

Cogeneration

Cogeneration plants capture heat from industrial processes or from coal- and gasfired power production to warm buildings, fuel manufacturing, or create electricity. Cogeneration reduces emissions when it displaces fossil fuels as the source of energy.

QUICK FACTS

- Cogeneration systems, also called combined heat and power systems, can be used in individual buildings, in a district heating network, or in manufacturing and electricity generation systems.
- In 2017, Georgia had 43 cogeneration facilities totaling 1.4 GW of capacity.
- Many of the largest cogeneration facilities in the state are industrial (e.g. pulp and paper), but some are commercial (e.g. the 3,000 KW system in the Bank of America Plaza in Atlanta).

BEYOND CARBON

- Cogeneration systems can be cost competitive and create local jobs.
- These systems can reduce coal- and natural gasfired generation, leading to overall improvements in air quality and benefiting the environment and public health.
- Issues to watch include potential impacts on localized air pollution. There is a need to look carefully at system design, primary energy source, and plant siting.

ELECTRICITY

GEORGIA'S 2030
MEGATON OPPORTUNITY

We could reduce 1 Mt of CO2e in Georgia by adding 16 new 25 MW cogeneration plants that generate electricity with waste heat from industrial processes.

Lead Researcher

Dr. Marilyn A. Brown, CEM, NAE, NAS Interim Chair, School of Public Policy Georgia Institute of Technology Climate and Energy Policy Lab: www.cepl.gatech.edu

