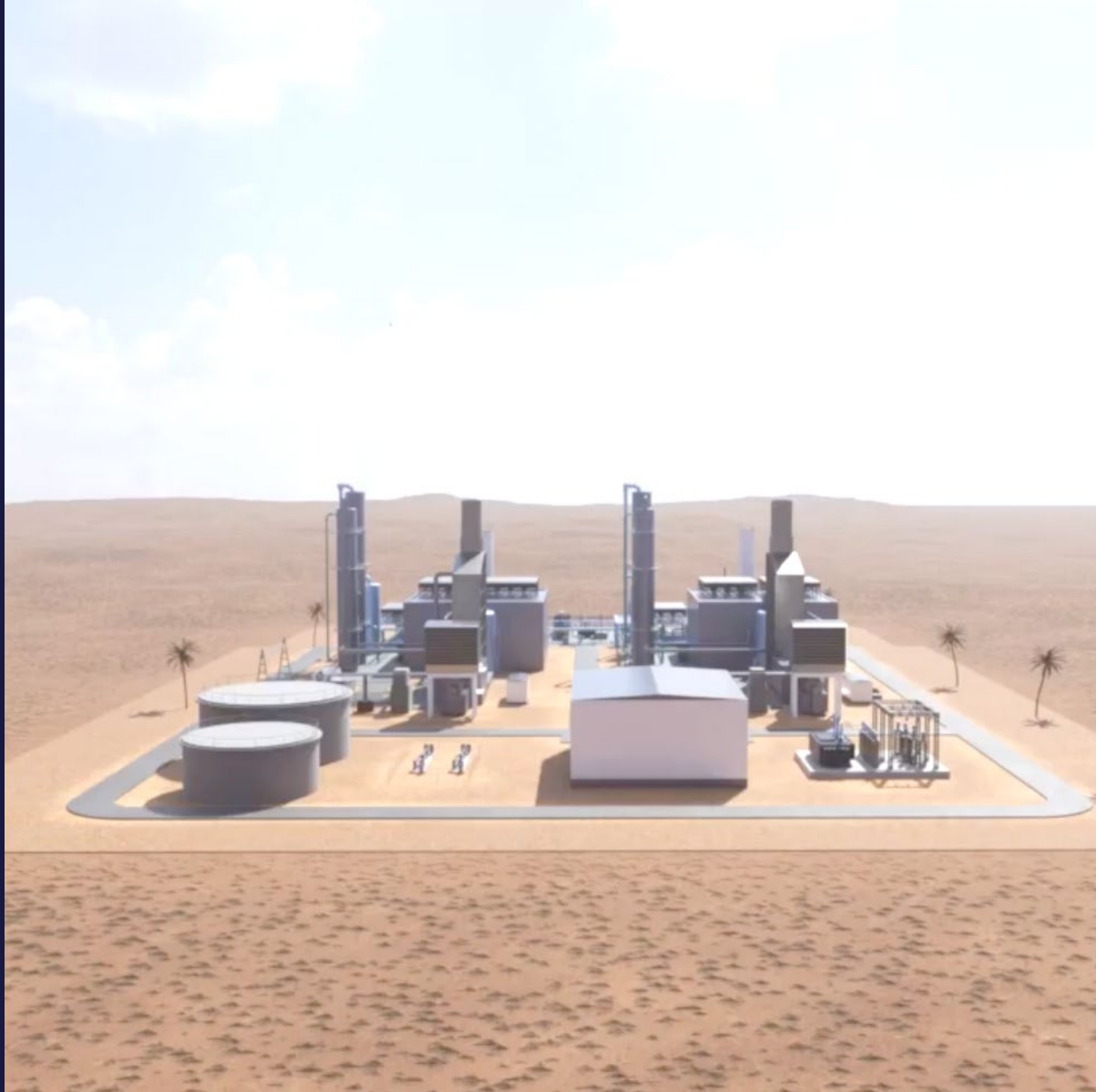


CapsolGT[®] enabling affordable low- carbon gas power generation

Carbon Capture Technology Expo North America
June 2024

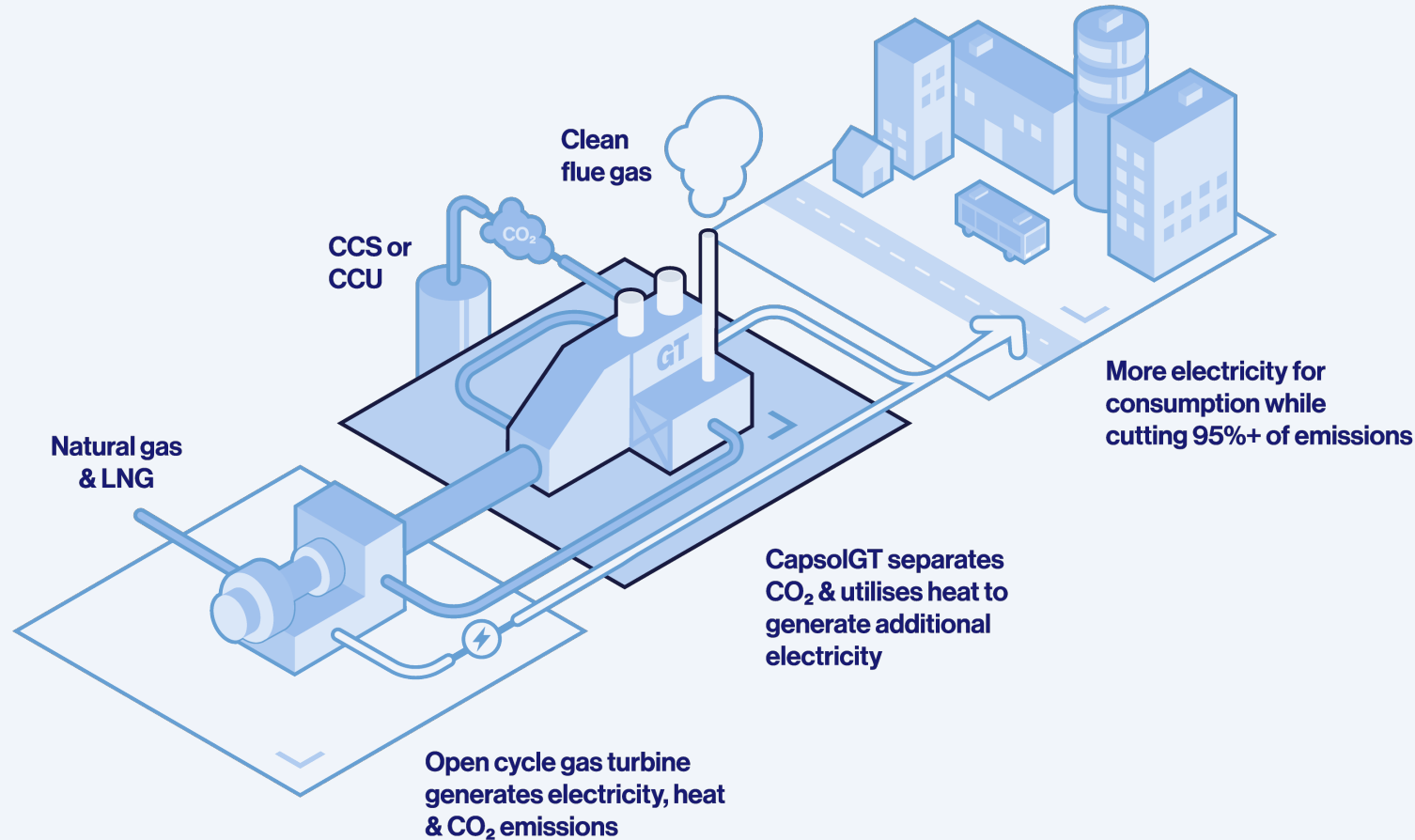




The challenge

- Highly efficient gas turbines play a key role in global decarbonization efforts
- Gas power is seen as a vital transition technology to replace heavy emitters
- To further increase its long-term relevance, turbine operators seek an economically viable carbon capture solution
- Traditionally linked with high capex and opex due to low concentration of CO₂ in the exhaust gas
- Cost-efficient carbon capture from gas turbines is seen as the “holy grail” in the carbon capture industry

CapsolGT[®]: A highly cost-competitive carbon capture solution developed specifically for gas turbines



Carbon capture plant for gas turbines

GE Vernova's and Siemens Energy's Aeroderivative and industrial sizes (10 - 120+ Mwe)

