



REGALIA ONE

Energy Efficiency Alliance

Delivering World-Class Lighting, Cooling, and
Smart Energy Savings
Smart Digital Asset Management
Southeast Asia, Europe & Middle East

Who We Are

REGALIA ONE is Southeast Asia's leading energy efficiency platform—integrating top innovators partners, Llewellyn & Partner Co (HONG KONG) and Barghest Building Performance (BBP) (APAC).

We provide clients with a single, trusted point of contact for outcome-based energy transformation.

Our subsidiary : MERCU MAKMUR Sdn Bhd (MM)

Competitive Edge:

- 1,000+ major projects delivered globally
- \$200M+ client energy savings; Fortune 500, public sector, healthcare, retail
- Zero upfront model; verified, auditable results
- Full delivery & support in SEA and GCC; institutional-grade reporting

Partners Track Record

World Leading ISO Based SuperApp AutoTwin powered by Artificial Intelligence (A.I.)

- Patented platform with full ISO series certifications in ISO 19650 which supports various ISO standards in A.I., Building Information Modelling (BIM), Smart City and Carbon Management
- Digital Twin for smart digital built assets
- Real-time energy intelligence and A.I. driven decision making for Energy reduction and carbon credit trading

Top Digital Consulting Services

- Professional Digitalisation, BIM, GIS, Technology and Sustainability to provide services on Standardisation, Digitalisation, Technology Integration and Asset Utilisation



Asia's leading HVAC optimization platform, driven by machine learning/ AI

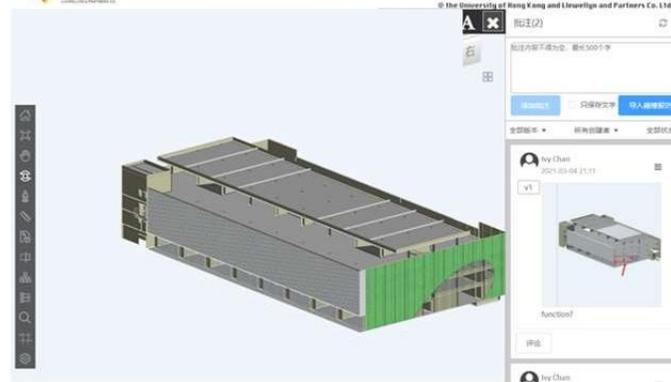
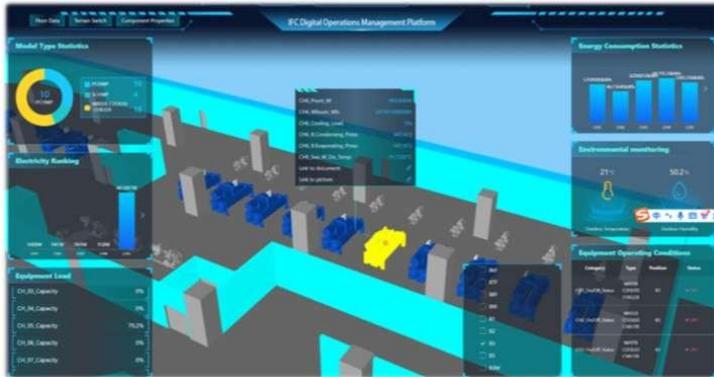
- >400,000 RT cooling systems optimized across 9 markets.
- Up to 40% HVAC energy savings delivered.
- Energy savings independently certified by 3rd parties.
- Trusted by mission critical industries like semiconductor and pharmaceutical manufacturing, data centers, district cooling plants, hospitals and commercial buildings.
- Clients include 3 of the world's top 10 semiconductor manufacturers, Fortune 500 companies and Asia's top 20 real estate firms.



The background features a hand holding a green globe. Surrounding the globe are several circular icons: a leaf, an electric car, a lightbulb, solar panels, a wind turbine, and a CO2 symbol. The overall theme is digital and sustainable technology.

