5th Facility Management Asia Conference 2026 · Kuching, Sarawak

Sustainable Facility Management Yielding Good Return on Investment

A Case Study: Sunway Group of Companies

Malaysia Association of Facility Management

Based on Sunway Sustainability Reports 2024–2025 & Sunway REIT Integrated Report 2025

Presentation Structure

OVERVIEW

About Sunway: 50 Years of Build-Own-Operate

01 ABOUT SUNWAY GROUP

RM38B	14,272	13	50+	RM14.4B
Market Cap	Employees	Divisions	Locations	AUM

Key Milestones

1974
Founded from rehabilitated tin mine

2010
Sunway REIT listed on Bursa

2019
1st Solar PV Green building KPI

2021
Malaysia's 1st Internal Carbon Pricing

2022
Green Lease Partnership launched

2024
Sunway REIT: RM6.0B SF (96% of borrowings)

2025
40% GFA green-certified

The Build-Own-Operate (BOO) Difference

Sunway designs, builds, owns AND operates thus aligning FM incentives under one roof. FM teams are mandatory at the design stage, embedding sustainable features from day one. Green Building Index data show that green building design adds 0.7–11% upfront construction cost. Retrofitting the same features after construction is significantly more expensive, with costs further increased by operational disruption, occupancy constraints, and regulatory compliance requirement.

Sunway REIT: The BOO Portfolio in Numbers

01 ABOUT SUNWAY GROUP

Retail	Hotels	Offices	Industrial & Others
14 properties (incl. 7 hypermarkets) Sunway Pyramid, Carnival, Putra Mall	6 hotels Sunway Pyramid Hotel: GreenRE Platinum (Dec 2025) Putra Hotel: GreenRE Gold	5 properties 3 of 4 labelled offices: 5-star BEI (Suruhanjaya Tenaga 2024)	3 properties 78% green lease participation (up from 40% in 2024)

28	Total Assets
RM10.2B	Property Value
RM7.9B	Market Capitalisation
1,728	Tenancies
40%	GFA Green-Certified
Top 3	M-REIT Ranking

Sustainable FM Delivers Returns Across Four Dimensions

02 THE BUSINESS CASE

Environmental ROI	Financial ROI	Social ROI	Governance ROI
• Reduced energy costs	• Premium rent — green assets	• Higher tenant retention	• Regulatory readiness (EECA)
• Lower carbon liability	• Lower borrowing costs (SLL)	• Reduced staff turnover	• ESG rating uplift
• Water savings	• Higher asset valuations	• Community goodwill	• Access to capital markets
• Avoided regulatory fines	• Better distribution yields	• Brand premium	• Climate risk mitigation

Sunway's approach: Sustainability is not a cost center. It is the foundation of long-term value creation

Environmental ROI: Energy & Carbon

03 ENVIRONMENTAL ROI

FM Energy Infrastructure Investments

RM3.8M — **Menara Sunway**
Lift replacements

RM6.8M — **Sunway Pyramid Mall**
Escalator, ACMV & full LED conversion

RM14.7M — **Sunway Carnival Mall**
Escalators, lifts, LED & ACMV — New Wing

Solar PV: 12,040 MWh → 9,319 tCO_2e avoided (REIT 2025)
Sunway Berhad Group 2025: 21,828 MWh renewable energy consumed

Key Outcomes

All divisions
met energy intensity targets (2024)
(Sunway Berhad Group — all business divisions)

5-star BEI
Sunway Pinnacle, Sunway Tower, Wisma Sunway
(Source: Sunway REIT SR 2024)

4-star BEI
Menara Sunway — Suruhanjaya Tenaga
(Source: Sunway REIT SR 2024)