Carbon capture, heat recovery and power generation in one

Utilizes waste heat to drive the capture cycle and generate additional power

Safe, environmentally friendly capture solution

The two main gas turbine segments



Simple/open cycle

10 – 120+ MW

35% – 40% +

Oil & gas Industry Peak load
power plants

CapsolGT® applicable for retrofit on existing and
new built



Combined cycle

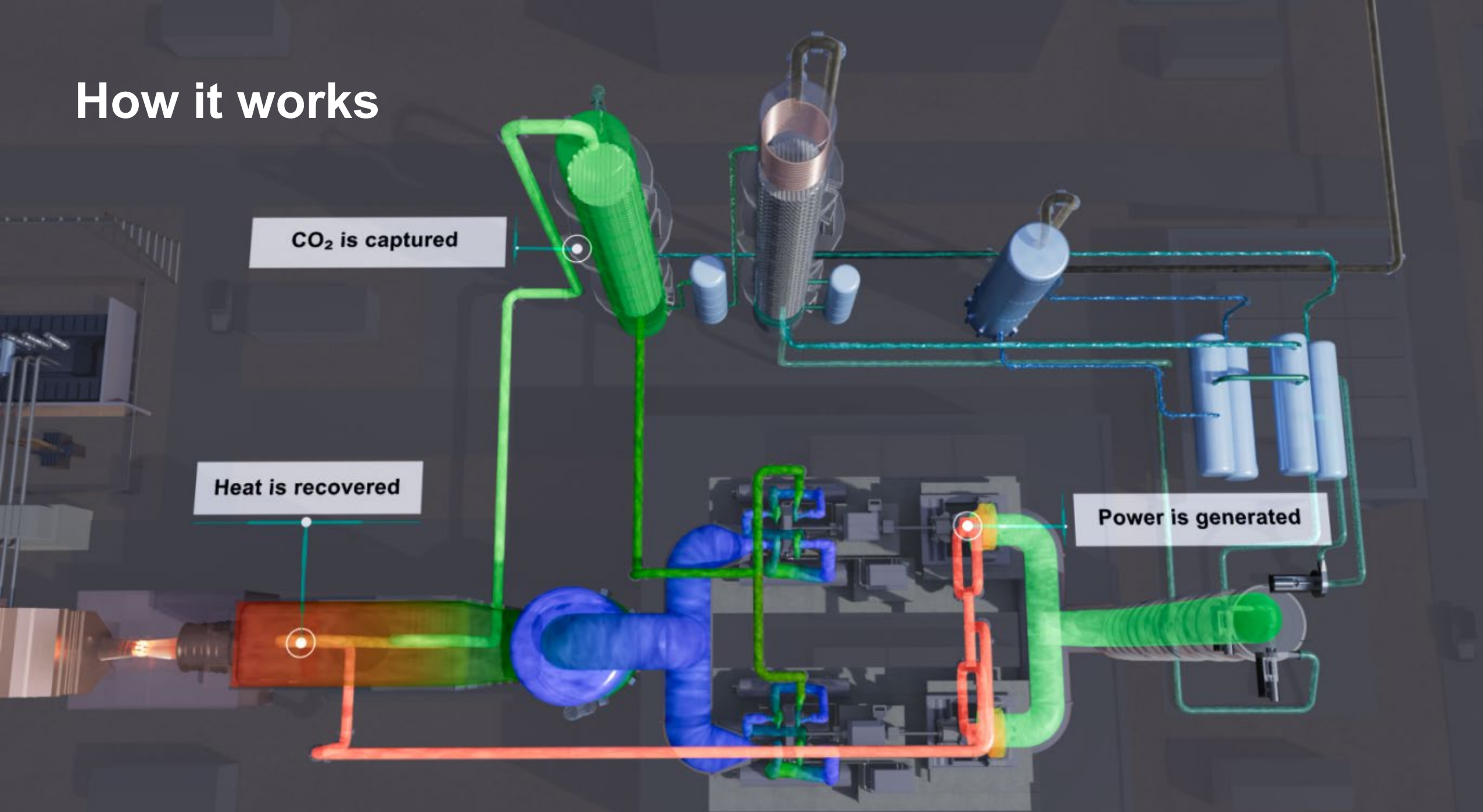
150 – 450+ MW

55% – 62% +

Power generation

Several parallel CapsolGT® plants as alternative to
new built “base load” power plant

