

Green Building Convention

2022



Join the **R** - Generation Movement.

Join the RE-Generation Movement at the 15th Green Building Convention and be part of driving the regeneration we need in the built environment in this decade of accelerated climate action.

Be part of Africa's most powerful green building gathering and connect with over 800 built environment professionals, influencers and decision-makers.

REGISTER NOW

Regular registration closes 26 October 2022.

www.gbcsaconvention.org.za







- 6 CHAIRPERSON'S FOREWORD
- 8 ABOUT US
- 9 ACHIEVING OUR VISION
- 10 HIGHLIGHTS
- 11 MSCI RESULTS
- 12 PROGRESS UPDATE: EPCs
- 14 AWARDS

- 16 2021 IN REVIEW:
 - Certification
 - Training
 - Advocacy
- 22 CASE STUDIES
- 30 BUILDINGS CERTIFIED IN 2021
- 32 FINANCIALS
- 38 BOARD OF DIRECTORS
- 39 STAFF
- 40 GOVERNANCE



CEO'S FOREWORD

LISA REYNOLDS

Agility and flexibility sees GBCSA go from strength to strength

The success and growth of Green Building Council South Africa (GBCSA) in 2021 is testament to a broader shift in the way we build. The appetite for sustainability and the commitment to building green increased in 2021. Businesses, governments and ordinary citizens are grappling with how climate change impacts them, and strategising more eco-conscious ways to provide their goods and services, govern, build and consume. This demand from all corners for information, expertise, systems, benchmarks and solutions is where GBCSA plays a role.

Headway of our members meant that we too had a spectacular year in 2021, and GBCSA is going from strength to strength.

The unpredictability of prolonged Covid made us cautiously optimistic about 2021. We stayed agile, flexible, and with our ears to the ground. This helped us gain further confidence within the property sector, and we have proven ourselves to be a robust, well-managed organisation that is here to stay.

In 2021 GBCSA focused on being even more responsive and member centric. We partner with our members to help them achieve their sustainability goals (specifically ESG and net zero targets). As CEO, I've done several roadshows in Gauteng and KZN, and Cape Town. This gives us the opportunity to meet our members face-to-face and understand their needs, then give the required support.

A Maturing Market

Our biggest area of growth in 2021 was in the number of Green Star and EDGE projects registered and certified. In total, 139 projects were certified, which included a number of bulk certifications.

The property sector's understanding of a green built environment in South Africa is growing and maturing and the needs and focus of our members have changed accordingly. We are reinventing our certification tools to truly respond to the changing market and our members' needs.

In 2021, this included initiating a new Green Star EBP Industrial rating tool, which deals with the nuances of industrial projects as compared to EPB's for offices. We'll be launching the pilot in June 2022.

According to MSCI research, industrial buildings have fared well during lockdown and are a growing sector for certification. We have also seen good growth in the retail sector and this too forms part of our focus. Another area of attention is South Africa's robust residential real estate market. We must ensure that developers are providing homeowners with healthy green spaces that enable a more eco-conscious way of living.

Further in the pages of this Integrated Report, you can read about the record number of people trained by the GBCSA Academy in 2021 and the new training developed, as well as our launch of individual GBCSA membership, known as ONE membership, our array of member events throughout the year, culminating in the phenomenally successful hybrid convention in November.

It was my first in-person convention as CEO. It felt like a true homecoming for me, and it seemed to be the same for others as well.

Of course, steering this ship is not something I do alone. A huge thanks to my dedicated team who've done amazing things this year, our community of APs, those who have volunteered their time to work on the New Build rating tool, and our supportive members who have shown such confidence in us throughout 2021. And then of course, a thank you to the board for their strategic support and visionary guidance.

Transforming Tomorrow

Our challenge now is to speed up and scale up the improvements being made in the built environment. Having dates like 2030 and 2050 to reach net zero are useful to set targets but can also lull us into thinking we still have some time. We don't. The devastation to our communities and infrastructure from climate change related events is already happening and makes the need for rapid change urgent.

We need to bring everyone into the green building movement. There is no room for shoddy, wasteful and resource intensive construction that locks us into unsustainable modes of operation. Our decisions today determine the future

Towards the end of 2021 GBCSA started work on our New Build Version 2 tool – a mammoth undertaking but a necessary one. With the dedicated support of volunteers consisting of Accredited Professionals (AP) and other GBCSA members and experts, we are well on our way in this process, which we have named Transforming Tomorrow, and hope to pilot the new tool in early 2023.

I am looking forward to seeing GBCSA grow even more in the years to come, both as an organisation and also in the positive green influence we have over the property sector. We'll keep focusing on staying membercentric, agile, and flexible but we also strive to be leaders that are transforming the built environment for people and planet to thrive.

Lisa Reynolds CEO



CHAIRPERSON'S FOREWORD

BRIAN UNSTED

A strong and stable base to implement the green vision from

I am pleased to report that 2021 was an extremely positive year for the GBCSA, and one which has seen not only recovery but also stability for the organisation. Despite the setbacks of 2020, we have worked even harder at becoming a responsive, member-centric organisation. We now have more headspace to strategise and execute our green vision.

"2020 was the year of laying strong foundations at GBCSA," explained Giles Pendleton in last year's report. The organisation went through a challenging time of key staff changes, closing the Johannesburg office and reducing overheads in the midst of Covid.

I was privileged to step up to the role as chair of the GBCSA board in January 2022. Huge gratitude and recognition must go to my predecessor, Giles Pendleton, whose clear, unwavering, and decisive leadership has been paramount to the success of the organisation over the last year.

In my tenure as Chair, I aim to ensure that the reach of GBCSA spreads more broadly into the property sector. We need to actively drive sustainability initiatives into the built environment and promote certifications. Good progress has been made in rating new builds and also existing builds in the office sector. We need to reach this same level of success in the retail, industrial and residential sectors of the property market.

Currently, the spotlight is certainly on Environmental, social and governance (ESG) reporting from an investor's perspective, and this creates opportunity for GBCSA and the 'green' industry at large. Public sector assets are numerous and often large, and taxpayers and voters also want to see more efficient management of these assets through lower operating costs as a result of sustainability and other pro-active interventions.

As a response to maturing of the market, GBCSA made strides in 2021 towards the development of our New Build Version 2 tool – a process that we have named "Transforming Tomorrow", and which we hope to pilot in late 2022, early 2023. A huge thank you to volunteers from our Accredited Professional (AP) community for volunteering their time and expertise in conjunction with the technical team from GBCSA to make this tool a reality. They are the true 'green stars' of our industry.

A highlight of 2021 for me, was the highly successful hybrid convention held in Cape Town and online, where many green building professionals were grateful to be able to meet once again face-to-face. I think that the way the organising team reimagined the convention has helped GBCSA to remain relevant, as well as accessible to people all over the country (and world).

Other highlights of 2021 include commencement of the development of the EBP industrial tool, the introduction of our ONE membership (for individuals), a full update and revamp of our training programmes leading to a record number of professionals trained in 2021, and more building certifications than any other year to date.

In 2022 we want to continue evolving with the market and remain relevant to different sectors of the property industry. We want to stay focused on our members, for whom we continually strive to ensure that we provide value. As a member-centric organisation, we are so grateful to all our members who are the core of our business. Thanks for your continued support and a big welcome to new members that joined us during 2021.

To our AP community, thanks again for your support and invaluable role in the built environment. Without you the green building industry would not survive.

A massive thanks to the hard-working GBCSA team, under the leadership of our charismatic CEO, Lisa Reynolds. Thank you for your contributions, not only in 2021, but previous years too. There were some sacrifices that had to be made in 2020, significant change and instability, however you have stuck through it, stayed focused, and continue to remain positive and loval.

Lastly, I'd like to thank the rest of the board for your support, the healthy debates, and your time dedicated to GBCSA matters. Thank you for the passion shown towards this organisation. Here's to steady growth for the green sector in 2022.

Brian Unsted Chairperson



ABOUT US

At Green Building Council South Africa (GBCSA) we are transforming the built environment for people and planet to thrive.

We are striving for climate resilient communities and inspiring spaces, where every South African can live and work in a healthy and sustainable built environment. Net zero carbon, waste and water buildings that are comfortable for occupants and well-connected to the broader community are what we aim for.

The goal is responsible, resilient, net zero buildings that promote health and wellbeing among people, for nature and consider the places they create beyond buildings.

With the help of our members, we can achieve this through certification of buildings, training of professionals, collaborations to further research, and advocacy to raise awareness, support and assist policies on green building and broader climate change issues.

STRUCTURE & MEMBERSHIP

At our core we are a team of about 20 people working from Johannesburg, Cape Town and Durban, and an active board of directors. However, our true strength lies in our extended network of members. GBCSA comprised over 600 members in 2021 – from listed property companies, to individuals who joined as ONE Members.

