



# IMPACT

Official  
publication  
of Green  
Building  
Council  
South  
Africa



# 27



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**Sustainability**

**THE AWARDS ISSUE**



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# +IMPACT

The official publication of GBCSA



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## Professional Membership Partners



## CALLING ALL THOUGHT LEADERS

+Impact magazine, the official publication of the GBCSA, presents thought leadership from local and international green building commentators and practitioners, and showcases the excellent work of GBCSA members. Are you a thought leader in your relevant field? GBCSA members are invited to submit stories about projects, design concepts, materials, research and anything else that promotes a healthy sustainable built environment. Submit a 100-word description of your content idea to: [editor@positive-impact.africa](mailto:editor@positive-impact.africa)

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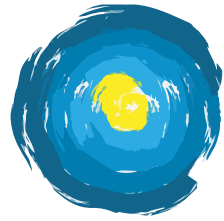
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**T**he new year is upon us and, phew, what a whirlwind the end of 2023 was. I trust that our readers enjoyed their festive season, and here's hoping 2024 brings you predictability, prosperity and all that you desire.

Last November saw a fantastic Green Building Convention in Cape Town with some fabulous speakers, and interesting and relevant topics covered in parallel sessions and workshops. While the opening plenary session had Cape Town's mayor Geordin Hill-Lewis and the Western Cape Department Minister for Infrastructure Tertuis Simmers tell us respectively about the City of Cape Town and the Province's sustainability and climate mitigation journeys, the highlight had to be hearing from the extraordinary Robert Swan – the first person ever to have walked to both the North and South Poles.

Robert, who accepted a challenge set 30 years ago by French ocean explorer Jacques Cousteau to save Antarctica from climate change, is also the founder of the 2041 Foundation, an organisation dedicated to the preservation of Antarctica. Robert had the convention delegates on the edge of their seats with tales from his first unassisted march to the South Pole, his walk to the North Pole, his mission to remove and recycle 1 500 tons of waste from the Bellingshausen station in Antarctica, and his multiple attempts to return to the South Pole with his son Barney some years later – all the time interspersed with graphic descriptions of injuries, trials, tribulations and near-death experiences. While his core talking points were inspiring, he used his experiences to foster perseverance, courage and vision, and to challenge leaders to think beyond their business, and consider society and the environment. My takeaway was his mantra, "If you say you're going to do something, then dammit, do it!"

In addition to a host of interesting topics, the closing plenary session included John Vlismas. Although John is a stand-up comedian with more than 25 years of experience, he delivered his keynote address as the founding partner of OGO Creative, an organisation that blends strategy with live events to assist businesses with being creative and "raising their energy towards finding better patterns". While he grappled with serious issues like climate change and sustainability, he certainly raised the consciousness of the audience when he contended that humans, as consumers, were the problem – and he did it with all the comedic flair South African audiences have come to know and appreciate.

After a panel discussion on future sustainability trends in the built environment, I delivered the Incoming Chair Address, in which I cautioned against the adoption of accelerated decarbonisation policies without considering the economic costs, or adopting decarbonisation tools developed in other countries without considering our local context. We are currently at the lower end of the business cycle, enduring higher-than-usual interest rates, and investors are likely to hold off until after the 2024 national elections. Coupled with worsening socioeconomic conditions, this means that, for some time, we are unlikely to see the new builds and growth we have experienced in the past.

While the business cycle takes its time to improve, the GBCSA will nevertheless push ahead with updating our rating tools to ensure market alignment, essentially investing now so that when business confidence improves, we are able to offer the market updated tools that drive even greater resource efficiency. We know that the built environment is responsible for one third of all global carbon emissions, 40% of energy consumption, 40% of solid waste generation and 12% of all freshwater consumption, and it is these new certification tools that are going to make a difference.

We simply must educate our finance and property sectors that certification is about resource efficiency, and not only about green credentials.



**André Theys**  
GBCSA Chairman



**I**t's hard to believe January's already been and gone – and we're well out of the starting gates for a 2024 that's packed with promise for the green building sector. But here at *+Impact*, we're still celebrating the remarkable achievements of our sustainability champions in 2023.

Like its host, the GBCSA's Green Building Convention grows from strength to strength each year. The theme at last November's event – Y/OUR SPACE – was perfectly placed to create room for robust discussion around sustainable building, at the same time honouring the projects and people who've succeeded in making a positive impact on the built environment.

At the vibey gala dinner, GBCSA's annual Leadership Awards were bestowed upon these very deserving recipients. We asked the Established Green Star and Rising Green Star winners and runners up what winning these accolades meant to them (page 36), and they share their stories on what prompted them to pursue a path in the sustainable built environment. Discover more about the outstanding projects that took home the top spots in 11 categories on page 12.

In September last year, a highlight of the South African Property Owners Association (SAPOA) annual convention was its awards ceremony, which showcase development excellence and celebrate innovation, setting the bar for growth within the real estate industry. Head to page 56 for an overview of the winning entries.

And then there are the planet shapers – the movers and shakers who are informing the future of sustainability in South Africa. Every year, the Greenovate Awards recognise and reward sustainable solutions by young minds in the built environment. Read more about the 2023 award winners on page 48.

While the changemakers quietly get on with it, giant strides are being taken elsewhere – at the end of October 2023, South Africa's National Assembly voted to pass the Climate Change Bill. This is a massive milestone that sets our country apart as one of the few in the world to enact climate change into law. Will this be the magical solution that aligns civil society, the private sector and the government's efforts towards a carbon-neutral future? GBCSA's Bakang Moeng delivers the first instalment on this topic on page 34.

Meanwhile, the WorldGBC has released its *Social Impact Across the Built Environment* position paper, which marks a significant change in thinking around the scope of a green project's sustainability reach. Abi Godsell of the GBCSA considers the importance of this report for South Africa and the global green building community (page 46).

As always, we feature some standout properties, and back at home in Pretoria's Menlyn Maine, the latest addition to this urban precinct is an arresting seven-storey contemporary office building, Park Lane West, (page 26), which has secured its 4-Star Green Star Office As Built rating.

Further south, Northridge Coastal Estate in Cape Town received its first 4-Star Green Star Sustainable Precincts certification in 2019. *+Impact* revisited the project to see how it's progressed since then (page 40).

You may be wondering why this issue hadn't hit the shelves earlier in the year – while we'll still be delivering the stellar content we always have, it'll now be in the form of four issues annually.

We hope you're inspired by our Awards issue – wishing you all a productive and abundantly green year ahead!

**Mariola Fouché**  
Editor



"Green is for everyone," says GBCSA CEO Lisa Reynolds. Key takeaways from the 16th Green Building Convention were the need for collaboration and inclusivity.





# EDITORIAL ADVISORY BOARD

## BOB VAN BEBBER

Bob van Bebbber, a senior director at Boogertman + Partners spearheads the conceptualisation and delivery of many of the practices' large complex projects. From Soccer City, the main stadium for the 2010 FIFA World Cup, to large mixed-use precincts as well as the largest single tenanted corporate head office in the southern hemisphere for Discovery Health. He was recently recognised by the South African Professional Awards as the winner of the Professional of the Year: Architecture Class Award as well as the Overall Professional of the Year for 2019. Van Bebbber's passion extends into urban design, interior design and education.

[www.boogertmanandpartners.com](http://www.boogertmanandpartners.com)



## GRAHAME CRUICKSHANKS

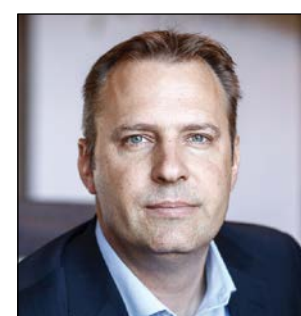
Grahame Cruickshanks has worked as a professional architect, sustainability consultant and management consultant with 20 years of experience in the design, construction and property industry. Focusing much of his career on green buildings and an expert in his field, he has worked on a variety of Green Star and BREEAM certified projects and other building projects in South Africa, Singapore and the UK. Prior to joining Growthpoint Properties as the head of sustainability and utilities, Cruickshank's previous roles included managing executive for market engagement at the GBCSA and manager at EY's Climate Change and Sustainability Services.

[www.growthpoint.co.za](http://www.growthpoint.co.za)

## JUTTA BERNS

Jutta Berns is an industry leader and one of South Africa's first internationally accredited green building professionals, establishing her company Ecocentric in 2007. She has degrees from the Universities of Bonn (Germany) and Cambridge (UK), and a diverse blue-chip client base. Berns specialises in sustainable and net-zero solutions for large property portfolios. She has several LEED Platinum and 6-Star Green Star projects in her portfolio, is a GBCSA faculty member, a Green Star Assessor and GBCSA TAG member, and winner of the Gauteng Entrepreneur of the Year 2019 Award by the Women's Property Network and 2019 winner of the Established Green Star Awards by the GBCSA.

[www.ecocentric.co.za](http://www.ecocentric.co.za)



## MANFRED BRAUNE

Braune currently holds the position of Director: Environmental Sustainability at the University of Cape Town (UCT), where he leads the strategy and implementation of environmental sustainability across all spheres of the university since early 2019. He has also served as a non-executive director of GBCSA in a voluntary role since August 2020. Braune's background is as a professional engineer, having worked at WSP Group for over 10 years as a consulting engineer, where he then started and led WSP's green building business for three years and then worked for the GBCSA for 10 years.

<https://www.uct.ac.za/main/explore-uct/sustainability>

## MARLOES REININK

Marloes Reinink is owner of Solid Green Consulting. With an academic background in innovation and architecture, she has been working as a sustainable building consultant for more than 15 years in South Africa and Africa. She founded Solid Green in 2010, which is one of the leading sustainability consultancies in Africa and achieved its 100th green building certification in October 2020. Reinink's passion is advocating for a greener built environment and she recently started GreenED, an online education platform for sustainability in the sector. Reinink is an ambassador for the International Living Future Institute; a Living Future accredited professional; and a facilitator of the SA Collaborative Network for a Living Future.

[www.solidgreen.co.za](http://www.solidgreen.co.za)



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# MAKING AN IMPACT

## GBCSA APPOINTMENTS



Georgina Smit,  
Executive Director, GBCSA

Head of Technical Georgina Smit has been appointed Executive Director of the Green Building Council South Africa (GBCSA). She has been an integral part of GBCSA's growth, bringing invaluable expertise to the GBCSA team, members and partners.

For the past year, Georgie Chennells has shared her marketing and communications prowess with the team on a part-time basis. Georgie has now officially been appointed as the GBCSA's new Head of Market Engagement. Congratulations, Georgina and Georgie!



Georgie Chennells,  
Head of Market Engagement, GBCSA

SINCE 2009, GBCSA HAS AWARDED...

**1 080 = 15.8M**

certifications m<sup>2</sup> certified

THIS EQUATES TO APPROXIMATELY



**2 250**

Rugby fields of space certified



**1 575**

Million kWh/annum will be saved



**1 890**

Million kg CO<sub>2</sub>/annum will be saved



**1 460**

Million litres of potable drinking water will be saved annually



**472 800**

Cars off the roads every year in terms of kg CO<sub>2</sub> equivalent



**109 445**

Households' worth of annual energy will be saved



**2 000 170**

Daily drinking water needs for this many people every year

## GBCSA ONLINE TRAINING

**Workshop 1–20 March:** Understanding the application of EPC Standards for Buildings

**Workshop 2–30 April:** Understanding the EPC Inspection Body Accreditation Process

These Energy Performance Certificate (EPC) workshops will provide property owners and managers with the knowledge, processes and calculations to successfully measure the energy performance of buildings, in compliance with South Africa's EPC regulations.

The workshops are ideal for public and private-sector building owners, and facilities managers responsible for data collection required for EPC auditing purposes.

**Book now** to secure your spot! [www.gbcса.org.za/train/](http://www.gbcса.org.za/train/)

**Green Star Sustainable Precincts Accredited Professional (AP) Programme**

Sign up for the Green Star Sustainable Precincts AP training course ahead of the compulsory online workshop coming up in April.

**Online modules:** 10 modules for self-paced learning (GBCSA Academy e-learning platform)

**Webinar:** 24 April, 09h00-15h00 (Zoom)

– unpack the application of the tool and case studies

**Final assignment:** validate your new skills

and knowledge and become a certified Green Star AP.

For more, email

[training@gbcса.org.za](mailto:training@gbcса.org.za)



## NEW GBCSA MEMBERSHIP CATEGORY

"Green is for everyone," maintains CEO Lisa Reynolds. In keeping with GBCSA's commitment to this philosophy, a new, cost-effective "entry-level" membership category for small businesses has been introduced. This means companies with an annual turnover of less than R5 million – such as building contractors, product manufacturers and distributors – qualify.

## A BOOST FOR AFFORDABLE HOUSING

The majority of South Africa's affordable housing is located at the urban periphery, far from economic opportunities and essential amenities. South African investment platform Divercity is dedicated to affordable rental housing with supporting amenities in high-density and centrally located urban precincts.

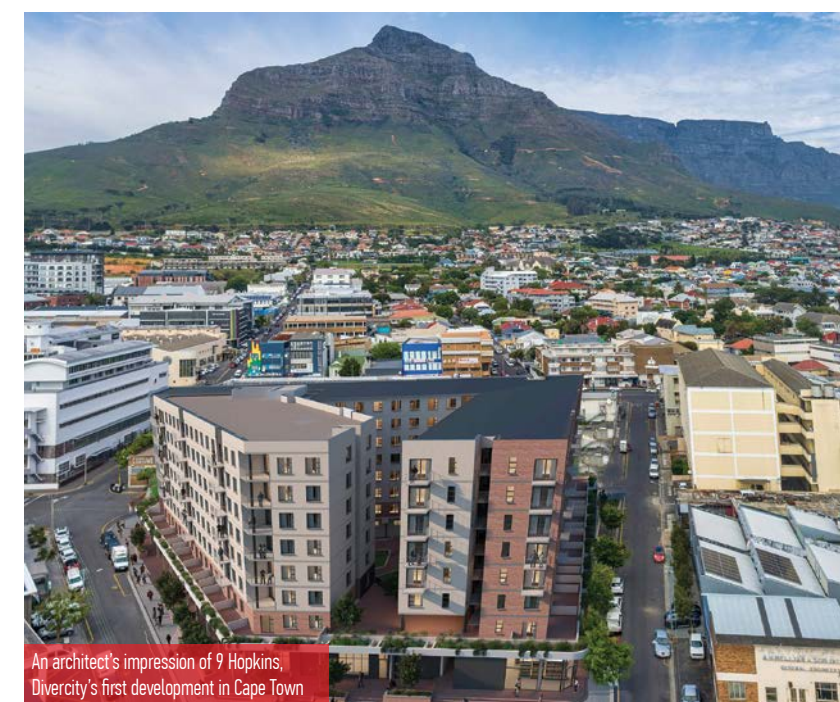
French development finance institution Proparco and 27four, a South African investment manager, have led a R550 million investment in Divercity Urban Property Group alongside reinvestment from its existing shareholders. Through this investment, Proparco and 27four will boost



An aerial view of Barlow Park, which is at the gateway to Sandton Central



Iconic Jewel City in Johannesburg Central



An architect's impression of 9 Hopkins, Divercity's first development in Cape Town

the affordable rental offering in South Africa, which has been identified as a key priority by the government, given the severe housing shortage. Divercity aims to develop over 2 500 new apartments.

Principal at Proparco, Gregor Quiniou, said: "Beyond the support to regenerate South African cities, this project also gives Proparco an opportunity to support energy-efficient building programmes targeting EDGE certification. It aims to achieve several development goals (including SDGs 5, 8, 11, 13) through job creation and combating gender inequality by providing safe and best-in-class accommodation for tenants." [www.proparco.fr/en](http://www.proparco.fr/en); [www.27four.com](http://www.27four.com); [www.divercity.co.za](http://www.divercity.co.za)

## A NET POSITIVE RESULT

**Environmental responsibility has become a high priority for mines, having been tasked with ensuring that their operations are sustainable and kinder to the environment.**

Vedanta Zinc International, owner of Black Mountain Mining (BMM), appointed sustainability specialist consultants from WSP in Africa to assist in its ambitious goal of achieving a Net Zero Carbon Level 2 (Measured) rating for BMM's White Office complex (see page 18).

"The first step towards achieving Net Zero in the offices was to install a metering system and gain an understanding of how much energy was being used by the office and residential units. This enabled us to calculate the benefit of the solar installation," says Alison Groves, Regional Director of WSP in Africa.

Next was the installation of a 99kW ground-mounted Photovoltaic Solar (PV) system, tied to the grid without a battery backup. "Because there is no battery storage installed as part of the PV system, the sizing of PV installation was designed to exceed the annual energy demand of the office complex. As the energy is not stored, the system is designed to continue to generate electricity, over and above the needs of the office," says Groves.



Vedanta Zinc International's Black Mountain Mining office solar installation

"This generated an opportunity to continue to serve the community in which it operates, by feeding the balance of the renewable energy to the nearby residences and create an energy bank of sorts."

The success of the project not only enabled BMM to meet its goals, but also showed just how attainable the Green Star Net Zero rating is for committed mines.

