

EASTGATE

Eastgate Shopping Centre's solar trees continue to provide an efficient option for energy generation

Natural capital is critical to the day-to-day functioning of the Liberty Two Degrees (L2D) business and forms part of the company's strategic thinking. Aligned to L2D's Good Spaces building block, which aims to minimise the impact of the malls on the natural environment while creating spaces that are agile, adaptable and aligned to Sustainability Development Goals as well as L2D's 2030 Net Zero carbon target, L2D's Eastgate Shopping Centre (Eastgate) has introduced three solar trees to the centre's rooftop Piazza.

The solar trees serve to provide a source of renewable solar energy to the centre and increase the public's awareness of alternative and responsible energy sources, while providing an architecturally enriched identity. The solar trees are self-reliant, harnessing energy from the sun to illuminate at night. With a bespoke installation of lights, the trees also contribute to feature lighting in the Piazza, while operating off the grid. The solar trees therefore come 'alive' in the evenings on their own accord for approximately 5 to 6 hours. The installation of the solar trees at the centre will contribute towards minimising the centre's impact on the natural environment as well as L2D's Net Zero target.

Jonathan Sinden, Chief Operations Officer at L2D comments **"We aim to accelerate our positive impact on the natural environment and remain bold in driving our net zero commitments. The solar trees at Eastgate are an exciting initiative as we aim to implement renewable energy projects throughout our portfolio, while creating sustained value for our stakeholders. This initiative also aims to inspire customers to adopt sustainability practices in their everyday lives for the benefit of the natural environment"**.

With the aim of improving accessibility while easing congestion in the mall areas, L2D' strategy to activate rooftop spaces offers further outdoor opportunities and enables customers to experience the mall differently while creating Good, Smart and Interactive Spaces for shoppers to interact.

"The solar trees form part of a wider Piazza project which includes a journey through an artistic interpretation of sustainability, community and nature for the benefit of future generations. The centre is able to present patrons with a renewed ambiance, and overall experience when dining out, or simply strolling through the Piazza" adds Sinden.

This initiative is in partnership with Architects **Batley Partners**, who took on the function of conceptualising a vision that would be befitting of the physical space, while matching the overall ethos of the centre with the ultimate goal of uplifting the atmosphere of the Piazza for the benefit of its patrons.

The solar tree concept at the Piazza, inspired by a visit to Baine' Baobabs in the Botswana Nxai Pan National Park, doubles as a public art and further aims to bring new energy to the area, enabling photo opportunities and a sense of community and connectedness between visitors.

The aesthetics of the solar trees was dictated by the scale of the trees and their relationship to the shopping centre. Three is the smallest nuclear family unit in nature and with this, an ensemble comprising of a large 'father' tree which towers at 13.5 meters in height and 14 meters in diameter, a slightly smaller 'mother' tree, and the smallest being a 'child' tree, was conceptualised. This concept speaks to Eastgate's philosophy of creating family focused activities, thus forming relatable, community driven and memorable experiences.

The trees consist of tubular hollow steel sections that have a 20-year lifespan requiring minor maintenance. The hollow steel sections mostly resemble tree 'trunks' and 'branches' and are extremely flexible, allowing for the necessary bendability, and convenient transporting and installation. The solar panels are set to operate for 10 years and are easily replaced. The solar trees are covered in a stainless-steel net called Jakob Webnet procured from Switzerland, and within this net, infills were placed to create an architectural effect. Several solar photovoltaic panels mounted on top of each spiral, are able to provide light.

"It became remarkable how our design team had to continually adjust the trees' components to resemble the geometry in nature and search for new types and ensembles of material to represent leaves and canopies in order to achieve a series of harmonious, sculptured architectural elements," comments Edmund Batley from Batley Partners.

The solar trees have continued to efficiently generate energy since October 2020. The design, manufacturing and installation of the solar trees saw over 200 people contributing to the successful completion of this project. The contractor responsible for bringing to life and constructing the solar trees was Anchor ENGINuity.

"Anchor ENGINuity is exceptionally proud of this project. Having had many years of experience in the specialised steel field, the Eastgate Solar Tree project is definitely one of the most iconic steel structures in South Africa. Integrating the steel component with electrical, solar and stainless-steel cladding, really creates a very special and unique world class structure," says Andrew Kirkland from Anchor ENGINuity.

L2D is passionate about taking its centres to new levels of innovation. Customer experience remains the cornerstone of the L2D business, the company therefore continuously seeks to enhance the customer experience while creating value.

“The state-of-the-art solar trees further enhance the Piazza’s offering to patrons and tenants alike, creating a sculptural, functional and sustainable environment, while entrenching our commitment to our patrons by providing them with iconic shopping experiences,” Sinden concludes.

ENDS

Responsible Parties:

Liberty Two Degrees: investors@liberty2degrees.co.za | www.liberty2degrees.co.za

Architect: Batley Partners

Project Manager: Profica Project Managers

Quantity Surveyor: MLC Construction Cost Consultants

Electrical Engineer: MNS Engineering

Lighting Consultant: Pamboukian Lightdesign

Contractor: Anchor ENGINuity

Notes to editors

Eastgate Shopping Centre has evolved into a prominent retail centre and retains its dominance and world-class reputation as a super-regional shopping centre in the eastern suburbs of Johannesburg, with a diverse tenant offering.

Since its opening over forty years ago in 1979, Eastgate has significantly grown in size and stature and has undergone a number of evolutionary upgrades to meet the ever-changing needs of customers and surrounding communities, notably the Aquaponics farm district – a first for the African continent.

Eastgate is five-star green-star rated by the Green Building Council of South Africa, with a focus on minimising its environmental footprint, with long-term sustainability goals embedded in day-to-day operational policies and plans. To achieve this the centre houses a 6 549m² 1 MW solar photovoltaic (PV) roof structure and three solar tree structures that serve to provide a source of renewable energy to the centre and increase the public’s awareness of sustainable green methods of preserving energy.

In accordance with the SHORE accreditation standards by international certification body SAFE Asset Group, Eastgate Shopping Centre is certified COVID-19 compliant and has also achieved gold level status as a safe retail destination for its ability to prevent, adapt, respond to, recover and learn from operational disruptions.

This asset also features an office component.

Eastgate Shopping Centre, is owned by Liberty Two Degrees and Liberty Group Limited. Information is available at www.liberty2degrees.co.za. The property management function is performed by JHI Retail Proprietary Limited.