



Collaborative Decarbonisation for Aviation Ground Services

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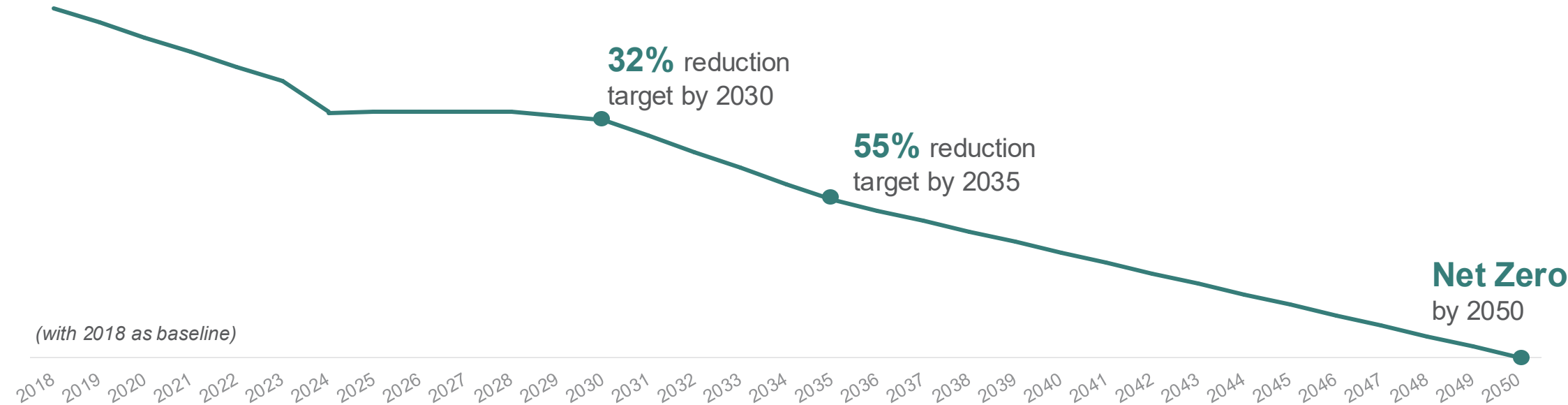
**CLIMATE
CHANGE**



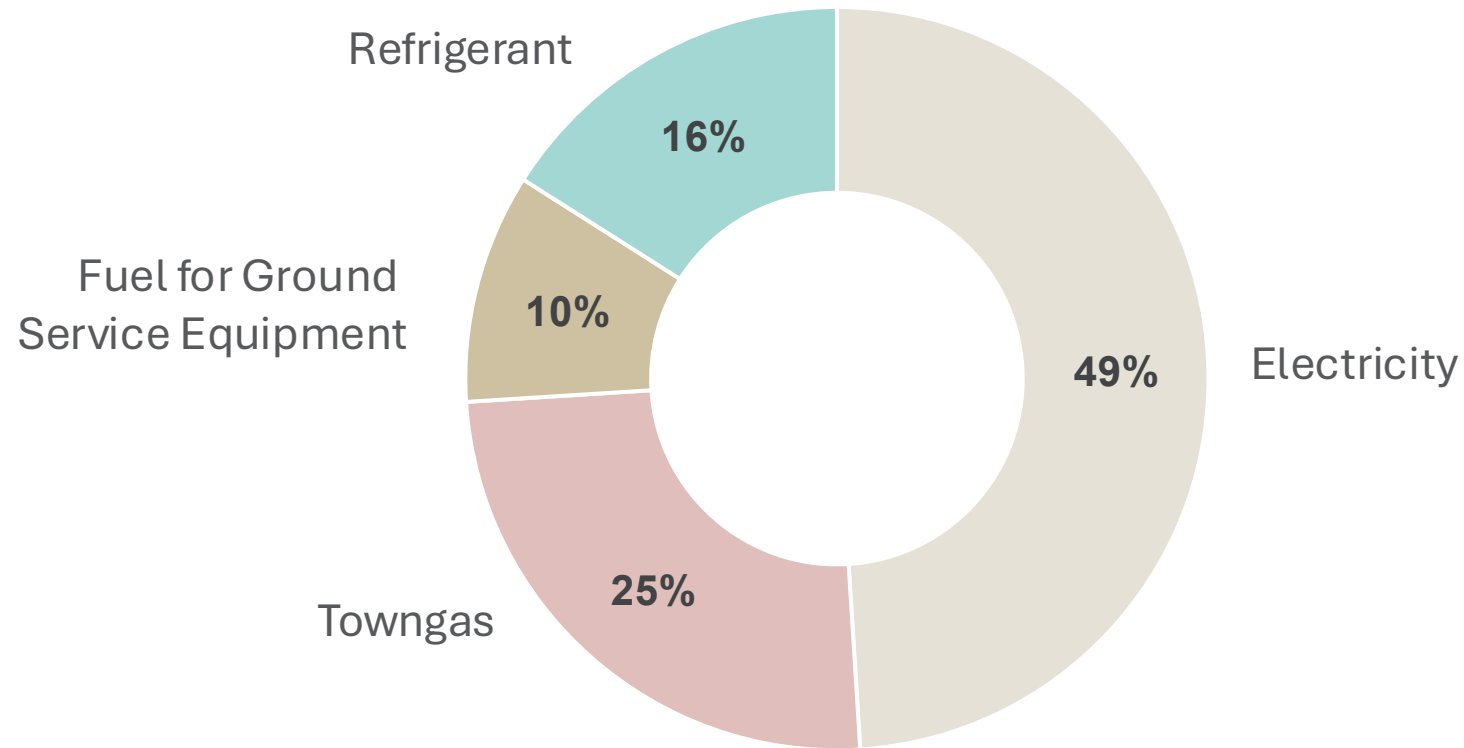
**CIRCULAR ECONOMY
AND WASTE
MANAGEMENT**