DITIGITAL TWIN
SMART DIGITAL ASSETS MANAGEMENT
SUPERAPP AUTOTWIN

Smart Digital Assets Management – Superapp AutoTwin



**Productivity in Approval
improve >50%**



**Cost & Manpower
Reduce >50%**



**Compatible with BIM, GIS, IoT, A.I., NLP
& other techs**



**Plant Energy
Savings >10%**



**Operation
Efficiency >30%**

TECH HIGHLIGHTS

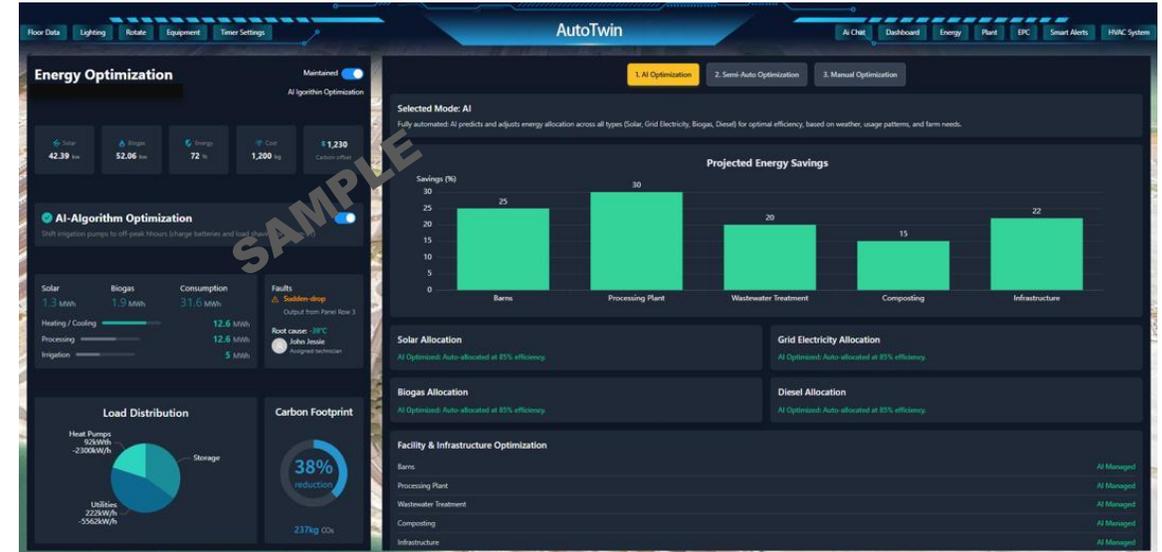
An innovative, A.I. powered solution designed to optimize energy efficiency in buildings. By creating a virtual replica of your physical building, the digital twin continuously monitors, analyzes, and simulates energy consumption patterns, enabling real-time decision-making and predictive maintenance. This cutting-edge technology integrates seamlessly with BIM and IoT for enhanced interoperability and data accuracy.

BIMB SOFTWARE – AUTOCDE (PRE-APPROVED PRODUCT PA22-07)

The only ISO-compliant integrated asset information management BIM software embedded in our SuperApp AutoTwin platform. Among one of the first BSI BIM Software Kitemark™ in the world for our full compliance with ISO19650 and BS1192-4 in adopting BIM functionality, security-minded approach, user support, and organisational resilience. It re-invents the design, construction, logistics, and operation for the AEC industry. Over a CDE, it integrates BIM, GIS, IoT and A.I. to capture high-value data from various systems like geographical information system (GIS) for informed decision as a Smart Project Management Solution.

Smart Digital Assets Management – Superapp AutoTwin

Energy optimisation and monitoring involve the continuous tracking and improvement of a building's energy performance using real-time data, automated controls, and advanced analytics. By monitoring systems such as HVAC, lighting, and equipment operations, the system identifies inefficiencies, adjusts settings, and ensures consistent performance throughout the day.



This approach helps reduce unnecessary energy use, stabilise building temperatures, improve comfort levels, and minimise equipment strain. With automated insights and alerts, building operators can act quickly to resolve issues, plan maintenance, and avoid costly downtime. Overall, energy optimisation delivers measurable savings—often between 10–30%—and supports long-term operational efficiency and sustainability.

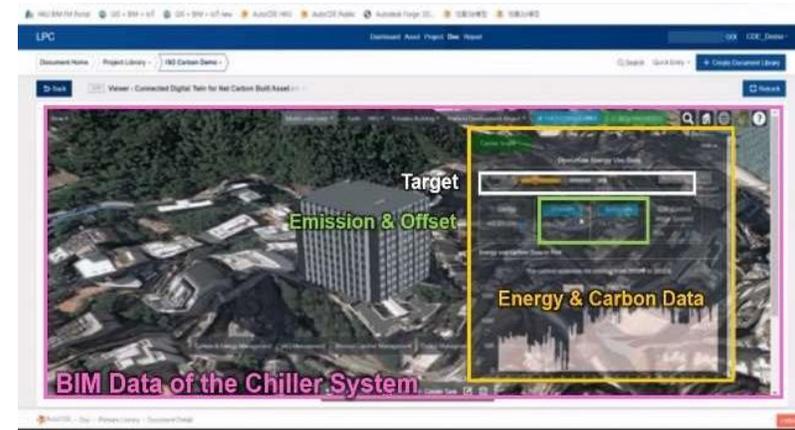
Professional Services



Get ready for digitalisation & standards compliance. Guiding you on standards, data strategies, and technology solutions for a greener future.

Consultancy Services:

- Standardisation, digitalisation, information management and smart city solutions
- Standard-compliant smart built asset platform for construction and real estate industry
- ISO certification.



ESG ADVISORY

Building a sustainable tomorrow through A.I. auto compliance and carbon management system.

Key Features:

- SuperAPP AutoTwin for ESG Management
- Standard compliance on BIM, smart cities, ESG
- Approval gateway for trusted data and carbon trading as RWA
- Real-time ESG performance

LIGHTING

Energy Efficiency



Revolutionizing Lighting with Energy-Efficient Solutions



Advanced LED systems designed for modern commercial needs.



