



AGIL 

SMART ENERGY BUILDING

A next-generation suite of smart energy solutions for buildings

 **ST Engineering**

BUILDINGS ARE THE FOUNDATION OF A GREENER FUTURE

Cities around the world are not only growing in population but also in complexity. In the face of climate change, they need to become not just smarter, but also greener.

Buildings consume 40% of global energy, offering the greatest potential for accelerating sustainability efforts. Beyond reducing carbon emissions, raising the energy efficiency of buildings can also help building owners significantly lower utility and operational costs, and improve productivity and comfort for building occupants.

CHALLENGES OF ENERGY EFFICIENCY IN BROWNFIELD BUILDINGS

- ✘ Existing systems have limited automation
- ✘ Fragmented systems are not optimised for efficiency
- ✘ Brownfield sites are too complex to upgrade



A GREENER BUILDING IS A BETTER BUILDING

AGIL® Smart Energy Building is a next-generation suite of smart energy solutions that enables building owners to take a whole-of-building approach in energy optimisation to accelerate building decarbonisation.

It optimises building energy consumption and enables buildings to intelligently adapt their operations to changing environmental conditions and the needs of occupants.

BENEFITS OF AGIL® SMART ENERGY BUILDING SOLUTION

- ✔ Designed to work with brownfield building equipment
- ✔ Modular system that enables progressive energy optimisation in stages
- ✔ Whole-of-building approach to fully maximise energy savings

DRIVE TOWARDS NET ZERO WITH AGIL[®] SMART ENERGY BUILDING



UP TO 25% ENERGY SAVINGS

Unlock the highest ROI for buildings with full suite solution.



QUICK RETURN- ON-INVESTMENT (ROI)

Enjoy the benefits of advanced building energy optimisation with IoT and AI/ML technology, with zero upfront cost.



ENHANCE OPERATIONAL EFFICIENCY

Streamline operational control and processes with building automation.



SCALABLE AND MODULAR

Enables easy and flexible integration into brownfield and greenfield spaces.



A WHOLE-OF-BUILDING APPROACH IN ENERGY OPTIMISATION

At the heart of AGIL® Smart Energy Building are 3 pillars that underpin the development of its revolutionary approach to energy optimisation – Energy Recovery & Optimisation, Building Automation and Sustainability. Together, they address the core challenges to decarbonising buildings.

Powered by IoT, artificial intelligence, machine learning and automation, AGIL® Smart Energy Building comprises an integrated suite of solutions that harnesses energy savings across different sources to enhance overall energy efficiency, resilience and sustainability in buildings.

OUR 3 PILLARS TO ACCELERATING BUILDING DECARBONISATION

ENERGY RECOVERY & OPTIMISATION

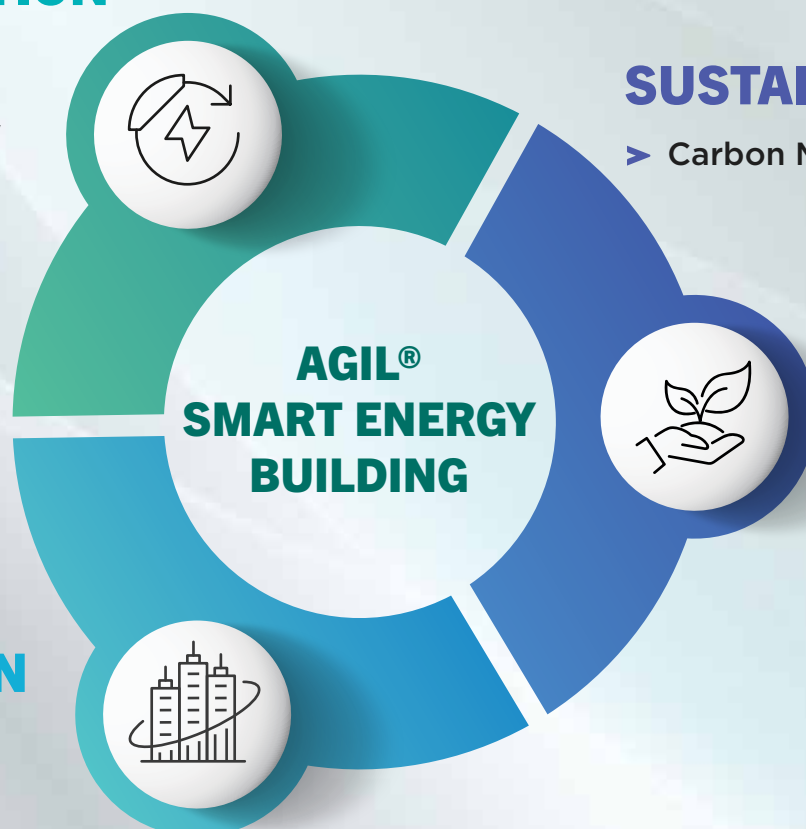
- > Smart HVAC
- > AI Airflow
- > Energy Recovery

SUSTAINABILITY

- > Carbon Monitoring

BUILDING AUTOMATION

- > Smart Lighting
- > Smart Metering



OPTIMISING BUILDING PERFORMANCE ACROSS THE ENERGY VALUE CHAIN



SMART HVAC

Unifies disparate HVAC equipment on a single platform, integrating all data and controls for data-driven insights. It accurately measures and predicts building heat load, enabling a more effective response to real-time cooling demand for energy efficiencies.



ENERGY RECOVERY

Leverages patented evaporative cooling technology to deeply pre-cool incoming fresh air without the use of refrigerants, compressors or the building's chilled water, reducing energy consumption by up to 30% compared to a conventional system.



AI AIRFLOW

Ensures building cooling is precisely and evenly distributed across the building with smart airflow adjustments, powered by AI and sensors that provide real-time data on workspace environments and thermal comfort.



SMART LIGHTING

Powers demand-based soft dimming and AI-based anticipatory lighting with smart data analytics to assess lighting patterns for demand planning, providing up to 55% energy savings with full building implementation.



SMART METERING

Automates tenant submetering, empowering building owners and landlords to efficiently track and manage tenant utilities consumption and billing, enhancing operational processes and tenant engagement.



CARBON MONITORING

Enables round-the-clock monitoring of building operational data with energy usage analysis and conversion to GHG emissions, facilitating clear, transparent reporting for data-driven decisions on energy efficiency measures.



TRANSFORM YOUR BUILDING WITH AGIL® SMART ENERGY BUILDING

AGIL® Smart Energy Building is here to empower building owners to take a confident first step in their journey towards net zero.

Engineered to deliver the highest ROI in energy and operational efficiency with low investment cost, AGIL® Smart Energy Building offers reduced risk and better addresses challenges of installation versus other energy solutions on the market.

Whether it is an existing building or a new construction, AGIL® Smart Energy Building can be deployed modularly and scaled to cover multiple buildings within an estate or township, significantly aggregating energy savings while providing flexibility in integration to meet evolving needs.

Get started on your smart building journey today with AGIL® Smart Energy Building and create a more effective environment for your occupants to live, work, learn, and succeed.



**Modular
Implementation**



**Scalable to Multiple
Buildings or Estates**

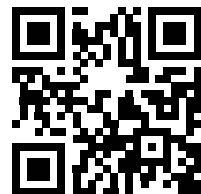


**Flexible to Adapt to
New Technologies**

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