These are the companies, organisations and people on the ground, doing the work to transform the built environment. GBCSA gives them a platform to network, share news, information and knowledge on how to accelerate a sustainable transition.

Many of these members work closely with us as faculty in the GBCSA Academy and as Accredited Professionals (APs) involved in the certification of buildings.

Being a member of GBCSA unlocks preferential pricing for our offerings including certification, training and events. Being a member also gives access to thought leadership and strategic advice on green building.

Achieving our vision of healthy and sustainable green buildings in climate resilient communities is possible through collaboration with our members in the following ways:



CERTIFICATION

We certify buildings and precincts that have worked through rigorous rating systems and provided evidence to support this, so that they may be proclaimed certified green buildings.

We certify buildings using the Green Star, Net Zero, EWP and EDGE rating tools. These create a common language and standard of measurement for green buildings. They promote integrated, whole building design, which requires buy-in and collaboration from an entire project team.



There are tools available for most projects, including new and existing commercial buildings, homes, precincts, interior fit-outs, retail and industrial buildings and more. Each tool acknowledges and rewards environmental leadership and is a recognised symbol of achievement in sustainability. When seeing a Green Star certified building, you can be assured that the building is striving for sustainability and has considered the important environmental categories of: energy; water; transport; indoor environment quality; management; materials; land use and ecology and emissions.

The certification process of each building is managed internally at GBCSA by a case manager and externally by the appointed assessors and/or moderators. Each certification is subject to these independent third party individuals who provide transparent feedback to the case manager and project team or accredited professional.

Since the first certification was awarded in 2009, over 740 certifications have been awarded by GBCSA.



GBCSA Academy provides an education platform for built environment professionals focusing on green building and the Green Star, Net Zero and EDGE rating tools.

Our flagship Accredited Professional (AP) training allows one to become a certified AP, with a depth of green building knowledge and ability to submit a Green Star and Net Zero project for certification. It gives tremendous insight into the Green Star and Net Zero rating tools procedures and processes.

We also provide bespoke training developed specifically for your organisation and focused on your green building priorities.

Our professional development is available online and on-demand, to allow individuals to kick-start their green building knowledge journey at their leisure. Live webinar workshops then bring trainees together for an intensive exploration of the course material.

Courses currently offered:

- Accredited Professional and Professional Team Member certification courses are available for all the GBCSA Tools. Green Star New buildings & Major Refurbishments; Green Star Existing Building Performance; Green Star Interiors; Green Star Sustainable Precincts; Net Zero (Carbon, Waste, Water & Ecology)
- EDGE Expert Training
- EDGE Auditor Training
- GBCSA Insights Training workshops for property owners, building managers, and other built environment professionals wishing to learn about green building topics.



EVENTS

Together with our members, GBCSA promotes discussion, solutions and tools that enable the design, construction and operation of all buildings in a sustainable way. Through advocacy we create strategic partnerships, share knowledge and champion the green building agenda.

We do this through research and collaboration, and campaigns and initiatives to reach broader audiences, as well as hosting events bringing together various built environment professionals.

Our flagship annual Green Building Convention provides inspiration, information and unbeatable networking opportunities. Our regular Planet Shaper events are a platform for members to share big ideas, inspirational insights and practical knowledge to sustainably transform the built environment.



In 2021 GBCSA was involved with the following:

Webinars/events:

- We hosted 13 online events in 2021. Our Planet Shaper webinars focus on content that is technically interesting and relevant to professional members.
- We celebrated 12 plaque handover events.
- We held 3 in-person events as we slowly shift back to hosting faceto-face gatherings.

Annual Green Building Convention:

- Showcases green innovation and encourages conversations.
- In 2021 the convention was themed ONE. One Planet. One Chance.

Awards:

- Annual GBCSA awards aimed at active Accredited Professionals (APc)
- YIPA GBCSA Sustainable Young Changemaker Award aimed at young professionals working in the green economy.
- Greenovate Awards aimed at students.

Advocacy

Engagement

- Engaging on various platforms, conferences and in certain conversations around sustainability, and related topics.
- Commenting on draft releases of legislation policy that affects the green building space.
- Accepting invitations to communicate through other platforms, often contributing editorial comments in various media.

Networking:

- Facilitating networking and connecting people in the sector to move the sustainability agenda forward.
- Special interest groups.

2021 HIGHLIGHTS

REVENUES



29 165 567

(2020: R23 341 069



SURPLUS

6 130 601

(2020: R2 921 720)



139

CERTIFICATIONS WERE AWARDED IN 2021

(2020: 103)



740+

CERTIFIED GREEN STAR BUILDINGS SINCE 2009 – AND RISING



MORE PROJECT REGISTRATIONS IN

THAN EVER, FOR

DEVELOPMENT OF THE



CUSTOM EBP INDUSTRIAL TOOL

BEGAN



WE KICKSTARTED GREEN STAR NEW BUILD V2 TOOL DEVELOPMENT, WE'RE CALLING THIS PROCESS

"TRANSFORMING TOMORROW"



GBCSA ACADEMY IS BORN



1 140
PEOPLE WERE TRAINED

BY GBCSA IN 2021

(2021: 1 139)



97

APS CERTIFIED



110

PROFESSIONAL TEAM MEMBERS TRAINED



69

EDGE EXPERT
COURSE ATTENDEES



9

GBCSA INSIGHTS
WORKSHOPS RUN

ATH ANNUAL GREEN BUILDING CONVENTION, NOVEMBER 2021 OUR FIRST EVER HYBRID CONVENTION 178 LEGATES [423 in-person & 452 virtual] SPEAKERS EXHIBITORS SPONSORS

2021 MSCI RESULTS

CERTIFIED OFFICES OUTPERFORM NON-CERTIFIED OFFICES IN SA

Green certified offices more defensive in pandemic property market

In 2021, the MSCI South Africa Green Annual Property Index celebrated five years, highlighting impressive cumulative results. The index is released annually by MSCI in conjunction with the GBCSA and sponsored by Growthpoint Properties. It provides an independent, globally consistent view on the investment performance of green-certified and non-certified offices.

In 2021 the MSCI South Africa Green Annual Property Index continued to support the investment case for accredited green buildings in the commercial property sector. At the end of 2020, the index sample comprised 289 prime and A grade office properties valued at R54.5 billion, of which 139 were green-certified buildings. These were compared to 150 non-certified offices of a similar quality.

Green certified offices outperformed in 2020, continuing long-term trend

For the year ended December 2020, the green-certified office sample delivered a total return of -1.6%, 170bps above the non-certified sample's return of -3.1%. Capital growth was the main driver of outperformance as the green-certified sample held its value better in a challenging operating environment for the office market.

Over the index's five-year history, the sample of green-certified offices delivered an annualised outperformance of 260bps as its compound annual total return of 7.3% exceeded the 4.7% of non-certified P & A-grade offices.

On a cumulative basis, this equates to a total return of 42.1% as it outperformed the non-certified sample by 13.2%.

Green-certified office assets deemed lower risk through crisis

As the COVID-19 pandemic stressed property fundamentals, green-certified offices proved more defensive, both from an income and capital perspective as its superior capital growth was the result of a better net income growth and lower discount rate.

Amid the impact of COVID-19, the green-certified office sample saw a significantly smaller decline in net operating income when compared to non-certified offices. (-5.8% vs. -10.1%) and had a 40bp lower discount rate when compared to the non-certified sample, implying that its future cashflows were deemed lower risk.

Also telling was a lower vacancy rate of 12.7% versus the non-green sample of 14.9%, highlighting the value occupiers are attaching to green certified premises.

The meaning behind these results

Released by MSCI in April 2021, the index results reinforced the association between quality and green-certified buildings, as reflected by a 31% higher capital value per square metre, more resilient capital growth and a higher net operating income per square meter compared to the non-certified office buildings.

"It is wonderful to see that after five years of tracking green-certified buildings, we can see real evidence showing that they provide higher returns to the investor because they have been more defensive through the economic downturn and the COVID crisis. Primary metrics like higher net income and lower vacancy point directly to desirability of these buildings by tenants. This has translated into better capital growth over the last five years." said Eileen Andrew, Vice President, MSCI.

Georgina Smit, GBCSA Head of Technical echoed this sentiment, adding that the results also emphasise the positive role that certified buildings can play within the broader responsible investing context. "For investors, these results indicate that certified green buildings are attractive investment options as well as ensuring future climate resilience and delivering on mitigation interventions associated with green building design and operation."

GBCSA hosted a webinar in May 2021, giving deeper insight into the MSCI South Africa Annual Green Property Index 2020 results, and a thought-provoking discussion was enjoyed. GBCSA's Georgina Smit was in discussion with MSCI South Africa Vice President for Client Coverage, Eileen Andrew; Gareth Allison, MSCI Executive Director and Head of Client Coverage for Sub-Saharan Africa; and Head of Sustainability and Utilities at Growthpoint Properties, Grahame Cruickshanks.