How it works



A highly attractive value proposition

1

Efficient technology suitable for any conditions

2

Reduced overall plant complexity and capex

3

Superior environmental impact

4

Delivered together with leading turbine manufacturers

1 Efficient technology suitable for any conditions

Maintaining additional electricity generation

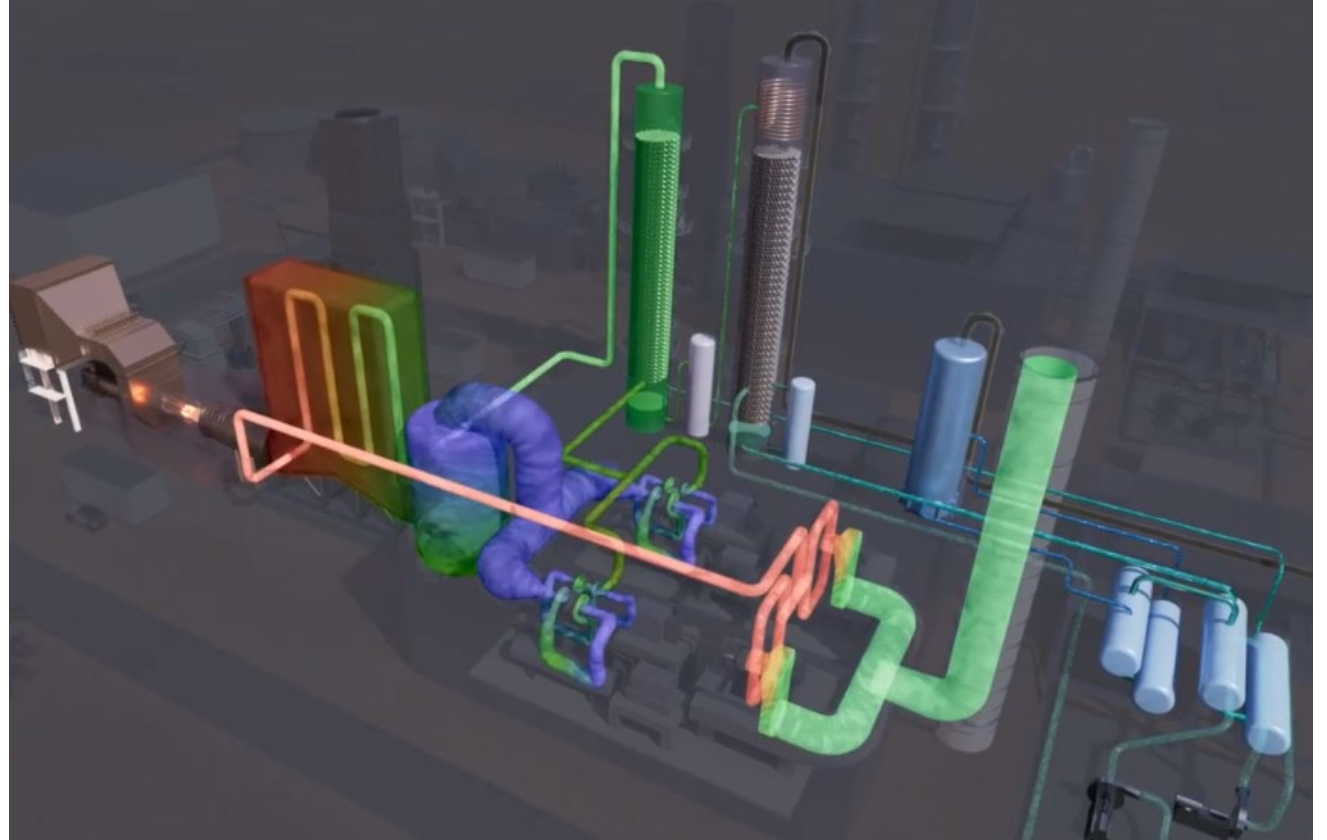
- **Where the weather is hot**
 - Minimized air-cooling demand
 - Optimized power generation during heat streaks
- **Where water scarcity occurs**
 - Closed-loop water balance possible
 - Utilizes water from flue gas
- **Where capture emissions matter**
 - Free of harmful Nitrosamines and Ammonia compounds



2 Reducing overall plant complexity and CAPEX

Easier to integrate and enhanced system reliability

- **No turbine modification required**
 - Avoids exhaust gas recirculation
 - Connects at the end of the exhaust gas duct
- **Avoids steam boiler**
 - Reduces operational complexity
 - Enhances system reliability
- **Modular and flexible**
 - Several parallel powertrains
 - Utilizes waste heat for efficiency





3 Superior environmental impact

- Low water consumption
- Superior degradation profile
 - Due to absence of thermal degradation as well as oxygen reaction
- Free of harmful Nitrosamines

