

NATIONAL CARBON CAPTURE CENTER



ADVANCING FOSSIL ENERGY TECHNOLOGY SOLUTIONS

NATURAL GAS TESTING

The National Carbon Capture Center is broadening its research scope to include testing of carbon capture technologies for natural gas power generation in addition to its existing coal-fueled testing capability.

The center is designing and constructing facilities to generate natural gas-derived flue gas over a range of operating conditions. While leveraging existing infrastructure, the additions will provide a flexible test platform that accurately represents state-of-the-art natural gas power generation.

This new capability is expected to significantly reduce carbon capture costs for natural gas power plants and help identify solutions for the continued use of natural gas as a power generation resource.

BENEFITS

- ▶ Realistic natural gas combined-cycle operating conditions
- ▶ Carbon capture testing from natural gas or coal flue gas at a single site
- ▶ Increased testing availability independent from operations at the host site, Alabama Power's Plant Gaston
- ▶ Accommodations for advanced designs such as high-temperature capture processes
- ▶ Experience and knowledge in natural gas carbon capture technology
- ▶ Project execution by highly trained and specialized staff

FACILITY ENHANCEMENTS

Key project components include a natural gas-fired boiler, flue gas cooler, condenser and blower. Operations and testing will begin in 2020.

Expansion of
natural gas
testing will
drive new
breakthroughs
in carbon
capture.