[www.vedanta-zincinternational.com](http://www.vedanta-zincinternational.com); [www.wsp.com](http://www.wsp.com)







# GREEN STARS of the show



## ANNUAL LEADERSHIP 2023 AWARD WINNERS

A highlight of the GBCSA's Green Building Convention each year is the Leadership Awards, which acknowledges the remarkable achievements of stellar professionals and projects in the green building environment. Here's a line-up of the winning 2023 projects that are pushing the green envelope ever harder for a better, more sustainable world.



## EDGE RESIDENTIAL LEADER

### WINNER: SAGEWOOD LIFESTYLE APARTMENTS, MIDRAND

Olifantsfontein Road, Midrand, Gauteng

**Sustainability specialist and EDGE expert:** Alison Groves, WSP

**EDGE Auditor:** Yvonne Pelsler, Inside Out Consulting

"Winning the EDGE Residential Leader award is a profound recognition of Century's relentless pursuit of Excellence in Design for Greater Efficiencies in the real estate sector. This accolade underscores our commitment to innovative practices, affirming a dedication to elevated standards that enhance efficiency and redefine residential leadership with a focus on cutting-edge design principles," says Japie Vos, Quantity Surveyor Executive and Project Manager at Century Property Developments.



**Project type:** Residential apartments  
**Project owner:** Century Property Developments  
**Certification:** EDGE certification  
**Project size:** 14 794m<sup>2</sup>

## HIGHEST-RATED BUILDING FOR AN ASSET-RATING DESIGN PROJECT

### WINNER: HASSO PLATTNER D-SCHOOL AFRIKA, UNIVERSITY OF CAPE TOWN

Cnr Cross Campus Road & Woolsack Drive, UCT Middle Campus, Rondebosch, Cape Town

**Accredited professional:** Yogesh Gooljar, PJC + Partners

Director of the Hasso Plattner d-school Afrika Richard Perez described the 6-Star Green Star rating as "a great milestone achievement": "It honours our philosophy as a d-school. It was important when we were conceptualising our place that it spoke to who we are and what our purpose is. Design-led thinking is an approach and mindset that drives change and innovation."

**Project type:** Public and education building  
**Project owner:** University of Cape Town/d-school Afrika  
**Certification:** 6-Star Green Star Public and Education Building V1  
**Project size:** 4 487m<sup>2</sup>



Paris Brummer and d-school Afrika



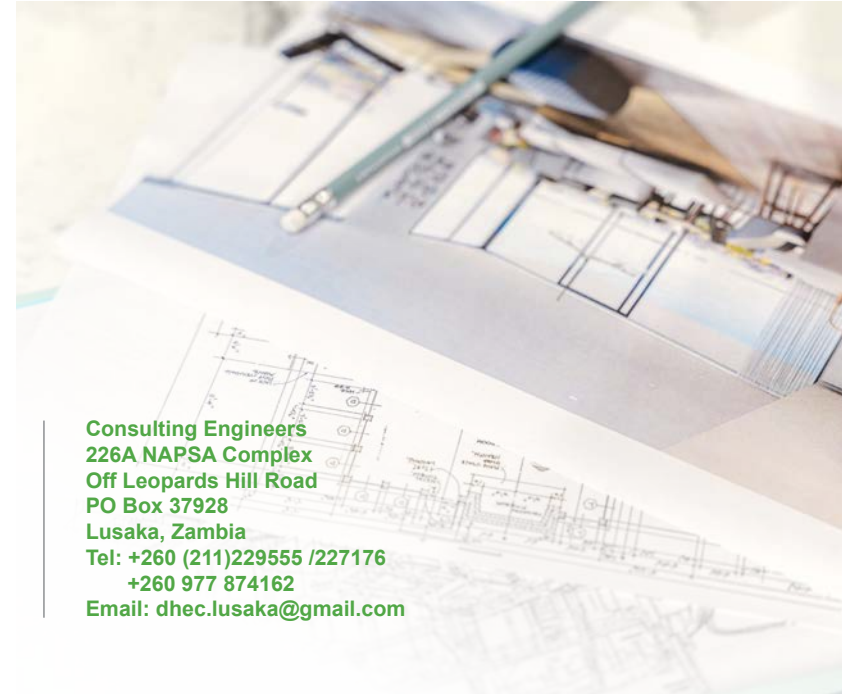


## Environmental Consultants, Consulting Engineers and Project Managers

DH Engineering Consultants is a Zambian-based Engineering Consultancy firm providing Engineering Design, Supervision and Project Management Services countrywide. The firm has over 20 years experience and all Engineers are Registered with the Zambian Engineers Registration Board.

The firm specialises in the design and supervision of Mechanical, Electrical and Plumbing Building Services, Fire Fighting Systems, and Petroleum Installations across all sectors of commerce, industry, agriculture and public infrastructure.

The firm also provides Environmental Consultancy Services such as the preparation of Environmental Impact Assessments and Site Health and Safety Audits.



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226A NAPSA Complex  
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PO Box 37928  
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Tel: +260 (211)229555 /227176  
+260 977 874162  
Email: dhec.lusaka@gmail.com

### RUNNER-UP: NEDBANK NAMIBIA BUILDING

Freedom Plaza, Independence Avenue, Windhoek, Namibia

**Accredited professional:** Elri Syfert, WCE Consulting Engineers and Solid Green Consulting

“This project and certification process presented us with an opportunity to [help inform] Namibians about the benefits of sustainable building design and construction methods. We hope creating awareness will also inspire future developers to follow suit,” says AP Elri Syfert of Solid Green Consulting.

**Project type:** Offices  
**Project owner:** Nedbank Properties  
**Certification:** 6-Star Green Star SA Office V1.1 As Built  
**Project size:** 10 716m<sup>2</sup>



## HIGHEST-RATED BUILDING FOR EXISTING OPERATIONAL PERFORMANCE

### WINNER: VISUAL ARTS BUILDING, STELLENBOSCH UNIVERSITY

Jan S Marais Square, Main Campus, University of Stellenbosch

**Accredited professional:** Simon Penso, Imbue Sustainability

“It is a great achievement for us at Imbue Sustainability to be a part of this award-winning project and assist in facilitating positive change. The building blocks for this high-EBP-scoring building are very low energy and water operational intensities, while its waste diversion from landfill percentage is outstanding. This doesn't just happen by chance but is a long journey that the university has committed to and followed intensely for a long time. It is very rewarding to receive recognition for all the hard work that has gone into it,” says AP Simon Penso, founder of Imbue Sustainability.

**Project type:** Education building  
**Project owner:** University of Stellenbosch  
**Certification:** 6-Star Green Star Existing Building Performance V1  
**Project size:** 3 790m<sup>2</sup>



Atriums



Canopies



Skylights



Façades

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Providing a full range of services from Concept Development through Engineering + Fabrication to Supply + Installation.

This single source approach ensures the feature elements on new and refurbishment projects are well executed and are built within a budget.

Proud to have worked on the freeform façade and atrium at the Hasso Plattner School of Design Thinking (d-school) project.







# Namibian ingenuity

## Green building milestone

Nedbank Namibia received a **Six-Star Green rating** from the Green Building Council of South Africa.

**Nedbank has always been at the forefront of green initiatives that build the community, placing Namibia among the world's best.**

### A green building milestone

An absolute first for Namibia – showcasing Namibian excellence leading the charge for environmental sustainability.

### Built for Namibia by Namibians

This achievement is shared with Namibian companies that received 97% of the total contract value.

### Excellence in execution and productivity

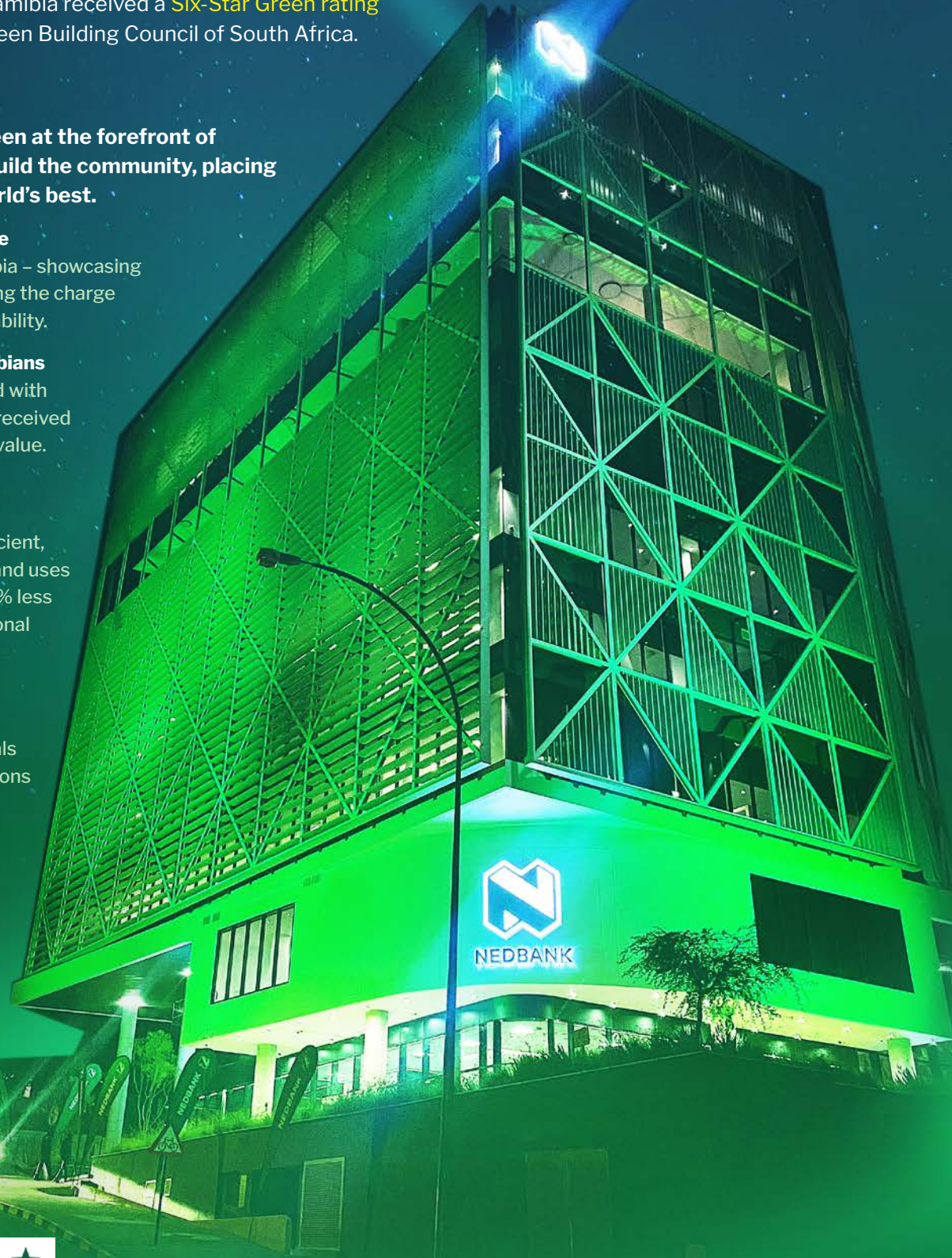
This building is energy efficient, with 100% LED lightning, and uses 45,5% less energy and 45% less water than other conventional buildings of the same size.

### Nedbank is here to stay

The building symbolises stability and our future goals that are tied to the aspirations we have for Namibia and future generations.

### At the forefront of leadership and transformation

A contemporary design breathing new life into the Namibian landscape.



We celebrate our culture of collaboration and innovation, with a sense of national pride delivered by Namibians.

see money differently

NEDBANK

## RUNNER-UP: THE WATERSHED, V&A WATERFRONT, CAPE TOWN

17 Dock Road, V&A Waterfront, Cape Town

**Accredited professionals:** Francois Retief and Melissa Titus, Sow & Reap Consulting

“EBP helps close the gap between benefits targeted during the design and construction phases, and then actual operation – and in the instance of The Watershed, this has been done exceptionally well. Designing buildings is one thing, but measuring the actual operational efficiency and performance of such buildings underpins the true value thereof, providing a sustainable building befitting of [the occupants].”  
– Mareli Cloete, Senior Manager of Safety, Health and Environment – Sustainability & Utilities, V&A Waterfront



**Project type:** Commercial and retail  
**Project owner:** V&A Waterfront Holdings (Pty) Ltd  
**Certification:** 6-Star Green Star Existing Building Performance V1  
**Project size:** 7 623m<sup>2</sup>

## HIGHEST-RATED BUILDING FOR AFRICAN GREEN STAR SUBMISSIONS

### WINNER: NEDBANK NAMIBIA BUILDING

Freedom Plaza, Independence Avenue, Windhoek, Namibia

**Accredited professional:** Elri Syfert, WCE Consulting Engineers and Solid Green Consulting



On winning the award, Nedbank Namibia Chief Financial Officer JG van Graan says, “Nedbank Namibia is truly humbled at receiving such an award of note, and representing Africa as a 2023 recipient of the Highest Rated African Green Star Submission Award. The Nedbank Campus will continue to enhance the qualities that made it fit for this ranking. Caring for our pristine environment and safeguarding it for generations to come has never been a choice for us. It is a responsibility that we take seriously.”

**Project type:** Offices  
**Project owner:** Nedbank Properties  
**Certification:** 6-Star Green Star SA Office As Built V1.1  
**Project size:** 10 716m<sup>2</sup>

### RUNNER-UP: FIRST CAPITAL BANK, LUSAKA, ZAMBIA

Tito Road, Lusaka, Zambia

**Accredited professional:** Kagiso Sebetso, Time A&PM

“The award is really an acknowledgement of the team’s and client’s efforts in pioneering the green office space in Zambia. We are thankful to the GBCSA for its support, and for making it possible for buildings in Africa to be assessed and certified for their environmental performance,” says AP Kagiso Sebetso, Green Building Consultant, Time A&PM.



**Project type:** Offices  
**Project owner:** Time developments  
**Certification:** 5-Star Green Star- Office Design V1.1  
**Project size:** 3 820m<sup>2</sup>





# NET ZERO SUBMISSION

## WINNER: dsm-FIRMENICH SOUTH AFRICA

Cnr 16th & Pharmaceutical roads, Midrand

**Accredited professional:** Marc Sherratt, Marc Sherratt Sustainability Architects

“For dsm-Firmenich South Africa, the award formally recognises the steps we’ve taken to support the environment in which we operate. This project is also the first formal step in not only neutralising our ecological impact, but now also positively enriching it. The ecological journey ahead for the site is an exciting one – we will now monitor and track the increase in biodiversity annually, which will truly show the long-term value of this project.” – dsm-Firmenich



**Project type:** Office  
**Project owner:** dsm-Firmenich  
**Certification:** Net Zero – Ecology (Measured)  
**Project size:** 10 650m<sup>2</sup>



Through its sustainable landscaping project, dsm-Firmenich’s South African office in Midrand, Johannesburg, is paving the way for urban ecological regeneration.

## RUNNER-UP: THE WHITE OFFICE

1 Penge Road, Aggenys, Northern Cape

**Accredited professional:** Alison Groves, WSP

“The mining industry is very aware of the environmental impact of its activities and is making the changes needed to move towards a Net Zero Carbon operating environment. I am proud to be associated with this change,” says AP Alison Groves of WSP.



**Project type:** Office  
**Project owner:** Black Mountain Mining  
**Certification:** Net Zero Carbon, Level 2 (Measured)  
**Project size:** 422m<sup>2</sup>



# BEST-QUALITY SUBMISSION FOR AN ASSET RATING

## WINNER: BRACKEN NATURE RESERVE, CAPE TOWN

2 Reservoir Street, Brackenfell South, Cape Town

**Accredited professional:** Justine Powrie, Goal Zero Consulting

On receiving this award, AP Justine Powrie says, “I am deeply honoured to have received this award on behalf of Goal Zero Consulting. It means the world to me to be recognised for our hard work and dedication on the project. I will continue to strive for excellence in all that I do, and use this recognition as a motivation to accomplish even more.”



**Project type:** Environmental Education Centre  
**Project owner:** City of Cape Town  
**Certification:** 5-Star Green Star Public & Education Building Design V1  
**Project size:** 710m<sup>2</sup>

## RUNNER-UP: REWARDSCO BLOCK A

Ncondo Place, Umhlanga Ridge, Umhlanga, South Africa, 4319

**Accredited professional:** Makhosazana (Khosi) Mthethwa, Solid Green Consulting



“Rewardsco Block A stands out as the third green-rated building in Umhlanga’s A-Grade commercial precinct. This office space prioritises high performance, providing a healthy and productive work environment that is cost-effective to operate and maintain while minimising its environmental impact. Rewardsco is dedicated to sustainable building practices, consistently embracing innovations to enhance energy efficiency, water conservation, and waste management in their facilities.” – GBCSA

**Project type:** Offices  
**Project owner:** Umhlanga Rocks Property Trust  
**Certification:** 5-Star Green Star Office Design V1.1  
**Project size:** 5 762m<sup>2</sup>





# BEST-QUALITY SUBMISSION FOR EXISTING OPERATIONAL PERFORMANCE

## JOINT WINNER: 29 SPRINGBOK ROAD, JOHANNESBURG

29 Springbok Road, Bartlett, Boksburg

**Accredited professional:** Sally Misplon, Misplon Green Building Consulting

“Winning the Best Quality Submission award at the annual GBCSA convention is truly a momentous achievement for Misplon Green Building Consulting,” says AP Sally Misplon. Being recognised by our industry peers for the high standard of work we deliver to our clients is an incredibly meaningful acknowledgment. This recognition is not just an individual triumph but a collective effort, and credit is due to everyone involved.”

