

EXPERTISE

Unlocking greater process efficiency and sustainability with expertise in electrical distribution

SMART Modular Technologies, Atibaia, Brazil
How a semiconductor packaging fab achieves improved uptime and safety with the EcoCare Services membership.



Reliability: the key to growth

SMART Modular Technologies is a pioneer and a leader in the packaging and test of semiconductor integrated circuits and memory modules. SMART Brazil was the first of its kind to develop advanced packaging technology for the IT&C sector in the region.

Spread across an area of 15,000 square meters with a total capacity of packaging 150 million dies per year, SMART's facility in Atibaia is equipped with high-precision machines and equipment for packaging and testing. Leveraging its automation and robotization capabilities, SMART delivers state-of-the-art technology products that are widely used in electronic and computer equipment.

"Our components and solutions offer high reliability, assured quality, and up-to-date technology at competitive prices. This has helped us be empaneled by all major OEMs and CMs around the world," said Adilson Piras, Engineering Supervisor at the site.

A digital modernization journey

Despite having state-of-the-art equipment, the facility met with challenges in process efficiency and maintenance costs. To overcome these hurdles, SMART decided to modernize its electrical equipment and processes, while improving safety at its facilities.

"We've already installed reliable equipment but quickly realized that if we wanted to improve the reliability of the most critical assets further, we needed to invest in cutting-edge technology," Piras said.

Since downtime affects the production process and service continuity, the project had to be completed swiftly. With proper planning and the support of Schneider Electric experts, the installation and configuration were accomplished in a day.

Goal

Modernize equipment and processes to improve process efficiency and safety, as well as optimize maintenance with condition-based maintenance.

Story

A semiconductor packaging fab modernized its systems and adopted a preventive maintenance approach without disrupting its operations.

Solution

- Installation of SM₆ switchgear equipped with smart sensors for thermal monitoring
- Adoption of EcoCare for exclusive access to expertise and 24/7 remote monitoring of electrical equipment with faster response time to onsite support
- Standardization of preventive maintenance
- Extended reality-based training with EcoStruxure XR Operator Advisor

Results

The partnership resulted in improvements in uptime, efficiency, and performance. It also brought the facility closer to its sustainability goals.

From reactive to proactive maintenance

SMART required support in gaining visibility of equipment's health, optimization of its operations, and improving the safety of the facility.

The project involved the installation of SM₆ switchgear that is equipped with sensors for thermal monitoring. This, along with the EcoCare service plan, gave them exclusive access to experts and digital capabilities that enabled them to unlock the full potential of the connected products.

EcoCare offered faster response time in remote and onsite support with 24/7 health remote monitoring of electrical equipment by Schneider Electric's Connected Services Hub experts. Furthermore, all the data and maintenance reports were available in real-time on the mySchneider portal.

In addition, the extended reality-based training with EcoStruxure XR Operator Advisor empowered the workforce to improve safety.

"This solution gives us entry to places that are inaccessible due to physical security—high voltage, for example. We can remotely monitor our equipment continuously and

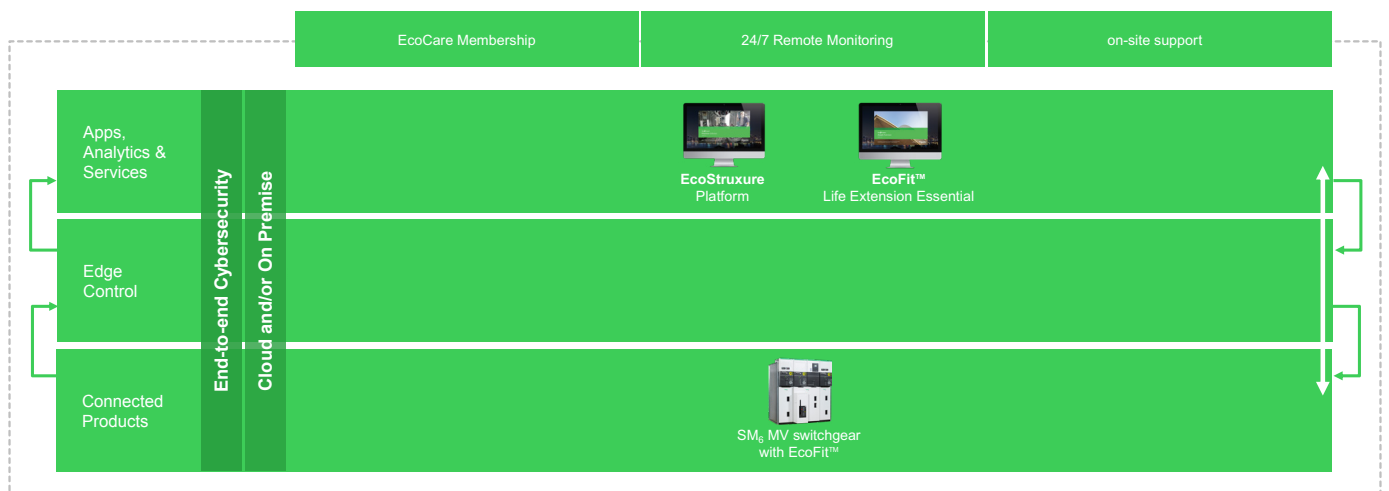


accurately, keeping our maintenance team safe. It also gives us access to instantaneous information and records that can help us identify future failures," Piras explained.