Comparison of Green Star Certified Buildings vs Non-Certified Buildings in 2020

CERTIFIED

NON-CERTIFIED

-1.6%



-3.1%

- TOTAL RETURN

12.7%

18

14.9%

- VACANCY -

-5.8%



-10.1%

— NET OPERATING INCOME -

21 216.9/m²



16 117.1/m²

——— CAPITAL VALUE PER SQUARE METRE —

PROGRESS UPDATE

EPCs

Doing the groundwork on EPCs

Our partnership with the Carbon Trust, with funding and support from the UK PACT (Partnering for Accelerated Climate Transitions) programme, has been helping South Africa get to grips with energy efficiency in the country's existing building stock through operationalising Energy Performance Certificates (EPCs).

The EPC regulations were made effective in 2020, requiring public sector buildings greater than $1000 \, \text{m}^2$ and private sector buildings greater than $2000 \, \text{m}^2$ to obtain an EPC by December 2022. GBCSA views this as a very important first step on the journey to net zero carbon buildings.

Through the real-time process of conducting EPCs in 30 buildings across South Africa, the UK PACT, Carbon Trust and GBCSA project made good progress in 2021 on developing an EPC roadmap for building owners. It will include additional guidelines on getting from an EPC to net zero via energy efficiency, renewables, and carbon offsets. Another deleverable of the project was the building of the National Building Energy Performance Register (NBEPR) platform (which is set to be launched in 2022). The learnings from the project will feedback and into policy recommendations for driving further energy efficiency in buildings through the EPC mechanism.

What are EPCs and how does this new legislation affect building owners?

An EPC provides a snapshot of a building's yearly operational energy performance by measuring energy consumption (including LPG, electricity, renewables, diesel, and more) per square metre. It's a colour-coded score from A-G, valid for five years, and is similar to the energy rating found on an electrical appliance. Knowing the energy performance of a building empowers potential buyers and tenants to make informed decisions. While, at the moment, there is no minimum rating requirement, EPCs provide a useful baseline to understand a building's current energy consumption. Once the inefficiencies are identified, improvements can be made.

"Because of their significant contribution to South Africa's greenhouse gas (GHG) emissions profile, buildings are a key part of South Africa's decarbonisation challenge. Energy efficiency in buildings is a good low hanging fruit to target and set the ball rolling towards net zero," said GBCSA CEO, Lisa Reynolds.

Jonathan Booth, project lead at the Carbon Trust, added: "While climate change is the fundamental driver, there are strong commercial arguments for embarking on a net zero journey; for instance, rising energy costs and advancing technologies continuously strengthen the economic case for many of the most effective interventions such as upgrading HVAC systems and managing plug loads."

EPCs will also provide much needed data to assess and monitor what proportion of the country's emissions can be attributed to buildings, and how a focus on energy efficiency can make a positive contribution towards South Africa's Nationally Determined Contributions (NDCs) reduction targets. There is currently no baseline, which means we don't know how well we are doing or how much carbon we must mitigate to achieve net zero by 2050 for existing buildings.

Operationalising EPCs in South Africa

The focus in 2021 was on the development of a robust mechanism to collect and process EPC data and for issuing EPCs. The Carbon Trust, GBCSA, and the South African National Energy Development Institute (SANEDI) recognised the importance of an effective EPC mechanism to drive energy efficiency and reduce carbon emissions from buildings. A grant funding proposal was developed to this effect and submitted to UK PACT. The proposal was successful and work began in March 2021.

The project is led by the Carbon Trust, supported by GBCSA and some of the immediate priorities identified involve creating awareness, developing an enabling environment for the EPC mechanism, and establishing a National Building Energy Performance Register (NBEPR). This will be managed by SANEDI and the National Department of Mineral Resources and Energy (DMRE).

The project began with a foundational phase of research exploring the PESTLE (political, economic, social, technological, legal, and environmental) factors which impact the EPC legislation process in South Africa and using these to identify what needs to be put in place to make EPCs a success. This also involved looking at global best practice in order to see what could be applied locally.

The next phase involved conducting EPCs with a sample of 30 buildings (15 public and 15 private sector). Through collecting essential EPC data from these sample buildings, learnings have been used to inform the development of an EPC roadmap for building owners with additional guidelines on getting from an EPC to net zero via energy efficiency, renewables, and carbon offsets.

Longer term, the outcomes focus on increasing EPC uptake among building owners, using NBEPR data to inform policy, training, and skills development around EPCs and the legislation, encouraging improvements in energy efficiency and stimulating the implementation of smart and green technologies in buildings.

"On top of the potential energy efficiency and carbon transformation within the built environment, the EPC legislation provides another gem: The roll out and implementation of this legislation will create green jobs – both as Inspection Bodies and in businesses related to the retrofit of energy efficiency technology and solutions in buildings. All adding to the growth of the green economy," concluded Reynolds.

GBCSA and the Carbon Trust also held two very well attended awareness webinars discussing all things relating to energy performance certificates (EPCs) in 2021.



BENEFITS OF

GREEN BUILDINGS

Environmental Benefits







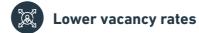


Economic Benefits











Future-proofed investment

Health & social Benefits

Increased cognitive function of occupants

Boosted workplace productivity

Fewer sick building symptoms

Lower airborne disease transmission

Promotion of eco-friendly behaviours

GREENER, FASTER, MORE

The buildings sector has a very large carbon footprint when indirect emissions are accounted for. The International Energy Agency (IEA) confirms that about 9% of global energy-related CO² emissions result from the use of fossil fuels in buildings, another 18% come from the generation of electricity and heat used in buildings, and an additional 10% is related to the manufacturing of construction materials.

A building's entire lifecycle is therefore responsible directly and indirectly for +-37% of global energy-related CO₂ emissions, which calls for whole-lifecycle emissions restrictions.

We have a huge opportunity to change the trajectory. And we don't have any time to waste.

Green buildings are one of the quickest, most cost effective ways to reduce carbon dioxide emissions and improve local development, air quality and health.

It is recommended that Net Zero-ready building standards covering the lifecycle emissions of buildings are implemented by 2030 at the latest. GBCSA continues to work with the public sector in the policy space to ensure that this is a possibility, while also doing significant research on embodied carbon in the South African built environment context.



GREEN BUILDING COUNCIL OF SOUTH AFRICA | Integrated Annual Report 2021

AWARDS 2021

GREENOVATE

The 2021 Greenovate Awards, sponsored by Growthpoint in collaboration with GBCSA were held in Johannesburg in November. The awards embed an early passion for sustainable development in university students by focusing on challenges and opportunities within the property industry. The programme also showcases up-and-coming talent – the future leaders of the built industry. The result: a growing community of advocates for green building with a passion for creating a better world and a brighter, greener future.

In 2021, there were 22 students from five universities - University of the Witwatersrand, University of Pretoria, University of Cape Town, North West University and Stellenbosch University – who entered the awards. The students researched current issues, came up with unique solutions to real-life problems, and presented their ideas to industry decision-makers.

After the pandemic forced the programme online 2020, the trail-blazing awards returned safely to the original (but suitably socially distanced) face-to-face format in 2021 to optimise its mentorship and collaborative advantages. In preparation for the awards, students are given the opportunity, expertise and resources to develop their research into a real and workable product or service for the property industry. The awards' mentorship programme and workshops with industry experts are also designed to benefit the students immensely. The young talent is exposed to the very latest in sustainability thinking and ideas, and they enjoy direct access to leading sustainability and property companies, which creates a springboard to launch their future careers. During this process they also create lasting networks and partnerships.

"This year's forward-thinking projects really impressed the judges," said Grahame Cruickshanks, Growthpoint's head of sustainability and utilities. "Big ideas come out of our tertiary education institutions that deserve private sector support. Growthpoint has already implemented one Greenovate solution commercially, and we are hungry to put more into practice. Growthpoint has undertaken to have all of its 400-plus buildings in South Africa operating at carbon net-zero by 2050 - and action and innovation is needed now if we are to get there. We are proud to be drivers of the Greenovate Awards, and if the quality and creativity of this year's entries are anything to go by, there is a promising future for green building that is in very capable hands indeed."

"The genuine passion for a higher cause shared by all the students participating in the awards, and nurtured by their universities, was clearly demonstrated in the cutting-edge thinking about building and operating our cities, towns, neighbourhoods and buildings in more environmentally sustainable ways. GBCSA is proud to spark 'greenovation' at South African universities and shape a better future," said Georgina Smit, Head of Technical at GBCSA.