**Project type:** Industrial distribution centre  
**Project owner:** Redefine Properties  
**Certification:** 4-Star Green Star Existing Building Performance Custom Industrial PILOT  
**Project size:** 22 067m<sup>2</sup>



## JOINT WINNER: ERPM

Comet Ext 14, Boksburg, Johannesburg

**Accredited professional:** Sally Misplon, Misplon Green Building Consulting

**Project type:** Industrial park with mixed-use tenants  
**Project owner:** Redefine Properties  
**Certification:** 4-Star Green Star Existing Building Performance Custom Industrial PILOT  
**Project size:** 67 742m<sup>2</sup>

Note: The runner-up in this category opted to remain confidential



# TRANSFORMING TOMORROW: ASSET PROJECTS

## WINNER: HASSO PLATTNER D-SCHOOL AFRIKA, UNIVERSITY OF CAPE TOWN

Cnr Cross Campus Road & Woolsack Drive, UCT Middle Campus, Rondebosch, Cape Town

**Accredited professionals:** Mlondolzi (Mlo) Hempe and Yogesh Gooljar, PJC + Partners

“In building a home for ourselves, it was important that we built a place that enhances the behaviour of innovation but also embodied tackling one of our world’s grand challenges related to environmental sustainability and climate change. We needed a home that was going to be a beacon for this,” says Director of the Hasso Plattner d-school Afrika Richard Perez.

**Project type:** Public and education building  
**Project owner:** University of Cape Town/d-school Afrika  
**Certification:** 6-Star Green Star Public and Education Building V1  
**Project size:** 4 487m<sup>2</sup>



Paris Brunner and d-school Afrika

## RUNNER-UP: PICK N PAY CLOTHING, BLUE ROUTE STORE, CAPE TOWN

Shop F154, Blue Route Mall, Tokai Road, Tokai, Cape Town

**Accredited professional:** Fabio Venturi, Terramanzi Group

“The Green Star certification and the Transforming Tomorrow: Asset Projects runner-up award signifies that Pick n Pay Clothing is committed to environmentally sustainable practices. It reflects our efforts to minimise environmental impact, promote ethical sourcing, and support sustainable manufacturing processes. These awards showcase Pick n Pay Clothing’s dedication to sustainable and responsible business operations,” says Abdulhaliem Vogt, Head of Store Planning, Pick n Pay.

**Project type:** Shopping mall retail store  
**Project owner:** Pick n Pay Clothing Blue Route Store  
**Certification:** 4-Star Green Star Interiors V1  
**Project size:** 578m<sup>2</sup>







# TRANSFORMING TOMORROW: EXISTING BUILDING PERFORMANCE

## WINNER: STELLENBOSCH UNIVERSITY

For 18 EBP tool-rated buildings, of which one was GBCSA's 1 000th certification

Accredited professional: Simon Penso, Imbue Sustainability

"This multiple building certification forms part of the university's Environmental Sustainability Plan to ensure that the university reaches its carbon neutral goal by 2030. This goal is backed by the ambition for a more resilient campus with reduced operational costs, reduced greenhouse emissions and a healthier and cleaner environment that is more productive and increases biodiversity." – GBCSA



**Project type:** 16 educational buildings, one office building and one mixed-use building  
**Project owner:** University of Stellenbosch  
**Certifications:** 4-, 5- and 6-Star Green Star EBP

## JOINT RUNNER-UP: BURSTONE GROUP

For 5 EBP custom industrial PILOT projects:

1. 39 Invubu Park Place, Riverhorse Valley, KwaZulu-Natal
2. 15 Pomona Road, Kempton Park, Gauteng
3. 16 Pomona Road, Kempton Park, Gauteng
4. 10 Jansen Road, Jetpark, Gauteng
5. 49 Diesel Road, Isando, Johannesburg (not pictured)

Accredited professional: Jutta Berns, Ecoentric



**Project types:** Industrial  
**Project owner:** Burstone Group  
**Certification:** 4 Star Green-Star Existing Building Performance rating using the Custom Industrial PILOT tool

Graham Hutchinson, Managing Director of Burstone Group SA, says: "We are proud that through our partnership with GBCSA we are able to obtain the five Industrial Green Star certifications, and we look forward to continuing to collaborate for the sustainability of the environment and the societies we operate in."

## JOINT RUNNER-UP: REDEFINE PROPERTIES

For 12 EBP custom industrial PILOT projects:

1. 190 Barbara Road, Henville, Germiston, Gauteng
2. 96 Cavaleros Drive, cnr Barlow Road & Cavaleros Drive, Jupiter Ext 3, Germiston, Gauteng
3. ERPM, Comet Ext 14, Boksburg, Gauteng
4. Hirt & Carter Cornubia, Tottum Road, Verulam, KwaZulu-Natal
5. Macsteel Cape Town, Steelpark, Modderdam Road, Cape Town, Western Cape
6. Midway Park, 61 Old Pretoria Road, Halfway House Ext 3, Midrand, Gauteng
7. Nasrec Road – Aeroton, cnr Alouette & Nasrec roads, Aeroton Ext 15, Johannesburg, Gauteng
8. S&J Industrial – Stampmill Building, Gosforth Road, Elandsfontein, Germiston, Gauteng
9. Schneider Midrand, 9 Old Pretoria Road, Halfway House Ext 3, Midrand, Gauteng
10. 29 Springbok Road, Bartlett, Boksburg, Gauteng
11. 239 Wadeville Road, Germiston, Gauteng
12. 17 Winnipeg Road – Aeroport, cnr Director & Winnipeg roads, Spartan Ext 2, Kempton Park, Gauteng

Accredited professional: Sally Misplon, Misplon Green Building Consulting

"Our joint runner-up award in the 'Transforming Tomorrow: For Moving the Industry Forward in Existing Building Performance' category acknowledges our significant contributions to market transformation within the existing building space. As a member of the GBCSA and the World Green Building Council (WorldGBC), Redefine continues to champion green building in the property and construction sectors. This accolade underscores our dedication to maintaining high standards in operational performance and sustainability." – Victor Mathey, Sustainability Project Manager, Redefine Properties. +

**Project type:** Industrial  
**Project owner:** Redefine Properties  
**Certification:** 4-Star Green Star SA Existing Building Performance rating using the Custom Industrial PILOT tool





# Home Hydrobliss: Cascading Comfort with STIEBEL ELTRON



Essentially making this living heat solution one that is versatile and efficient for maintaining indoor comfort throughout the entire year.

Ingo Hamann, Managing Director  
STIEBEL ELTRON SOUTHERN AFRICA

## Liquid Luxury: The Lark Drive Transformation into a Heatwave Waterfall Retreat

Located within the Waterfall Country Estate in Midrand, this residential new build home has embraced sustainability and self-reliance, addressing the challenges of frequent load shedding in the country. The installation features an Air Source Heat Pump WPL 25 ACS and an Integral Cylinder HSBC 300, providing an eco-friendly solution for underfloor and DHW heating. In the pursuit of self-independence amidst power disruptions, this family home stands as a testament to the commitment to a sustainable lifestyle. STIEBEL ELTRON South Africa seamlessly created an outdoor home setup transforming this home into a haven of comfort and reliability. The integration of cutting-edge technology not only ensures a constant and efficient heat supply but also aligns with the global push towards eco-conscious living. As a residential reference, this project not only showcases technological prowess but also emphasizes the importance of a happy home. In a country familiar with the inconvenience of load shedding, the reliability of the installed products ensures uninterrupted warmth and contentment.

Ingo Hamann, Managing Director of STIEBEL ELTRON Southern Africa, said: "As one of the leading suppliers of technology products for building services and green technology, STIEBEL ELTRON South Africa provided a sustainable solution combining energy savings and the highest level of comfort. An air-water heat pump offers heating power in a compact form. The outside-installed WPL extracts enough heating energy from the outside air for the heating supply. The system's timeless design is integrated seamlessly into this home's architectural requirements, and it delivers the highest level of hot water convenience even during loadshedding. The air source heat pump combi-system: the WPL 25 AC and HSBC, supplies the hot water and underfloor heating for the entire property." The outdoor air source heat pump excels in providing efficient heating even in extremely low temperatures, ensuring maximum efficiency. Its versatility is showcased through the capability to generate high flow temperatures, making it suitable for heating traditional radiators and various indoor spaces. This appliance offers year-round comfort by easily combining with underfloor heating or fan convectors, enabling both heating and cooling for a consistently cozy home environment. With a focus on top performance, the heat pump operates reliably in diverse conditions.



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Air source heat pump WPL 25 ACS  
Integral cylinder HSBC 300







# Ahead of the CURVE

The healthy lifestyle benefits of an energised mixed-use urban environment are increasingly being seen and felt as Park Lane West in Menlyn Maine, Pretoria, secures its 4-Star Green Star Office As Built rating.

WORDS Anne Schaffer  
IMAGES Supplied

## PROJECT NUTSHELL

<b>Location:</b>	Cnr Amarand & Banker avenues, Waterkloof Glen x2, Pretoria
<b>Green Star rating:</b>	4-Star Green Star Office Design V1.1 (2021); 4-Star Green Star Office As Built V1.1 (2023)
<b>Type of building:</b>	Commercial offices over seven floors
<b>Project complete:</b>	Dec 2022/Jan 2023
<b>Project size:</b>	Total gross floor area 19 900m <sup>2</sup> ; parking area 17 518m <sup>2</sup>

Innovation was a sought-after sustainability goal and tool at Park Lane West in Pretoria's Menlyn Maine, and continues to be so post-rating.





The vision for Pretoria's Menlyn Maine precinct is of a world-class Green City. In essence, this precinct in the eastern suburbs of the capital city comprises a group of mixed-use properties designed to enable all occupants and visitors to have easy access to everything from residential apartments, hotels and retail shopping to healthcare, restaurants and entertainment.

As the latest addition to this urban precinct, Park Lane West is an arresting seven-storey, 19 900m<sup>2</sup> contemporary office building. Designed by architects Boogertman + Partners, it features maximum flexibility to enable multi-tenancy occupation, both large and small, and is co-owned by Menlyn Maine Investment Holdings and Barrow Properties (Pty) Ltd. The building's distinctive curved facade above the main entrance provides a welcoming pedestrian experience and key access route to the precinct's amenities. It is positioned on the precinct's "green belt"; the absence of a fence or barrier evokes the near-sense of a public space. Certified with a 4-Star Green Star Office Design V1.1 rating in 2021, Park Lane West received a 4-Star Green Star Office As Built V1.1 rating from the Green Building Council South Africa (GBCSA) in January 2023.

Within the Menlyn Maine precinct, Park Lane West fits seamlessly between the other buildings, embracing its surroundings and neighbours. The double-volume entrance has substantial presence, and relates perfectly to the retail centre on the west side.

Inside, the impressive atrium is covered by a steel and glass roof – an innovative skylight that enhances natural light in the interiors. Developed by Leaf Structures, the 465m<sup>2</sup> skylight yields over 97% transparency through a three-pin beam design that reduced the need for steel beams, placing



An award-winning, innovative steel and glass skylight floods the impressive atrium with natural light.

it top in the Skylight category at the South African Institute for Steel Construction (SAISC) 2020 Awards.

A significant visual landmark on the northern side of the atrium is the white sculptural cantilevered staircase that connects all floors and merges seamlessly with the curves of each floor's walkways. It's enticingly positioned to woo occupants to choose this active option over the sedentary one of the lift, and in addition, promotes sociability for the diverse range of tenants. It received a commendation in the 2020 SAISC Awards for its innovative off-site construction and on-site installation.

### NOT JUST FEEL-GOOD FACTORS...

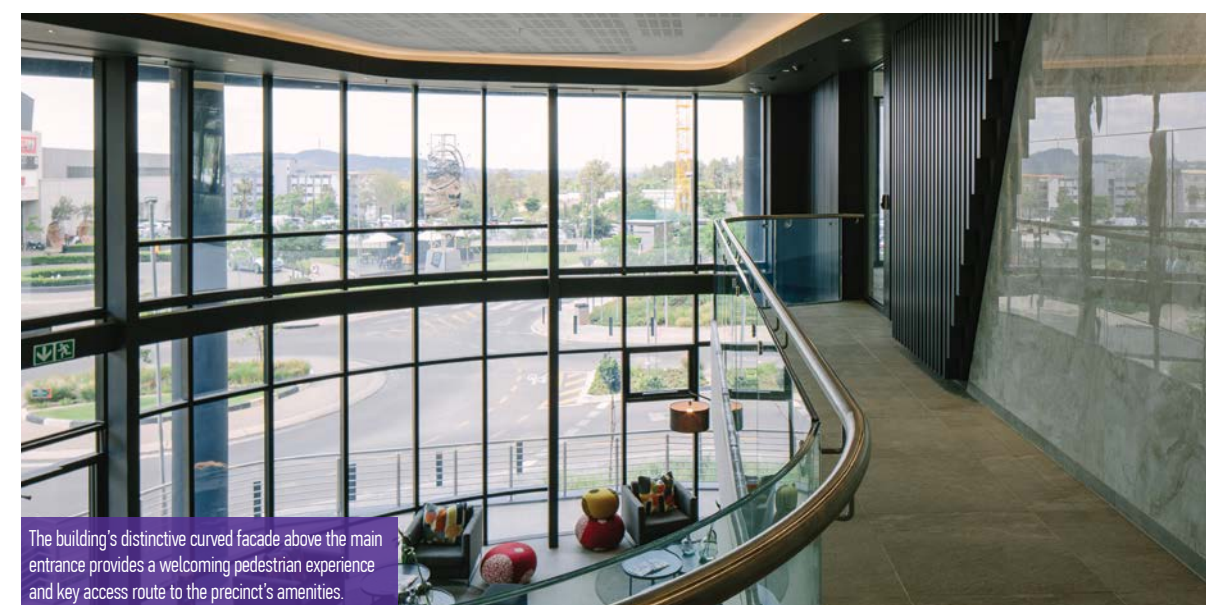
Natural light is always a significant sustainability and wellness factor, and at Park Lane West, the staggered window grid and balcony structures ensure that all tenants – up to six per floor – have good quality daylight and views, and an accessible outdoor balcony without the need for floor-to-ceiling glazing. On top of the building, the shared roof garden provides further access to fresh air and the feel-good factor of breathtaking views. The building envelope is well designed to balance the need for light with the heat overload from vast glazing, and employs devices such as performance glazing, recessed balconies and smaller glazing ratios, all of which contribute to reduced heat gain and energy consumption.



The building's double-volume entrance has substantial presence.



The building envelope is well designed to balance the need for light with the heat overload from vast glazing.



The building's distinctive curved facade above the main entrance provides a welcoming pedestrian experience and key access route to the precinct's amenities.



Green buildings contribute greatly to occupants' wellness, ensuring health, and pleasurable working spaces.

Solid Green Consulting was the Accredited Professional on Park Lane West. According to Senior Sustainable Building Consultant Zendré Compion: "Site selection is critical in a green building context. This precinct identified an island of large suburban stands flanked by a substantial retail mall, auto-retailers and large public roads, to redevelop into a far denser multi-use urban space."

The design of the precinct encourages alternative and public transport use, and provides an alternative means of access to single-occupant private cars. The Gautrain services the precinct, its bus stopping in front of the building, direction Hatfield Gautrain Station. The Bus Rapid Transport (BRT) service is a work in progress, and the A Re Yeng bus station will offer a service connecting to Hatfield and through to the west of the city, and to Mamelodi in the east. Tshwane Bus Services and the paratransit industry also service the precinct.

Compion refers to the good "walkability" of the precinct, and points out how the developers were – and remain – constantly focused on innovating and facilitating pedestrian movement. Well lit, planted sidewalks connect to the rest of the precinct's pedestrian infrastructure – bus stops, ample safe road crossings and traffic-calming measures mean building occupants will walk rather than drive for an errand or a meeting. Passive safety and inclusive design principles at this building (but also at the precinct mall, park and hospital) bring down this corporate building to a human scale.

Development Manager Jurgens van Huyssteen of Menlyn Maine describes how, from the outset, they worked together with the local authority: "Menlyn Maine as a precinct upgraded all the infrastructure in and around it, including roads, sidewalks, electricity, water, sewers, and even landscaping and security infrastructure. The precinct is testament to what is possible when the private and public sectors work together to create something new."

### A HYBRID WORKING OPTION

As with all office space, Covid had a big impact on Park Lane West – the building was completed two weeks before lockdown: "We had a brand-new building unoccupied," says Van Huyssteen. "The building is multi-tenanted, so we had some floors unlet and we lost a few potential tenants."