CARBON REDUCTION TARGET

Set up **Long Term Decarbonisation Target** per subsidiary to govern our scope 1 and 2 emission pathway, and some **interim milestones** to celebrate small wins. Progress check every quarter.



MAJOR EMISSION SOURCE



SIX-PRONGED APPROACH

2030

32% Carbon Reduction

2035

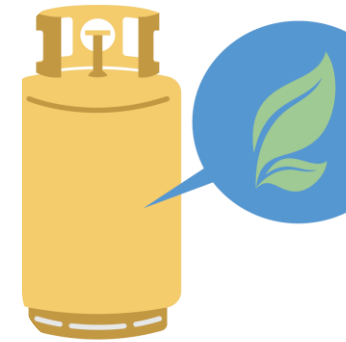
55% Carbon Reduction

2050

Net zero emissions



Facility Enhancement



Low GWP Alternative



Active Monitoring &
Maintenance



Fleet Modernisation



Alternative Fuel



Carbon Offsets

GOVERNANCE

Effective **organisational oversight** through structures at Group level, Company level and Working level, e.g. Sustainable Development Steering Committee Meetings, regular key departments meetings and site visit initiatives, and the implementation of robust **environmental management systems** (IEnvA/ISO 14001)



RETRO-COMMISSIONING (RCX)

Cathay Dining has signed up to **CLP Retro-Commissioning and Retrofitting Charter Programme**, which provides comprehensive training on energy saving and related areas to our Professional Engineers.

Leveraging **CLP Eco Building Fund** and collaborating with **CLP Specialists**, Cathay Dining has completed the chiller system retro-commissioning project, saving over 700 tonnes of carbon emissions annually.



TARGETED UTILITY SAVING PROJECTS

Partnering with our Operations Department, Cathay Dining has launched a large-scale revamp to upgrade our warewash system. This new system is anticipated to reduce 1,625 tonnes of carbon emissions annually by saving electricity and Towngas consumptions.