The 2021 awards' sponsors included Terra Firma Solutions, Solareff and RMS Remote Metering Solutions. Prize money of R30 000 was awarded to the winning student/s in each category, while the runner-up received R15 000, and the third place took home R10 000. All winners also receive tickets to attend the GBCSA convention, where the top team in each category will present their projects on the innovation stage. Continuing to promote sustainable thinking and learning, the three top participants for each stream also win entry to a nationally-recognised GBCSA Accredited Professional (AP) Candidate Course.

Congratulations to the winners of the 2021 Greenovate Student Awards:

PROPERTY



Tristan Fernandes – University of Cape Town: "A Life Cycle Cost Analysis of Developing High-rise Sustainable, Innovative, Affordable Housing in South Africa".



Aasif Mohamed, Asemahle Mngxuma and Sacha Harper – University of the Witwatersrand: "Experimental process of introducing chicken manure as an additive in Portland Cement to decrease pollution and increase thermal insulation as well as other properties of a concrete mix.



Barret de Willers – University of Cape Town: "Investigating the adoption of green building features, initiatives, and technology in commercial buildings".

ENGINEERING



Karabo Makole – University of Cape Town: "Manufacturing tiles from copper mine tailings using geopolymerization".



Andrea Fiorita – North West University: "Industrial LED Fixture".



Nina Sirba – Stellenbosch University: "Mechanical and durability properties of concrete containing recycled plastic waste (resin8 and pet) as a sand replacement".

AWARDS 2021

GBCSA AWARDS

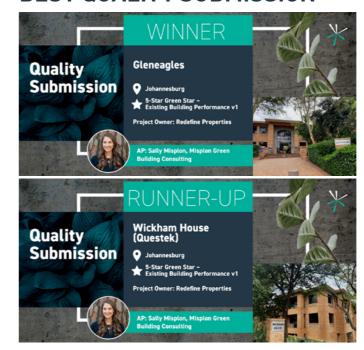
GBCSA announced the winners of our annual Leadership Awards at the closing plenary of the 2021 Convention in Cape Town. The awards are based on submission data gathered during the Green Star certification process, and individuals are nominated by the industry.

"Congratulations to all the projects and individuals who received awards this year. It is an honour to recognise the movers and shakers in our industry," said GBCSA CEO Lisa Reynolds.

HIGHEST RATED BUILDING



BEST QUALITY SUBMISSION



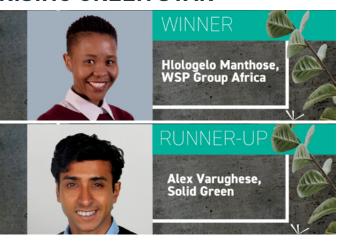
EDGE LEADER



ESTABLISHED GREEN STAR



RISING GREEN STAR



YIPA SUSTAINABLE YOUNG CHANGEMAKER



GBCSA also partnered with the Youth in Property Association (YIPA) to introduce the inaugural YIPA Sustainable Young Changemaker Award, which recognises the exceptional contribution of young people to sustainability in the built environment sector.

Thamsanqa Hoza, is the first recipient of the award. Hoza is a young leader who is passionate about the intersection of infrastructure development, technology, and people, and particularly using this to improve the livelihoods of Africans. He is the founder of Hot Nozzle, a company that manufactures novel water heating technologies. He is an Allan Gray fellow, AIF top ten young innovators, received qualifications from UCT & Cambridge University, and has also received an award from the Queen of England.

CERTIFICATION

Driving market transformation

A record number of buildings were registered and certified in 2021, indicating that the appetite for certified green buildings is growing steadily across the board.

In 2021, GBCSA reached a landmark 740 certifications (since the organisation's inception) by convention in early November. A notable 139 official certifications were added to the South African built environment during the year. We also had 220 registrations in 2021, which is double the previous year and also the highest in the history of GBCSA.

We see this as a reflection of the growing understanding in the market of the value of certified green buildings, how they contribute to investment returns, future-proofing assets, and also quality, healthy spaces.

The business case for building green is growing stronger

Key trends in the green building sector in 2021 revolved around how certified green buildings provide financial benefits over and above conventional buildings. With the emergence of green financial products, certified green buildings have increased access to funding opportunities.

We noticed how the value of certifications feed into ESG (Environmental, Social, Governance) reporting as different elements of green building certifications speak to climate change risks and mitigation, and also translate into environmental risk alleviation for businesses. ESG reporting is a fast-growing field, with over half of asset owners worldwide currently evaluating or implementing ESG in their investment strategy (according to a recent World Green Building Council report published in November 2021 which emphasises the business case for building green).

The WorldGBC report also discusses how third-party sustainability ratings for built assets have provided the property market with benchmarks to compare against their green design, performance, and maintenance targets.

Private sector

We continued to support the commercial office sector in 2021 and were encouraged to see the re-certification of some green buildings by a few commercial REITs. Re-certification (under our Existing Building Performance tool) is required every three years, which speaks to the value that certification has in the commercial sector. Our Energy Water Performance (EWP) tool for offices is still the only benchmark, to our knowledge, which has been normalised for building owners to judge their water and energy performance.

Backing up the business case for green buildings, the latest MSCI Green Building Property Index showed green certified offices outperforming conventional non-certified buildings in terms of lower vacancy rates, lower operating costs, and greater capital value per square metre. Now in its fifth year, the MSCI Index has shown an upwards trend in favour of certified green buildings that we expect to continue.

As commercial took a bit of a backseat in 2021, we were particularly focused on supporting the industrial, retail, residential, and student accommodation sectors, and partnering on portfolio commitments. We had some bulk certifications from these sectors in 2021 through both EDGE and our EBP tool.

We wrapped up the 'My Clean Green Home' competition (a partnership with the City of Cape Town) in early 2021. We're excited to see green loans and mortgages emerging in the residential sector and will be curious to see how these translate into benefits for homeowners in the future.

Public Sector

In 2021 our government engagement increased, along with a greater appetite to invest in the green journey across the public sector. Green legislation has a key role to play in driving green building practices throughout the property industry.

The WorldGBC report noted that demand for verified sustainable construction is increasing globally due to the inclusion of local building and planning policies. We were encouraged to see provincial and local governments take big steps through the creation of green building strategies and policies. All of these activities have a supporting role to play in driving the appetite for green building certifications.

On a city level, the C40 Cities South Africa Building's Programme came to a close in June 2021. While not a formal partner of this programme, GBCSA provided ancillary support and commends the progress and leadership this programme effected. This programme has helped the cities (Joburg, Tshwane, eThekwini, and Cape Town) form foundational green building policies, incentive policies, and bylaws to create an enabling and sustainable environment for building green, in support of the net zero by 2030 (for new buildings) global goal.

New tools in development

Our New Build Version 2 rating tool is now well underway, and we aim to pilot this in early 2023. The new comprehensive tool will include all different new building typologies under one umbrella. This update will redefine what green buildings mean for the South African property market for the future. Topics such as responsible materials procurement. health and wellbeing, resilience, and place-making will now form part of this holistic tool. We will be defining a new 'best practice' entry point as minimum for all green buildings (like the previous 4-star Green Star rating), and also pushing the requirements for 6-star buildings to the next level by ensuring they follow a climate positive pathway. We have received a huge amount of support from volunteers in our AP community, who are helping us make sure this tool is something which truly serves the industry well. We are calling the process to the finalisation of the New Build Version 2 rating tool, Transforming Tomorrow. We truly believe that this tool is an important way that we can work towards transforming the built environment of the future.

Embodied carbon is making its way into net zero conversations, and we will be incorporating it, alongside operational carbon, into our net zero carbon tool. We are working with the WorldGBC to accelerate the uptake of net zero carbon buildings to 100% by 2050.

Our second major tool development is the Growthpoint-sponsored Industrial EBP tool, which will be piloted during 2022. This is likely to spark the customising of our EBP tool for other specific sectors so that it can better serve their sustainable requirements.

We are also extending our local partnership agreement with IFC which means that GBCSA will continue to be the certifier for EDGE Residential in South Africa, as well as being able to certify all other EDGE typologies within Africa as well.

Highlights & looking into the future

GBCSA's hybrid convention was a highlight of 2021, during which we awarded some of the highest-rated and most innovative certified projects of the year. These awards also recognise our top-performing APs during

Going forward we will continue to drive market transformation with certifications, and are excited to see exponential growth in green building certifications over the next few years, along with all the benefits that green buildings will provide to society.