But Menlyn Maine saw Covid as an opportunity to introduce a hybrid working option to Park Lane West: "Colab was born, and is now the single largest tenant in the building – taking up around 6 500m<sup>2</sup> of lettable area – catering specifically for like-minded individuals, start-ups, and small companies striving to collaborate, innovate and thrive," says Van Huyssteen. "The concept of flexible, hybrid working has been hugely successful: the space is currently 95% occupied, seats are in high demand and expansion possibilities are being investigated." But importantly, this fed into Menlyn Maine's strong focus on wellness of occupants and members: "Green buildings contribute to this to a very large extent, ensuring health, and pleasurable working conditions and spaces. But the enhancement in environment and the vibe created in the building by Colab has been massive, and contributes to an overall feeling of positivity. Even the other tenants have started using some of the Colab offerings and amenities, and are engaging with our members on a working and social level."

### MATERIAL MATTERS

For Compion, "Material selection is growing in importance if we want to build more sustainable cities. While industry and load shedding will eventually force cleaner operational carbon, it is our design decisions that impact the upfront or embodied carbon of buildings. While reduced cement content in concrete and recycled steel have become industry standard, it remains challenging to demonstrate good



It is our design decisions that impact the upfront or embodied carbon of buildings.





material selection on the other major building components. Looking into big-cost items on building materials is a good place to start, and Park Lane West could show that the building's windows had a high recycled content both on aluminium frames and glass. It's not always straightforward to get the required accurate, detailed information about the embodied carbon of materials from the supply chain, but with some healthy pressure on industry and, hopefully, changes in regulation, availability of embodied carbon data will move up the priority list."

A contributing sustainability feature at Park Lane West was that the building was delivered as shell and core, with the tenant fit-outs executed on a different contract as integrated fit-outs. This ensured less construction waste throughout the building life span than a typical delivery, where first tenants are already ripping out generic fittings.

Occupants' wellness is always tied to high fresh air rates, and at Park Lane West, all occupied areas receive such. Outdoor air is delivered at a 66% higher rate than the SANS 10400-O standard, to counteract the accumulation

From the top down, water strategies were implemented to reduce the use of potable water – this was achieved through the efficient design of building systems and metering and monitoring of water consumption. Reducing potable water consumption upfront simultaneously reduces the impact on public infrastructure and sewers.

Waterwise initiatives begin with rainwater collection on the roof, filtered and treated for external irrigation and toilet flushing. Waterwise sanitary fittings and waterless urinals are standard, while efficient irrigation systems further reduce potable water demand.

All thermal insulating materials used in the project have an Ozone Depletion Potential (ODP) of zero, ensuring no adverse impact to the Earth's stratospheric ozone layer over the long term. Likewise, the paints and carpets are low in volatile organic compounds (VOC), which contributes to healthier indoor environments for building users.

Innovation was a sought-after sustainability goal and tool at Park Lane West, and continues to be so post-rating. Compion comments on the exterior lighting. "At night,



The interior is imbued with natural light, clean lines and curves; (Right) a sculptural cantilevered staircase promotes sociability for the diverse range of tenants.



### The sculptural cantilevered staircase connects all floors and merges with the curves of each floor's walkways.

of indoor pollutants. This is achieved via the energy-efficient air-conditioning, which allows more fresh air to be introduced into the building without significantly increasing the building's energy use. The building has two air-cooled chiller tanks housed in the basement, and a thermal storage tank that is "charged" at night during off-peak hours when electricity is cheaper, and provides 50% of the building's peak energy demand during the day.

### SUSTAINABILITY MEASURES

To reduce the overall energy consumption of the building, various strategies were employed. Energy modelling carried out during the building's design stages assisted in reducing operational energy consumption by 42% compared to a national building model. Thermal energy storage reduces the energy demand of the mechanical system, and shifts the heating and cooling load off peak.

Ongoing management of energy consumption is in place through sub-metering of tenancies and all substantive energy loads, and occupancy sensors positioned throughout the circulation and common areas ensure lights are only on when needed.

the building features are subtly lit with strip lighting, and pathways and access points have warm downlights that serve their important safety and accessibility functions. Light pollution is often an afterthought, but good lighting design has clear benefit for the environment and the residential building next door."

Compion pointed out another significant factor in the sustainability journey: "More than five members of the professional team and four representatives from the contractor completed the Green Building Council South Africa's New Building Accredited Professional course. From an educational, skills and knowledge perspective, we deemed this to be an important milestone."

Standing loud and proud in the Menlyn Park precinct, Park Lane West's design flexibility offers occupants of varying size enterprises – from a hot-desking solo entrepreneur to a large corporate – a range of customised and unique spaces, all set within a dynamic urban environment offering walkable access to both essential and luxury facilities – and quality transport – on their doorstep. The resource efficiency and occupants' well-being strategies employed at Park Lane West are clearly paying dividends, as everybody – driven by the developers at Menlyn Maine – works towards the betterment and fine-tuning of this increasingly energised urban environment. Van Huyssteen feels that "the benefits derived from green buildings on occupants are sometimes difficult to measure. However, we do believe they enhance the working experience, thereby increasing occupant satisfaction, productivity, creativity and overall well-being." +



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# GREYWATER:

## A promising method for fostering water conservation in green buildings

Rand Water is dedicated to supporting both industries and communities in becoming conscientious water consumers. This commitment is exemplified, in part, by its Water Wise brand. Beyond educating on various facets of water conservation, the brand delves into pioneering methods and techniques for promoting responsible water usage.

**W**ater scarcity is becoming a worldwide issue rather than a remote worry. This precious resource continuously experiences huge pressure because of aspects such as population growth, urbanisation and increased climate change effect. According to the International Water Management Institution, the urban water demand is forecasted to increase from 1995 to 2025 by 62%. With these pressures, water shortage is likely to manifest in 2050. For these reasons, it has become imperative that we find adaptable solutions in which we can maintain the existing water resources, while seeking methods in which we can reduce the demand of potable water.

Greywater reuse is receiving more traction as a solution to urban water management as it offers a straightforward, but effective, option to shift our water-use patterns. Greywater

reuse is significant because it simultaneously addresses two urgent issues: environmental sustainability and water scarcity. Adopting greywater methods is a critical step towards a future where we are more water-conscious and resilient. In the face of an unpredictable climate context, water reuse is a commitment to protecting our most valuable resource, whilst supporting business and community sustainability.

### WHAT IS GREYWATER?

Greywater is wastewater that can be reused for other purposes. Greywater makes for as much as 70% of all residential building's water use. Although greywater and blackwater are typically combined, by separating the two, greywater on its own provides several reuse

opportunities such as toilet flushing and garden irrigation. This can assist in lowering potable water use in water-stressed areas by up to 30% for households and up to 60% for corporate buildings. Furthermore, saving money on garden irrigation through reuse can boost household savings by 40%. Blackwater, on the other hand, is toilet water that contains faecal matter and urine. Faecal matter is a breeding ground for harmful bacteria and pathogens that can cause diseases. As a result, this requires a specialised treatment process for onsite use. Greywater can be collected from the source by installing a plumbing system from an outlet of bathrooms/kitchens to a garden or for toilet flushing. To this end, a greywater treatment system such as constructed wetlands and green walls can be installed to help filter large particles, nutrients and pump-treated water through irrigation pipes.

### BENEFITS OF GREYWATER IN GREEN BUILDINGS

**Water Conservation:** The use of greywater provides us with an opportunity to use an average of approximately 35 – 234 litres (per person per day) of greywater, which can be repurposed for garden irrigation or toilet flushing where little human contact is achieved.

**Enhancing the EDGE (Excellence in Design for Greater Efficiencies) Standard:** The incorporation of a greywater reuse system can play a pivotal role in diminishing the reliance on potable water, consequently elevating the overall EDGE score of the building.

**Cost-effectiveness:** The use of greywater is inexpensive, and for this reason, water bills can be drastically reduced while investing in a greener future.



**Lush Landscapes:** Watch your garden flourish! Greywater provides essential nutrients such as total nitrogen (2.75 to 21.00mg/L) and total phosphorus (0.062 to 57.00mg/L) that mainly originate from the kitchen (kitchen residues/waste) and hand basins (soap), respectively. These nutrients nourish our soil and plants, promoting healthier growth and vibrant blooms.

**Resilience to Drought:** Water-efficient measures (greywater reuse) make green buildings more resilient to water scarcity and drought conditions, ensuring continued operations during challenging times.

### SAFE AND SUSTAINABLE USE OF GREYWATER

- Greywater has been shown to be a potential hazard to human health. Its handling must be done with care to reduce the risk of infection. Use gloves when handling greywater.
- Greywater that contains potentially infectious pathogens should not be used for irrigation. This includes water used to wash nappies or soiled sheets.
- To reduce odour and bacteria, greywater should be used within 24 hours of collection.
- Subsurface irrigation is the best way of watering as it protects against possible microbiological health hazards.
- To avoid waterlogging and prevent possible root damage, it is critical to disperse greywater uniformly in your landscape.
- When irrigating with untreated greywater, it is not advisable to use spray irrigation. This is primarily due to the increased risk of exposing people to greywater.
- Where possible, greywater should not be used for an extended period in the same area. This may in some instances result in the accumulation of different components found in greywater that may negatively impact the health of plants. +



# Towards a LOW-CARBON FUTURE

At the end of October 2023, South Africa's National Assembly voted to pass the Climate Change Bill – a massive milestone that sets the country apart as one of the few in the world to enact climate change into law.

WORDS Bakang Moeng, GBCSA  
IMAGES Supplied

Recognising that climate change poses a threat to societal health, the environment and the economy, the new legislation – introduced in Parliament in February 2022 by the South African Minister of Forestry, Fisheries and the Environment, Barbara Creecy – seeks to “reduce emissions in a way that is appropriate to the country's unique circumstances and development pathway”.

The Climate Change Bill will now be tabled at the National Council of Provinces (NCP) before being presented for presidential assent, after which it is written into law as an Act. At its core, the Bill seeks to shape South Africa's legal framework to address climate change and to ensure a just transition towards a low-carbon future.

Minister Creecy also stated that the Bill will ensure we reach the country's Nationally Determined Contributions (NDCs) greenhouse gas emissions reduction by assigning individual enterprises carbon budgets and facilitating public disclosure of our progress. According to the minister, “The Bill provides impetus for mainstreaming our climate disaster response by placing a legal obligation on every organ of the state to co-ordinate and harmonise policies, plans and programmes to make sure climate change risk and associated vulnerabilities are acted upon by national, provincial and local government.”

## THE IMPACT ON BUSINESS

On being asked about the implications of the Climate Change Bill for businesses, Nkopodi Mphahlele, an Environment and Energy Policy Co-ordinator with Business Unit South Africa (BUSA) said, “The introduction of the Climate Change Bill is a positive signal that the country is committed towards reducing its emissions as part of collaborative local and international efforts to reduce emissions and respond



Nkopodi Mphahlele, Environment and Energy Policy Co-ordinator, Business Unit South Africa (BUSA)

## Will the Climate Change Bill be the silver bullet that aligns civil society, the private sector and the government's efforts towards a carbon-neutral future?

to climate change. This also encourages companies to comply with new legislative instruments while investing in low-carbon technologies and creating new green jobs. In addition, businesses have started incorporating climate-related risks and opportunities into their business models.”

The international community has also been developing its own climate change responses through policies and other mechanisms. The carbon-intensive nature in which South Africa produces most of its exports is increasingly being disadvantaged by various carbon taxes being introduced globally – particularly in the European Union (EU): South African exports to this market make up a significant part of our economy. With the EU's Carbon Border Adjustment Mechanism (CBAM – a carbon tariff on carbon-intensive products such as cement, iron, steel and aluminium, imported by the EU) having entered its transitional phase in October 2023, it has become vital for South Africa to accelerate its transition to a low-carbon economy. The Climate Change Bill is the key piece of legislation to catalyse this. In line with the Bill, sectoral targets defining desired emission-reduction outcome Sector Emissions Targets (SETs) are to be set for each significant sector and sub-sector of the economy.

## A STEP IN THE RIGHT DIRECTION

Will the Climate Change Bill be the silver bullet that aligns civil society, the private sector and the government's efforts towards a carbon-neutral future? Much work is being done within the climate change space, and those who practise within that space fundamentally understand that it would take collaborative efforts from all spheres of government, civil society and public sectors to reach the ambitious NDC targets we have set for our country. At its core, the Climate Change Bill seeks to bring about coherence and collaboration within different sectors, while ensuring the decarbonisation of our various sectors and simultaneously ensuring that as a developing country, our social and economic development is not

compromised in the process. Mphahlele highlighted that “the Bill provides a holistic framework underpinning climate-change response measures. What follows would be the development of regulations, allowing different governmental departments affected by climate change to develop policies and measures in accordance with the principles and objectives of the Climate Change Bill”.

He also states that what the Climate Change Bill does is to institutionalise our work functions to effectively respond to climate change differently to how we have thus far. The Bill essentially brings dialogue and engagement between different sectors that have traditionally not engaged with each other.



The Bill brings dialogue and engagement between different sectors that have traditionally not engaged with each other.

The built environment will certainly be impacted by the Climate Change Bill, and Human Settlement (including buildings) has been identified as one of the sectors considered for Sectoral Emission Targets. As South Africa grapples with the detrimental effects of climate change, with extreme droughts and flooding in different parts of the country, this piece of legislation is a step in the right direction – if implemented correctly, it may be the very push we need to propel us towards a carbon-neutral future in a manner that is just. +

## THE SOUTH AFRICAN NATIONAL CONTEXT WITH REGARD TO CLIMATE CHANGE

- South Africa is a developing country and aims to develop its economy in order to deal with its triple challenges (i.e., poverty, unemployment, and inequality).
- Climate Change (CC) poses considerable risks and is a critical constraint to inclusive and sustainable economic growth for South Africa. South Africa's climate is known to have a high degree of variability at all timescales and is highly susceptible to climate risks.
- The current economy in South Africa is dominated by large-scale, energy-intensive mining and minerals beneficiation industries, as well as a heavy reliance on fossil fuels for electricity generation, along with significant levels of liquid-fuel consumption. As such, the energy and mining (Energy) and industrial processes and product use (IPPU) sectors are primary contributors to the South African economy, GDP growth and jobs.
- An estimated 93% of South Africa's electricity produced within the energy sector currently comes from coal combustion that contributes to greenhouse gas (GHG) emissions. This over-reliance on coal presents significant transition and climate risks.

South African Dept of Forestry, Fisheries & the Environment





# LEADING BY EXAMPLE

The GBCSA's annual Established Green Star Award celebrates the people who consistently contribute to the advancement of the green building movement. The Rising Green Star Award recognises emerging Green Star Accredited Professionals (APs) who are making a tangible difference in the sustainable building sector, and are evaluated for their work on leading projects and industry firsts. **+Impact** caught up with the four 2023 individual winners and runners-up of the GBCSA Leadership Awards.

## Established Green Star Awards

**WINNER:** Simon Penso, Founder and Director of Imbue Sustainability



**Realising projects that have a positive sustainable impact – while still achieving financial benefits – is key to unlocking a rapid transition to a sustainable future.**

**Q: What prompted you to pursue a career in the sustainable built environment?**

**SP:** I've always had a passion for the environment and grew up spending most of my time in the mountains or sea. My added fascination for how things worked and were built led to my studying mechanical engineering. I was working in the commercial property sector diagnosing technical issues with buildings and running implementation projects before the green building movement gained momentum. So I took on a technical role with a company that supported my working with a greater focus on the sustainable built environment. Bruce Kerswill, founder of the Green Building Council South Africa, was instrumental in my freedom to explore this avenue. It led to "greening" listed funds, developing strategies and implementing projects, along with Green Star tool development work with the GBCSA. Through a collaborative, dynamic and close-knit sustainability consulting network, I established Imbue Sustainability, which has been an amazing journey.

**Q: What do you believe are the key foundations of a green building? Which of your projects embody these standards?**

**SP:** The foundations of a green building are ever-evolving, and I strongly support the philosophy that sustainability is a journey. The world as a whole is on this journey, and it cannot slow down but rather needs to speed up – this means that the starting point for every client's journey needs to evolve along with the global community. This is evident in the simple example of VOCs [Volatile Organic Compounds] from paints: in the early days of Green Star certification, achieving zero VOC content for paints was a challenge – by contrast, today, most of these paints can be bought at major building supply outlets. This philosophy is a key foundation of green buildings, along with the equally important one that adding alternative supplies to an inefficient structure does not necessarily make it efficient. A classic instance is adding solar PV to a high energy-consuming building: this will improve its carbon footprint but it will still be inefficient.

We strive to realise projects that have a positive sustainable impact while still achieving financial benefits – I believe this is key to unlocking a rapid transition to a sustainable future. In terms of project examples, a few of our client's journeys that we've assisted in moulding and guiding come to mind. One of these is the truly holistic approach that we've been able to take with Stellenbosch University, in strategy and implementation projects, ranging from benchmarking and reporting, awareness initiatives, efficiencies and renewable energy rollout masterplans, to renewable energy implementation, green building certifications, and development of ongoing sustainable building practices.

