

HYDE GATE ESTATE

A Model for Sustainable Living with Solar Energy

OVERVIEW

Nestled in the prestigious northern suburbs of Johannesburg, Hyde Gate Estate exemplifies modern, sustainable living. Comprising 78 residential units across three buildings with flat concrete roofs, Hyde Gate partnered with Solarise Africa to embrace solar energy by installing a robust micro-grid solution of 350 kWp solar system and a 700 kWh Battery Energy Storage Solution. This microgrid system can operate autonomously, ensuring a continuous supply of electricity during grid failures, grid maintenance or unreliable power infrastructure, ensuring an uninterrupted power supply, which is particularly beneficial for people working from home.

The residents at Hyde Gate now enjoy a stable and reliable energy source, reducing their dependency on external providers. The reliable power supply enhances property values and attracts quality tenants and buyers prioritising a stable living environment without power disruptions.

SYSTEM DETAILS

At Solarise Africa, we prioritise high-quality products for our solar installations. For Hyde Gate, the key components include:

- Solar Modules: 644x 545W monocrystalline Jinko Solar Modules
- Inverters: 2x ATESS 150 kW inverters
- Battery Storage: 1x 700 kWh Freedom Won battery

Additionally, the estate has implemented an effective energy management system, including geyser controllers to optimise power usage, ensuring that geysers which are one of the largest household energy consumers operate efficiently.

AT A GLANCE

350 kWp Solar System with 700 kWh Battery Storage: Provides over 90% of energy needs during the day.

Seamless Operation

Automatic transitions between power sources for uninterrupted supply.

Environmental Benefits

Significant reductions in CO₂ emissions.

Technological Reliability

High-quality solar modules and battery with smart energy management.

Increased property valuation

Properties equipped with independent energy sources sell for a premium compared to those without it

Increased interest

A microgrid equipped with solar and battery storage boosts a property's appeal to attract home buyers and tenants

By embracing solar energy, Hyde Gate Estate is leading the way toward a greener, more reliable, and cost-effective energy future.



CASE STUDY

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BENEFITS

Affordability

The Hyde Gate energy system is structured under a power purchase agreement where they pay for solar-generated electricity at tariffs that are lower than their current grid costs. This setup allows the estate to use the savings from the solar system towards the payment of the BESS rental system. Given the rising electricity prices, this investment is wise, as it ensures more savings each year and shields the estate from future price hikes.

Technological Advancements

Technological improvements in solar panels and battery storage have made systems more efficient, durable, and cost-effective. The solar panels used have a higher efficiency rate than other panels with a 21.13% efficiency rate, allowing the estate to generate more energy from the sunlight. Additionally, the Freedom Won batteries are a high-capacity, long-lasting battery solution with a lifespan of 16 years (5500 cycles at 80% DOD) and they have a full battery management system and internal trip protection to enhance the safety of the solution.

CONCLUSION

Hyde Gate's solar installation sets a positive example for other residential complexes, showcasing the practical benefits of adopting renewable energy solutions. It represents a forward-thinking approach to energy management that not only meets current needs but also contributes to a sustainable and economically stable future.

**Hyde Gate Estate
sets the standard
for modern,
sustainable living
through smart solar
innovation, leading
the way in
residential
sustainability with
clean, reliable solar
energy.**

Solarise Africa is a pan-African Energy-as-a-Service company. We provide reliable and affordable decentralised energy solutions for businesses in Africa. Together with our solar partners, we offer a full-service solution that covers designing, building, financing and maintaining solar installations. Through our smart financing solutions, we unlock possibilities and empower our partners to thrive and actively drive Africa's progress.