



SUSTAINABILITY SAVINGS

through green property management

Sustainability in property management has moved beyond being a luxury – it's now a valuable and necessary investment.

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Property managers traditionally oversee the upkeep and operations of buildings. But sustainability within property management extends far beyond daily tasks. Property managers have the unique opportunity to influence energy use, water consumption, waste management and building certifications – ultimately driving significant operational savings. As sustainability goals gain traction, property managers are becoming essential in achieving environmental targets while reducing operating costs.

KEY AREAS OF SUSTAINABILITY SAVINGS

Sustainability savings in property management can be broken down into five principal areas, each of which presents substantial financial and environmental benefits:

1. Energy optimisation and cost reduction
2. Water conservation
3. Waste reduction
4. Building certifications
5. Tenant engagement

1. ENERGY OPTIMISATION AND COST REDUCTION

Energy use is one of the most significant costs in property management. Improving energy efficiency leads to lower utility bills, reduced carbon emissions and improved tenant comfort. Property managers can reduce energy costs through strategies such as:

- **LED lighting upgrades:** Replacing older lighting systems with LED bulbs can save 50% of energy consumption.
- **HVAC optimisation:** Improving the efficiency of heating, ventilation and air conditioning systems can reduce both energy use and maintenance costs.
- **Building management systems (BMS):** These systems help monitor and optimise energy use by controlling lighting, heating and cooling based on occupancy and external weather conditions.
- **Multi-channel metering:** Multi-channel smart metering systems are advanced systems that monitor multiple energy circuits simultaneously, providing real-time data for efficient energy management and consumption analysis (recommended mostly for mixed occupancy buildings).

At GreenBDG Africa, we have seen first-hand how small, strategic changes result in substantial savings. A prime example of this is our work with the Bertha House project, where a series of energy-efficient upgrades led to significant cost reductions, and continues to achieve



further sustainability savings as it navigates various external factors in its operations.

BERTHA HOUSE: A CASE STUDY

A mixed-occupancy building in a major South African city, Bertha House sought to reduce operational costs and its environmental footprint. GreenBDG Africa conducted an energy audit, which identified several opportunities for energy conservation, cost savings and sustainability improvements. By starting the optimisation process with an energy audit, our sustainability team was able to tackle the often silent big elephant in the room – energy efficiency.

Energy optimisation measures

Using a multi-channel smart meter, the team accurately recorded consumption patterns and loaded profiles in specific zones, which led to the identification of several opportunities for optimisation:

1. **Lighting system upgrade:** Outdated fluorescent lighting was replaced with energy-efficient LED fixtures, resulting in a 35% reduction in lighting-related energy consumption (these were already installed by the client prior to the audit).
2. **HVAC system optimisation:** The project's facility management team was trained to use smart meter and BMS data or aligning operational activities around energy management activities. By adjusting HVAC operations based on actual building needs (rather than running continuously at set levels), energy use was reduced by 10%.
3. The potential to introduce a **renewable energy system** to reduce the building's reliance on the municipal grid.

At Bertha House, the introduction of smart metering systems allowed for more accurate utility recovery and the identification of distinct usage patterns across different zones of the building. This improvement resulted in a 15% reduction in tenant-related utility costs, benefiting both the property owner and tenants.



A smart meter installation in a multitenanted building

Moreover, a 44kWp solar system paired with a 20kWh Li-ion battery was installed to cover daytime load, focusing on the essential loads. This renewable energy solution reduced reliance on grid electricity, lowering the building's utility costs while reducing its carbon footprint. These combined upgrades resulted in a **25% reduction in overall energy consumption**.

Financial and environmental impact

Without these energy-saving upgrades, Bertha House would have continued to waste valuable resources, incurring unnecessary operational costs and contributing to its environmental footprint. The energy audit clearly demonstrated that investing in energy-efficient solutions yields significant returns, both financially and environmentally.

2. WATER CONSERVATION

Water is another critical resource that property managers must manage efficiently. As water prices rise and scarcity becomes more of an issue, property managers must explore strategies for reducing water consumption. Effective strategies include:

- **Low-flow fixtures:** Installing low-flow toilets, taps and showerheads can reduce water usage by up to 40%.
- **Rainwater harvesting:** Capturing rainwater for irrigation or non-potable uses reduces reliance on municipal water sources.

3. WASTE REDUCTION

An often overlooked area, waste management is where substantial savings can be realised, and rising disposal costs make waste reduction essential. Property managers can adopt green waste strategies to reduce waste sent to landfills and lower disposal fees. These strategies include:

- **Recycling programmes:** Encouraging tenants to separate recyclables from general waste can divert a significant amount of waste from landfills.
- **Composting:** For properties with dining facilities, composting organic waste helps reduce food waste.
- **E-waste management:** Properly disposing of electronic waste reduces environmental harm and disposal costs.

4. BUILDING CERTIFICATIONS

Achieving sustainability certifications such as Green Star and Energy Performance Certificates (EPC), offers significant value to property managers. On 8 December 2020, it became mandatory for accounting officers and building owners to display and submit an EPC for their eligible building(s) by **7 December 2025**.

These certifications validate a building's sustainability and can lead to higher rental income, reduced vacancies and increased property values. Obtaining them often requires investment in energy-efficient systems, water conservation measures and waste reduction. However, the long-term benefits – such as higher property values, better tenant retention and the ability to charge premium rents – more than justify the costs.

At Bertha House, the EPC improved the building's marketability, enhancing its appeal to its daytime users of ± 1 500 community-based social entrepreneurs.

5. TENANT ENGAGEMENT

One of the most effective ways to drive sustainability in a building is through tenant engagement. By educating tenants on energy-saving tips, water conservation and recycling initiatives, property managers can encourage more sustainable behaviours.

An educational campaign was implemented at Bertha House that informed tenants about their role in reducing energy and water usage using the installed smart meters. This initiative contributed to a **5% reduction in tenant-related energy consumption**, resulting in both cost savings and improved tenant satisfaction.

By focusing on energy efficiency, water conservation, waste reduction, building certifications, utility management recovery and the expectation management of its tenants, property managers can drive significant savings while simultaneously contributing to a more sustainable and resilient built environment. These changes, although incremental, add up to meaningful savings that enhance the building's overall value especially as the real estate environment looks to ramp up its decarbonisation efforts at the operational level. + www.greenbdgafrica.com



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References

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