

Switch to Green Hybrid Chillers Cuts 60% of Cooling Costs and 327-Tonnes of Carbon Emissions with Ease at Wisma Prosper

The Background

- The owner of Wisma Prosper is Prosper Palm Oil Mill Sdn. Bhd., which engages in the trading and supply of edible oil.
- The 13-storey building located in Kelana Jaya, Selangor serves as the office space for the owner's corporate headquarters and other business tenants.



The Challenges

Aging air-cooled chillers used to provide comfort cooling for the building challenged the owner's ability to keep **occupants comfortable** and **ownership-costs low**:

- Their reliability was affected by the weather and aging components.
- The temperature of the chilled water supplied varied from **16 to 19°C**.
- Their efficiency had declined greatly from long exposure to the outdoors.

The Solution

ETCO hybrid-cooled chillers were a **straightforward** replacement solution for an existing air-cooled chiller to address the owner's needs.

The Difference

Before				
BIL ELEKTRIK DAN INVOIS CUKAI				
No. Akaun	:	220105525208		
No. Kontrak	:	197008		
Deposit	:	RM126,075.00		
No. Invois Cukai	:	17988822		
PROSPER PALM OIL MILL SDN BHD				
3 BLK B, KELANA CENTRE POINT				
JLN SS 7/19				
KELANA JAYA				
47301 PETALING JAYA				
SELANGOR				
		SALINAN		
Jumlah Perlu Dibayar		RM 54,058.80	Tarikh Bil : 01.07.2018	
Tunggakan	RM	Amaun	Bayar Sebelum	
		0.00	Terima Kasih	
Caj Semasa	RM	54,058.79		
Penggenapan	RM	0.01		
Jumlah Bil	RM	54,058.80	31.07.2018	
Bil Terdahulu	RM	57,212.95	Bayaran Akhir	RM 57,212.95
		(02.06.2018)		
Jenis Bacaan		: Bacaan Sebenar		
Tempoh Bil		: 01.06.2018 - 30.06.2018 (30 Hari)		
Tarif		: C1:Perdagangan		
Blok Tarif (kWh/kW)		Kegunaan (kWh/kW)	Kadar(RM)	Amaun(RM)
Kegunaan		110,903.00	0.3650	40,479.60
Kehendak Maksima		474.82	30.3000	14,387.05
Jumlah				54,866.65

~ RM 55k

After				
BIL ELEKTRIK DAN INVOIS CUKAI				
No. Akaun	:	220105525208		
No. Kontrak	:	197008		
Deposit	:	RM126,075.00		
No. Invois Cukai	:	17988822		
PROSPER PALM OIL MILL SDN BHD				
3 BLK B, KELANA CENTRE POINT				
JLN SS 7/19				
KELANA JAYA				
47301 PETALING JAYA				
SELANGOR				
		SALINAN		
Jumlah Perlu Dibayar		RM 34,350.70	Tarikh Bil : 01.10.2018	
Tunggakan	RM	Amaun	Bayar Sebelum	
		0.00	Terima Kasih	
Caj Semasa	RM	34,350.71		
Penggenapan	RM	0.01		
Jumlah Bil	RM	34,350.70	31.10.2018	
Bil Terdahulu	RM	57,014.20	Bayaran Akhir	RM 57,014.20
		(03.09.2018)		
Jenis Bacaan		: Bacaan Sebenar		
Tempoh Bil		: 01.09.2018 - 30.09.2018 (30 Hari)		
Tarif		: C1:Perdagangan		
Blok Tarif (kWh/kW)		Kegunaan (kWh/kW)	Kadar(RM)	Amaun(RM)
Kegunaan		67,083.00	0.3650	24,485.30
Kehendak Maksima		278.32	30.3000	8,433.10
Jumlah				32,918.40

