

Massmart  
powered by Walmart

makes sustainable

# IMPACT

A retail chain takes building  
and power management to  
the next level.



**Massmart**, Johannesburg, South Africa

How Green Wave, a Master-level EcoXpert™  
Partner, and Schneider Electric helped  
Massmart of South Africa upgrade  
hundreds of stores

[se.com/ecoxpert](https://se.com/ecoxpert)

Life Is On

**Schneider**  
Electric



Massmart is a major retailer owned by Walmart and headquartered in South Africa. The company manages a vast network of over 300 stores under four major brands: Makro, a big-box retailer of food, liquor, and general merchandise; Game, a discount retailer specializing in appliances, electronics, and groceries; Jumbo, a wholesaler focused on food, liquor, and general merchandise; and Builders, a leading home improvement and building materials chain.

This impressive retail footprint varies widely in size, ranging from smaller mall-based stores to expansive big-box outlets with refrigeration and backup systems essential for seamless operations.

In 2012, Massmart began a transformative journey to modernize its facilities to achieve comprehensive oversight and control over building management, power usage, and other operational factors. Massmart required a technology provider capable of delivering versatile and robust solutions across its diverse store formats, while meeting the corporate goals of reducing costs, enhancing efficiency, and driving sustainability.

Now, over a decade later, Massmart has integrated Schneider Electric's EcoStruxure™ platform into more than 250 locations, achieving significant energy savings and unprecedented visibility across its operations.

## Goal

To centralize asset management and energy monitoring across all facilities, reducing costs, enhancing efficiency, and supporting sustainability efforts.

## Story

Massmart partnered with Schneider Electric and Green Wave, a master-level EcoXpert partner, to implement the EcoStruxure platform across more than 250 stores, creating a unified system for building and power management.

## Results

The project has delivered substantial savings. Massmart has reduced energy consumption, uncovered billing discrepancies, and streamlined its response to system alerts, achieving a strong return on investment.

## An ambitious plan

At the heart of Massmart’s initiative was a desire to centralize its asset management and energy monitoring for all facilities, addressing both sustainability and cost-reduction goals.

According to Mfundo Ntuli, Group Facilities Technical Bureau Manager at Massmart, “Our goal was to gain a centralized view of all our facilities’ assets on one platform, enhance energy management, optimize usage, and reduce consumption in our stores.” This comprehensive system would allow Massmart to monitor everything from energy usage and billing comparisons to alarm statuses and HVAC control.

It was an ambitious goal. Massmart’s property network includes locations of all sizes and configurations, some as large as 20,000 square meters with complex refrigeration setups. For a project of this scale, Massmart needed a solution capable of addressing varied building sizes, age, and mechanical needs, especially with the challenge of an unstable energy supply in some regions.

## Choosing a partner

The company’s journey began with a recommendation from Walmart, which had experienced several successful installations of Schneider Electric solutions in its own stores.

Based on that recommendation, Massmart turned to Schneider Electric’s EcoXpert Partner in the region, Green Wave, a multi-badge EcoXpert specializing in both building management and critical power solutions. Green Wave’s ability to design, install, and maintain Schneider Electric’s EcoStruxure solutions made them the ideal partner.

The first step was to deploy Schneider Electric’s Building Management System (BMS) at three stores as Proof of Concept. The pilot project not only met expectations, it exceeded them. “We had estimated a 12- to 14-month payback based on the early results of our proof of concept,” says Nigel Armstrong, Director of Green Wave, who has been with the project from start. “But after the system prevented a major operational disruption, it was able to pay for itself in a single day.”

The incident occurred on a Friday night when a critical generator unexpectedly failed, putting the store’s weekend operations at risk. With the alert from the BMS, technicians were dispatched early Saturday morning and completed emergency repairs before the store’s scheduled opening. Thanks to the rapid response enabled by the BMS, the store was opened on time and avoided a full day of lost revenue.

Locations of all sizes and configurations, some as large as

**20,000**  
square  
meters

Estimated

**12 to 14**

month payback, but was able to pay for itself in a single day

“The EcoStruxure system caught a problem that would have cost us thousands of dollars in lost sales.”

Mark Calderwood  
Massmart Group  
Facilities Executive





## Rolling out the solution

With the Proof of Concept a success, Massmart and Green Wave moved to a phased rollout of the EcoStruxure platform across hundreds of stores, ranging from large warehouses with refrigeration to mall-based sites with simpler HVAC needs.