Key research/ thought leadership projects of 2021

The research, thought leadership, and collaborations that result from our advocacy work pave the way for development of new certification tools and policies. We strive to deliver knowledge products that empower and inform decision making around going green. Some highlights of 2021 included:



Research into the impacts of housing location on carbon emissions by Divercity and Arup



Updates to the Cost of Green report



UK PACT: Operationalising EPCs in South Africa in partnership with Carbon Trust and SANEDI

2021 CERTIFICATION STATS

CERTIFICATIONS



TOTAL GREEN STAR NEW BUILD CERTIFICATIONS



TOTAL GREEN STAR EBP CERTIFICATIONS



TOTAL GREEN STAR INTERIORS CERTIFICATIONS



TOTAL EWP CERTIFICATIONS



TOTAL NET ZERO CERTIFICATIONS



TOTAL FINAL EDGE CERTIFICATIONS

"Work on the new build version 2 rating tool began, and the process of transforming tomorrow is well underway, we aim to pilot this in early 2023. The new green star tool will include all different new building typologies under one umbrella. It will redefine what green buildings mean for the South African property market for the future. "

- Georgina Smit, GBCSA Head of Technical



GREEN BUILDING COUNCIL OF SOUTH AFRICA | Integrated Annual Report 2021

YEAR IN REVIEW

TRAINING

GBCSA Academy expands its reach

Building on 2020's successes, our training products and processes were streamlined into the GBCSA Academy in 2021, and we expanded our reach with new training workshops.

In 2020, a complete overhaul of our existing training programmes was undertaken. In 2021 training was consolidated into an online learning space, and rebranded as the GBCSA Academy. The GBCSA Academy is a core business unit of GBCSA and offers training and professional development opportunities for anyone who works in the sustainable built environment sector.

The Covid lockdown in 2020 helped us to fast-track our vision for offering training on demand and online. The significant benefit is that any of our potential training delegates can work through online training material on demand and then attend the next upcoming live webinar workshop, no matter where they are located. The adjusted delivery method has supported greater numbers of training delegates with a much-reduced carbon footprint.

In 2021, we went from strength to strength and saw a record number of delegates trained throughout the year, including the largest number of Accredited Professionals (AP) successfully completing training and becoming certified in GBCSA's history. We also introduced a modified AP training for professional team members in green building projects. We had 110 delegates successfully complete this training in 2021. This has meant that knowledge of the green building principles and rating systems does not lie solely with the AP's or sustainability team within a building project. All professionals can understand how their work plays a role in achieving a green building.

A goal for 2021 was to broaden our training offerings to include a wider segment of property professionals. This led to the launch of our GBCSA Insights Training workshops. In 2021 this training was predominantly in support of property owners and property managers who need to understand the legislated requirements for the display of Energy Performance Certificates (EPCs) by December 2022. We also supported training of prospective SANAS Accredited Inspection bodies. These workshops will carry on throughout 2022.

GBCSA continues to work closely with our members and partners to make additional relevant training interventions available during 2022. We want to truly understand and be able to meet the training and knowledgesharing needs of the sector, in order to support our members' important

Furthermore, our training covers the entire ambit of what is sustainable, what green buildings are, and how these can be achieved, and this is relevant to so many more people than just our existing green building community. We will continue to explore ways in which our training can permeate beyond the sector, and we're excited to see what this next year



STATS FOR 2021







PROFESSIONAL TEAM MEMBERS TRAINED



EDGE EXPERT COURSE ATTENDEES



GBCSA INSIGHTS WORKSHOPS RUN

GBCSA Accredited Professional certification courses are structured with three components:



ONLINE LEARNING

A digital knowledge platform which consists of online lessons and resources that trainees can study at their own pace.



WORKSHOP

A full day live online workshop which allows for face-to-face teaching, networking with other participants, and interactive question and answer sessions. These are run quarterly.



ASSESSMENT

A final assessment which accommodates diverse learning styles, and tests practical knowledge.

ADVANCING & PROMOTING GREEN BUILDING

Flying the green building flag

Our Events and Advocacy work advances the green building knowledge that underpins membership, certifications, and technical work at GBCSA, and raises awareness beyond the sector in South Africa. In person networking opportunities made a comeback alongside a strong online presence. The previous year's key research projects gained momentum, and some important new collaborations were formed.

GBCSA is involved in many knowledge-based activities which promote sustainable building design, construction, and operation. The aim of these activities is to provide solutions, tools, and platforms in partnership with our members and stakeholders. Our technical research also informs the continuing development of our certification systems.

THE HOT TOPICS IN 2021



Resilience



Net zero carbon



Embodied carbon



Circularity



ESG reporting



Green recovery



Just transition



Adaptation

GBCSA EVENTS IN 2021



(A) 32 EVENTS IN 2021

PLAQUE HANDOVERS

RTIFICATIONS PLAQUE HAND OVER EVENTS



PLANET SHAPERS THEMED EVENT





KEY RESEARCH & KNOWLEDGE PROJECTS OF 2021

MY CLEAN GREEN HOME

GBCSA supported the City of Cape Town as part of the 2020 Future Energy Festival with a competition for the creation of a net zero carbon home. A physical model of the winning project was displayed in Greenpoint Park, Cape Town, early in 2021. We hosted an exclusive GBCSA member tour of the house which was well-attended.



DIVERCITY RESEARCH COLLABORATION

A quantitative study on the impact of location selection for low-middle income housing developments on carbon emissions in Johannesburg. South Africa, conducted by Arup in collaboration with Divercity Urban Property Fund and GBCSA. The study is based on the premise that housing will be the most-added typology to our built environment in future, thus shaping our cities. It is therefore designed to support the city, property developers, and built environment professionals to make choices that meet the needs of current and future generations of Johannesburg citizens. Findings showed that urban sprawl, reliance on private car travel, and long car trips should be discouraged through spatial planning.

UK PACT FUNDED PROJECT ON OPERATIONALISING EPCS IN SOUTH AFRICA

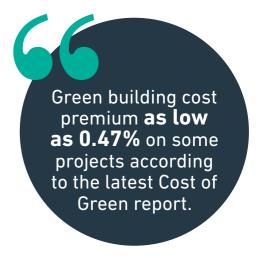
GBCSA's partnership with the Carbon Trust, supported by the UK PACT programme to operationalise Energy Performance Certificates (EPCs) is an important first step towards achieving South Africa's net zero ambitions for existing buildings. A key outcome of the project is to establish a National Building Energy Performance Register (NBEPR) for SANEDI. Longer term, the outcomes focus on increasing EPC uptake among building owners, using NBEPR data to inform policy, training, and skills development around EPCs and the legislation, encouraging improvements in energy efficiency, stimulating the implementation of smart and green technologies in buildings.

WASTE MANAGEMENT PROJECT WITH LIBERTY TWO **DEGREES**

Liberty Two Degrees (L2D) has committed to achieve net zero wasteto-landfill readiness by 2022 with certification in 2023. While the net zero target relates to tenants, this project focused on what tenants give customers at point of sale. GBCSA conducted research to understand of use of problematic single use plastics offered at point of sale to customers in six major retail centres across South Africa with the ultimate goal of eliminating problematic plastics. Additional outcomes were to understand some of the barriers and challenges facing tenants and learn from those who have shifted to alternatives.

COST OF GREEN

The third release of GBCSA's Cost of Green report shows that green building cost premiums (for new 4, 5 and 6-star buildings) continue to reduce over time. While many focus on the median which is 3.15% for certified projects between 2019 and 2021, what is most remarkable is the minimum of 0.47% which shows green adding an almost insignificant additional cost to construction. Furthermore, more than half of projects (of 91 projects sampled) certified between 2019 and 2021 fell below 4%



Public Sector Engagement

GBCSA provides strategic advice and guidance to local, provincial, and national governments, and 2021 saw a notable increase in government engagement as well as a greater appetite to invest in the

Some significant happenings in 2021 included an update to the country's Nationally Determined Contributions (NDCs) - essentially the cornerstone of South Africa's climate change response, to meet the Paris Agreement carbon emissions target for 2030 and 2050, and the National Development Plan 2030 mentioning net-zero buildings as a priority.

Provincial departments are prioritising green programmes and we've seen a desire to do more in the sustainability space. Through the strengthening of our advocacy approach, we managed to overcome misconceptions about green buildings in provinces like Mpumalanga, and as a result helped the province draft its Climate Change Strategy and Just Transition strategy (with other stakeholders like SALGA and GreenCape). This will create an enabling environment for the certification of green buildings, training and expand our sphere of influence in the province. This is a big achievement since the province currently has no certified green buildings. GBCSA further assisted Limpopo Department of Public Works with the alignment of their Green Building Strategy.

On a city level, GBCSA continues to actively work with the cities (Joburg, Tshwane, eThekwini, and Cape Town) which are part of the C40 Cities South Africa Building's Programme. We work with the cities to assist them in developing green building policies, incentive policies, and bylaws to create an enabling and sustainable environment for building green. In 2021, some metro cities launched their Climate Action Plans, which GBCSA assisted with through consultation and development.

