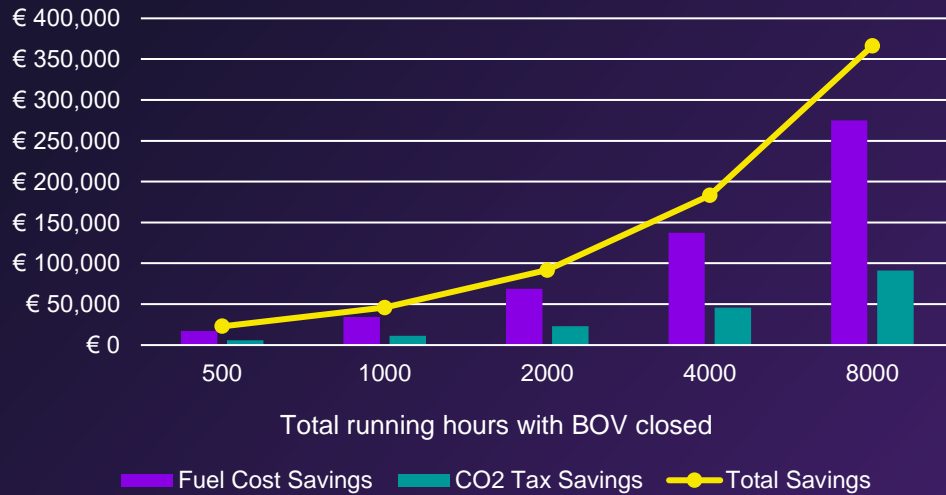


# BOV Optimization

Applicable fleet: SGT-A20

\*can be bundled with Closed Loop VIGV Upgrade

## A20 Estimated Average Fuel and CO2 Tax Cost Savings



Note: Estimated Fuel Cost / CO2 tax Savings above are provided for indicative purposes only and are based on a fuel gas price of €7/MMBtu and CO2 tax of €50/ton.



Equivalent to ~14% H2 blend

CO<sub>2</sub> Up to 5.4% CO<sub>2</sub> reduction

### Product Overview

Thanks to many years of experience and operational data, Siemens Energy has enabled the lowering of the SGT-A20 Bleed Off Valves (BOV) closure setpoints.



- Running with closed BOVs increases the Gas Turbine's operating efficiency and reduces NO<sub>x</sub> and CO<sub>2</sub> emissions.
- BOV optimization is ideally bundled together with VIGV Closed Loop Control Mod.

### Improved Features

- Engine Control System (ECS) that allows a reduction in the steady state switching points for closing and opening the BOVs.
- Significant reduction in the power level at which BOV closing at steady-state conditions occur.
- BOV closure power is reduced from above 8 MW to between 5-8 MW depending on site-specific conditions.



### Benefits

- Up to 1.34% increase in thermal efficiency.
- Up to 5.4% reduction in Fuel Consumption and CO<sub>2</sub> Emissions.
- Up to 20% reduction in NO<sub>x</sub> Emissions.



### Scope of work & Implementation

- Performance analysis is conducted at a Siemens Energy facility followed by on-site adjustments by Field Service Engineers.
- If package has VIGV Closed Loop Control Mod installed, BOV Optimisation is implemented via software update. Otherwise, Mod implemented via manual adjustment of BOV coupling rod.