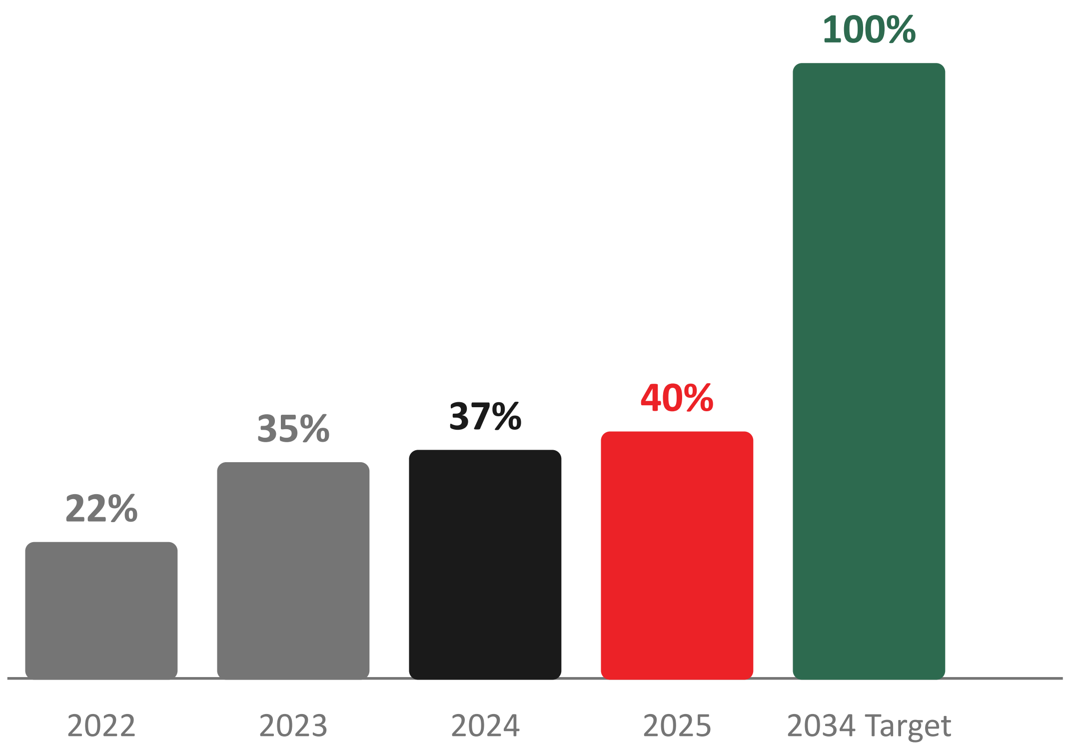
Carbon Tax Ready
25,944 tCO_2e avoided (retail div. total energy efficiency) → RM1,945,829 if RM75/tonne carbon tax applied (Sunway Berhad SR 2024)

RM5.6M saved
Cumulative SL finance cost savings (2021–2025)
RM3.4M at end-2024 · Source: REIT SR 2025

Environmental ROI: Green Building Roadmap 2034

03 ENVIRONMENTAL ROI

GFA Certification Progress



Target: 100% by 2034

2025 New Certifications

- **Platinum** — Sunway Pyramid Hotel
- **Platinum** — Sunway Putra Tower
- **Gold** — Sunway Carnival Mall (New)
- **Gold** — SREIT HMkt – Putra Heights
- **Silver** — SREIT HMkt – Ulu Kelang

Premium rents · Lower lifecycle costs · Gate-keeps new acquisitions (2024 policy)

Financial ROI: Sustainable Finance & Capital Markets

04 FINANCIAL ROI

RM4.6B

Sustainable Finance

Sunway REIT

96%

of all REIT borrowings
under sustainable finance

Linked to 2 FM metrics:

Building Energy Intensity (BEI)

Annual RE Generation (MWh)

Source: REIT SR 2025

Malaysia Capital Market Firsts — 2024

1st M-REIT

Rated SL Medium Term Notes

RM400M · July 2024 · First rated SL-MTN by a REIT in Malaysia

1st Malaysia

Rated SL Perpetual Bonds

RM500M · Oct 2024 · First SL perpetual bonds in Malaysia; first rated perpetual bonds by a Malaysian REIT

GOLD

RAM Sustainability Framework

Gold Sustainable Finance Rating awarded by RAM Sustainability Sdn Bhd

Sources: Sunway REIT IAR 2024; SUNREIT press release 22 Oct 2024; RAM Sustainability 23 Aug 2024

FM Performance Yields:

RM5.6M

Cumulative finance cost savings — 2021 to 2025

RM3.4M at end-2024

▼

RM5.6M at end-2025

Direct return from:

