

Retail leads the way with solar PV installations

JSE listed REIT SA Corporate Real Estate Limited will invest more than R30 million to install state-of-the-art rooftop solar PV plants to help curb ever climbing electricity tariffs at its malls and reduce their carbon footprint.

Retail Asset Manager, Carmen Collison, said that the ongoing multimillion-rand investment in solar by SA Corporate Real Estate Limited, one of the oldest and most established property companies in the South African property market, put it on a par with some of the most advanced malls around the globe.

It also showed that, although large regional malls with their large underutilized roof tops were probably best suited to large scale solar power generation, the installation of PV panels at smaller centres also delivered substantial returns.

She said that SA Corporate Real Estate Limited had invested R26.2-million in solar to date with 2 MWh installed. The future capex spend would be approximately R33.5-million which would see an additional 1MWh installed.

Coachman's Crossing Shopping Centre in Bryanston, Town Square Shopping Centre in Weltevredenpark, Forest Road Design and Décor in Fourways, Celtis Ridge Shopping Centre in Centurion and the recently revamped East Point Shopping Centre in Boksburg are among those who are going solar!

SA Corporate Real Estate Limited has an attractive portfolio of properties that is diversified across 178 properties covering a total 1.39 million square metres of lettable space. This is divided across retail, office, industrial and residential space.

"Energy efficiency for businesses is a low-risk investment which yields substantial rewards. Taking steps to achieve efficiency is essential for businesses across sectors because of the far-reaching benefits and long-term savings," she explained.

Collison said that the degree to which cost savings would accrue would vary across different malls.

For the most part, the size of the plants cannot sustain the whole centre but rather supplements the supply during peaks. It also goes some way to address reliability of supply.

"As responsible corporate citizens, energy efficiency had been identified as a key strategic deliverable to support the broader call made on the private sector to implement these renewable and environmentally sustainable technology. However, the energy crisis in South Africa, growing energy demand, grid reliability concerns and the increasing cost of electricity have meant that efficiency has become a necessity for South African businesses to remain profitable. Energy efficiency has allowed us to improve our risk management and to achieve cost savings," she explained.

Terra Firma Solutions, a turnkey specialist solar PV solutions service provider will be responsible for designing, building, commissioning and managing the rooftop solar PV plants at the shopping centre.

Managing Director, Ed Gluckman, said that there was an increasing trend for the retail property sector to embrace solar.

"We are seeing many property companies building solar PV plants on their malls as the malls use energy consistently across seven days and this mirrors the solar PV plant production. We know of around 100 Solar PV plants across South Africa on shopping malls," he said.

Referring to an already operating system at Willow Way Shopping Centre in Pretoria, which is part of the SA Corporate Real Estate Limited portfolio, Gluckman said that the 390 kWp system which covers approximately 2800 m² with 1200 solar panels mounted on the roof was commissioned in September 2017.

In February this year, 356 MWh cumulative energy had been produced during a period of six months since installation, providing a cumulative CO² (carbon dioxide) reduction of 349 tonnes.

Gluckman said that the move to solar in shopping centres probably began in 2012, as they are big users of electricity. Energy hungry HVAC systems which control heating, ventilation, air conditioning and cooling (refrigeration) account for around 50 percent of a mall's energy needs with another 30 percent being used to power lighting.

He noted that shopping centres were particularly suited to the installation of solar panels as they had large homogenous roofs with a seven-day electricity load ensuring that all of the solar PV power was used.

"Malls have a similar electrical load profile to solar PV plants with their peak usage being around midday," he said.

Gluckman added that he expected the number of solar PV installations on both new builds and existing malls to increase as South Africa caught up with its retail counterparts elsewhere in the world.

"The commercial rooftop solar PV market is seeing unprecedented growth in South Africa. With forward thinking property such as SA Corporate Real Estate Fund recognising the value in mitigating rising energy costs with solar PV. This will help protect their future income by retaining tenants and offering cost effective utility fees."

He pointed out that South Africa was the second most dense shopping mall country in the world after the USA. Because malls centralised the shopping experience, local retailers and landlords had an excellent opportunity to not only contain costs but also to help mitigate the risk of climate change.