Important work in Africa includes GBCSA the WorldGBC African Regional Network (ARN), which supports the growth of existing, new and potential GBC's in Africa; as well as implementation of policy, legislation, projects and programmes (planning and design to construction) across the continent. The WorldGBC ARN linked up with the African Union to support the drive towards a smart and sustainable built environment for everyone, everywhere. Lastly, the WorldGBC ARN worked towards the #BuildingToCOP26 campaign called 'Build Better Now', and as a global organisation we contributed to the narratives about the future of climate resilient societies, cities, and buildings.

NET ZERO CARBON

INDUSTRIAL BUILDINGS

Of all typologies, industrial buildings tend to have the shortest payback periods for implementing sustainable initiatives. Thus the business case for building green industrial buildings is strong, and the demand for green warehouse space is growing. With typically massive floor areas of warehousing space needing to be cooled, or kept at consistent temperatures, there are huge opportunities to implement sustainable renewable energy solutions including rooftop solar PV. Water harvesting, saving and reuse systems are also relatively easy to implement in industrial buildings. Green industrial buildings set an example for the customers they serve – often large supermarket chains, or commercial operations. This in turn affects the sustainability of supply chains.

Two large new build industrial projects achieved certifications in 2021. These are some of the largest industrial projects to receive certifications to date.

CITY INDUSTRIAL PROPERTY - BELLVILLE FACILITY



4-Star Green Star Custom Industrial EBP & Net Zero Carbon — Level 1 (modelled)







BUILDING FUNCTION

Warehousing and offices



LOCATION

Bellville, Cape Town



DATE CERTIFIED

September 2021





PROJECT TEAM

ARCHITECT: Lika Architects

ELECTRICAL ENGINEER: JW & Associates Electrical Engineers

FIRE ENGINEER: National Fire & Safety

MECHANICAL ENGINEER: Myelo Air

QUANTITY SURVEYORS: Quantic Consulting

STRUCTURAL ENGINEERS: Egmont Furstenburg

SUSTAINABLE DESIGN REVIEW: Ecolution

Consulting

SUSTAINABLE BUILDING CONSULTANT:

Ecolution Consulting

WET SERVICES: Basil Adams

MAIN CONTRACTOR: Tyris Construction



IN2FOOD FACILITY



4-Star Green Star Custom Industrial Design & Net Zero Carbon – Level 1 (modelled)







BUILDING FUNCTION

Food preparation facility with offices, storage, and amenities



LOCATION

Kempton Park, Gauteng



DATE CERTIFIED

November 2021



PROJECT TEAM

ARCHITECT: ESArchitects

ELECTRICAL ENGINEER: CP Engineering

FIRE ENGINEER: Adengo Fire

MECHANICAL ENGINEER: Meccanitek

QUANTITY SURVEYORS: Quanticost QS

STRUCTURAL ENGINEERS: DG Consult

WET SERVICES: Sutherland

MAIN CONTRACTOR & PROJECT MANAGER:

Enzacon

ENVIRONMENTAL CONSULTANT: SEF and

Ecology International

FACILITIES MANAGEMENT: In2food

BMS SYSTEMS PROFESSIONAL: BB Energy

GREEN INTERIORS

FOR HEALTH AND WELLBEING

DISCOVERY HEAD OFFICE INTERIOR

Discovery's head office building in Sandton is centred around occupants' wellbeing and incorporates various sustainability strategies for energy and water efficiency, occupants' comfort, responsible use of materials, and limited emissions.

Designed by Boogertman + Partners, the sculpturally iconic building previously achieved a 6-Star Green Star As-built rating and Discovery took occupation in 2018. It is only fitting that the building should have a world class interior to match Discovery's core values, ambition and purpose.

An Interiors rating can only be conducted after occupation, measures the use of the building over a period of time, and is indicative that the building is functioning as intended. Interior designers, Paragon Interface and sustainability consultants Zutari worked together closely to achieve a 5-Star Interiors rating in 2021.

This project is significant because at 147 000m², it is one of the largest in South Africa to have ever been certified. The building has a 6-Star Green Star Office Design and As-Built rating, and now also exemplifies world class green healthy interiors.

















PROJECT TEAM

ARCHITECT: Boogertman+Partners

INTERIOR ARCHITECT: Paragon Interface

ELECTRICAL ENGINEER: Conscious Consulting & Classen Auret Inc

FIRE ENGINEER TWCE LIFT SPECIALIST:

Solutions for Elevation S4E

MECHANICAL ENGINEER: Zutari

QUANTITY SURVEYORS: RLB Pentad

STRUCTURAL ENGINEERS: Sotiralis Consulting

WET SERVICES: Sutherland Engineers

MAIN CONTRACTOR: WBHO & Tiber JV

PROJECT MANAGER: Morta

FACILITIES MANAGEMENT: Discovery

ACOUSTIC CONSULTANT: Sound Research

Laboratory

COMMISSIONING AGENT: Shared Energy

Management



INNOVATIVE SUSTAINABLE HIGHLIGHTS



The tenant fit-out is designed to provide extensive external views, activity-based workspaces, areas with flexible set-ups and to promote physical activity for occupants.



A large number of the newly installed materials and furniture, assemblies, flooring and wall coverings have third party ecolabels and certificates.



All occupants and visitors have access to energy and water consumption data by means of a display screen installed in the public area of the building.



Various acoustic interventions were implemented to ensure that the building meets the acoustic comfort requirements.



Majority of the appliances and tenant equipment in the fit-out are rated energy efficient.



Video conferencing solutions are provided throughout the meeting rooms to limit unnecessary travel.

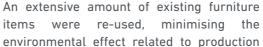


Paints, adhesives, sealants, and carpets throughout the fit-out have low VOC emissions.

and transportation of new furniture.



The building has a centralised waste recycling storage facility for sorting and collecting of operational waste.



All building services are comprehensively commissioned and tuned to achieve optimal performance.







A MAJOR

GREEN REFURB

BALWIN HQ

The Balwin HQ development is a substantial refurbishment of the existing iconic Creative Council building located along the M1 highway, and adjacent to Melrose Arch in Birnam, Gauteng. The building is made up of four basement levels and five office floors.

The lettable area of the existing building was increased from 2200m² to more than 6000m² without having to strengthen the existing foundations. Designed by Paragon Architects, the refurbishment saw the removal of three cone-shaped elements and the addition of two new floors under the elevated concrete box. On the roof level a steel structure was added as a third floor to the building. The steel roof will house a solar photovoltaic installation and the roof space will accommodate a gym, meeting areas, and a canteen.

This project is significant because it is one of the first 6-Star major refurbishments in South Africa. The project scored highest in the innovation, energy, transport, and management categories.



CERTIFICATION

6-Star Green Star Office Design v1.1, targeting As-built & Net Zero Carbon and Waste







LOCATION

Corlett Drive, Birnam, Gauteng



DATE CERTIFIED

September 2021



PROJECT TEAM

ARCHITECT: Paragon

ELECTRICAL ENGINEER: Sutherland

FIRE ENGINEER: Sutherland

LIFT SPECIALIST: Kone

MECHANICAL ENGINEER: Sutherland

QUANTITY SURVEYORS: JMHT Quantity

Surveyors

STRUCTURAL ENGINEERS: Sotiralis Engineers

WET SERVICES: Sutherland

MAIN CONTRACTOR & PROJECT MANAGER:

Onsite Solutions

ENVIRONMENTAL CONSULTANT: LEAP

INTERIOR DESIGNER: Paragon Interface

COMMISSIONING AGENT: Cardinal

Commissioning Services

RENEWABLES: RWP





INNOVATIVE SUSTAINABLE HIGHLIGHTS



The building features FSC-certified vertical timber fins which provide shading for the façade.



Energy and water sub-meters are provided for all substantive energy and water uses in the building.



Learning resources will provide information and teach building occupants how to best use a Green Star building.



100% of the building structure was reused, while materials that are typically replaced during a refurbishment like mechanical ducts, fire water piping, balustrades and sanitary fittings and fixtures were reused in the new building.



GREEN BUILDING COUNCIL OF SOUTH AFRICA | Integrated Annual Report 2021

GREENING HOMES

IN SOUTH AFRICA

URBIKA LIFESTYLE ESTATE, PARKDENE, EKURHULENI

Urbika, a portmanteau of the words 'urban' and 'Afrika', is a novel development that showcases the best of contemporary design and cloud-based tenant and facilities management systems. A key feature of the estate is the intentional and intuitive urban design and landscaping. Urbika is an EDGE-certified estate purposefully designed for efficiency in energy, water, and embodied energy in the choice of construction materials.

The estate is conveniently situated in Parkdene, Boksburg, on a main road that links residents to major hubs such as East Rand Mall, OR Tambo International Airport and the N17/ N12 Freeways. The estate is planned in three phases, Urbika Apartments, Urbika Lake Village, and Urbika Parks. The first phase, Urbika Apartments, is a close-knit community of 325 rental apartments that have been carefully designed to make the most of the space, with beautiful, high-quality finishes.