**Q: Any instances of sustainability-related challenges – or pushback from stakeholders – that you've had to overcome?**

**SP:** This is and always will be an ongoing challenge – it's a reality we need to constantly work with. Often within the same organisation, there are opposing stakeholders, but most of the time, such resistance can be overcome with two important aspects: awareness/education and financially viable solutions.

**Q: How do you convey the value of adopting green building practices to stakeholders from different backgrounds?**

**SP:** That's a challenge I'm constantly gaining more insight into and learning from as we engage with more stakeholders. I feel it is about understanding a stakeholder's point of reference on the topic. A project that opened my eyes greatly to this was when we were lead consultants in a consortium, including Sow & Reap, that developed a residential sustainability rating

tool for the GBCSA, backed by government and international funders. We held workshops across the country, from the streets of Alexandra township (Johannesburg) to the Cape Town suburb of Constantia, to engage with the general public in understanding what sustainability meant to each of them.

**Q: And your vision for South Africa's green building movement – any significant changes you'd like to see?**

**SP:** As I mentioned in the philosophy of sustainability

being a journey, change will happen, but the rate of change, and whether it will be enough, is always a concern. I feel we have enough passionate people to accelerate change and, being a relatively small country, the "business as usual" status quo can move more swiftly compared to much larger consumer-based nations. South Africa, while facing constant challenges, innovates to face and change them, so it's important to bear all aspects of sustainability in mind throughout this process.

**Simon Penso** has a deep understanding of greening existing buildings and serves as a Green Star Assessor, Green Star Faculty member and Green Star Technical Advisory Group member for the GBCSA.

A mechanical engineer by training, his sustainability and green building consultancy Imbue Sustainability assists clients in identifying sustainable potential, demystifying green building and gaining the ability to turn sustainability initiatives into tangible financial, economic, environmental and social returns.

**RUNNER-UP:** Sally Mislplon, Founder of Mislplon Green Building Consulting



responsibility. Implementing sustainable materials, energy-efficient systems and mindful water usage are integral components. In addition, prioritising indoor air quality and promoting a healthy, occupant-friendly environment are crucial.

**Q: Any instances of sustainability-related challenges – or pushback from stakeholders – that you've had to overcome?**

**SM:** Navigating sustainability in the business world comes with its fair share of challenges and pushback from stakeholders. One instance that stands out is when we proposed implementing a comprehensive waste recycling system in a commercial project. While we were committed to reducing environmental impact, some stakeholders were concerned about initial costs and potential disruptions during the implementation. To address this, we conducted a detailed cost-benefit analysis, highlighting the long-term savings and positive environmental impact. We also engaged in transparent communication sessions, addressing concerns and showcasing the societal and reputational benefits of adopting sustainable practices. Ultimately, by presenting a compelling case for the environmental and economic advantages, we were able to secure buy-in and successfully implement the recycling system.

**Q: How do you convey the value of adopting green building practices to stakeholders from different backgrounds?**

**SM:** In essence, it's about tailoring the message to resonate with each stakeholder's priorities, whether it's financial savings, social impact or regulatory alignment. The goal is to make it clear that embracing green building practices isn't just good for the planet; it's a strategic and responsible decision that brings value to their specific concerns and goals.

**Q: And your vision for South Africa's green building movement – any significant changes you'd like to see?**

**SM:** My vision involves mainstream integration of sustainable practices. I aim to see widespread adoption, innovative technologies and increased community awareness, making green building a standard rather than an exception. The goal is to foster a national commitment to environmentally conscious construction, shaping a resilient and sustainable future.

**Q: What prompted you to pursue a career in the sustainable built environment?**

**SM:** My interest in sustainability in the built environment dates back to my university thesis, which centred around the drivers for green building practices in South Africa. Early in my career, I was involved in property management, overseeing a diverse portfolio of commercial, retail and industrial buildings. The turning point came when the GBCSA introduced the Existing Building Performance Tool. Recognising the potential to merge property management with eco-friendly practices, I seized the opportunity to pioneer "green property management". This convergence aligns with my academic interest and reflects a proactive approach to harmonising property operations with sustainable, environmentally conscious principles.

**Q: What do you believe are the key foundations of a green building?**

**SM:** The key foundations of a green building revolve around energy efficiency, resource conservation and environmental

Founder of Mislplon Green Building Consulting, **Sally Mislplon** holds an honours degree in BSc Property Studies from the University of Cape Town. She brings a decade of expertise to the nexus of the built environment and sustainability, and excels in building operations, management and leasing, notably in commercial, retail and industrial sectors.

Sally's contributions to the GBCSA's Green Star rating system have earned her multiple Green Leadership Awards. With qualifications for both new and existing buildings and a record of over 300 Green Star certifications, Sally's leadership has firmly established Mislplon as a leading green building consultancy.







## Rising Green Star Awards

**WINNER:** Kagiso Sebetso, Green Star Accredited Professional; Green Building Consultant, Time A&PM



**I'd like to see more regional – for example, SADC – rather than only country-specific rating tools.**

**Q: What prompted you to pursue a career in the sustainable built environment?**

**KS:** I was previously in construction project management, which is a valuable discipline, but I struggled to find a positive impact or outcome that deeply resonated with me. I then stumbled upon the sustainable built environment path because I happened to be in the right place at the right time. Since then, I have been motivated to learn more, and work harder at it because it just makes sense to me. And because it makes sense to me, I believe in it. It is very rewarding to pursue a career in something that you believe in.

**Q: What do you believe are the key foundations of a green building? Which of your projects embody these standards?**

**KS:** For me, occupant mindset/behaviour, passive design and efficient services technology are key foundations. The projects I've been involved in embody these in varying

**Kagiso Sebetso** is a green building consultant for Time A&PM, and Director of Green Insights in Botswana. With a background in construction project management, she ventured into specialisation in green buildings over five years ago, and has been involved with some of the first Green Star-certified green buildings in Botswana and Zambia.

Kagiso is also the EDGE Expert for Botswana's first EDGE-certified (preliminary) building. In addition to her interest and work on green buildings, she has had training and some experience in ESG Investing and in Renewable Energy solutions. This three-pronged skill set enables her to develop holistic sustainability solutions for a variety of organisations.

degrees. We've been lucky to have clients who genuinely believe that green buildings are the right way to go. Along with the clients, we've had project design teams who are pro-sustainable design. This combination gives way to an intentional passive design strategy that positively impacts the project's ability to afford efficient services technology (effective passive design = lower installed capacity of systems, which reduces cost). It's also been rewarding to see the enlightening effect that this has had on contractors, sub-contractors and suppliers.

**Q: Any instances of sustainability-related challenges – or pushback from stakeholders – that you've had to overcome?**

**KS:** There are still large pockets of the market where the idea of a sustainable built environment is not embraced. It's been very challenging to present to the leadership of such organisations and realise that the battle is bigger than just bringing sustainable initiatives that work well for their contexts. There's still a lot of convincing and advocacy that needs to be done. The task of convincing people to do things differently is a big one and requires an understanding of where they are coming from.

**Q: How do you convey the value of adopting green building practices to stakeholders from different backgrounds?**

**KS:** This is still a learning journey for me but, so far, I am realising that it is more important to listen than to rush into advocating my views about green building practices. The more I listen to their objections and concerns, the more I understand them and the more innovative I become when addressing them.

**Q: And your vision for Southern Africa's green building movement – any significant changes you'd like to see?**

**KS:** I'd like to see more regional – for example, SADC [the Southern African Development Community] – rather than only country-specific rating tools. I say this because I have been privileged to work cross-culturally with South African clients in Botswana, act as a service provider in Zambia, and work with foreign clients in the Zambian context. There are so many interdependencies within the region – on both the supply and demand side – on which the green building movement can leverage.



**There are many interdependencies within the Southern African region – on both the supply and demand side – on which the green building movement can leverage.**

**RUNNER-UP:** Elri Syfert, Green Star Accredited Professional; Sustainable Building Consultant, Solid Green Consulting



**Focusing on awareness, regulations, innovation and collaboration will allow South Africa's green building movement to evolve and hopefully spill over to our neighbouring countries.**

**Q: What prompted you to pursue a career in the sustainable built environment?**

**ES:** The decision to pursue this career was driven by a passion for creating a positive impact. Recognising the urgent need for sustainable practices in the construction industry and the potential to address pressing issues such as climate change, resource depletion and environmental degradation through sustainable design and construction inspired me to embark on this path. By working in the sustainable built environment, I aim to be part of the solution and contribute to a more sustainable and resilient future for generations to come.

**Q: What do you believe are the key foundations of a green building? Which of your projects embody these standards?**

**ES:** The key foundations of a green building centre around several crucial aspects. Firstly, it is essential to comprehend the shared objective of the client, whether it be reducing operational costs, promoting the health and well-being of occupants, or enhancing marketability. Secondly, it is imperative for the entire project team, including developers, architects, engineers, facilities managers and occupants, to align with this common goal and collaborate towards this achievement. Lastly, it is highly recommended to involve the sustainability consultant at the earliest stages of the design process. This early inclusion facilitates an integrated design approach, ensuring a project outcome that is both high-performing and cost-effective.

**Elri Syfert** holds a bachelor's degree in architecture from NMU. Her credentials also include Green Star Accredited Professional (New Buildings, Interiors, Existing Building Performance, Net Zero) and LEED Accredited Professional (BD+C).

With a passion for making a positive impact, Elri has dedicated the past four years to finding creative and innovative sustainable design solutions to reduce environmental impact, improve business practices and operations, and create healthier and more sustainable spaces for all.

One of the projects that really embodied these principles is the Nedbank Namibia project. The sustainability consulting was a collaboration effort between WCE Consulting Engineers and Solid Green Consulting. WCE (myself) was the Green Star Accredited Professional on the project and Solid Green was responsible for the modelling and the relevant credits. The client's objective was clear from the start. The project team drafted "Basis of Design" documents, outlining how they planned to meet these objectives. A progress report was also drafted after each stage and issued to the client. The sustainability consultant was included from the concept design phase, allowing modelling outputs to be implemented early enough to allow for design integration while avoiding additional cost.

**Q: Any instances of sustainability-related challenges – or pushback from stakeholders – that you've had to overcome?**

**ES:** Resistance is not uncommon – it typically arises when a client's interest in a green project is driven by marketability rather than long-term commitment to the building's operation and occupants. Consequently, the client may show little enthusiasm for technologies or interventions that require higher upfront costs but offer long-term savings. In addition, when a client expresses interest in an environmentally friendly building or embarks on a sustainable journey, the project team responsible for the operations and management is excluded from the discussions and therefore the intentions are often not effectively communicated and shared with them.

We often also experience resistance when the sustainability consultant is not part of the project team from the schematic design phase, resulting in changes required at a later stage. An integrated design process allows for a high-performance, cost-effective and equitable project outcome.

**Q: How do you convey the value of adopting green building practices to stakeholders from different backgrounds?**

**ES:** It is crucial to tailor the message to their specific interest and priorities. It's also essential to consider and compare the long-term advantages and short-term expenses, both in terms of financial and environmental aspects.

**Q: And your vision for South Africa's green building movement – any significant changes you'd like to see?**

**ES:** Firstly, increased awareness and education about the importance of sustainable building practices can foster a culture of environmental consciousness within the construction industry. This can also allow the market to move away from a tick-box exercise and rather adopt a holistic sustainable approach. Secondly, the implementation of stricter regulations and incentives can encourage the adoption of green building practices. Lastly, promoting research and development in green building technologies and materials can drive innovation and affordability. Overall, focusing on awareness, regulations, innovation and collaboration will allow South Africa's green building movement to evolve and hopefully spill over to our neighbouring countries. +





# Green, greener, GREENEST

In 2019, the Green Building Council South Africa (GBCSA) awarded its first 4-Star Green Star Sustainable Precincts certification in Africa to Northridge Coastal Estate in Cape Town. *+ Impact* revisits the project to see how it has progressed.

WORDS Nicole Cameron  
IMAGES Garden Cities

## PROJECT NUTSHELL

**Location:** Sunningdale, Cape Town  
**Green Star rating:** 4 Star Green Star – Sustainable Precincts Pilot V1.1 (2019)  
**Type of buildings:** Residential homes  
**Date certified:** 16 January 2019  
**Project Size:** 566 100m<sup>2</sup>

The conservation area at Northridge Coastal Estate in Sunningdale, Cape Town, features a boardwalk built from a sustainable wood composite decking product, composed of 95% recyclable and reclaimed materials.





Comprising 429 homes, Northridge Coastal Estate (NCE) was designed to preserve biodiversity and enhance community interaction, promoting an active and sustainable lifestyle among residents. The project was planned by historic Cape Town development company Garden Cities, as a further phase of its flagship Cape West Coast suburb, Sunningdale. Having been featured in *+ Impact* magazine in the past, in this issue, we revisit this innovative development for a progress update...

“Regrettably, Covid-19 and its ripple effects resulted in a delay in the Northridge Coastal Estate project kicking off, with the first housing scheme commencing only in May 2022,” says Renier Smith, Group Manager: Engineering and Planning, Garden Cities NPC. “As of November 2023, we had delivered the first 92 houses – now occupied – together with the community & education facility [clubhouse], the administration building, conservation area [dune thicket with boardwalk] and various landscaped open-space areas,” he says. “In terms of the Green Star rating and the credits targeted, we have achieved some very easily, while others are posing more of a challenge. We have credits in hand across various spheres spanning governance, liveability, economic prosperity, environment and innovation.” Smith says that the Sustainable Precincts Rating (SUP) tool has provided upfront, clear guidance as to how to achieve these goals.

The sustainable building features on the project include more than 30% of the annual energy need being met through on-site power generation systems, LED infrastructure lighting and external lighting with an upward light output

ratio of less than 5%. In terms of water savings, there are rainwater harvesting tanks, and non-potable water is used for irrigation. The downstream stormwater retention facilities achieve a 1-in-2 year Average Recurrence Interval (ARI) event discharge (being able to handle big storm events occurring on average every two years). Through roofing and vegetation that has a solar reflectance index (SRI) of less than 35, there is a reduction of the heat island effect. Heat islands are urbanised areas that experience higher temperatures than outlying areas, as structures such as buildings, roads and other infrastructure absorb and re-emit the sun’s heat more than natural landscapes such as forests and water bodies.

NCE boasts open green spaces with a conservation area of approximately seven hectares, leading to the site’s enhanced ecological value. Footpaths and cycling facilities enable residents to walk and ride around the estate, with amenities such as food and retail services available within a walkable distance. A rich community life is cultivated through a community centre and food garden, together with a dog park and sports facility.



**The Sustainable Precincts Rating (SUP) tool has provided upfront, clear guidance as to how to achieve the project’s goals.**



The estate has been designed to preserve biodiversity, with a conservation area created to protect the dune thicket vegetation.



A community garden allows residents to consume their own produce.



Northridge Coastal Estate became Africa’s first 4-Star Green Star sustainable precinct in 2019.



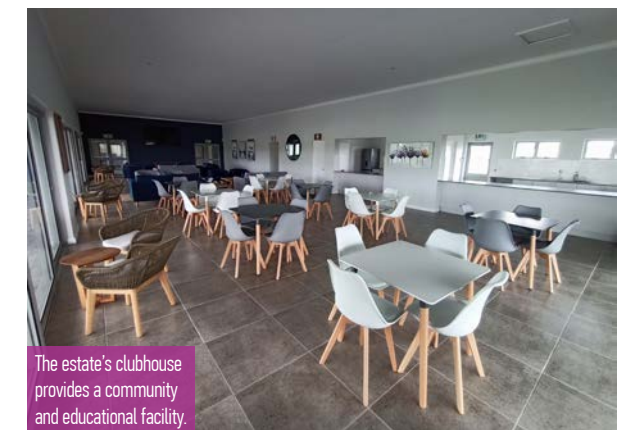
Footpaths and cycling facilities enable residents to walk and ride around the estate.

### A DEDICATED EFFORT

“The challenges on the Green Star process were limited, with perhaps only the Climate Adaption Plan (CAP) posing some difficulty, owing to the fact that a CAP was something new in the context and size of what was encapsulated in the NCE precinct,” Smith says. “Some of the risks had to be revisited, assessed and included into the design responses, which will be submitted as part of the recertification process.”



**A rich community life is cultivated through a community centre and food garden.**



The estate’s clubhouse provides a community and educational facility.

Smith says some other minor challenges were overcome in the following areas:

- Recycling: Privatising the recycling of 429 units was problematic from a financial and sustainability perspective, but through successful engagement with the City of Cape Town, NCE was included within the municipality’s recycling scheme.
- Water sources: While alternative water resources were targeted as part of the project’s sustainability approach, with very saline groundwater resources and limited access to treated effluent supply resources (and not wanting to place an added burden on potable water supply), Garden Cities undertook bulk-treated effluent supply projects to unlock treated effluent water supply sources with the support of the City of Cape Town, to ensure and facilitate sustainable supply to this end.
- Environmental management: This part of the process included educating and training sub-contractors and the complete supply chain, in order to align and utilise the newly created Environmental Management Plan.
- Safe Places credit: This credit is a new target, where Garden Cities has incorporated “designing out crime principles”, which includes various security solutions, interventions, technologies and an all-encompassing app to manage and engage with residents.