BEI improvement

+

Solar RE generation

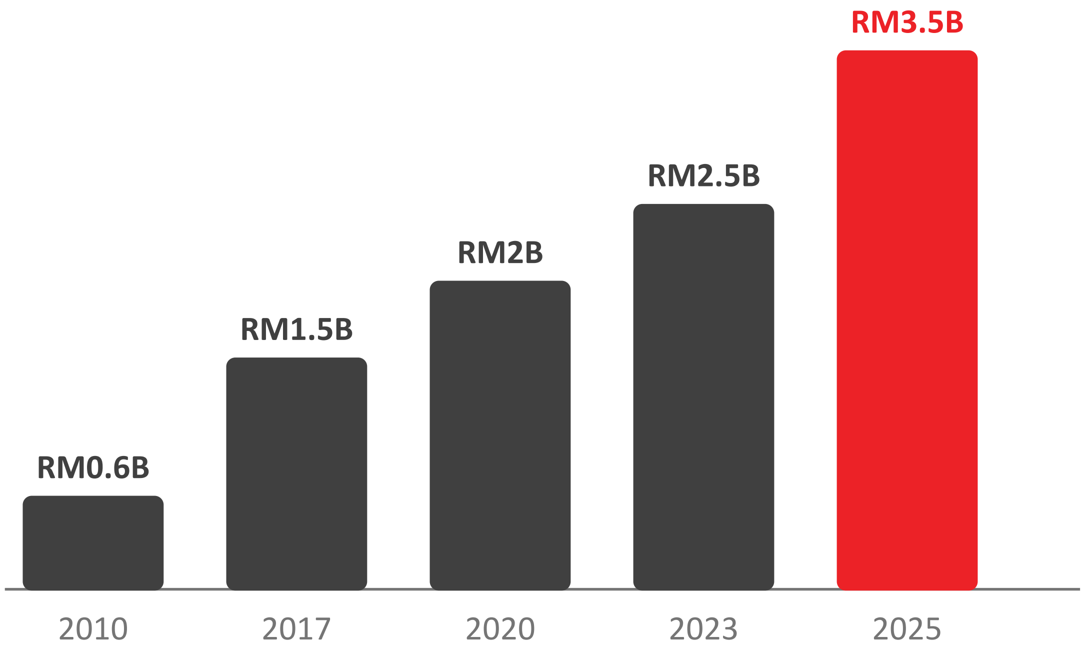
Source: REIT SR 2025

Financial ROI: Investor Returns & REIT Outperformance

04 FINANCIAL ROI

31.2%	14.48 sen	RM894M	6.3%	51.9%
Total Return FY2025 vs sector avg 10.7%	DPU FY2025 +44.8% year-on-year	Net Property Income FY2025	Distribution Yield vs sector avg 5.8%	Premium to NAV (FY2024: 22.1%)
Source: SUNREIT Q4 2025 Presentation; IAR 2025	*Source: SUNREIT Q4 2025 Results; The Edge, 29 Jan 2026*	*Source: SUNREIT Q4 2025 Presentation, 29 Jan 2026*	*Source: SUNREIT Q4 2025 Presentation, 29 Jan 2026*	*Source: SUNREIT Q4 2025 Presentation; IAR 2025*

Revenue Growth (RM billion)



The Sustainable FM → Value Creation Chain

- FM invests in energy efficiency & green certification
- BEI improves + RE generation grows → SL finance KPIs met → lower cost of debt
- Green assets attract premium tenants & higher rents
- Higher NPI → better distribution per unit
- Strong ESG ratings attract institutional capital
- Unit appreciation + yield = 31.2% total return

Social ROI: People, Tenants & Community

05 SOCIAL ROI

Green Lease Partnership

- 92% retail tenant participation
- 96% office tenant participation
- 100% hotel master lessee
- 78% industrial & others
- First Green Lease Partnership Programme by a REIT in Malaysia (2022)

Workforce & Safety

- 14,272 employees
- Zero fatalities (2024)
- 65% employee retention
- 66 avg learning hrs/employee

Community & Social Impact

- 84,121 beneficiaries (2025)
- RM7.38M CSR (2025, Sunway Group)
- 900+ volunteers, 3,900+ hours
- 2M+ packed meals since 2014

Sunway's Integrated Township: FM manages not just buildings but entire sustainable communities

Governance ROI: Regulatory Readiness

05 GOVERNANCE ROI

Getting ahead of regulation is cheaper than catching up to it. Sunway tracked BEI since 2019 — when the EECA made it mandatory in 2025, our offices already labelled, three at 5-star. When Malaysia's carbon tax arrives in 2026, we have priced carbon internally at RM15 per tonne since 2021. Readiness is not luck. It is five years of decisions made before the deadline existed.