Save up to 72% energy compared to LED lights in the market



Built for a lifespan of more than 100,000 hours.



Lower energy consumption and reduced maintenance.



Patented designs for a greener future.

Energy-Efficient Lighting for a Sustainable Future

What We Offer & Business Model:

Aspect	Details	
Zero Upfront Cost	Energy-efficient lighting with no upfront payment .	
Energy Savings	Save up to 88% on energy costs.	
Long Lifespan	LEDs last 150,000 hours , ensuring durability.	
Guaranteed Performance	Includes a 10-year warranty and 3% buffer stock for replacements.	
Sustainability Focus	Reduce waste and carbon footprint to support green initiatives.	
Revenue Sharing Model	Share parts of the profits derived from savings on electricity bills.	

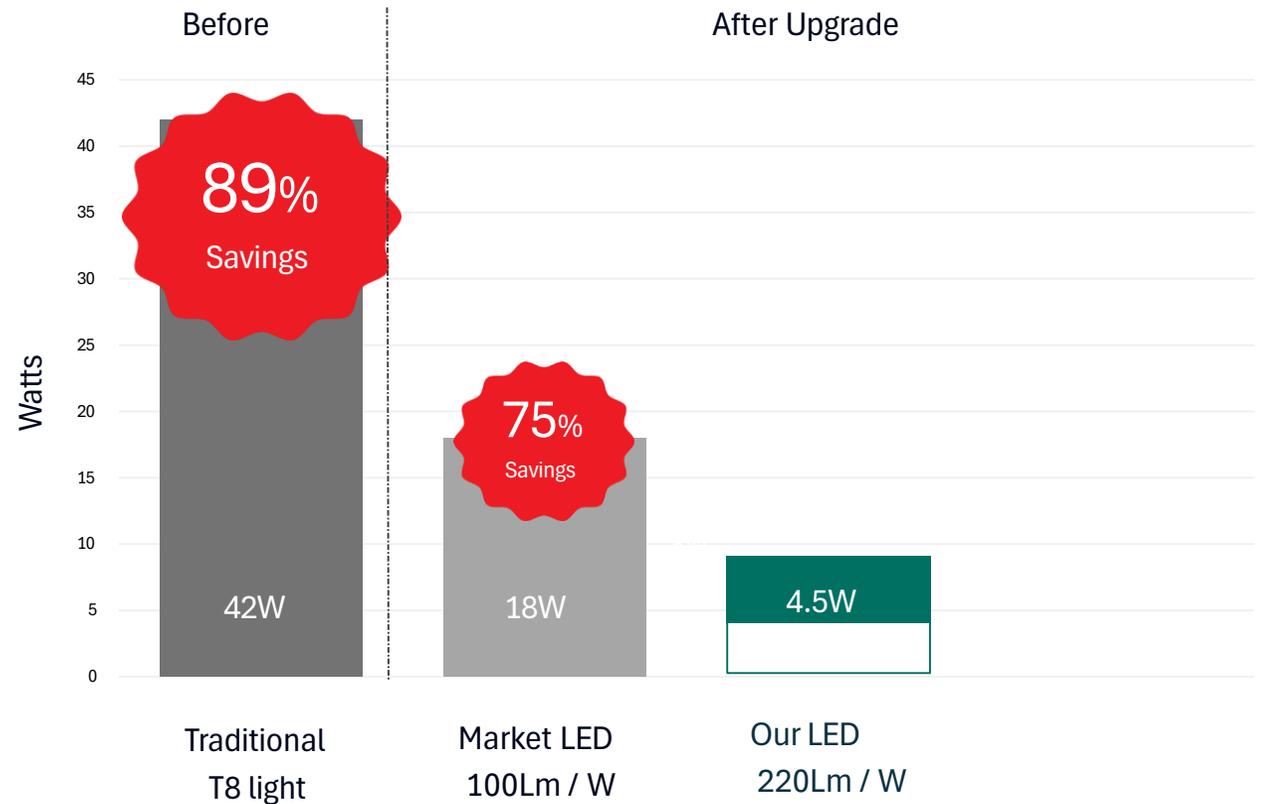
GEN 4.0 breakthrough @220 Lm/watt (effective)