Urbika boasts a photovoltaic solar system which provides 30% of the estate's energy. It uses no batteries, as excess energy is stored as hot water in centralised boilers, which provide immediate hot water to units thanks to a 'ring-system design' which negates the need to run the water for 5 to 30 seconds as is usually the case with traditional geyser installations. The gardens are irrigated via a grey water reticulation system, using little to no municipal water. Four of the apartment blocks feed their grey water into a natural filtration system tied into the attenuation pond where storm water from the estate is harvested.





DEVELOPER Similian Properties





LOCATION Parkdene. Ekurhuleni



DATE CERTIFIED 2021



PREDICTED SAVINGS OF EDGE **CERTIFICATION**



25% WATER

MATERIAL

INNOVATIVE SUSTAINABLE HIGHLIGHTS



ENERGY

- Efficient window to wall ratio.
- Efficient heat pumps for domestic hot water
- Solar PV



WATER

- Low flow kitchen and bathroom taps
- Dual flush toilets
- Low flow showerheads



MATERIALS

- Hollow pre-cast concrete slabs
- Light-weight roofing materials
- Cored bricks for internal and external walls



BUILDINGS CERTIFIED

IN 2021

PROJECT NAME	RATING ACHIEVED		PROJECT APPLICANT
Discovery Sandton Interiors	Interiors v1	5 Star	Discovery
Port Shepstone New Office Accommodation on ERF 1884	Office v1.1	4 Star	Zatovect
140 West Street	Office v1	4 Star	Zenprop
Park Square	Office v1.1	5 Star	Nedbank
Santam Head Office Refurbishment	Office v1.1	4 star	Ingenuity Property Investment
NERSA KULAWULA HOUSE REFURBISHMENT	Office v1.1	4 Star	National Energy Regulator (NERSA)
In2food Group	Custom Industrial	4 Star	In2food Group
Sable Park	Office v1.1	5 Star	Rabie Property Group
Gems Menlyn Maine Orion	Office v1.1	5 Star	Menlyn Maine Investment Holdings
The ConneXXion	Interiors v1	4 Star	Exxaro
Rewardsco Block B	Office v1.1	5 Star	Zenprop
Mastercard Lagos Office	Interiors v1	4 Star	Mastercard
Sable Corner	Office v1.1	4 Star	Rabie Property Group
Biomedical Research Facility	Public & Education Buildings v1	4 Star	Stellenbosch University
Westend Building D	Office v1.1	4 Star	Abland
Sandton City Precinct	Existing Building Performance v1	6 Star	Liberty two Degrees
Nelson Mandela Square	Existing Building Performance v1	5 Star	Liberty two Degrees Liberty two Degrees
Eastgate	Existing Building Performance v1	5 Star	Liberty two Degrees
Liberty Midlands Mall	Existing Building Performance v1	5 Star	Liberty two Degrees
Botshabelo Mall	Existing Building Performance v1	4 Star	Liberty two Degrees
Promenade Mall	Existing Building Performance v1		, ,
Nicol Grove - Old Mutual (DQ 3)		5 Star	Liberty two Degrees
	Existing Building Performance v1	4 Star	Investee Property Fund
Nicol Grove - Lexmark (DQ 4)	Existing Building Performance v1	4 Star	Investee Property Fund
Investec Pretoria	Existing Building Performance v1	4 Star	Investec Property Fund
1 and 1A Protea Place	Existing Building Performance v1	4 Star	Investec Property Fund
ACSA WPO Phase 1	Office v1.1	4 Star	ACSA - Airports Company South Africa
Ext 124 Waterfall - Courtyard Hotel	Custom Hotel	4 Star	Attacq
OXFORD PARKS- LIFE	Office v1.1	5 Star	Oxford Parks Intaprop Property Development and Investment
Oxford Parks- Building 3	Office v1.1	5 Star	Oxford Parks Intaprop Property Development and Investment
Old Cape Quarter Development	Multi Unit Residential Design - v1	4 Star	Tower Property Fund
Greenparks Lifestyle Centre	Public & Education Buildings v1	6 Star	Balwin Properties
Menlyn Maine Park Lane West	Office v1.1	4 Star	Menlyn Maine Investment Holdings
Water Corporate Campus Building 5	Office v1.1	4 Star	Zenprop
Golf Park	Existing Building Performance v1	4 Star	Growthpoint
Honeywell	Existing Building Performance v1	4 Star	Growthpoint
33 Bree & 30 Waterkant	Existing Building Performance v1	4 Star	Growthpoint
The Estuaries	Existing Building Performance v1	4 Star	Growthpoint
The Oval Newlands	Existing Building Performance v1	4 Star	Growthpoint
De Zicht Lifestyle Centre	Net Zero - Carbon	Carbon	Balwin Properties
Ballito Lifestyle Centre	Net Zero - Carbon	Carbon	Balwin Properties
Greenparks Lifestyle Centre	Net Zero - Carbon	Carbon	Balwin Properties
Balwin De Zicht Lifestyle Centre	Public & Education Buildings v1	6 Star	Balwin Properties
Balwin The Huntsman Lifestyle Centre	Public & Education Buildings v1	6 Star	Balwin Properties
UCT School of Education	Public & Education Buildings v1	4 Star	University of Cape Town
Ballito Hills Lifestyle Centre	Public & Education Buildings v1	6 Star	Balwin Properties
SANBS Mount Edgecombe	'	5 Star	South African National Blood Service
	Public & Education Buildings v1		Abland
Irene Link - Building B	Office v1.1	4 Star	
Oxford Parks Building 5 (changed to 6 Parks Boulevard)	Office v1.1	4 Star	Oxford Parks
Greenlee Lifestyle Centre	Public & Education Buildings v1	6 Star	Balwin Properties
Prime Plaza 2	Office v1.1	5 Star	PrimeTime Property Holdings
Corporate Park	Energy Water Performance v1	EWP	Vodacom
Renaissance Park	Energy Water Performance v1	EWP	Vodacom
8 Merchant Place	Public & Education Buildings v1	4 Star	Firstrand Bank Llmited
2 Fricker Road	Existing Building Performance v1	5 Star	Redefine Properties
Duncan Street	Existing Building Performance v1	4 Star	Redefine Properties
Thabakgolo	Existing Building Performance v1	3 Star	Redefine Properties
18 The Boulevard (Re-cert)	Existing Building Performance v1	4 Star	Redefine Properties
90 Grayston	Existing Building Performance v1	4 Star	Redefine Properties
The Avenues	Existing Building Performance v1	4 Star	Redefine Properties
Observatory Business Park (Re-cert)	Existing Building Performance v1	4 Star	Redefine Properties
Wembley 2 (Re-cert)	Existing Building Performance v1	4 Star	Redefine Properties
The Towers (Re-cert)	Existing Building Performance v1	4 Star	Redefine Properties
CIB Insurance	Existing Building Performance v1	4 Star	Redefine Properties
Centurion Gate (Re-cert)	Existing Building Performance v1	4 Star	Redefine Properties
Warich Close Office Park	Existing Building Performance v1	5 Star	Redefine Properties
Kernick House (Re-cert)	Existing Building Performance v1	4 Star	Redefine Properties
Yellowwood House (Re-cert)	Existing Building Performance v1	4 Star	Redefine Properties
Cedarwood House (Re-cert)	Existing Building Performance v1	4 Star	Redefine Properties
Kimberley-Clark House	Existing Building Performance v1	4 Star	Redefine Properties
Convention Centre			Redefine Properties
	Existing Building Performance v1	4 Star	
Hillcrest Corner	Existing Building Performance v1	4 Star	Redefine Properties
Silver Stream: Building 3 Sasfin Head Office Building	Existing Building Performance v1	4 Star	Redefine Properties
	Existing Building Performance v1	3 Star	Redefine Properties