4 Delivered together with leading turbine manufacturers

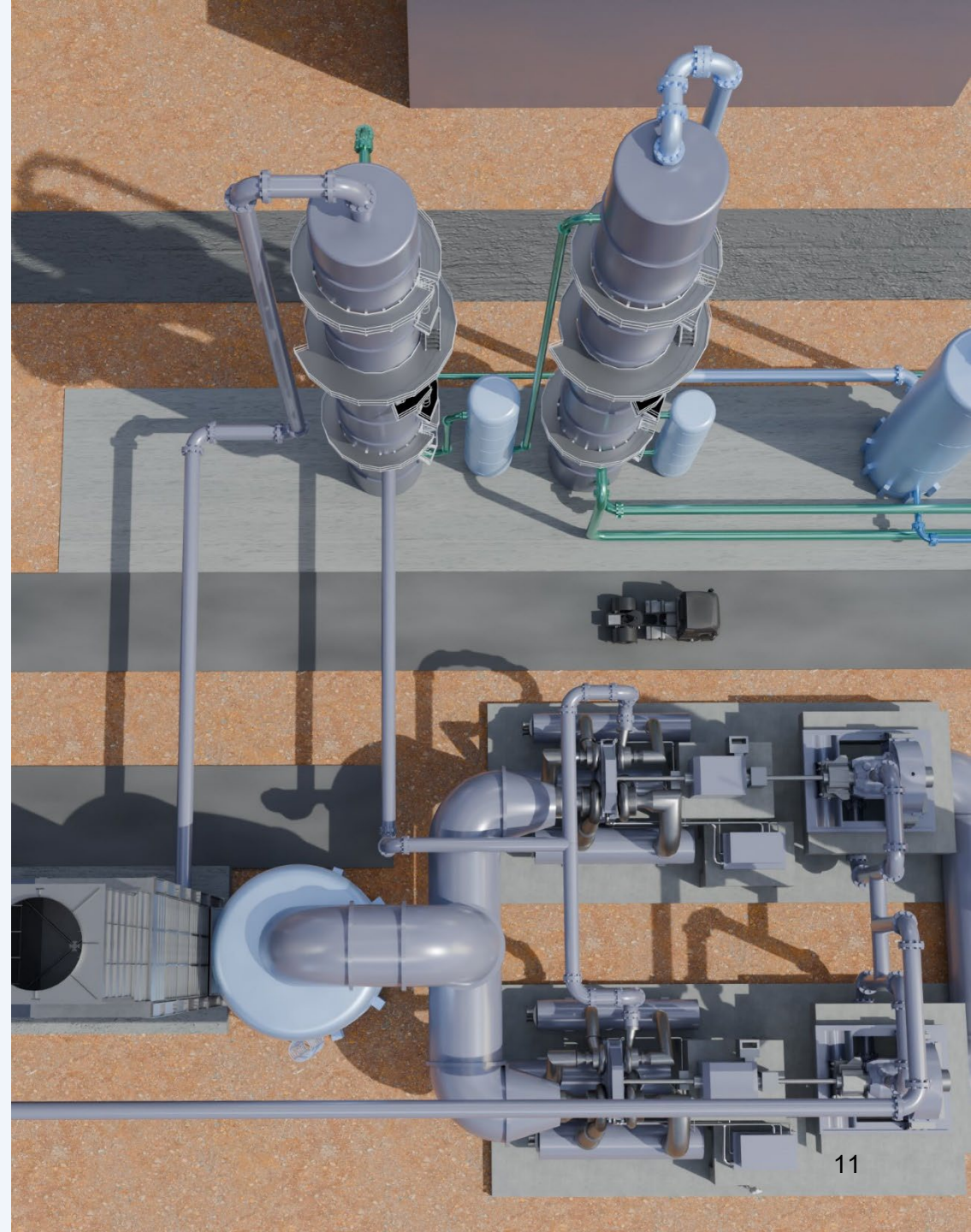
GE Vernova and Siemens Energy



- Collaboration agreement with GE Vernova to collaborate on lower-carbon gas power by deploying GE's aeroderivative gas turbines in combination with CapsolGT® carbon capture plants
- The aim is to add significant value for low-carbon power producers, helping them to reduce costs and improve the efficiency of their future gas power plants
- Siemens Energy and Capsol Technologies participated in a non-exclusive pre-Feed study to evaluate CapsolGT® solution in combination with open cycle gas turbines
- Siemens Energy delivered thousands of gas turbines in relevant CapsolGT® size

Pre-FEED study validates highly attractive offering

- ✓ 95%+ capture rate for greenfield power plant with CapsolGT®
- ✓ CapsolGT® produces additional electricity
- ✓ Capex targets within range – list of value engineering initiatives to further reduce costs identified





Ready for contracting

- Actively engaging with gas turbine operators and greenfield project developers
- Carbon capture potential of more than 200,000 tons of CO₂ per year per 50MW gas turbine
- Scalable solution tailored for various gas turbine sizes

H1 2024

Pre-FEED
executed

H2 2024

Expected FEED

2026/27

Target start up of
first capture plant