Our LED's energy savings are up to **89%**

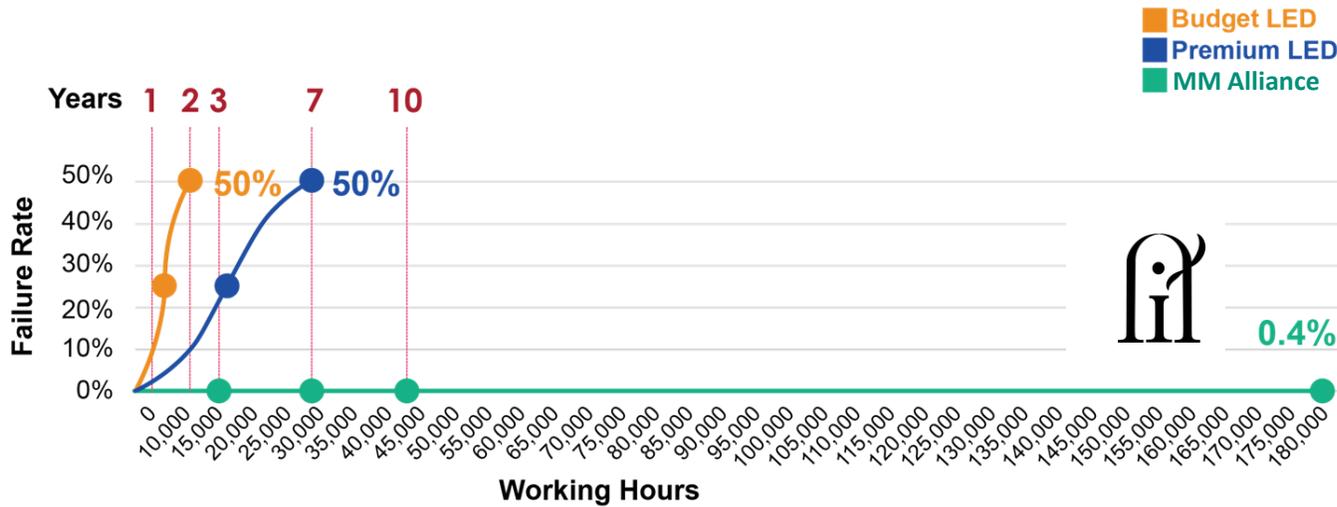
Designed for 180,000 hours
24 hours operation lasts for 20 years
12 hours operation lasts for 40 years

We warrant 180,000 HOURS

Traditional Light or LED to Our LED



LED Life Expectancy



Our LED

- LED failure **only 0.01% per year**
- L70/B10 at 180,000 hours

Market LED

- **fails 50%** by end of design life
- L70/B50 at 10,000 hours (Budget)
- L70/B50 at 30,000 hours (Premium)

NOTE:

Operating hours - 12 hours per day / 4,380 hours per year

BUDGET LED - Design Life 10,000 hours (2.3 Years) / Half Life 5,000 hours (1.1 Years)

PREMIUM LED - Design Life 30,000 hours (7 Years) / Half Life 15,000 hours (3.4 Years)

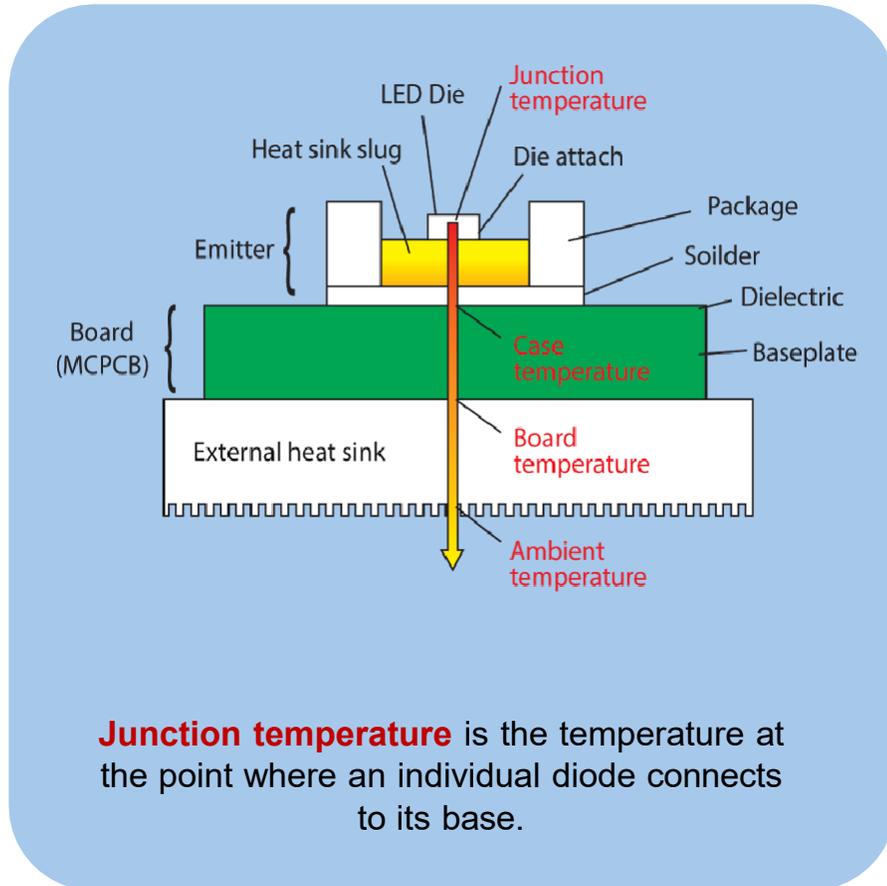
LED chips to produce the brightest and coolest ops temperature with a design life of 180,000 hours

