

# Standing Out with Simplicity & Flexibility

Restoring competitiveness by recovering energy waste



## Prosper Palm Oil Mill Sdn. Bhd.(PPOM)

Industry: Refining & Supplying Edible Oil

Parent Company: Prosper Group of Companies

Project Location: Wisma Prosper, Kelana Jaya, Selangor

### Company Bio

PPOM supplies premium-grade crude and refined vegetable oils ranging from sunflower to palm oils to worldwide markets.

### Overview

PPOM owns Wisma Prosper, an office building providing space for its HQ and other businesses. The old chillers that cooled the building often failed to work, challenging its ability to keep tenants comfortable and costs low.

We responded to the challenge by providing a straightforward replacement solution made up of ETCO hybrid chillers and cooling-plant enhancements.

*"Changing to ETCO hybrid chillers has made a world of difference to keeping our building going – through improved comfort and recovery of money lost to inefficiency."*

**Jonathan Koh**  
Property Manager, Prosper Group of Companies

Average Monthly Energy Bill (Before)

**RM 55k**

Average Monthly Energy Bill (After)

**RM 33k**

Plant Energy-Cost Savings

**60.5%**

Reduction in Carbon Emissions

**327 mt**

## The Challenge

The building's old air-cooled chillers were nearly worn out from long exposure to the outdoors. Their performance had worsened so badly that they could only deliver chilled water at 16 – 19°C. On top of that, extensive repairs had to be done frequently to keep the machines running. These issues led to very high operating costs and extreme tenant dissatisfaction.

Thus, PPOM looked for replacement options that were energy efficient and could be installed on the roof like the old units.

## The Approach

We identified ETCO hybrid chillers as the ideal replacement solution to minimize the cost of chiller ownership.

At the same time, we recognized that improvements to daily plant operations were essential to completing our solution.

## The Solution

ETCO hybrid chillers are at least 30% more energy efficient than air-cooled chillers for similar installation requirements. Their modular design allowed us to easily complete the replacement of an old chiller over a single weekend.

We equipped the existing pumps with controls to adapt them to the new chillers and the building's demand for cooling.

We installed a real-time energy monitoring system at the plant to verify the effectiveness of the upgrading project.

## The Results

The new chillers have successfully restored comfort and productivity in the building by supplying chilled water at 7°C.

The upgrading of the cooling plant has delivered 60% energy cost savings where 8% is due to higher pumping efficiency as verified by ongoing energy monitoring.

Today real-time energy monitoring is used to ensure that the plant continues to perform efficiently well into the future.