Year	Regulation	Readiness
2022	**OSH Amendment Act 2022** Mandatory OSH Coordinators; higher penalties	✓ Appointed OSH-C; 74% staff OHS-trained
2025	**Energy Efficiency Conservation Act (EECA)** BEI labelling mandatory for large buildings	✓ 4 offices labelled; 3 achieved 5-star
2025	**National Sustainability Reporting** IFRS S1/S2 mandatory for PLCs	✓ First M-REIT to adopt full IFRS S1 — ahead of all
2026	**Malaysia Carbon Tax** RM75/tonne; expanding scope	✓ Internal carbon pricing operational since 2021

ESG Ratings: MSCI 'A' · GRESB 4-star · FTSE Russell Top 8% · RAM Gold · GreenRE SDA Award 2024/2025

Technology & Innovation: The FM Accelerator

05 INNOVATION

Smart Building Management

- BMS with IoT sensors across portfolio
- Energy & HVAC monitoring; asset-level water metering; periodic IAQ audits (9 properties since 2022)
- Automated chiller & AHU optimisation
- LED with motion sensors

Digital FM Operations

- Cloud migration & app modernisation
- AI-powered operational transformation
- Big data for smart township management; Integrated Operations Center
- Digital Innovation Programme 2.0

Sustainable Energy

- District Cooling (thermal storage)
- Corporate Green Power (VPPA)
- NEM rooftop solar PV across portfolio
- Large-scale solar EPCC capability (SunCon)

Circular Economy & Water

- 438,500+ m^3 water recycled (2024, Sunway Group)
- 52% waste diverted from landfills (2025, Sunway Group)
- XFarms: vertical farming in buildings
- Water Crisis SOP across all managed properties

Co-opt FM early. Build performance in from Day 1 and not bolt it on later

FM Co-option at Design Stage: The Policy Foundation

06 FM AT DESIGN STAGE

The Cost of NOT Co-opting FM: Why does a car park run mechanical ventilation 24 hours a day for 50 years? Because nobody asked the FM team at concept stage.

Sunway's Three-Policy Framework

Green Building Policy (April 2025)

- FM mandatory at design concept stage — not advisory
- All new buildings: GreenRE / GBI from 2025
- New acquisitions certified at purchase or within 3 years
- Sustainability integrated from concept to O&M

Green Township Policy

- 100% walkable — covered links in master plan
- 40% greenscapes reduce heat → lower cooling load
- EV bays & public transport links built in
- CPTED: security in landscape — reduces OPEX

Lifecycle Cost Analysis (2025)

- All M&E: 20–30 year whole-life cost evaluation
- Capital savings cannot override FM efficiency
- Green materials specified in construction contract
- ICP RM15/tonne CO_2e makes high-carbon costs visible

In Sunway's BOO model, every design decision becomes tomorrow's operating cost, so it pays to get it right from the start.

FM Co-option: Stage by Stage Process

06 FM AT DESIGN STAGE

PRE-DESIGN & BRIEF	SCHEMATIC & CONCEPT	DETAILED DESIGN & M&E	CONSTRUCTION & COMMISSIONING	OPERATION & IMPROVEMENT
FM sets OPR: energy, water, maintenance targets	OTTV <50 W/m^2 permanent cooling reduction	VVVF lifts: up to 50% energy savings	SunCon design & build: single point accountability	BMS from Day 1: 3.5–4% annual BEI reduction
15-factor Sustainability Due Diligence	Orientation & passive shading for FM energy impact	LED + motion sensors as standard base build	All 28 sites ISO 14001:2015 compliant	Annual Asset Enhancement Initiative (AEI)
Climate VaR for all acquisitions	Solar PV readiness designed in from start	BMS integration points fully specified	FM in Defects Liability Period — verifies OPR	Lessons learnt feed next project OPR

FM is embedded from the start because the BOO model aligns design with operations

What Gets Built In & The Continuous Improvement Loop

06 FM AT DESIGN STAGE

FM-Driven Design Requirements

Energy Systems

- OTTV <50 W/m² building envelope
- VVVF lifts with sleep mode
- BMS sub-metering by zone
- Solar PV-ready roof & risers
- LED + motion sensors

Water & Resilience

- Water-efficient fittings — base build
- Rainwater/lake harvest infrastructure
- Recycling bays sized into base build (per Green Building Policy)
- Water Crisis SOP across all properties