To accommodate this diversity, Green Wave standardized on the EcoStruxure Automation Server as the solution's "heartbeat," connecting subsystems like power, lighting, HVAC, and security at each location, while communicating with headquarters. This setup provided Massmart central control over critical infrastructure while allowing store-level visibility and management.

With so many stores in their fleet, Massmart has approached the project in phases, averaging about 20 upgrades per year. Meanwhile, new building projects have the EcoStruxure platform designed into the specifications as a standard requirement. Today, more than 250 locations have the new platform, and the rest are scheduled to be upgraded over the next few years.

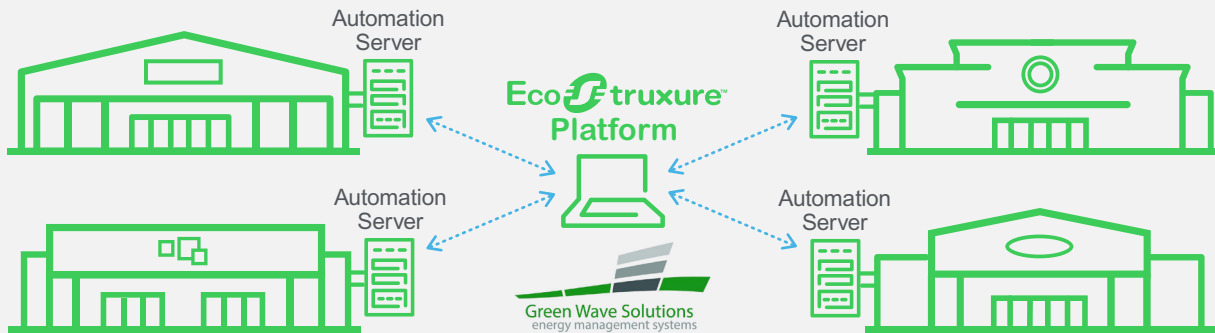
Each store has a local application that enables managers to monitor key aspects in real-time, including air conditioning status, temperature readings, and security alarms. "The equipment is managed centrally, but local staff can see exactly what's happening and get early warnings if something goes wrong," Calderwood adds.

Today, more than  
**250**  
locations have the  
new platform

Massmart has  
approached the  
project in phases,  
averaging about  
**20**  
upgrades per year

At first, some store managers were hesitant about giving up control of lighting and air conditioning, according to Mark Calderwood. "But once they saw the savings on energy costs – often thousands of dollars a month – they were fine with the changes. We make their stores more profitable."

The Green Wave and Schneider Electric solution provides visibility into every store with centralized management and reporting



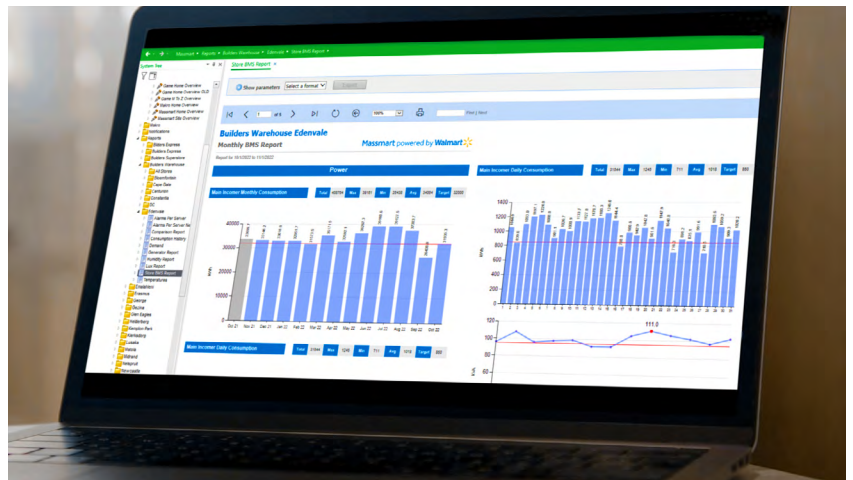
## ROI keeps growing

At the corporate level, the BMS enables Massmart to monitor and maintain every detail of their energy use across their entire fleet of stores. At any time, they can see what's happening. Crucially, they can spot unusual trends and take action early.