Brightest & Coolest Chips Design

- Raw LED chips efficiency @ **265 Lm/watt**
- Driver efficiency at 99%
- Reflector efficiency at 90%
- Nano diffuser efficiency at 93.5%
- Results in system efficiency @ **220 Lm/watt (effective)**
- LED junction temperature @ **45°C** while average market product at 80°C.
- Most energy converts to light, heat generated reduced up to **75%**

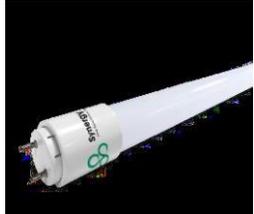
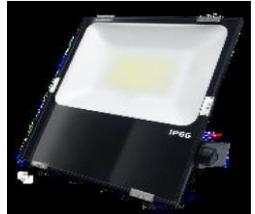
Robust design and good performance

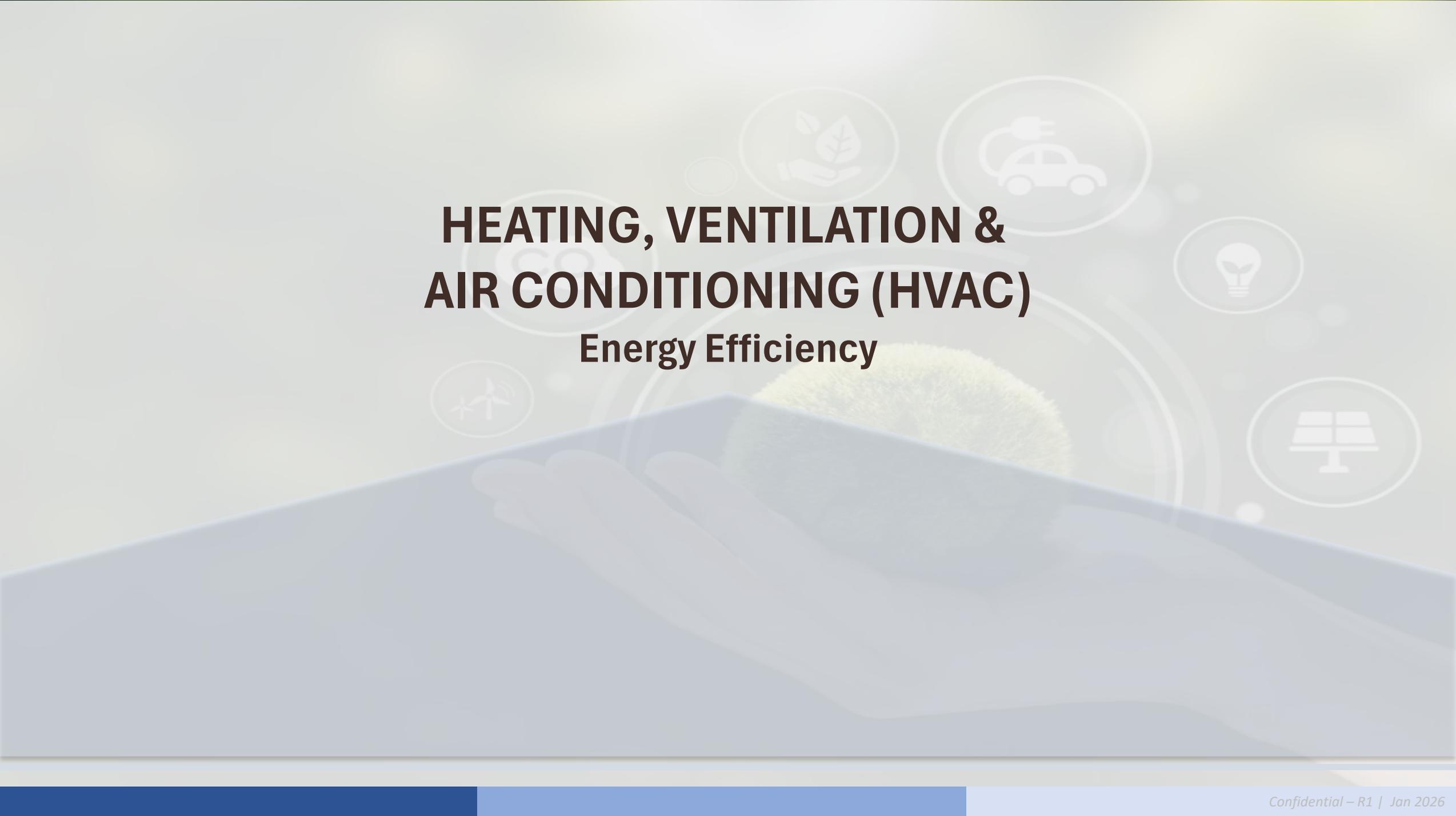
- With LM80 rating, our LED chips can last for a **40 years lifespan**
- Ultra High Efficiency driver **only loss 1%** while market LED driver loss is around 12%



Junction temperature is the temperature at the point where an individual diode connects to its base.

