

SELECTED PROJECT HIGHLIGHTS

Measured context. Actionable opportunity.

Nine Malaysian project packages with complete annual energy, cost and carbon estimates reported in the reviewed source documents.

REVIEWED PORTFOLIO

9

PROJECT PACKAGES

24,235.7 GJ

IDENTIFIED ENERGY

RM 3,047,135

IDENTIFIED COST

5,036.4 tCO₂

IDENTIFIED CARBON

Figures are recommended ESM estimates, not achieved savings. They remain subject to implementation, operating conditions and measurement and verification.

Source basis. Reports use varying baseline years, tariffs, operating assumptions and carbon factors. Portfolio totals are a convenience sum of report-stated estimates, not an independently validated result.

Professional note. Duopharma Bangi 2 values reproduce the report total row. Its tariff and carbon-factor narrative does not independently reproduce those totals.

01 Commercial and essential services

Each card reproduces one selected, non-overlapping project package from the reviewed source record.

WATER & WASTEWATER

IWK PJA211 & PJA374, Kota Damansara

Pumping, aeration and process loads across one integrated site with two treatment plants; four efficiency measures were identified.

2,850.7 GJ

ENERGY / YEAR

RM 319,970

COST / YEAR

600.2 tCO2

CARBON / YEAR

Source-reported annual ESM estimate. Recommended opportunity; not verified achieved savings.

FOOD MANUFACTURING

Kong Lee Eng / Ayam Wira, Shah Alam

Ammonia refrigeration, compressed air, office cooling and lighting; eight efficiency measures were identified.

2,273.6 GJ

ENERGY / YEAR

RM 296,833

COST / YEAR

478.7 tCO2

CARBON / YEAR

Source-reported annual ESM estimate. Recommended opportunity; not verified achieved savings.

RETAIL / MALL

Viva Home Shopping Mall, Kuala Lumpur

Cooling, lighting, vertical transport and pumping in a retail building; six efficiency measures were identified.

2,369.5 GJ

ENERGY / YEAR

RM 262,055

COST / YEAR

420.6 tCO2

CARBON / YEAR

Source-reported annual ESM estimate. Recommended opportunity; not verified achieved savings.

02 Industrial systems

Each card reproduces one selected, non-overlapping project package from the reviewed source record.

OFFICE

Menara MyIPO, Petaling Jaya

Building utilities, cooling, power quality and environmental performance; the selected combined strategy is shown.

849.5 GJ

ENERGY / YEAR

RM 86,129

COST / YEAR

178.9 tCO2

CARBON / YEAR

Source-reported annual ESM estimate. Recommended opportunity; not verified achieved savings.

RUBBER MANUFACTURING

GIIB Rubber Compound

Electrical and thermal systems including compressed air, cooling, pumps, lighting and boiler monitoring; eight measures were identified.

509.7 GJ

ENERGY / YEAR

RM 66,550

COST / YEAR

107.3 tCO2

CARBON / YEAR

Source-reported annual ESM estimate. Recommended opportunity; not verified achieved savings.

PHARMACEUTICAL MANUFACTURING

Duopharma Klang

Compressed air, building controls, water-cooled and air-cooled chillers and pumps; seven measures were identified.

4,645.7 GJ

ENERGY / YEAR

RM 606,519

COST / YEAR

978.2 tCO2

CARBON / YEAR

Source-reported annual ESM estimate. Recommended opportunity; not verified achieved savings.

03 Manufacturing performance

Each card reproduces one selected, non-overlapping project package from the reviewed source record.

PHARMACEUTICAL MANUFACTURING

Duopharma Bangi (B1)

Compressed air, building controls, water-cooled and air-cooled chillers and pumps; six measures were identified.

2,141.2 GJ	RM 279,542	450.8 tCO2
ENERGY / YEAR	COST / YEAR	CARBON / YEAR

Source-reported annual ESM estimate. Recommended opportunity; not verified achieved savings.

ELECTRONICS MANUFACTURING

Youngreem Electronics

Compressed-air storage, leaks, controls and monitoring, plus office VRF and EMS; six measures were identified.

2,612.0 GJ	RM 341,015	550.0 tCO2
ENERGY / YEAR	COST / YEAR	CARBON / YEAR

Source-reported annual ESM estimate. Recommended opportunity; not verified achieved savings.

PHARMACEUTICAL MANUFACTURING

Duopharma Bangi 2

Compressed air, chiller load rotation, chilled-water pumps and building controls; six measures were identified.

5,983.8 GJ	RM 788,522	1,271.7 tCO2
ENERGY / YEAR	COST / YEAR	CARBON / YEAR

Source-reported annual ESM estimate. Recommended opportunity; not verified achieved savings.