

## A More Profitable Market Position with Flexible Operations, Enabled by OpFlex Solution



**60%** turndown to 40% load

**110%** emissions compliant peak load

**2%** fuel savings during part load operation

### Challenge

Mainova AG is one of the largest regional energy suppliers in Germany, providing electricity, gas, heat and water.

In Germany, cogeneration using gas fuel is competing in a landscape where electricity sells on a daily basis and purchases are mainly driven by the price of fuel. Other less costly fuel sources, such as solar, wind, coal and nuclear take precedence, leading Mainova to take an innovative step to drive production efficiency.

Mainova was interested in lowering its minimum part load, reducing fuel costs, and improving maximum power output — all while maintaining emissions compliance.

### Solution

The GE unit in Frankfurt was the first 6B gas turbine in the world to receive OpFlex control software technologies: AutoTune, Turndown, Variable Peak and Smart Inlet Bleed Heat (IBH).

This advanced control solution is designed to deliver broad operational flexibility across all modes of plant operation by expanding the operating envelope, while enabling significant performance improvement.

### Results

Mainova is now able to run their gas turbine at competitive levels, leading to a more profitable position in the market. They also now have the ability to set emissions limits and let the turbine control maximum performance within those limits.

One of the biggest benefits Mainova saw was the ability to expand their emissions-compliant operating range from 60-100% load to 40-110% load.