LOW GLOBAL WARMING POTENTIAL (GWP) REFRIGERANT



Hardware Modification (for Existing Equipment)

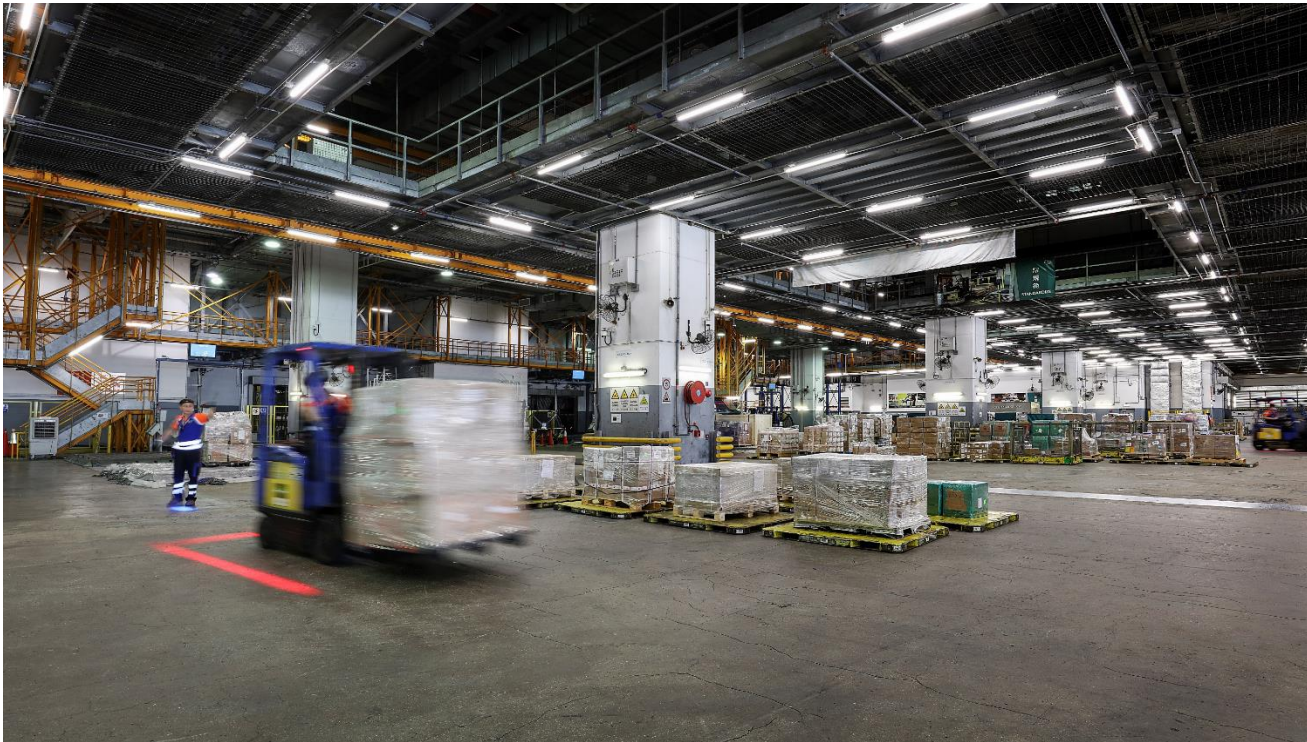
Through modifying the pressure system of the catering trucks (cold chain) to guarantee compatibility of lower GWP refrigerants - from R404A (3,922 GWP) to R134A (1,430 GWP).



Replacement

Cathay Dining is currently adopting water cool chiller, and on top of that, we progressively replace refrigerants from chiller units to R514A (2 GWP).

ACTIVE MONITORING AND MAINTENANCE FOR FACILITIES



Installing Energy Monitoring Platforms

To understand performance with granularity

Annual Environmental Analysis

Based on your understanding on daily practices to do a best “guestimate” of where energy is being used. So as to define strategy for management

Monthly or Quarterly Review

Together with working level and management staff, we review our utility monthly or quarterly as a way to monitor our KPI performances

ELECTRIFYING OUR FLEET



Electrification

Already electrified all Passenger Cars operating in Airside. Aiming to replace more Ground Service Equipment (GSE) by 2030.

