

## Ground Support Equipment Carbon Footprint Reduction

### About HAECO Group (HAECO)

Established in Hong Kong in 1950, HAECO is one of the world's leading independent aircraft engineering and maintenance groups. It is one of the largest Maintenance, Repair and Overhaul ("MRO") service providers in terms of capacity. Through its 17 subsidiaries and joint venture companies around the world, the Group offers a full spectrum of services including airframe services, line services, component services, engine services, inventory technical management, fleet technical management, cabin integration and reconfiguration services and interior products, private jet solutions, freighter conversion, parts manufacturing and technical training.

HAECO fulfils its vision to be a green and sustainable MRO service provider by striving to be a good steward of the natural resources and biodiversity in the areas where we operate. What's more, the nature of our business of providing MRO services means that we contribute to the efficiency of aircraft which, in turn, alleviates the adverse impacts of the aviation industry on the environment. HAECO promotes and encourages compliance with international standards, such as the ISO 14001 framework within the group. We carefully manage our energy use, emissions and waste in accordance with relevant laws, regulations and industry best practice.

We have strived to protect our environment through decarbonisation, water conservation, waste reduction, adoption of renewable energy.

For further details on HAECO sustainability efforts: <https://www.haeco.com/en/About-HAECO/Sustainable-Development>

### **Problem Statement**

Improve energy and productivity efficiency of ground support vehicles and machinery for airport operations to reduce GHG-intensive fuel consumed

### **Aims**

As part of the Swire Pacific Sustainable Development (SD) Fund Challenge Process, HAECO invites tenders to submit a new solution to be trialled to address the following:

- Demonstrate ability to significantly reduce carbon emissions of ground support equipment (GSE) with uncompromised performance

- May include, but not limited to vehicle idling reduction, alternate fuels (hydrogen, electric, etc.), or other changes

### ***Problem Background***

Diesel consumption from ground support equipment (GSE) is a significant source of GHG emissions for the group, contributing about 9% of HAECO's overall carbon footprint. Finding ways to make the GSE operation more efficient or reduce the carbon intensity of the fuel will greatly reduce GHG emissions. Reduction to carbon footprint, however, cannot come at the detriment of functionality (e.g. power and torque) of the vehicles, some of which must service aircraft that can weigh over 400 tonnes. It must also consider the existing infrastructure (e.g. fuel availability) of the location.

GSE is a term for a range of equipment and vehicles used at airports to support aircraft operations and servicing on the ground. This could be equipment used in moving or washing aircraft, transporting passengers, crew and cargo, or providing power and air conditioning amongst others. HAECO has around 400 units of GSE.

The trial will take place in Hong Kong.