Monthly savings
~ RM 22k

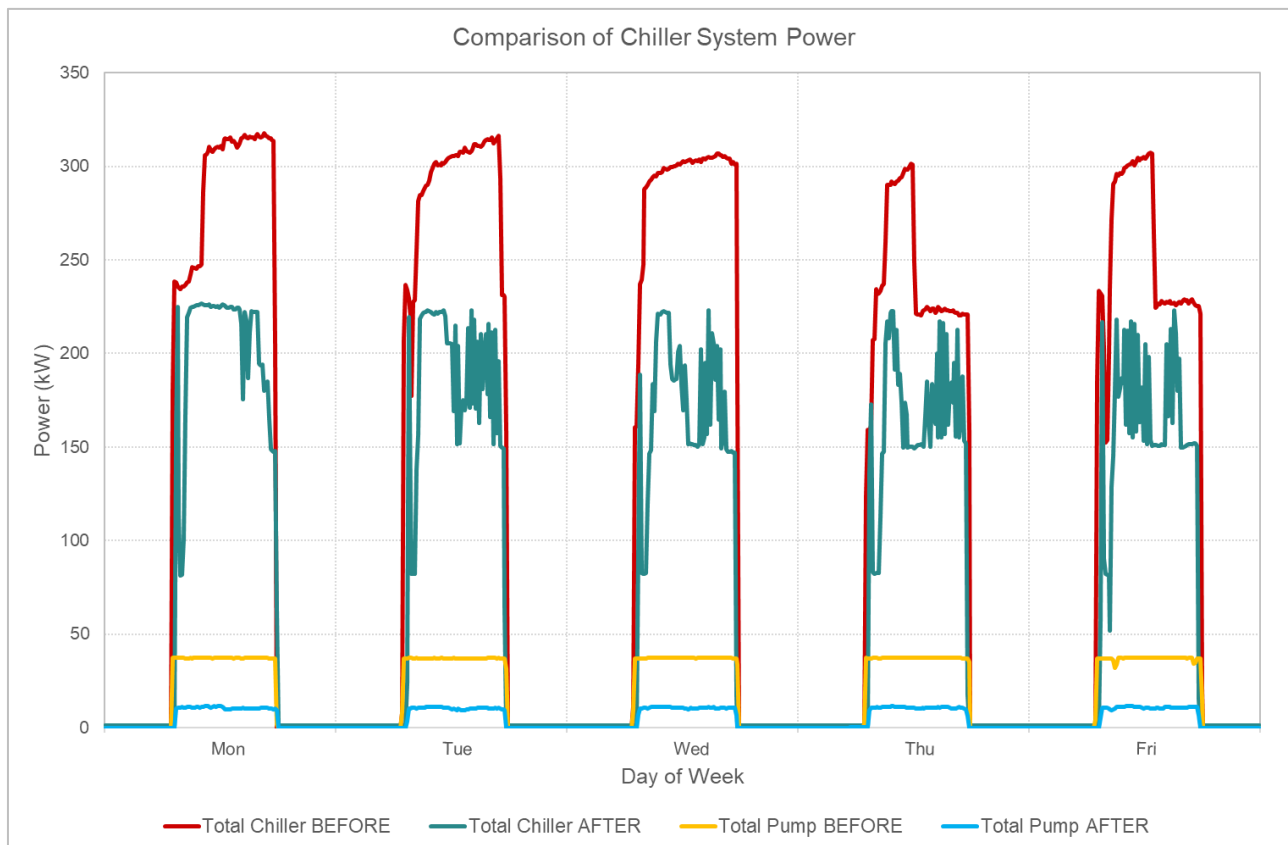
~ RM 33k

- The monthly energy bill from TNB provided the most direct measure of success for the project. The cost savings were worth **40% of building energy costs** or nearly **60% of chiller-plant energy costs**.
- The replacement also restored the comfort and hence, productivity of building occupants since the new chillers can readily supply chilled water with a temperature as low as **7°C**.
- The energy saved by implementing the project was expected to reduce more than **327 tonnes of CO₂**, equivalent to removing over 70 cars from the road or planting 14,420 trees annually.

Switch to Green Hybrid Chillers Cuts 60% of Cooling Costs and 327-Tonnes of Carbon Emissions with Ease at Wisma Prosper

Enduring Value

- The new hybrid chillers were packaged together with a system that enables monitoring of the energy consumed by the chiller plant in **real time**.



- The benefits of the energy-monitoring system powered by the building's Internet facility are
 - ✓ Verifying the effectiveness of the chiller changeover on reducing energy costs in the **long run**.
 - ✓ Supporting the owner's application for the Green Investment Tax Allowance (GITA) incentive by making **actual operational information** easily available for reviews of the project's achievements.
 - ✓ Allowing simple but effective **management of the plant operations** by offering the owner continuous access to live operational data from anywhere.



iETCO Sdn. Bhd. is an HVAC specialist company that focuses on solutions that deliver sustainable value. We help people and businesses work better by working together to build HVAC systems using innovative and energy-efficient products.

For more information, please contact us via [+6012-283 1080](tel:+6012-2831080) or kelvinlim@ietco.com.my.