

# Decarbonization via Efficiency Mod Solution for an Aeroderivative Gas Turbine Customer in Malaysia



Equivalent to ~6% H2 blend

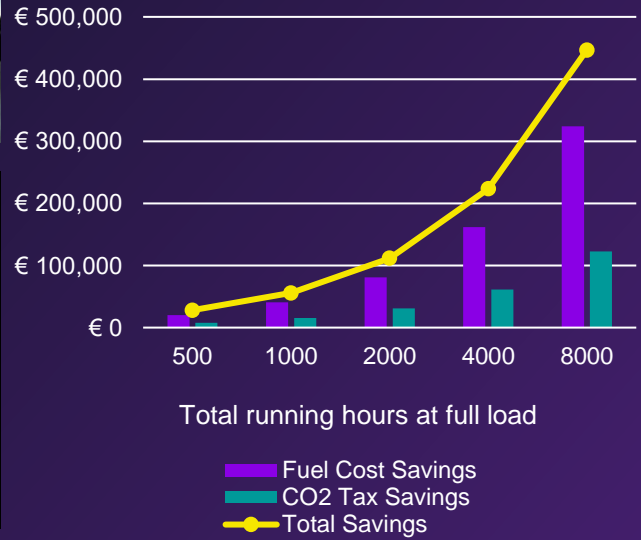
CO<sub>2</sub> Up to 2% CO<sub>2</sub> reduction

## RT62X Upgrade

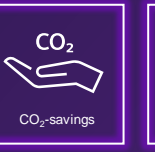
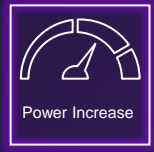
Applicable fleet: SGT-A35



### A35 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.



## Client Needs & Challenge

Customer in Malaysia was exploring means to reduce carbon footprint of their SGT-A35 units.

Customer had initially purchased a standard RT62 zero-hour power turbine in 2021 but was later exploring way to address decarbonization goals. Siemens Energy (SE) worked closely with customer to evaluate the site-specific benefits and options in a quick time. Finally, customer agreed with SE suggested solution of convert the RT62 order to RT62X.



## Solution and Improved Features

The RT62X power turbine is designed as an upgrade of the legacy RT62 power turbine installed on over 400 Siemens Energy SGT-A35 C, G and GT units.

- New 3D aerodynamic design of the turbine's vanes and blades, enhancing cycle efficiency.
- Improved honeycomb tip seal design resulting in decreased tip seal leakage and better control of tip clearances.
- Same footprint as legacy RT62 and no change to the mounting location.



## Benefits

- Time between overhaul (TBO) increased to 132,000 operating hours.
- Up to 8% increase in power
- Up to 2% fuel savings and CO<sub>2</sub> emissions reduction.
- Independent benefits allow for customization to fit customer specific requirements.
- G to GZero upgrades could add to RT62 to RT62X performance improvements.



## Scope of work & Implementation

- Implementation of the RT62X is done via a Zero Hour upgrade at a Siemens Energy approved **overhaul** facility.
  - The Zero Hour scope for the RT62X upgrade involves replacement of key hot gas path components, supplied in pre-assembled kits.