“We have found cases where energy usage was three times higher than expected, allowing us to identify and fix HVAC or other system issues,” says Calderwood. “When we started benchmarking kW usage per square meter across similar stores, we found one store that had the highest power usage per square meter in the country, yet the building was only seven years old, equipped with the latest HVAC system, and had no refrigeration. We discovered that parts of the HVAC system were connected incorrectly, causing it run 24/7 and ignoring timers and temperature controls.”

In another store with unusual energy consumption, Massmart found the landlord had connected other equipment into Massmart's electricity system. “We were unknowingly paying for somebody else's power usage,” says Calderwood.

According to Massmart, problems like these might never have been found without the BMS and the visibility it provides. “It has changed the way we can manage our business,” concludes Massmart's Ntuli, “and the return on investment keeps growing with every problem we're able to identify.”



Local store personnel can see all aspects of their energy systems

“I once asked for funds to upgrade the lighting in 20 stores, based on data from the EcoStruxure system. The committee was so impressed with the savings, they green-lighted 120 stores. The whole project paid for itself in nine months.”

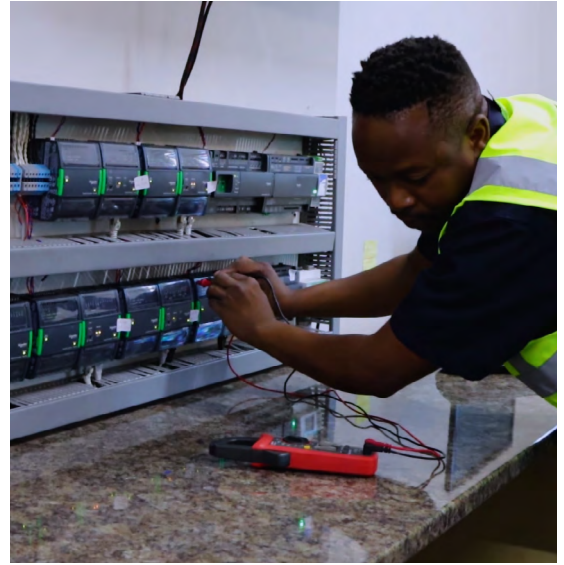
– Mark Calderwood  
Massmart Group Facilities Executive

## What's next?

Massmart's modernization journey is far from over. With over 265 stores already on the EcoStruxure platform, the company plans to expand its energy management approach to include water usage and other resources, incorporating even more sustainable practices into its operations.

Massmart says a key goal for the future is to utilize the vast amount of data that is available thanks to the EcoStruxure platform. For example, the company is now exploring predictive maintenance options for its critical infrastructure. According to Ntuli, "Our next step is to capitalize on the data and begin implementing AI and machine learning models to predict equipment failures before they happen, which will further enhance our operational efficiency and sustainability efforts."

With the data-driven insights available through the EcoStruxure platform, Massmart continues to drive its business toward greater resilience, cost savings, and sustainability.



### EcoXpert Partner Program

The award-winning EcoXpert Partner Program is unique in its industry, offering an esteemed partnership between Schneider Electric and a truly global, cross-expertise ecosystem of solution providers. Trained and certified by Schneider Electric, EcoXpert partners digitize and electrify our world for a more sustainable future.

Stronger together, our mission is to deliver smarter, more efficient, and more sustainable solutions to our shared customers.

To find out more, visit [EcoXpert Partner Program](#).



## About Massmart



At **Massmart** we are proud of our African heritage. Through our widely recognised and differentiated retail and wholesale formats, represented in more than 300 stores in 8 sub-Saharan countries, we have leading market shares in the general merchandise, liquor, home improvement and wholesale food markets. Our key foundations of high volume, low cost, responsible business and operational excellence enable our price leadership.

### Our Purpose

We are dedicated to helping our customers to save money and live better.

This is underpinned by our commitment to doing business responsibly. Our brand values guide how we work and interact with our associates, customers, communities and environment.

- Creating opportunities for everyone to prosper
- Thoughtful choices for a better future
- Good business at the centre of everything we do

## About Green Wave Solutions



Founded in 2009, Green Wave Solutions has built a team of dedicated professionals and with over 110 BMS installations and a number of large customised power metering roll outs, we are the team for you! All projects are designed, implemented, and supported by Green Wave in-house teams.

We have a history of working with Blue Chip clients throughout Africa on an on-going basis where understanding their business is critical to providing solutions that suit their needs. We pride ourselves in providing a world class service and going the extra mile.

[se.com/ecoxpert](https://se.com/ecoxpert)