Market Readiness

Readiness of GSE is not high, we have therefore looked for transitional fuel to decarbonise our fleet

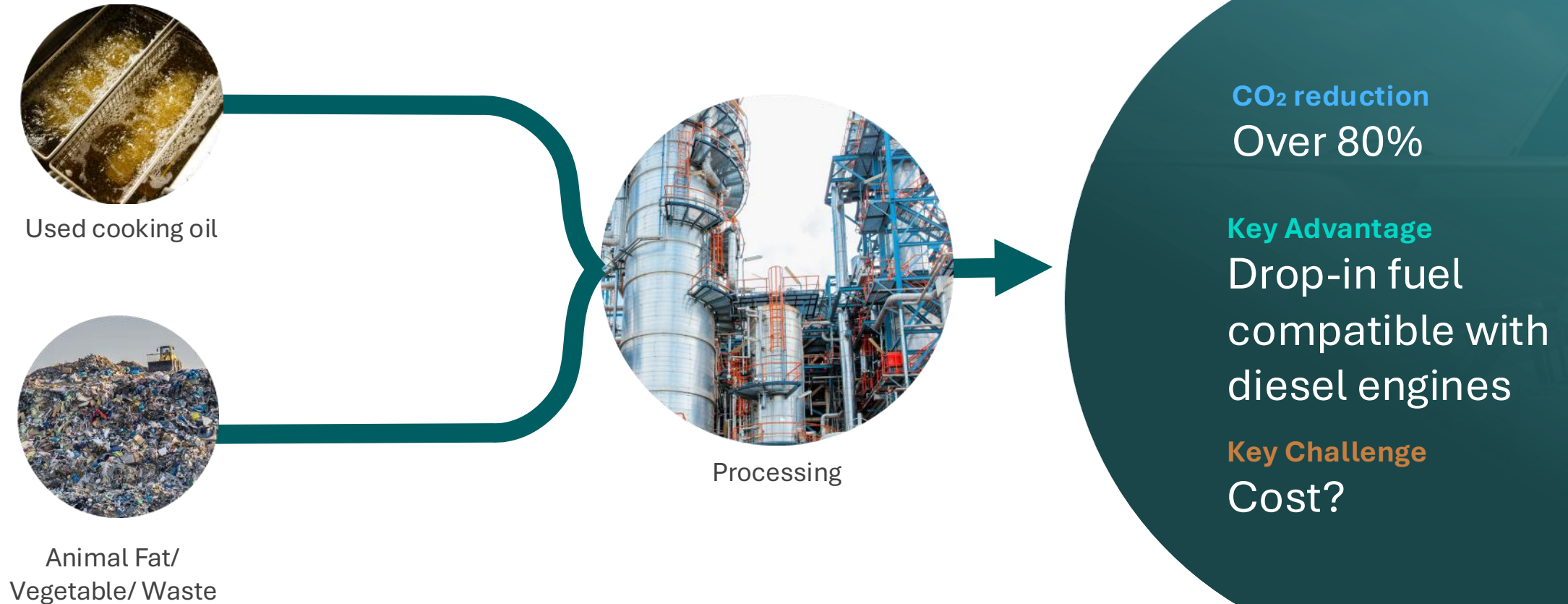
HYDROTREATED VEGETABLE OIL (HVO) TO DECARBONISE OUR FLEET

Cathay Cargo Terminal, HAS by Cathay and Hong Kong International Airport (HKIA) work collaboratively to launch HVO Pilot. HVO is a renewable diesel alternative that offers a cleaner combustion process, reducing over 80% of lifecycle carbon emissions compared to traditional diesel fuel. HAS by Cathay is the first Ramp Handling Operator at HKIA to utilise HVO.



HYDROTREATED VEGETABLE OIL (HVO)

HVO is a type of renewable diesel generated from waste cooking oil / animal fat/ vegetable etc., it is a drop-in fuel fully compatible with diesel engines of equipment. It reduces lifecycle emission by over 80% compare to diesel.



KEY TAKEAWAYS

NET-ZERO CARBON EMISSIONS

Reduce 32% emission by 2030, 55% by 2035 and Net Zero by 2050 (compare to 2018 level)

SIX – PRONGED APPROACH

1. Facility Enhancement
2. Low GWP Alternatives
3. Active Monitoring & Maintenance
4. Fleet Modification
5. Alternative Fuel
6. Carbon Offset

COLLABORATION

Many successful cases Cathay subsidiaries have based on collaborating with industries, suppliers, partners etc., especially the innovative ones!

The only way we can go ‘greener’ is by working ‘together’