IEQ & Wellness

- Low-VOC materials throughout
- Natural car park ventilation
- Periodic IAQ audits (9 properties since 2022)
- Green Township Policy: 40–55% greenscapes (township level)

Mobility & Future

- EV charging infrastructure
- Covered links to public transport
- Climate VaR-informed flood risk design
- Green fit-out guide for tenants

The Continuous Improvement Loop

1. **BMS Data — Day 1**
   Energy & HVAC; asset-level water metering; sub-metering by zone
2. **Benchmark vs. Targets**
   3.5–4% annual BEI reduction; GRESB tracked
3. **Annual AEI Programme**
   e.g. RM3.8M + RM6.8M + RM14.7M in M&E upgrades (REIT SR 2024); lifecycle ROI
4. **Green Lease Feedback**
   96% office, 92% retail data + IAQ audits
5. **Feed Back to Next Brief**
   OPR updated; design standards improved

Sunway 2030 Sustainability Goals: The FM Framework

07 GOVERNANCE

Goal	Focus	Targets	FM Role
Goal 1	**Driving Carbon Reduction**	Net zero 2050; 45% GHG reduction by 2030	Energy audits, BEI, solar PV, ACMV upgrades, green certification
Goal 2	**Responsible Value Chain**	100% supplier ESG; Green Lease Partnership	Tenant engagement, supplier risk, simplified ESG guidelines
Goal 3	**Safe & Dignified Workforce**	Zero fatalities; ISO 45001 — all sites compliant, 67% certified	OHS programmes; 66 avg learning hours/employee (FY2025)
Goal 4	**Community Inclusivity**	>1.4M cumulative beneficiaries (2015–2025); RM7.38M CSR (FY2025)	Urban poverty programmes, volunteers, community infrastructure
Goal 5	**Transparency & Excellence**	IFRS S1/S2 (FY2025); MSCI 'A'; GRESB 4-star; FTSE Russell top 8%; RAM Gold	Sustainability data collection; ESG KPIs driving performance ratings

When FM performance affects executive incentives, sustainability becomes a boardroom priority.

Key Lessons: Building a Sustainable FM Industry in Malaysia

07 KEY LESSONS

Malaysia's infrastructure pipeline — green energy, digital economy, industrial, transit, urban development — will require professional FM for decades. The foundations being laid today will determine operational costs for the next 50 years.

1 Co-opt FM at Design Stage

Mandatory in every project brief. Designing green adds just 0.7–11% upfront — and keeps you ahead of regulation before enforcement costs compound.

2 Establish Internal Carbon Pricing

RM15/tonne CO_2e. Ready for Malaysia's 2026 carbon tax.

3 Green Building Roadmap from Day 1

GreenRE Silver as minimum for all government & GLC buildings.

4 Link FM Performance to Finance

Sustainability-linked loans available in Malaysia today.

5 Build Digital FM Capability

Design BMS & IoT into the construction contract.

6 Engage Tenants via Green Leases

Sunway: 96% office participation within 3 years.

The ROI Summary: Sunway's Sustainable FM Returns

07 ROI SUMMARY

Environmental	Environmental	Environmental	Financial
7% below BEI target	**9,319 tCO_2e**	**40%**	**RM4.6B**
Retail BEI: 288 vs target 310 kWh/m²/yr (FY2025)	Emissions avoided by solar (FY2025)	GFA green-certified (100% by 2034)	Sunway REIT sustainable finance (FY2025)

Financial	Financial	Social	Governance
RM5.6M	**31.2%**	**96%**	**Zero**
Cumulative SL finance cost savings (2025)	Total return FY2025 vs avg 10.7%	Green Lease office tenants	Workplace fatalities 2024–25

Sunway's evidence: Sustainable FM is not a cost. It is a long-term value multiplier

The Opportunity Before Us

Malaysia stands at the beginning of a sustained infrastructure build-out.

Every building that rises will require professional FM for its entire lifetime.

The time to establish the right foundations is now.

Co-opt FM at Design Stage	Adopt Green Building Standards	Invest in FM Talent
Mandatory for all new builds from day one	GreenRE/GBI minimum for all new builds	Partner with MAFM, universities & technical colleges

"Sunway was built on a tin mine. Malaysia's FM industry can be built on a foundation of sustainable excellence."

Thank you · Malaysia Association of Facility Management · 5th FMAC 2026, Kuching, Sarawak