“The process of achieving and maintaining a Green Star Sustainable Precinct is administratively intense, and requires a great deal of effort and patience on the side of



Residents are encouraged to get to know their neighbours and spend time living together in community.



Through roofing and vegetation that has a solar reflectance index (SRI) of less than 35, there is a reduction in the heat island effect.







Of the 429 planned residential units, 92 have been built and are occupied.

all parties involved,” says Smith. “Of course, it is absolutely worth it, but it is important to be aware of the level of dedication and commitment required.”

Looking ahead, NCE has some exciting sustainability initiatives in the pipeline, involving further development and implementation of technology-driven tools and the use of IoT (Internet of Things), which lends itself to various community-aligned type projects. “These engagements and processes will incorporate residents and will be kept simple and straightforward, so that they are well received by the local community and not seen as burdensome in any way,” says Smith.



**The boardwalk is built from a sustainable wood composite decking product, made from 95% recycled and reclaimed materials.**

“The innovation category is the credit likely to be further considered and developed to achieve accreditation, but it is a fine balance to achieve between benefits added and the costs associated, so as to not create a long-term burden on residents’ operational levies.”

Resin8 is one of the innovative processes that NCE has undertaken in pursuing the Green Star Sustainable Precinct rating, which has now been incorporated into standard development and roll-out. Resin8 technology takes all seven types of plastic waste and turns it into a lightweight aggregate that adds strength, reduces weight and increases thermal properties. The Resin8 technology was utilised in the clubhouse parking bay kerbs. Another innovation has been the construction of the conservation area’s boardwalk, which is built from a sustainable wood composite decking product, made from 95% recycled and reclaimed materials.



**There has never been a more appropriate time for bold leadership in the property sector to create a meaningful difference.**

**BOLD LEADERSHIP IN SUSTAINABILITY**

Fabio Venturi, founder of Terramanzi Group, the sustainable design consultants who achieved this ground-breaking certification for the project in 2019, and who are progressing with the recertification process, attributes what has been accomplished to dedicated teamwork and collaboration. “With pressing global climate change and resource challenges, there has never been a more appropriate time for bold leadership in the property sector to create a meaningful and measured difference on this planet for now and for generations to come. We applaud Garden Cities for their radical goals, which they have been able to formalise and implement with focus and drive.”

Further recognition for the project was achieved in June 2023 when Garden Cities won in the Sustainable City Initiative category at the Big 5 Southern Africa Construction Awards. NCE was applauded for having been designed to incorporate all the essentials of sustainable development, from preserving the local biodiversity and conserving energy, water and materials to planning for climate change, espousing smart city features and enhancing community interaction.

“As we’ve progressed along this journey, we’ve incorporated a number of mindset changes. This has resulted in an overall greener approach with less wastage, and better techniques considered. The team has been instrumental in the success of this project – especially Danielle Cronje, who has played a pivotal role in ensuring the wonderful achievements at NCE,” says Smith. Given that the journey is far from over, it seems that when it comes to this West Coast sustainable precinct, the best is yet to come! +

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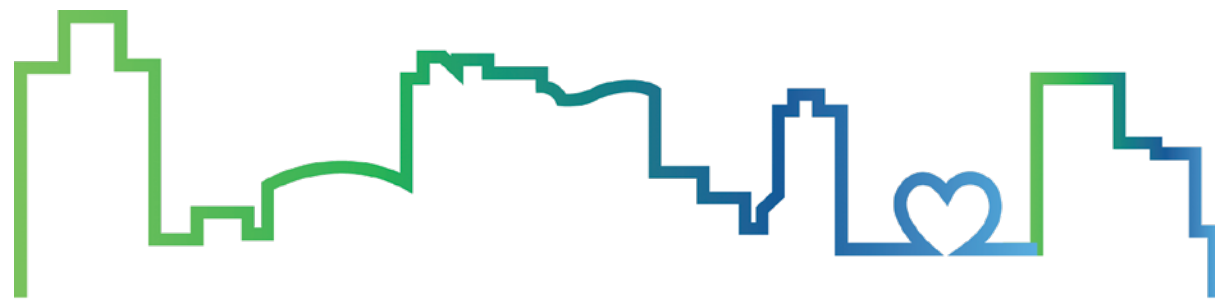
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# BEYOND SUSTAINABILITY: social impact across the built environment

The *Social Impact Across the Built Environment* position paper marks a significant change in thinking around the scope of a green project's sustainability reach.

WORDS Abi Godsell, GBCSA  
IMAGES WorldGBC



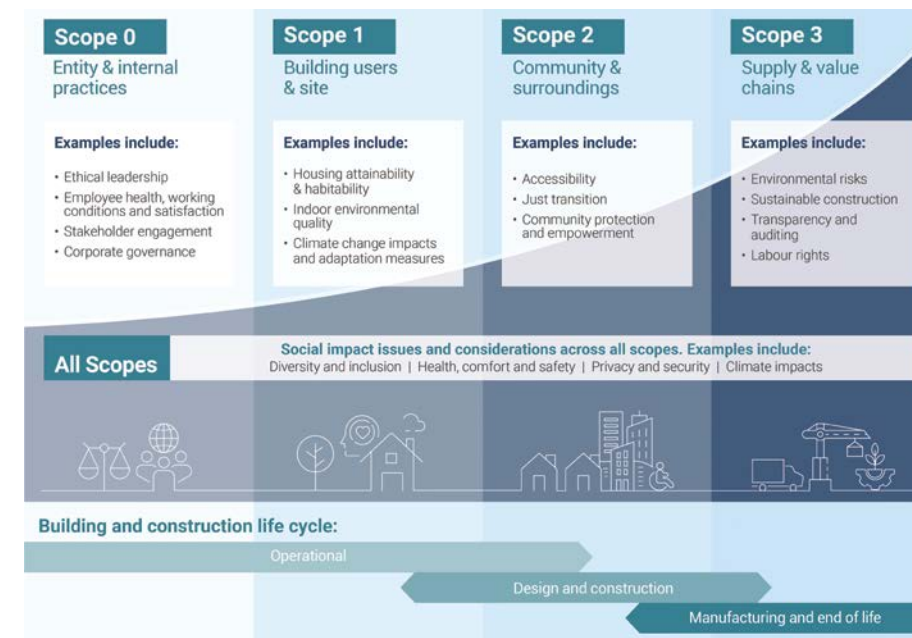
## A MESSAGE FROM CRISTINA GAMBOA, CEO, WORLD GREEN BUILDING COUNCIL:

"People are not just a part of the solution – they are the key to it. Social value is about the impact the built environment has upon all of its inhabitants, as individuals and communities. It can be overlooked in many ways, yet it is fundamental to creating high-quality buildings and surroundings that can affect all aspects of people's lives. It is time for the sector to action the "S" in ESG by putting people first."

Authored by the World Green Building Council's Better Places for People programme, the *Social Impact Across the Built Environment* position paper – to which the Green Building Council South Africa (GBCSA) is proud to have been an active contributor – aims to recentre our understanding of sustainability on the people who design, create, occupy and visit green buildings.

Already, the GBCSA is responding to an observed need to hone, adapt and update its own tools (see *+Impact* issue 26 – V2 People Category Deep Dive) that give a voice to the silent "S" of ESG (environmental, social and governance) pillars. Because of this, we are excited by the lenses and frameworks that this report offers to start the work of people-centered thinking in other spheres of the green building space.

This is not an area of green construction where there are existing pathways that we must simply commit to walking, or where the tools and techniques for effecting transformation must simply be applied. We are all partners in the development of the map towards a sustainable future where green buildings are developed through processes that support and actively increase: Diversity and Inclusion; Health, Comfort, and Safety; Privacy and Security; and Positive Climate Impacts.



Sustainable development cannot be achieved without focusing on social impact. – *Social Impact Across the Built Environment* position paper – page 14.

This position paper offers two sets of tools for beginning this map-making:

The first set of tools, as shown above, are a series of scopes – which may feel familiar to the community already engaged in Carbon Emissions Reporting – that frame how different scales, timelines and theatres of operation can impact social equity, and therefore help increase the positive contribution of green projects.

These lenses range from Scope 0, which examines the implementing organisation's internal practices and protocols (so that the values that green projects intended to champion in broader society are lived and practised by those champions), through Scope 3, which examines details of supply chain, ethical and accountable labour and construction practices and life-cycle environmental risks of buildings. They serve to break down green construction into distinct systems that have different characteristics and require different kinds of responses.

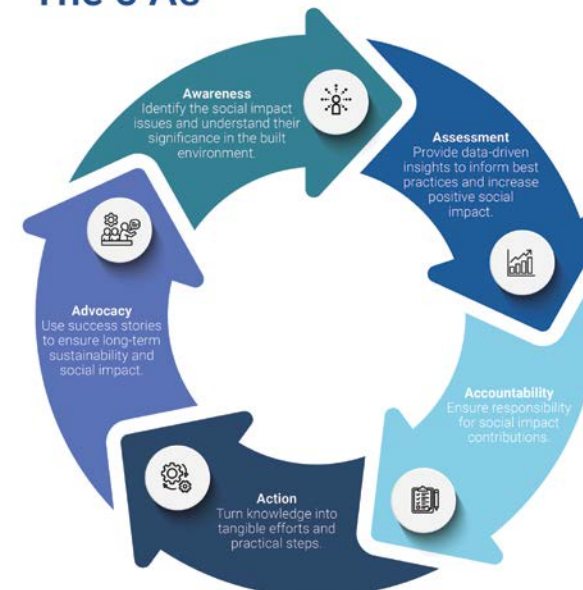
The next set of tools deals more explicitly with those responses that will be assistive in the different systems:

The 5 As (below) are less a list of specific actions that can be taken, and more a recipe for organisations to begin crafting an action plan that is responsive to their contexts, needs and resources. Like the scopes, these are ways of thinking about bringing about a positive social impact, and pro-actively taking steps towards increased social equity.

The GBCSA is excited to be part of the ongoing exploration of how green buildings can be at the heart of strong, inclusive and empowered communities. We are weaving some of these principles, framings and values into our existing work and programmes to produce tools, leadership and recognition of, and guidance towards, a socially sustainable future, where the built environment is rapidly and robustly transforming for people and planet to thrive. +

<https://worldgbc.org/article/social-impact-paper/>

## Call to action The 5 A's



Awareness	Action
<p><b>Raise awareness</b> to understand all social impact issues relevant to organisations across the built environment value chain.</p> <p>Help identify challenges and opportunities of improvement in social impact and areas where interventions are needed, while encouraging responsibility to drive change.</p>	<p><b>Implement social impact strategies</b> into organisational or project work to achieve specific goals, objectives and outcomes, setting methodologies for robust and comparable measurements against an agreed target.</p>
<p><b>Assessment</b></p> <p><b>Undertake a systematic assessment and audit of current practices, policies, and outcomes</b> to allow organisations to identify their impacts on people at all stages of operations, facilitating informed decision-making based on data and setting realistic goals for progress.</p> <p>International building rating tools and certifications offer assessment benchmarks, including BREEAM, DGNB, Green Star, LEED and WELL (to name a few).</p>	<p><b>Advocacy</b></p> <p><b>Change mindsets and influence decisions</b> through impact on communities, building users and stakeholders, with particular recommendations for political and governmental institutions to demonstrate supportive leadership for long-term sustainability to all people within their homes, communities and cities.</p>
<p><b>Accountability</b></p> <p><b>Take responsibility and ownership</b> of actions and consequences that impact people and communities throughout the value chain, and create accountability mechanisms to ensure that organisations are held liable for commitments and obligations, with transparency across processes and practices and regularly reporting progress.</p>	<p>The 5A's are an ongoing process for every actor in the building and construction sector. We call for all stakeholders across the built environment to use this position paper to initiate conversation, collaboration, leadership and action to further improve positive social impact.</p>



Greenovate

GREENING  
the Future

The Greenovate Awards showcase up-and-coming talent and innovation in the sustainable development arena. The ninth edition in 2023 revealed a host of exemplary young winners.

WORDS Growthpoint Properties IMAGES Greenovate



"GBCSA is proud of our Greenovate partnership with Growthpoint and delighted by the solutions developed by such bright young minds. Knowing that we are supporting the skills and opportunities of future leaders who are going to shape our future and inform South Africa's sustainability trajectory is a source of hope and inspiration." – **Georgina Smit, GBCSA Head of Technical**



"Growthpoint emphasises environmental sustainability in our ESG strategy, demonstrated by our support of the Greenovate Awards. The submitted projects showcase the growing global trend towards eco-friendly buildings. Some contributions focused on adding to critical research, while others explored practical solutions. We commend the students' resilience in delivering such high-quality presentations while managing exams and other academic responsibilities at the end of the year." – **Grahame Cruickshanks, Head of Sustainability and Utilities, Growthpoint**

Since 2015, Greenovate has been inspiring university students to pursue sustainable development. Hosted by **Growthpoint Properties** and the **Green Building Council South Africa (GBCSA)**, the **Greenovate Awards** recognise and reward innovative, sustainable solutions by young minds in the built environment. The University of Cape Town (UCT) excelled once again, taking the top prizes in both property and engineering categories. In addition, the first-ever proptech award was introduced at the 2023 event, and was won by independent start-up, Oelinga.

Using waste materials for thermal insulation; growing bio-building materials with reused carbon dioxide and bacteria; a renewable energy planning app and energy trading platform; and evaluating water efficiency measures to reduce water scarcity impacts – these are some of the sustainability ideas explored by local university students who submitted their entries.

The Greenovate Award winners were announced at a gala dinner held at the Levelthree venue in Kramerville, Johannesburg, with its picturesque views of the Sandton CBD skyline – an iconic South African built environment, the centre of Sandton has the highest concentration of certified green buildings in Africa.

In 2023, 37 students from seven universities – University of the Witwatersrand (Wits), North West University (NWU), UCT, University of Pretoria (UP), University of the Free State, Nelson Mandela University and Stellenbosch University – entered the property and engineering awards. The students researched existing challenges, proposed unique solutions to real-life problems and presented their ideas to industry decision-makers. In addition, the seven entries from the proptech category came from small businesses that are within the research and development phase. Prize money of R37 000 was awarded to the winner/s in each category, while the runner-up received R18 500 and the third place took home R12 500.

The Greenovate proptech category winner also receives a one-year Property Point Business Development Support programme focused on empowering them to grow in the ever-changing proptech market. Property Point is a proud catalyst for successful enterprise development and has been transforming the property industry since it was established in 2008. Now, it has developed a custom programme to help establish the Greenovate proptech winner as an industry leader and promote the sustainable progression of proptech solutions.

The bespoke programme will be based on a baseline assessment to determine Oelinga's specific development needs and challenges as they navigate building a sustainable business in the South African market. It includes strategic business planning, market access, networking, training, capacity building, financial support, funding guidance, mentorship, coaching, innovation, technology integration, and monitoring and evaluation. After completing this programme, the Greenovate proptech award winner should have valuable insights, an expanded network, and measurable growth in market presence, revenue and business development.

The International Finance Corporation (IFC) prize winner receives a laptop computer and EDGE (Excellence in Design for Greater Efficiencies) Expert training with the GBCSA. All winners receive tickets to attend the GBCSA convention, where the top team in each category present their projects on the innovation stage. Continuing to promote sustainable thinking and learning, the three top participants from the property and engineering streams will each attend a GBCSA One-Green Star Accredited Professional (AP) Candidate course.

Participants in the Greenovate Awards receive valuable mentorship and collaboration opportunities. They gain access to knowledge and resources needed to turn their research into practical products or services for the property industry. The awards also offer mentorship programmes. ▶



## GREENOVATE 2023

### PROPERTY CATEGORY MENTORS

Gert Fourie and Deelan Govender – Turner & Townsend  
 Marlene Senne and Iphendule Ndzipho – WSP  
 Cebisa Mafukuzela and Wardah Peters – Solid Green Consulting  
 Jutta Berns – Ecocentric  
 Mapula Matlakala – African Bank  
 Jenni Lombard, Michal Hohlfeld and Abigail Godsell – GBCSA

### ENGINEERING CATEGORY MENTORS

Alex Varughese and Craig Blankers – WSP  
 Mary Anne Fechter – Zutari  
 Siziwe Mulidi – AMC Engineers  
 Makhosazana Mthethwa and Thato Molapo – Solid Green Consulting  
 Vere Shaba – Greendesign Africa

### PROPTECH CATEGORY MENTOR

Ezra Rasethe – investRand

### PROPERTY STREAM JUDGES

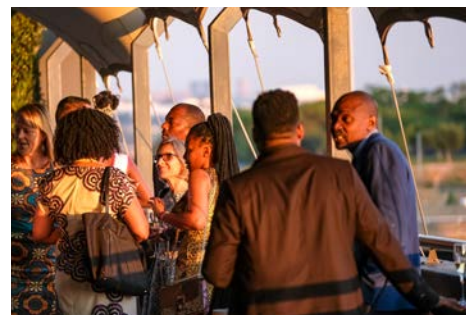
Kedibone Modiselle – City of Tshwane  
 Georgina Smit – GBCSA  
 Kushinga Kambarami – IFC  
 Yovka Raytcheva-Schaap – Zutari  
 Brian Unsted – Liberty2Degrees

### ENGINEERING STREAM JUDGES

Mike Aldous – MPAMOT  
 Dash Coville – GBCSA  
 Werner van Antwerpen and George Muchanya – Growthpoint Properties  
 Marloes Reinink – Solid Green Consulting

### PROPTECH STREAM JUDGES

Matt Marshall – REdimension Capital  
 Bakang Moeng – GBCSA  
 Clint Higgins and Hannes Steyn – Property Point



## ENGINEERING CATEGORY AWARDS

**First prize:** Julian Banks – UCT

**Project:** Design of an autonomous energy management agent for a hybrid microgrid

“Taking part in the Greenovate Awards was an amazing opportunity to meet like-minded students. Further, having our ambitions supported and encouraged by industry leaders is a unique and inspiring experience.

