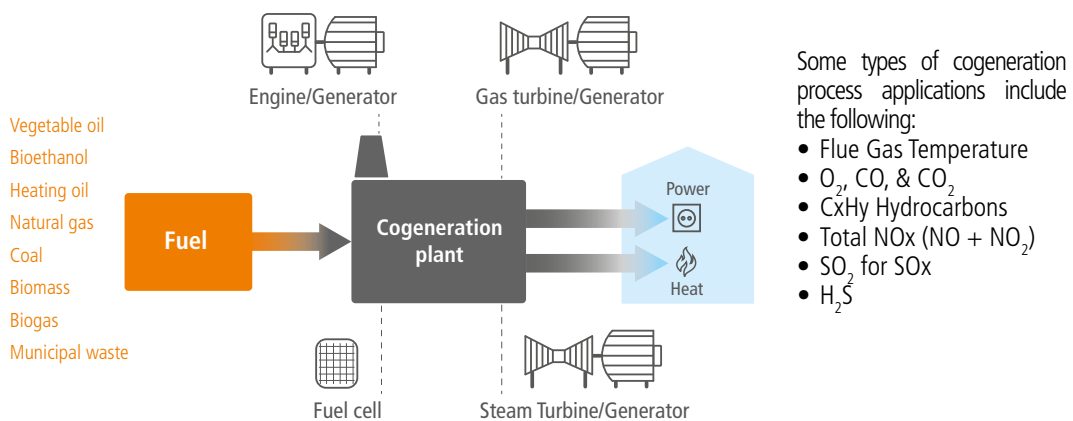




# USING PORTABLE EMISSIONS ANALYZERS FOR OPTIMIZING THE PERFORMANCE OF A COGENERATION PLANT

Cogeneration, or combined heat & power (CHP), is the utilization of boilers, turbines, and/or engines to simultaneously generate electricity power and heat that can be useful in several ways such as for hot water, steam, district heating, and water desalination.

## The cogeneration principle



Optimizing the overall performance of a cogeneration plant for fuel savings, combustion efficiency, maintenance, safety, and emissions reduction purposes can be done by using a portable emissions analyzer to monitor important parameters at many different locations in the CHP plant including the following:

- Industrial Processes – Power Plants, Refineries, Chemical Plants, Food & Beverage, Pharmaceutical
- Waste Incineration & Management – Industrial, Municipal, Medical & Hospital, Landfills
- Burning Biomass – Pulp & Paper Plants, Saw Mills, Sugar Mills, Peat & Wood Waste
- Institutional – Schools, College Campuses, Prisons, Hospitals

## Instrument Solution: Si-CA 230 Portable Gas Analyzer and Si-CA 8500 Emissions Analyzer

The [Si-CA 230](#) Portable Gas Analyzer and [Si-CA 8500](#) Emissions Analyzer can easily be used for accurate measurements of flue gas temperature, O<sub>2</sub>, CO, CO<sub>2</sub>, both NO & NO<sub>2</sub> for True NOx, SO<sub>2</sub>, H<sub>2</sub>S, and CxHy hydrocarbons throughout a cogeneration plant.



The instruments include a PC software with wireless connectivity to monitor, graph, and record all measurements and calculations. The Si-CA 230 Portable Gas Analyzer also comes with a free Mobile App for iOS and Android for Real-Time Display & Control of measurement data.