



# Extending the Life Of an Existing Installation By Replacing Old Gas Turbines

Oil & Gas

## At A Glance

Installation:  
4 X OP16-3A

Location: Indonesia

Output:  
Electricity: 7.2 MWe

Customer: Pertamina

## The Challenge

Pertamina is an Indonesian state-owned oil and gas corporation that operates various fields offshore. Pertamina's X-Ray platforms were equipped with old KG2 gas turbines for power generation and those units were no longer meeting the requirements in terms of performances and reliability.

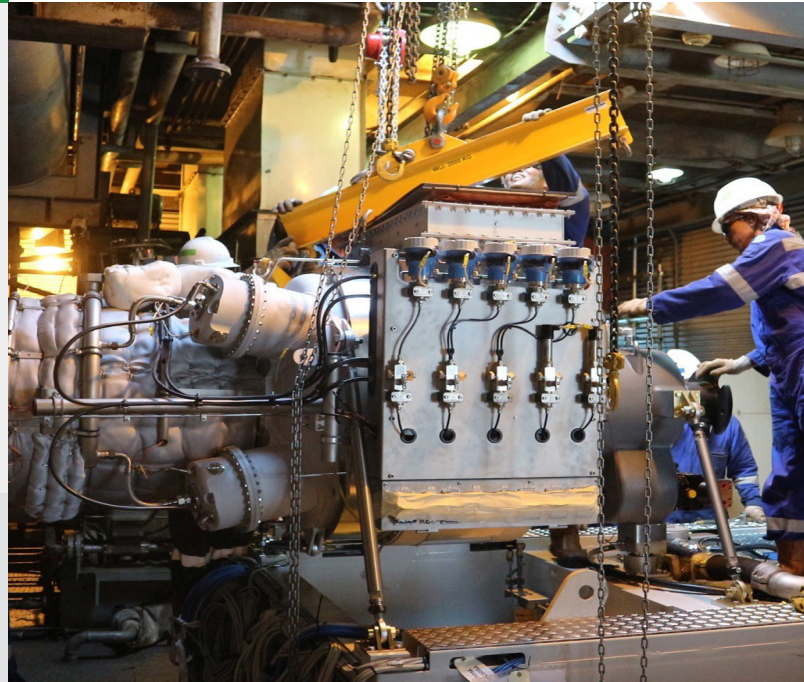
Upgrading of existing offshore platforms is a challenge, as the replacement of obsolete equipment must be done by adapting the new solution to the existing installation, ensuring the minimum possible downtime.

## The Solution

OPRA provided four gensets powered by OP16-3A gas turbine, each one rated at 1,8MWe. To facilitate a quick and cost-effective installation, OPRA adapted its solution to reuse existing utilities, such as the air intake ducting and the exhaust of each unit. Thanks to its compact design, the OP16 genset fit in the footprint of the previous gas turbine, delivering a 50% higher power output.

The four OP16 gensets are in dual-fuel configuration, primarily powered by associated gas from the wells with a diesel backup fuel system.

The units are equipped with a remote monitoring system that collects all operational data, providing a real-time machine condition analysis and enabling predictive maintenance for each turbine.



## The Results

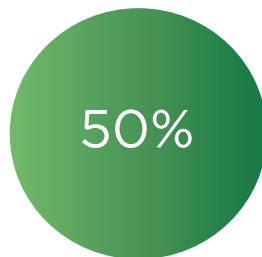
By choosing OPRA to replace its old gas turbine generators, Pertamina has been able to reduce power generation emissions on the platform by 40%, with a 50% gain in power output. This represents 2.5 million USD in savings per year.

The upgrade has been possible with minimal modification of the existing installation.

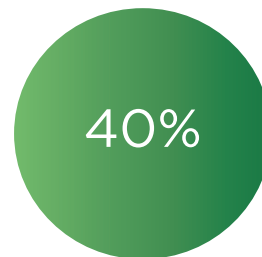
The result is a state-of-the-art offshore power generation system, combined with 24/7 customer service support from OPRA, to ensure the highest availability for Pertamina's assets.



USD Saved Per Year



Increased Power Output In The Same Footprint



Emissions Reduction

Get in Touch With Us

OPRA, Haaksbergerstraat 71,  
7554 PA HENGLO, THE NETHERLANDS

+31 (0)74 245 2121  
www.opra.energy  
sales@opra.nl