The partnership resulted in uptime, efficiency, and performance improvements in utilities, productivity, and safety. It also brought the facility closer to its sustainability goals.

"We can summarize this SMART Modular Technologies project with Schneider Electric in three words -partnership, predictability, and trust," Piras concluded.

EcoStruxure™ for Semiconductor



EcoStruxure™

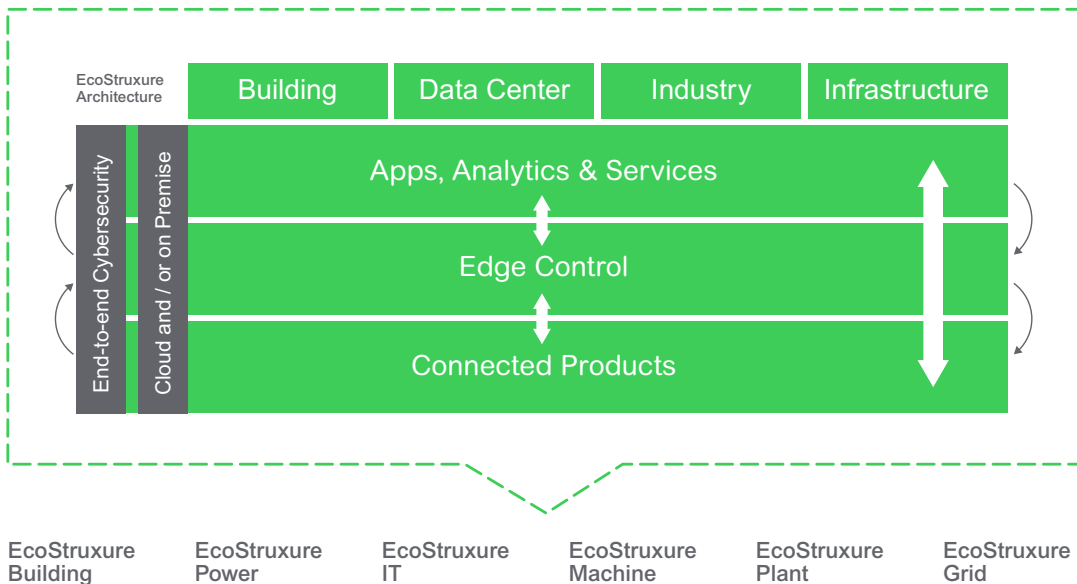
Innovation At Every Level

IoT-enabled solutions that drive operational and energy efficiency

EcoStruxure is our open, interoperable, IoT-enabled system architecture and platform. EcoStruxure delivers enhanced value around safety, reliability, efficiency, sustainability, and connectivity for our customers. EcoStruxure leverages advancements in IoT, mobility, sensing, cloud, analytics, and cybersecurity to deliver Innovation at Every Level.

This includes Connected Products, Edge Control, and Apps, Analytics & Services which are supported by Customer Lifecycle Software. EcoStruxure has been deployed in almost 500,000 sites with the support of 20,000+ developers, 650,000 service providers and partners, 3,000 utilities and connects over 2 million assets under management.

One EcoStruxure architecture, serving 4 End Markets with 6 Domains of Expertise



Connected Products

The Internet of Things starts with the best things. Our IoT-enabled best-in-class connected products include breakers, drives, UPSs, relays, sensors, and more. Devices with embedded intelligence drive better decision-making throughout operations.

Edge Control

Mission-critical scenarios can be unpredictable, so control of devices at the edge of the IoT network is a must. This essential capability provides real-time solutions that enable local control at the edge, protecting safety and uptime.

Apps, Analytics & Services

Interoperability is imperative to supporting the diverse hardware and systems in building, data center, industry, and grid environments. EcoStruxure enables a breadth of agnostic Applications, Analytics, & Services for seamless enterprise integration.

Find out more about EcoStruxure

se.com/ecostruxure

Learn More



Find more about EcoCare



Explore modernization
with EcoFit™



Discover EcoStruxure XR Operator
Advisor



Explore predictive and condition-
based maintenance



Discover all our services



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