“The Greenovate awards validate our place as future professionals and provide an encouraging space that nurtures the belief that we can implement sustainable solutions.

“Truly, I feel privileged to have been afforded the platform to connect and form relationships with so many interesting individuals. I look forward to using this platform and working together to form a sustainable future for our country.”



From left: Grahame Cruickshanks, Growthpoint Head of Sustainability and Utilities, first-prize winner in the Engineering category Julian Banks, UCT student, and Georgina Smit, GBCSA Head of Technical

**Second prize:** Willem Barnard and Arnold van der Merwe – NWU

**Project:** Renewable energy planning app and energy trading platform

**WB:** “Winning second place in this category was a profoundly affirming milestone. The award was the perfect way to end my undergraduate studies on a high note. I’ve always had a strong passion for renewable energies and have seen their positive impact first-hand on communities and society. The award symbolises my commitment to environmental sustainability but also serves as an accolade for personal growth. I plan to pursue a master’s degree in the future, hopefully focusing on renewable energies and their effective management and utilisation.”

**AvdM:** “Receiving this award shows me that the industry is willing to encourage sustainable practices and that there are large areas where the sustainability of buildings can be improved.

“This will lead me to placing more emphasis on supporting green building practices and other sustainability measures in my research and future professional career.

“I believe that there is still much to be done in creating a greener future.”



From left: Grahame Cruickshanks (Growthpoint Properties), second-prize winners in the Engineering category Arnold van der Merwe and Willem Barnard, NWU students, and Georgina Smit (GBCSA)

## Meet the 2023 Greenovators

**+Impact** chatted to the young movers and shakers behind the innovative solutions that earned them their awards.

**U**CT won the engineering category – which incorporates electrical, computer and electronic, civil and mechanical engineering. The second-place winners were from NWU, and UP took third place.

The property category – which includes quantity surveying, construction management and property studies – also saw UCT triumph in first and second places. The third place went to Wits.

Mahima Maharaj of UCT received the IFC Excellence in Design for Greater Efficiency (EDGE) Award for their presentation on growing bio-building materials from CO<sub>2</sub>.

The inaugural Greenovate PropTech Award went to independent start-up Oelinga, by Songo Didiza and Zadok Olinga, which provides solutions for resource management of energy, water and carbon emissions. The second prize went to Kaizen by Rob Whiteley, and the third place to Learn Base Energy by Mokeke Ratlabala.

**We asked these change-makers what winning a Greenovate Award means to them, and how it impacts their careers and academic pursuits.**



**Third prize:** Tiffany Moodley – UP  
**Project:** Enhancement of a hot water accumulator by varying volume fraction and maintaining a constant surface area of phase change material

“Receiving the Greenovate award marked an unforgettable conclusion to my academic journey. The competition not only provided a platform to showcase the culmination of my engineering studies, but also emphasises the significance of sustainable practices in the industry. This recognition fills me with gratitude, and instils the confidence to venture into the professional realm with a strong commitment to contributing towards creating a more sustainable and environmentally friendly world.”



“  
**The Greenovate Award instils the confidence to venture into the professional realm with a strong commitment to contributing towards a more sustainable and environmentally friendly world.**

From left: Grahame Cruickshanks (Growthpoint Properties), third-prize winner in the Engineering category Tiffany Moodley, UP student, and Georgina Smit (GBCSA)

## PROPERTY CATEGORY AWARDS

**First prize:** Aiden van Wyk and Isobella van der Merwe – UCT  
**Project:** An investigation into the benefits of EDGE-certified residential estates in terms of real-world savings

**AvW:** “Participating in Greenovate was an honour, as I was exposed to like-minded individuals, who not only care for the natural environment, but also take proactive steps towards innovation and change. Winning the competition serves as a humble reminder to keep pushing the boundaries of knowledge in my career and to consistently strive towards making a lasting positive impact on the South African property market. We look forward to presenting at the GBCSA Green Building Convention later this year and exposing ourselves to new research in the field of sustainability.”

**IvdM:** “Securing this award has not only instilled a sense of confidence and validation in me, but has also served as a catalyst for advancing my research endeavours. Earning the first-place position has motivated me to pursue a Master’s degree, allowing me to delve deeper into the unexplored facets of long-term studies on green buildings. The competition proved to be an invaluable networking platform, facilitating connections with influential figures in the industry. A noteworthy highlight was the privilege of meeting my mentor, Wardah Peters, whose guidance during the presentation process and insights from her extensive field experience have been instrumental in shaping my professional trajectory.”



From left: Grahame Cruickshanks (Growthpoint Properties), first-prize winners in the Property category Aiden van Wyk and Isobella van der Merwe, UCT students, and Georgina Smit (GBCSA)

**Second prize:** Sindisiwe Kalumba and Hannah Volker – UCT  
**Project:** An examination of the uptake of Net Zero buildings in the South African commercial property market

**SK:** “To be among the winners is a true honour, validating the diligence and dedication invested by me, my research partner Hannah, and our supervisor Dr Saul Nurick in our examination. Furthermore, this achievement enables me to start my career in property valuation with confidence and with sustainability in mind. I am sincerely grateful to all who have made it possible for me to achieve this.”

**HV:** “Winning this award was my greatest achievement during my time at UCT. This competition furthered my passion for sustainable building, making me realise I could pursue this in my future career; but more importantly, giving me a sense of responsibility to make my mark in the industry. At the event, we met many inspiring people, who believed we could be youthful ambassadors in this space. My partner and I are working towards publishing our research, where we intend to contribute to the understanding of Net Zero buildings in South Africa. I eagerly await my future in sustainable development.”



From left: Grahame Cruickshanks (Growthpoint Properties), second-prize winners in the Property category Sindisiwe Kalumba and Hannah Volker, UCT students, and Georgina Smit (GBCSA)

**Third prize:** Xihluke Shivambu, Riyaadh Dawood and Sechaba Mohlabeng – Wits  
**Project:** The utilisation of eggshells as a partial replacement for cement in concrete

**XS:** “Winning third prize in the 2023 Greenovate Awards is a tremendous honour. It validates my dedication to sustainable construction and motivates me to further contribute to eco-friendly practices. This recognition enhances my career as a contractor’s quantity surveyor, enabling me to integrate solutions into future projects. It has fostered a holistic approach, aligning my thoughts and actions with sustainability directives. I’ve come to realise the importance of reviewing all infrastructural developments in order to provide sustainable solutions. I aim to advocate for sustainable construction practices and promote the incorporation of environmentally conscious materials.”

**RD:** “Placing third at the Greenovate Awards is a profound affirmation of my commitment to sustainable building practices. This achievement has fuelled my passion for ‘green’ solutions, amplifying my dedication to reducing environmental impacts within the industry. Such recognition validates the significance of our research, propelling

me towards a future where sustainable practices in construction are integral to my career. It is an honour that not only acknowledges our efforts but also motivates me to contribute further to the intersection of academia and sustainable development.”

**SM:** “This accomplishment fills me with pride, not just for myself but for my dedicated group members. Our collective hard work and commitment have manifested in this success, showing that with determination, we can overcome challenges and achieve remarkable milestones. This achievement is a testament to the potential for success when individuals come together with a shared goal. It serves as a powerful reminder that I have the capability to tackle and triumph over any endeavour in my academic and professional journey, further solidifying my commitment to excellence in sustainable construction practices and advancing my career as a forward-thinking quantity surveyor.”



From left: Grahame Cruickshanks (Growthpoint Properties), third-prize winners in the Property category, Wits students Xihluke Shivambu, Riyaadh Dawood and Sechaba Mohlabeng, and Georgina Smit (GBCSA)



# PROPTech CATEGORY AWARDS

**First prize:** Oelinga by Songo Didiza and Zadok Olinga

“Winning the Greenovate award has introduced our cutting-edge technology to the real estate environment in a meaningful way. With real-time data, our real estate clients will be able to make informed decisions to reduce their utility costs, carbon footprint and operating costs. We believe that the timing of this technology is opportune as it supports our clients plan for clean energy projects and thus helps in circumventing their exposure to the carbon tax.”



From left: Grahame Cruickshanks (Growthpoint Properties), first-prize winners in the Proptech category, Zadok Olinga and Songo Didiza for Oelinga, and Georgina Smit (GBCSA)

**Third prize:** Learn Base Energy by Mokete Ratlabala

“The Awards mean a lot for Learn Base Energy, especially showcasing the technology that has been built to industry experts and to students in pursuit of their own technological development – that they can also take a project from university to a fully commercial product that can be put out in the marketplace. Since participating in the competition, Learn Base’s technology has become available at major retailers.”

From left: Grahame Cruickshanks (Growthpoint Properties), third-prize winner in the Proptech category, Mokete Ratlabala for Learn Base Energy, and Georgina Smit (GBCSA)

**Second prize:** Kaizen by Rob Whiteley



From left: Grahame Cruickshanks (Growthpoint Properties), second-prize winner in the Proptech category, Rob Whiteley for Kaizen, and Georgina Smit (GBCSA)


“The Greenovate award wasn’t just a pat on the back – it was a launchpad. My RWA-backed STO, Kaizen, soared into a vibrant hub of green champions – fertile ground for sustainable real estate. Greenovate’s mantra ‘expose, introduce, encourage’ resonated. It illuminated industry needs, connected me to key players and ignited a passion to build better, greener cities. Every future pitch will echo their call: be an advocate for green buildings, a builder of better futures. The fuel, the connections, the exposure – Greenovate amplified my dream, propelling me from entrepreneur to founder, from dream to reality. It gave me a voice, purpose and platform: Revolutionizing Real Estate Investment and Greening the Planet. One Building at a Time.”



# IFC EDGE PRIZE

**Winner:** Mahima Maharaj – UCT  
**Project:** Growing bio-building materials from CO<sub>2</sub>



 This award is a step forward in realising a future where our built environment aligns seamlessly with the principles of sustainability.

From left: Grahame Cruickshanks (Growthpoint Properties), Yayeri Kisaame, Private Sector Development, Swiss Government State – Secretariat for Economic Affairs, IFC, EDGE prize winner Mahima Maharaj, UCT student, and Georgina Smit (GBCSA)

“For me, the true value of this award lies not in the personal recognition but in the opportunity it provides to spotlight the urgency of rethinking our approach to construction materials. It is a reminder that our current practices are not just unsustainable; they contribute significantly to environmental challenges. My focus is on showcasing the possibilities of cultivating bio-building materials using

carbon dioxide and bacteria, which not only addresses the environmental impact but also opens avenues for innovative, eco-friendly construction solutions. This award is a step forward in realising a future where our built environment aligns seamlessly with the principles of sustainability. It is an invitation to join a larger conversation and work collaboratively towards a greener, more sustainable world.”




**A WIN-WIN**  
Greenovate introduces young talent to the latest sustainability concepts and connects them with top sustainability influencers and property companies. This opportunity serves as a launchpad for their careers and expands the green talent pool for Growthpoint, the green building movement and South Africa’s overall benefit. The programme also fosters lasting networks and partnerships among participants.  
Students from all South African universities are invited to participate in the Greenovate Awards and can register at <https://www.greenovatecompetition.co.za/register/> 





# SPOTLIGHT ON EXCELLENCE

## SAPOA Property Development Awards 2023

According to the organisation, “SAPOA is constantly interrogating the categories and improving the criteria for the Property Development Innovation Excellence Awards to acknowledge all building types. The interest in the awards shows that they are serving a purpose in ensuring that we not only acknowledge the best property designs and developments, but also showcase the growth of the commercial property sector despite the economic challenges we face in the country.” And the 2023 winners are...

Held in September last year, the South African Property Owners Association (SAPOA) annual convention showcased development excellence within the real estate industry, and celebrated innovation at its awards ceremony.

## COMMERCIAL OFFICE DEVELOPMENTS AWARD

**WINNER: 110 OXFORD**  
Architect: Paragon Architects

**Location:** 110 Oxford Rd, Houghton Estate, Johannesburg  
**Completion date:** 17 November 2022  
**Certification:** 4-Star Green Star Office Design V1.1 rating  
**Type of building:** Commercial office development  
**Project size:** 4 800m<sup>2</sup>

Gaining this prestigious honour underscores our talent for blending refinement and functionality within commercial development. Our award-winning project sets new heights for small-scale office developments by cleverly integrating design and practicality to create an inspirational environment where professionals and companies can prosper.



## CORPORATE OFFICE DEVELOPMENTS AWARD

**WINNER: 8 MERCHANT PLACE**  
Architect: Boogertman + Partners

Winning the SAPOA award is a significant validation of our dedication and hard work, recognising not only the design but also the effective collaboration that took place between us and the client. Our commitment remains steadfast in maintaining an innovative, sustainable, and client-focused approach across all our projects.



**Location:** 8 Merchant Place, 1 Fredman Drive, Sandton  
**Completion date:** 1 November 2019  
**Certification:** 4-Star Green Star Public & Education Building V1 Design rating  
**Type of building:** Commercial office development  
**Project size:** 3 500m<sup>2</sup>



**Battery energy storage powered by renewable energy is the future, and it is feasible in South Africa right now!**

Sodium-sulphur batteries (NAS® Batteries), produced by NGK Insulators Ltd., and distributed by BASF, with almost 5 GWh of installed capacity worldwide, is the perfect choice for large-capacity stationary energy storage.

A key characteristic of NAS® Batteries is the long discharge duration (+6 hours), which makes the technology ideal for daily cycling to convert intermittent power from renewable energy into stable on-demand electricity.

NAS® Battery is a containerised solution, with a design life of 7.300 equivalent cycles or 20 years, backed with an operations and maintenance contract, factory warranties, and performance guarantees.

Superior safety, function and performance are made possible by decades of data monitoring from multiple operational installations across the world. NAS® Battery track record is unmatched by any other manufacturer.

Provide for your energy needs from renewable energy coupled with a NAS® Battery.



info@altum.energy  
www.altum.energy



Contact us right away for a complimentary pre-feasibility modelling exercise to find out how a NAS® Battery solution can address your energy challenges!

**INTERIORS AWARD**

**WINNER: THE RIDGE, PORTSWOOD PRECINCT, V&A WATERFRONT**  
Architect: StudioMAS



The V&A Waterfront continues to strive for excellence and has raised the bar when it comes to sustainability by focusing on circular design and development, with The Ridge as a primary example.

**Location:** The Ridge Building, V&A Waterfront, Cape Town  
**Project dates:** April 2019 – December 2020  
**Certification:** 6-Star Green Star Office V1.1 Design and As-Built ratings  
**Type of building:** Commercial property building  
**Project size:** 8 500m<sup>2</sup>

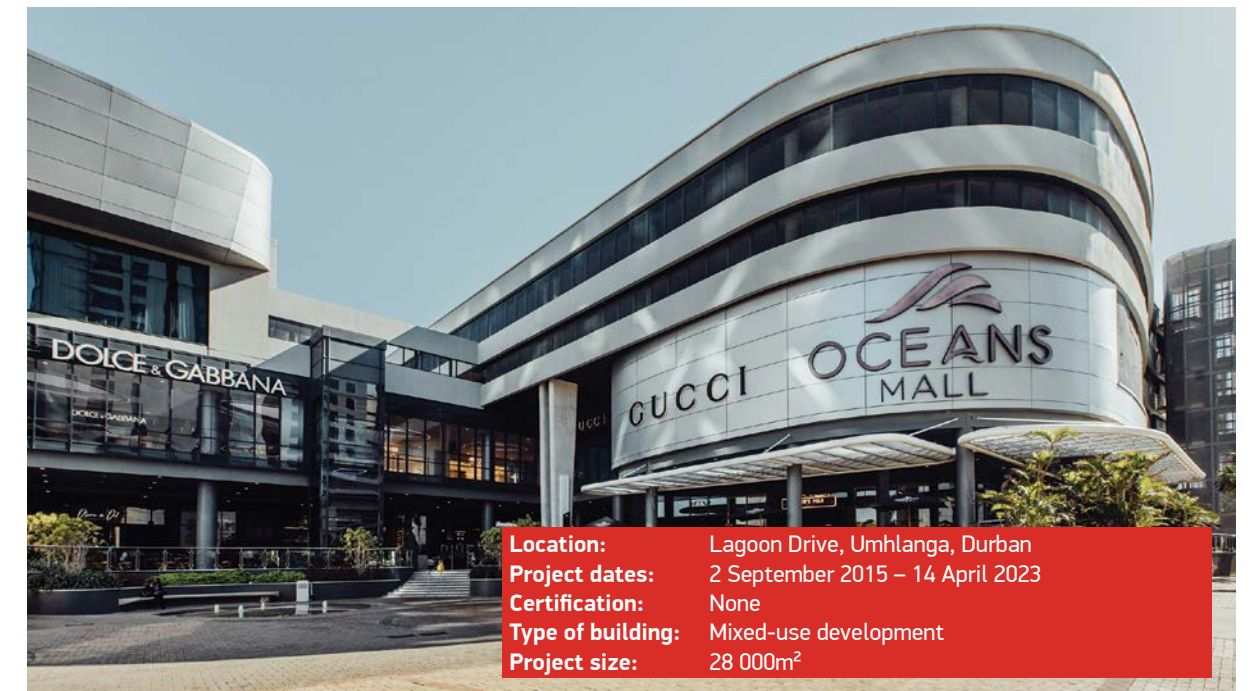


**MIXED-USE DEVELOPMENTS AWARD**

**WINNER: OCEANS UMHLANGA**  
Architect: Elphick Proome Architects



Winning the Mixed-use Developments award is a testament to Elphick Proome Architecture's innovative design prowess, strategic vision and commitment to enhancing urban spaces. The accolade recognises our ability to seamlessly integrate residential, commercial and recreational elements, showcasing excellence in creating dynamic environments that redefine the way people live, work and interact.



