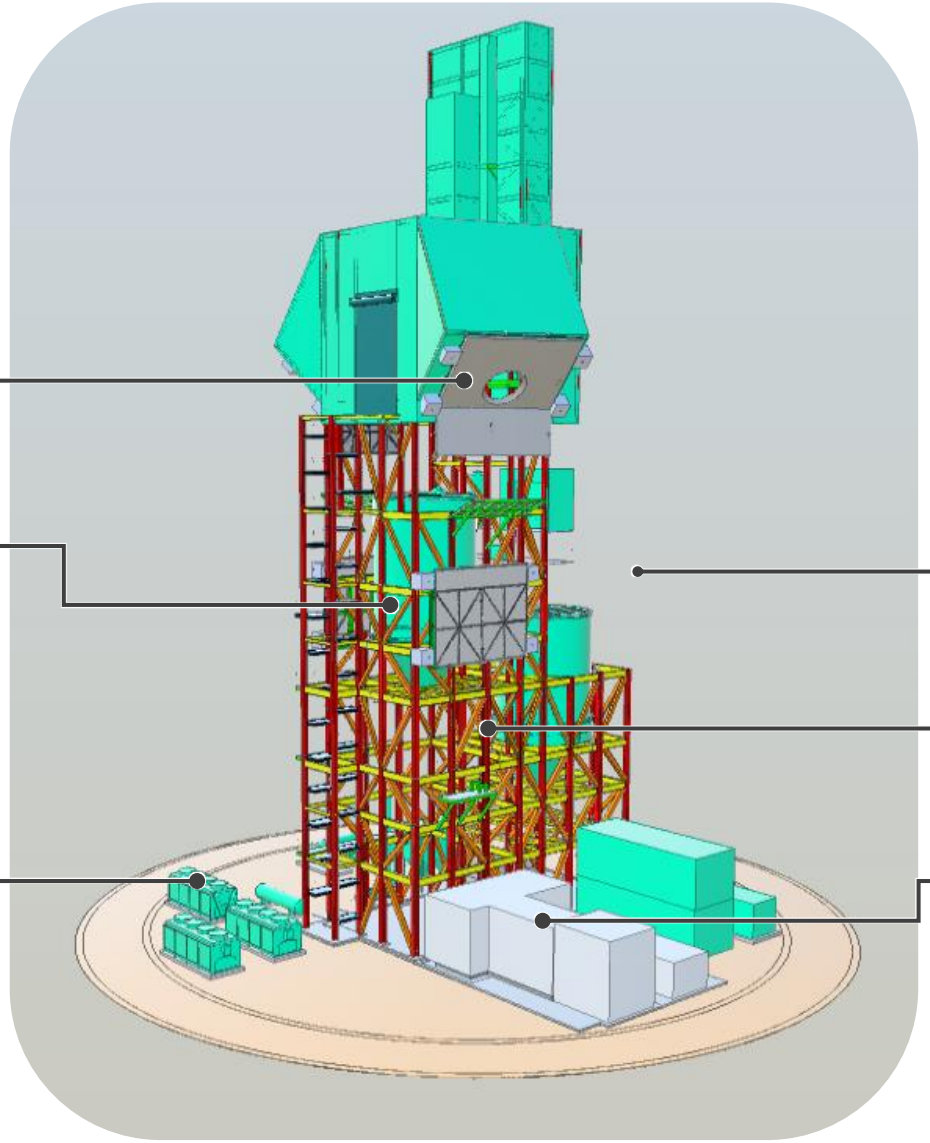
Aimpoint Height (m):	43.3
Receiver Manufacturer:	Heliogen
Receiver Configuration:	Centrifugal Cavity
Aperture Diameter (m):	2.6

THERMAL ENERGY STORAGE

Storage Capacity:	4 hours (60.2 MWh)
Temp Range:	470 to 670 °C
Thermal Storage Media:	CARBO HSP 16/30

COOLER UNITS 1-3

Cooling Type:	Hybrid (Adiabatic)
Number of Coolers:	3 units, 4 fans each



HELIOSTAT FIELD

Solar Field Aperture Area (m^2):	33,024
# of Heliostats:	17200
Heliostat Manufacturer/Model:	Heliogen / Gen V
Control System Provider/Method:	Heliogen / Closed-loop (SOHOT)

PRIMARY HEAT EXCHANGER (PHX) UNIT 1

Nominal Thermal Duty (MWh):	13.4
Heat Exchanger Manufacturer:	VPE/Solex
Heat Exchanger Construction:	Diffusion bonded Parallel plate

POWER BLOCK UNIT 1

Nominal Power Cycle Capacity:	5 MWe
Power Block Manufacturer:	HPS
Power Cycle:	sCO_2 / RCBC
Turbine Inlet Temperature (°C):	600