Range of Lighting Products

Downlight		Light Tube	Spot Light	Light Bulb
				
Panel Light	PAR	ARA	Light Strip	
				
High Bay	Flood Light	Street Light		
				

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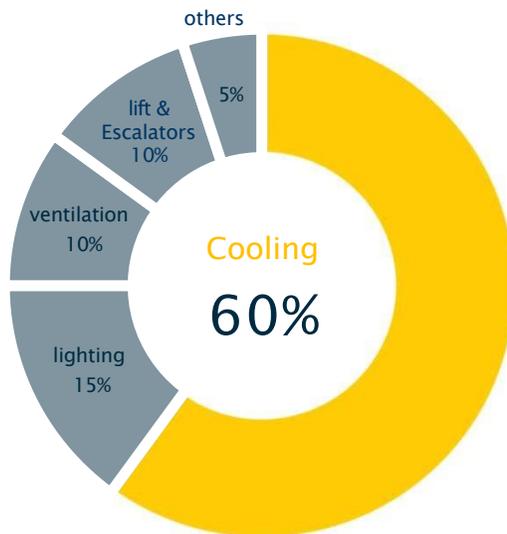
HEATING, VENTILATION & AIR CONDITIONING (HVAC)

Energy Efficiency

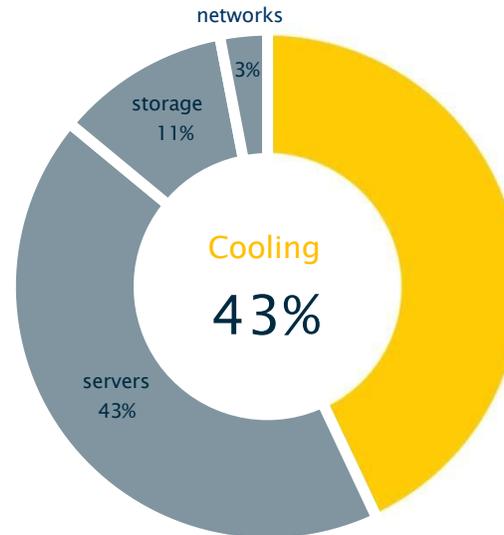
Patented Solutions

Addresses the world's largest global warming contributors

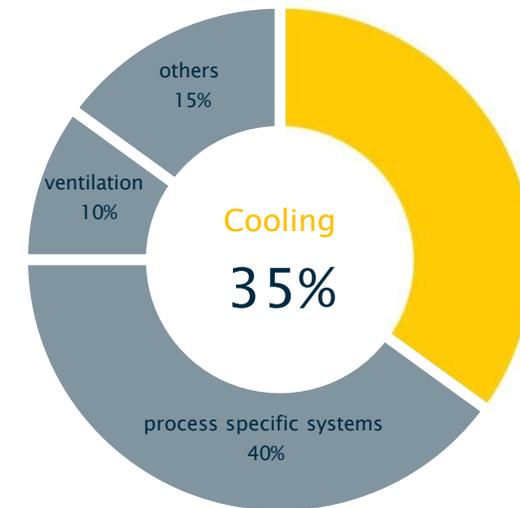
Commercial building



Data center



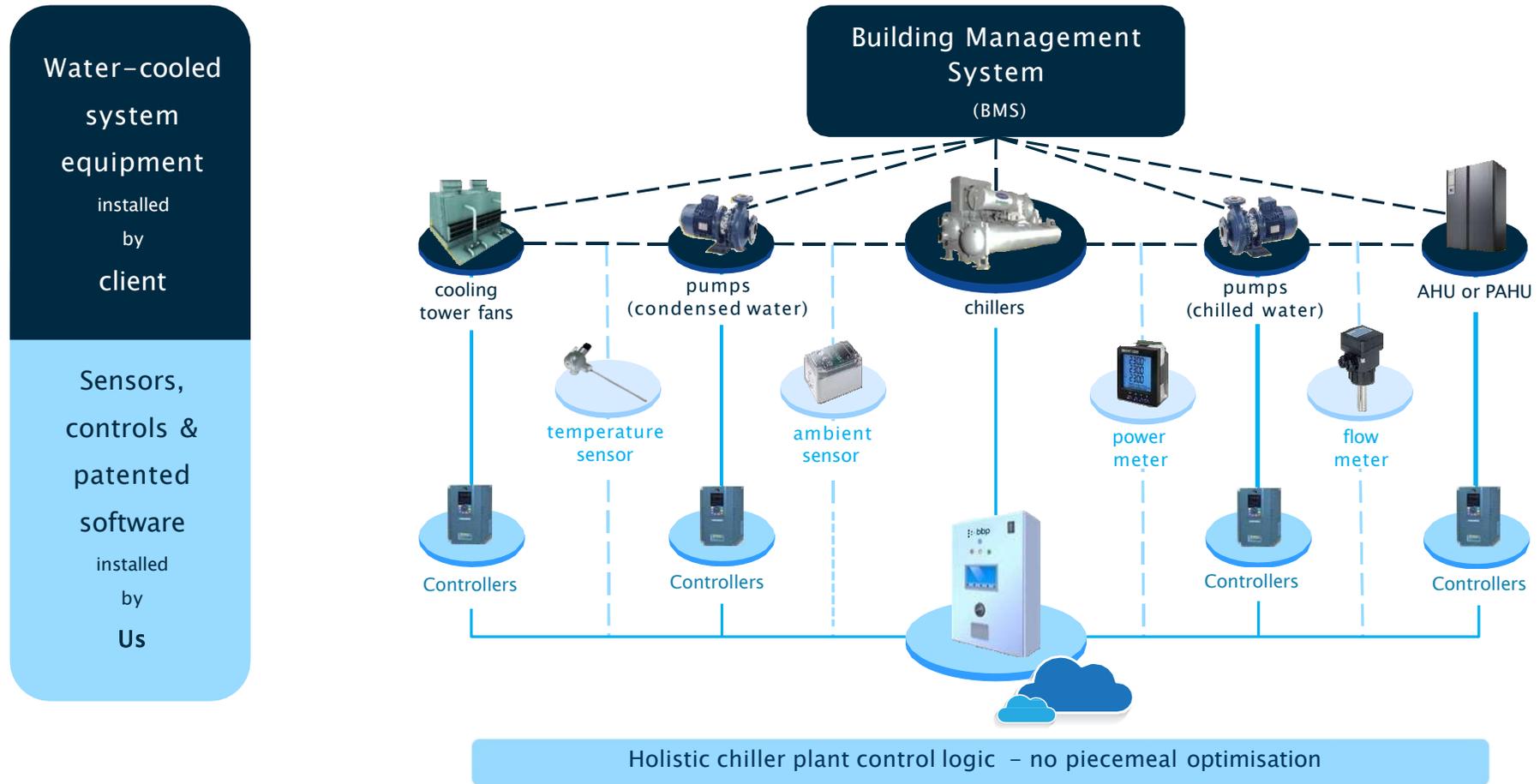
Industrial building



HVAC energy consumption is 1 of the top 5 polluters in the world

Core Work

Comprehensive suite of intelligence, automation and control



Investments during contract tenure

Backed by decades of experience and a dedicated team of HVAC experts to diagnose & respond to root causes promptly

1. Comprehensive maintenance of bbp installed equipment and software
2. Remote monitoring of chiller plant performance to drive maximum savings & provide insights to plant engineering & facilities team
3. Chiller plant dashboard & monthly reports generation to provide insights chiller plant equipment performance
4. Data analytics module & software upgrades to extract more savings & drive predictability