**Location:** Lagoon Drive, Umhlanga, Durban  
**Project dates:** 2 September 2015 – 14 April 2023  
**Certification:** None  
**Type of building:** Mixed-use development  
**Project size:** 28 000m<sup>2</sup>

**CRANE**  
Group Consulting

CRANE GROUP CONSULTING IS PROUD TO PART OF THE PROFESSIONAL TEAM THAT HAS DELIVERED THE AWARD WINNING PROJECT.

Crane Group Consulting are specialists in Quantity Surveying, Project and Program Management for built assets across specialized areas of the construction industry, including Retail, Mixed-Use Developments, Residential, Leisure, Industrial, Infrastructure, Work place, Education and Healthcare and benchmarks itself according to international standards.

We operate in Africa through a network of experts based in Africa, working for Africa. Our localised experience and expertise ensure that clients obtain the benefit of scale and scope when building assets in Africa.

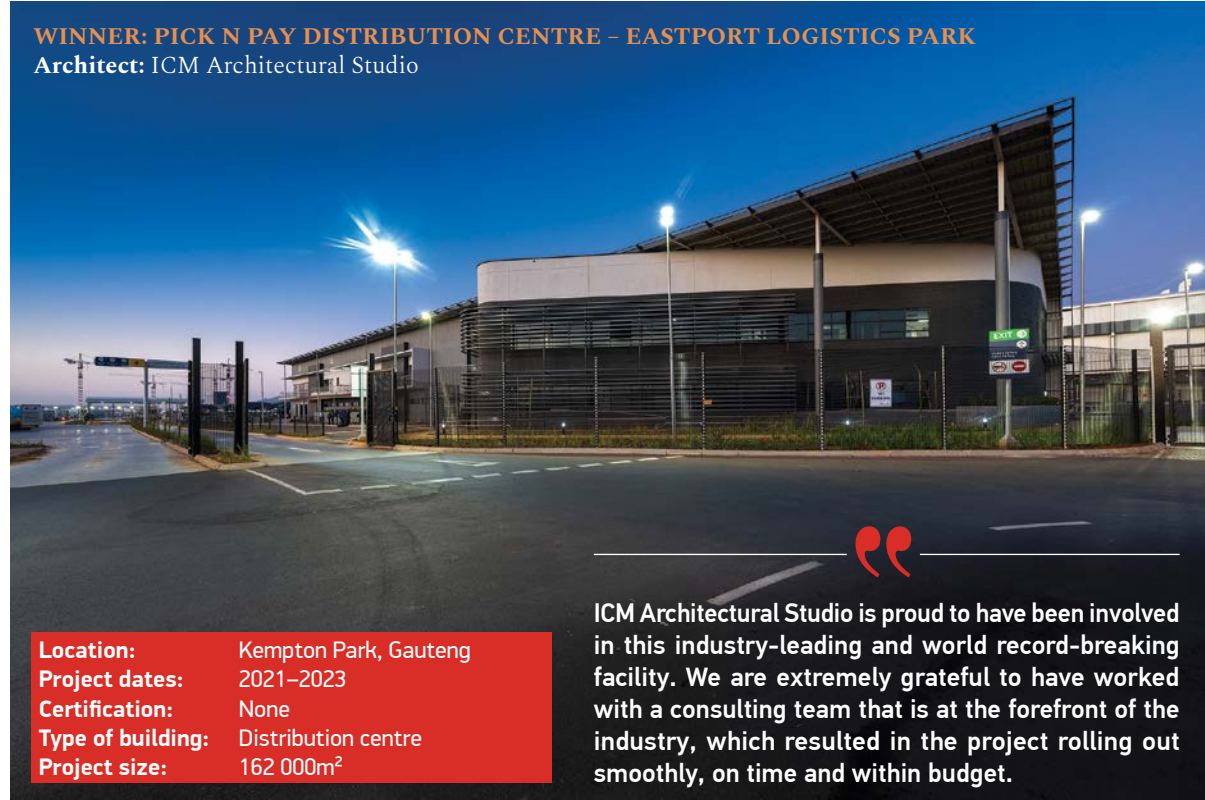
cranegroupconsulting.com | info@cranegroupconsulting.com





## INDUSTRIAL DEVELOPMENTS AWARD

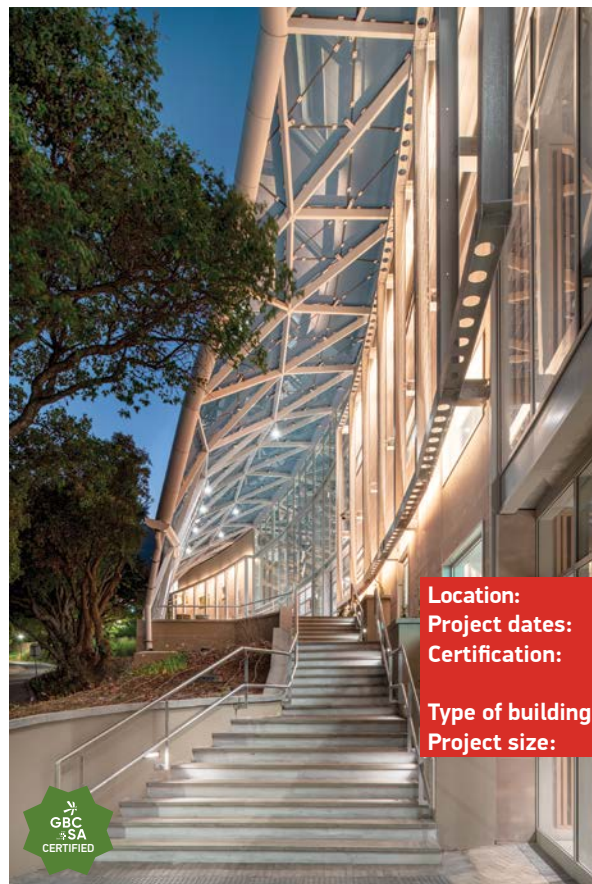
**WINNER: PICK N PAY DISTRIBUTION CENTRE – EASTPORT LOGISTICS PARK**  
**Architect:** ICM Architectural Studio



**Location:** Kempton Park, Gauteng  
**Project dates:** 2021–2023  
**Certification:** None  
**Type of building:** Distribution centre  
**Project size:** 162 000m<sup>2</sup>

ICM Architectural Studio is proud to have been involved in this industry-leading and world record-breaking facility. We are extremely grateful to have worked with a consulting team that is at the forefront of the industry, which resulted in the project rolling out smoothly, on time and within budget.

## INNOVATIVE AWARD, SUSTAINABILITY AWARD AND OVERALL WINNER



**WINNER: HASSO PLATTNER D-SCHOOL AFRIKA**  
**Architect:** KMH Architects

This award acknowledges our efforts in having applied our expertise and professional services along with the entire consultant team, in realising a building that provides optimal human comfort and functionality while keeping green principles at the forefront, ultimately creating a flagship 6-Star Green Star building that contributes significantly to the green building landscape in South Africa.

**Location:** Cnr Woolsack & Cross Campus roads, Rosebank, Cape Town  
**Project dates:** 2015 (inception), 2020 (construction), 2022 (completion)  
**Certification:** 6-Star Green Star Public & Education Building V1 Design rating  
**Type of building:** Education building  
**Project size:** 5 500m<sup>2</sup>



## INTERNATIONAL AWARD

**WINNER: RADISSON BLU MOSI-OA-TUNYA LIVINGSTONE RESORT**  
**Architect:** DSA Architects



**Location:** Livingstone, Zambia  
**Project dates:** Completion in mid-2022  
**Certification:** None  
**Type of building:** Hotel resort  
**Project size:** 17 691m<sup>2</sup>

WSP Group [the developer] is proud to have been involved in this project. It is important that developers are recognising the benefits of reducing their environmental footprint, in terms of energy, water and the embodied carbon in materials. It is a growing trend for visitors to be discerning about the holiday destinations that they choose, preferring to vacation in more responsible resorts.



## OTHER DEVELOPMENTS AWARD

**WINNER: DR PIXLEY KA ISAKA SEME MEMORIAL HOSPITAL**  
**Architect:** TV3 Architects

**Location:** 310 Bhejane Street, KwaMashu, Durban  
**Project dates:** Completion in March 2022; official opening on 24 November 2023  
**Certification:** None  
**Type of building:** Memorial hospital  
**Project size:** 86 000m<sup>2</sup>

The Dr Pixley ka Isaka Seme Memorial Hospital project is a flagship project for Enza Construction and solidifies our place as a leading infrastructure and solutions-driven contractor in the healthcare capability in South Africa. This achievement not only validates the collective hard work of the Enza team, but is also an indicator of our commitment to serving and building communities.







## REFURBISHMENTS AWARD

**WINNER: BOARDWALK MALL**  
Architect: MDS Architecture



The design is cognisant of integrating into the existing architecture and creating a streetscape that has developed over time. Pedestrian access points integrate the precinct into the urban landscape. MDS Architecture is honoured to have designed the iconic Boardwalk Mall where one is able to step out onto the beautiful beachfront promenade directly from the shopping centre.



**Location:** Marine Drive, Summerstrand, Gqeberha  
**Project dates:** May 2021 – September 2022  
**Certification:** None  
**Type of building:** Shopping centre refurbishment  
**Project size:** 31 400m<sup>2</sup>

## RESIDENTIAL DEVELOPMENTS AWARD

**WINNER: THE ELLIPSE WATERFALL**  
Architect: dhk



This award endorses dhk's approach to designing multi-residential accommodation, which is to create a landmark development characterised by creative and unconventional form. It recognises our expertise as creators of elegant, contemporary structures that meet the client's brief while also responding to the needs of residents in and around the precinct.

**Location:** Waterfall City, Midrand, Gauteng  
**Project dates:** 2 September 2015 – 14 April 2023  
**Certification:** 4-Star Green Star Multi-Unit Residential V1 Design ratings for phases 1 and 2  
**Type of building:** Residential  
**Project size:** 45 000m<sup>2</sup>



## RETAIL DEVELOPMENTS AWARD

**WINNER: MERINO MALL**  
Architect: MDS Architecture



Merino Mall features a unique combination of contemporary architecture and integrated local art. The design establishes an experiential sense of place, paying tribute to the site's heritage while meeting environmental and social challenges. MDS Architecture is thrilled to have been recognised by SAPOA – a testament to a winning partnership with Moolman Group and Abland.

**Location:** Gert Sibande District, Ermelo, Mpumalanga  
**Project dates:** July 2021 – October 2022  
**Certification:** None  
**Type of building:** Shopping centre  
**Project size:** 28 600m<sup>2</sup>



## STUDENT ACCOMMODATION AWARD

**WINNER: APEX STUDIOS**  
Architect: GASS Architecture Studios



As the first recipient of the SAPOA Student Accommodation Award, Apex Studios reflects the contribution to the well-designed and executed urban architecture that GASS aims to produce, and we are proud to set a standard for this building typology. Apex studios form part of the new national THRIVE Student Living Portfolio of buildings, and promotes a student living experience with a variety of support, and communal spaces and offerings.



**Location:** 10 Jorissen Street, Braamfontein, Johannesburg  
**Project dates:** September 2021 – December 2022  
**Certification:** EDGE Preliminary (Design) certification in December 2023  
**Type of building:** New student residential building with alterations to existing heritage buildings  
**Project size:** 17 265m<sup>2</sup>







## HERITAGE AWARD

WINNER: PEAK STUDIOS

Architect: GASS Architecture Studios



**Location:** 368A Main Road, Observatory, Cape Town  
**Project dates:** October 2021 – December 2022  
**Certification:** EDGE Final (Design) certification in December 2023  
**Type of building:** New residential building with additions and alterations to existing heritage building  
**Project size:** 11 424m<sup>2</sup>



With the great importance and value placed on architectural heritage in the Western Cape, this recognition from SAPOA serves as a great acknowledgement of the pursuit of regeneration and development within a heritage-rich built environment by means of sensitive and functional integration, instead of mere replacement – something integral to the GASS philosophy.



## MERIT AWARD

WINNER: OCEAN SCIENCES CAMPUS EXTENSIONS, NELSON MANDELA UNIVERSITY

Architect: SVA International



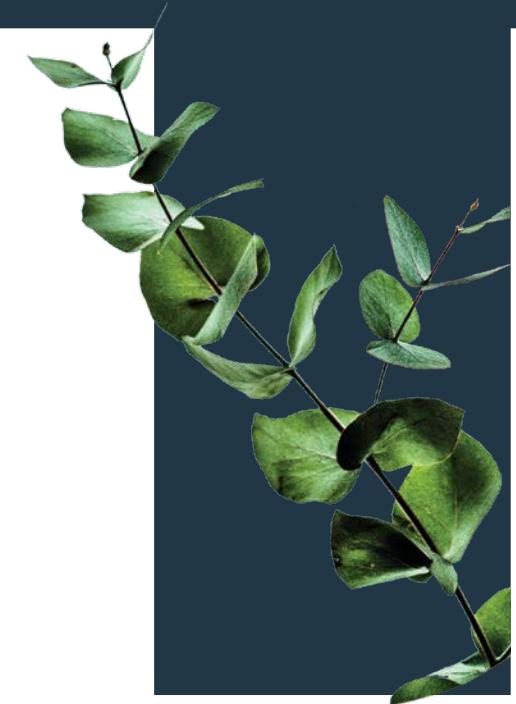
SVA International is extremely proud to have been recognised at such a prestigious event. This project aimed to challenge the traditional notion of “spaces of learning” and establish a new identity for the campus while creating a modern, state-of-the-art academic and research facility. +



**Location:** 15 Gomery Avenue, Gqeberha  
**Project dates:** Completion in 2022  
**Certification:** None  
**Type of building:** Additions and alterations to academic and research facilities  
**Project size:** 22 000m<sup>2</sup>



# IMPACT



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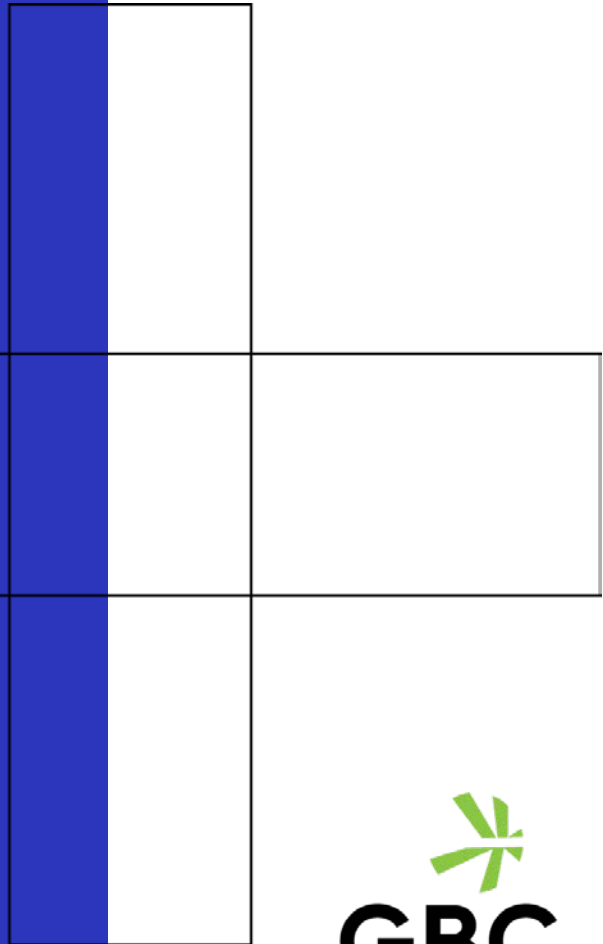


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