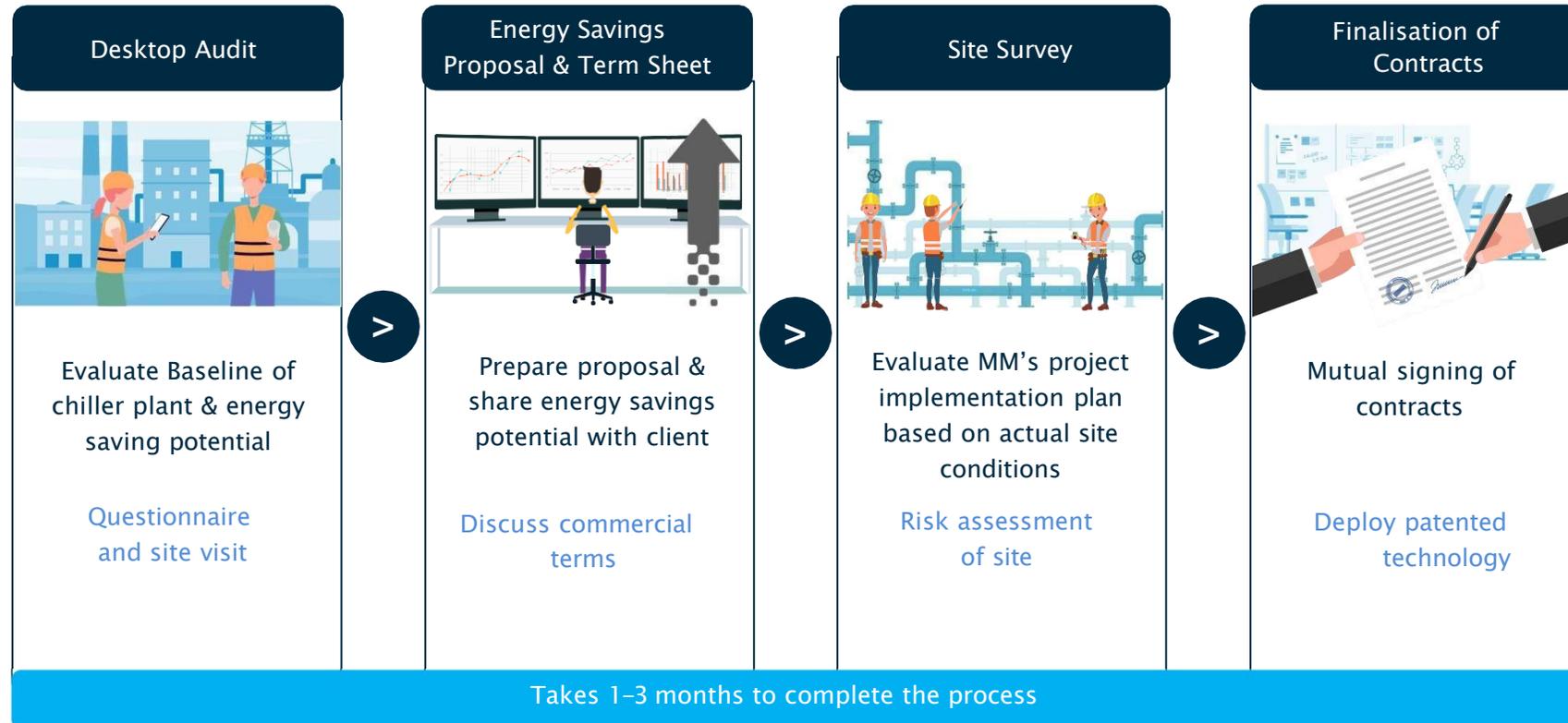


asset engineers



data analysts

Start Your Decarbonisation Journey with Us



A hand holding a green globe with various energy and sustainability icons floating around it. The icons include a leaf, an electric car, a lightbulb, solar panels, a wind turbine, and a CO2 cloud. The background is a soft, light green gradient with a subtle circular pattern.

REFERENCE PROJECTS

Energy Efficiency

Reference Project

DIGITAL TWIN – SUPERAPP AUTOTWIN



BIM Management Services at KFSC Stadium Project, King Fahd Sport City, Riyadh, KSA



HONG KONG

Digitalization Consulting Services for Yuexiu Real Estate



HONG KONG

Provision of BIM Services for North District Hospital Expansion



HONG KONG

Provision of Services for BIM for Asset Management – Trial of Converting Asset Data from 2D Drawings into BIM Model



HONG KONG

Provision of CDE, BIM Services and SSSS in Temporary Public Transport Terminus (TPTT) Works at Kennedy Town, Hong Kong

Reference Project Outcomes

LIGHTING SYSTEM - HOSPITALS



JOHOR, MALAYSIA

77% savings in lighting.

Before : 3.01 GWh
After : 0.7 GWh



JOHOR, MALAYSIA

81% savings in lighting.

Before : 0.96 GWh
After : 0.18 GWh



NEGERI SEMBILAN, MALAYSIA

80% savings in lighting.

Before : 1.06 GWh
After : 0.22 GWh



JOHOR, MALAYSIA

79% savings in lighting.

Before : 3.4 GWh
After : 0.7 GWh



NEGERI SEMBILAN, MALAYSIA

79% savings in lighting.

Before : 0.4 GWh
After : 0.09 GWh

Reference Project Outcomes

COOLING SYSTEMS



28% improvement in energy efficiency (chiller plant).

3.0 GWh of annual savings.

1st industrial plant in Singapore to attain **Green Mark Platinum Award**
(for existing building)

Completed optimization without disruption to 24-hour operations and zero equipment replacement.



30% improvement in energy efficiency (chiller plant).

1.2 GWh of annual savings.

Completed optimization without disruption to 24-hour operations and zero equipment replacement.



11% improvement in energy efficiency (chiller plant).

5.5 GWh of annual savings.

Completed optimization without disruption to 24-hour operations and zero equipment replacement.



THAILAND

36% improvement in energy efficiency (chiller plant).

1.0 GWh of annual savings.

Completed optimization without disruption to 24-hour operations and zero equipment replacement.



INDONESIA

14% improvement in energy efficiency (chiller plant).

2.8 GWh of annual savings.

Reference Project Outcomes

LIGHTING SYSTEM & COOLING SYSTEM



71% savings in lighting.
33% savings in cooling.
45% total of annual savings = MYR 3.1million



47% savings in lighting.
47% total of annual savings = MYR 748,000



KUALA LUMPUR INTERNATIONAL AIRPORT (KLIA) TERMINAL 2

78% savings in lighting.
78% total of annual savings = MYR 1.25million



76% savings in lighting.
20% savings in cooling.
34% total of annual savings = MYR 0.95million



76% savings in lighting.
20% savings in cooling.
28% total of annual savings = MYR 1.1million

Why REGALIA?

- **Single trusted partner in the Region**
- Pay-for-performance; deploy at any scale
- 30–60% cost reductions; proven carbon impact
- Ready for institutional requirements in SEA, GCC, and beyond

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