PROJECT NAME	RATING ACHIEVED		PROJECT APPLICANT
Thornhill Office Park Building 20 (updated)	Existing Building Performance v1	4 Star	Redefine Properties
Pybus Road	Existing Building Performance v1	4 Star	Redefine Properties
lampton Office Park	Existing Building Performance v1	4 Star	Redefine Properties
Rosebank Link	Existing Building Performance v1	4 Star	Redefine Properties
Riverside Office Park	Existing Building Performance v1	4 Star	Redefine Properties
15 West Street	Existing Building Performance v1	3 Star	Redefine Properties
Gleneagles	Existing Building Performance v1	5 Star	Redefine Properties
Vickham House (Questek)	Existing Building Performance v1	5 Star	Redefine Properties
Abcon House	Existing Building Performance v1	4 Star	Redefine Properties
31 Jorissen Street	Existing Building Performance v1	3 Star	Redefine Properties
Oouglas Roberts Centre	Existing Building Performance v1	3 Star	Redefine Properties
Nedbank Lakeview	Existing Building Performance v1	4 Star	Redefine Properties
Knowledge Park II	Existing Building Performance v1	4 Star	Redefine Properties
The Old Match Factory	Existing Building Performance v1	3 Star	Redefine Properties
Bree Street	Existing Building Performance v1	4 Star	Redefine Properties
Thornhill Office Park: Building 2	Existing Building Performance v1	4 Star	Redefine Properties
Thornhill Office Park Building 5	Existing Building Performance v1	4 Star	Redefine Properties
1006 on the Lake	Existing Building Performance v1	4 Star	Redefine Properties
Brookfield Office Park	Existing Building Performance v1	4 Star	Growthpoint
Rosebank Office Park	Existing Building Performance v1	4 Star	Growthpoint
Waterfall Park: Phase 1	Existing Building Performance v1	4 Star	Growthpoint
Freestone Office Park	Existing Building Performance v1	4 Star	Growthpoint
19 Impala Road	Energy Water Performance v1	EWP	Growthpoint ABQ
23 Impala Road	Energy Water Performance v1	EWP	Growthpoint ABQ
15 Sloane Street (Ogilvy)	Energy Water Performance v1	EWP	Growthpoint Properties
Sandown Erf 169	Energy Water Performance v1	EWP	Growthpoint Properties
Pharos House	Existing Building Performance v1	4 Star	Growthpoint Properties
34 & 36 Fricker Road	Energy Water Performance v1	EWP	Growthpoint Properties
Fricker Road	Energy Water Performance v1	EWP	Growthpoint Properties
3 Rivonia Road	Energy Water Performance v1	EWP	Growthpoint Properties
The District	Energy Water Performance v1	EWP	Growthpoint Properties
Sovereign Quay	Energy Water Performance v1	EWP	Growthpoint Properties
11 Adderley	Energy Water Performance v1	EWP	Growthpoint Properties
Paramount Place	Energy Water Performance v1	EWP	Growthpoint Properties
Fynbos Lifestyle Centre	Public & Education Buildings v1	6 Star	Balwin Properties
City Industrial Property Fund – City Logistics Bellville	Net Zero - Carbon	NET	Adzam Trading 176 T/A Industrial Property Fund
Greenlee Lifestyle Centre	Net Zero - Carbon	Carbon Level 1	Balwin Properties
Fynbos Lifestyle Centre	Net Zero - Carbon	Carbon Level 1	Balwin Properties
The Huntsman Lifestyle Centre	Net Zero - Carbon	Carbon Level 1	Balwin Properties
Project Windsor Head Office Development	Office v1.1	4 Star	Stanbic IBTC Pension Managers Limited (SIPML)
Balwin Head Office	Office v1.1	6 Star	Balwin Properties
incoln House	Energy Water Performance v1	EWP	Emira
Lone Creek - Block B	Energy Water Performance v1	EWP	Emira
Lone Creek - Block C	Energy Water Performance v1	EWP	Emira
Greencreek Lifestyle Centre	Public & Education Buildings v1	6 Star	Balwin Properties
Strathavon 11	Energy Water Performance v1	EWP	Growthpoint Properties
The Oval - Bryanston	Energy Water Performance v1	EWP	Growthpoint Properties
Belmont Office Park	Energy Water Performance v1	EWP EWP	Growthpoint Properties
Peter Place Office Park	Energy Water Performance v1		Growthpoint Properties
Noodmead Estate	Energy Water Performance v1	EWP 4 Stor	Growthpoint Properties
Boundary Place	Existing Building Performance v1	4 Star	Growthpoint Properties
2929 on Nicol	Existing Building Performance v1	5 Star	Investec Property Fund
28 Fricker Road	Existing Building Performance v1 Energy Water Performance v1	4 Star EWP	Acucap Investments Growth point
The Terraces		_	Growthpoint Proporties Limited
200 on Main	Energy Water Performance v1	EWP Carbon	Growthpoint Properties Limited
Greencreek Lifestyle Centre	Net Zero - Carbon	Level 1	Balwin Properties
N2 F00D	Net Positive - Carbon	Carbon Level 1	In2food Group
Midrand Gautrain (Grand Central)	EDGE Final certification		International Housing Solutions (RF)
Celebration Retirement Village	EDGE Final certification		Central Development Property Group ZOTEC Developmen
Kingswood	EDGE Final certification		Renico Construction
Devland Phase 2	EDGE Final certification		International Housing Solutions (RF)
Parkdene (Urbika - Section 1)	EDGE Final certification		Real Living Spaces (RF)
Bogmore Unit A, B, C (Ballito NEW NAME)	EDGE Final certification		International Housing Solutions / AVOCA
Erand Gardens	EDGE Final certification		True North Developments
Brentwood Park (Norton Park)	EDGE Final certification		International Housing Solutions
Ihlathi	EDGE Final certification		International Housing Solutions
		_	<u> </u>



"We have achieved a record surplus of R6.1 million, which has cleared the accumulated deficit. As a result, GBCSA is in a solid financial position for growth in 2022 and beyond."

- Levinia Palmer, GBCSA Head of Finance and Operations.



STATEMENT OF

FINANCIAL POSITION

FIGURES IN RAND	2021	2020
Assets		
Non Current Assets		
Property, plant and equipment	175 714	53 133
Intangible assets	122 014	-
Deposits	-	31,664
	297 728	84 797
Current Assets		
Trade and other receivables	1 641 807	527 318
Cash and cash equivalents	21 769 404	14 604 691
	23 411 211	15 132 009
Total Assets	23 708 939	15 216 806
Equity and Liabilities		
Equity		
Accumulated surplus (deficit)	4 938 034	(1 192 567)
Liabilities		
Current Liabilities		
Trade and other payables	3 621 436	3 681 248
Income received in advance	2 017 191	2 202 123
Deferred income	12 082 278	10 046 002
Provisions	1 050 000	480 000
	18 770 905	16 409 373
Total Equity and Liabilities	23 708 939	15 216 806

STATEMENT OF

COMPREHENSIVE INCOME

FIGURES IN RAND	2021	2020
Revenue	29 165 567	23 341 069
Other operating income	1 393 725	767 349
Other operating losses	-	(168,893)
Movement in credit loss allowances	(85 343)	9 236
Other operating expenses	(24 844 300)	(21 320 387)
Operating profit	5 614 209	2 628 374
Investment income	501 449	390 481
Finance costs	(498)	(97 135)
Profit for the year	6 130 601	2 921 720
Other comprehensive income	-	-
Total comprehensive income for the year	6 130 601	2 921 720



STATEMENT OF

CHANGES IN EQUITY

FIGURES IN RAND	ACCUMULATED SURPLUS (DEFICIT)	TOTAL EQUITY
Balance at 01 January 2020	(4 114 287)	(4 114 287
Profit for the year	2 921 720	2 921 720
Total comprehensive income for the year	2 921 720	2 921 720
Balance at 1 January 2021	(1 192 567)	(1 192 567
Profit for the year	6 130 601	6 130 60
Total comprehensive income for the year	6 130 601	6 130 601
Balance at 31 December 2021	4 938 034	4 938 034



STATEMENT OF CASH FLOWS

Total cash at end of the year

FIGURES IN RAND	2021	2020
Cash flows from operating activities		
Cash generated from operations	6 925 573	4 162 88
Interest income received	501 449	390 48
Finance costs paid	(498)	(1 191
Net cash from operating activities	7 426 524	4 552 17
Cash flows from (used in) investing activities		
Purchase of property, plant and equipment	(167 985)	(28 290
Proceeds on sale of property, plant and equipment	10	94 21
Purchase of intangible assets	(125 500)	
Decrease in deposits	31 664	325 11
Net cash from (used in) investing activities	(261 811)	391 038
Cash flows used in financing activities		
Payment on lease liability	-	(997 587
Total cash movement for the year	7 164 713	3 945 62
Cash at the beginning of the year	14 604 691	10 659 06

21 769 404

14 604 691

BOARD OF

DIRECTORS



Giles Pendleton Chair (non-executive) (Resigned 06/12/2021)



Brian Unsted
Deputy chair
(non-executive)
(Appointed Board
Chair 06/12/2021)



Ilse Swanepoel Immediate Past Chair (non-executive)



Kevin James Chair of Governance Committee (nonexecutive)



Nkosinathi Manzana (non-executive)



Anthony Stroebel (non-executive)



Mfundo Xulu (non-executive)



Cormac Cullinan (non-executive)



Andre Theys (non-executive)



Engelbert Binedell (non-executive)



Darryl Mayers (non-executive)



Michele Bekkens (non-executive)



Gavin Kode (non-executive)



Manfred Braune (non-executive)



Mokena Makeka (non-executive)



Joanne Solomon (non-executive)



Shameela Soobramoney (non-executive)



Steve Brookes (non-executive)



Phillip Barttram (non-executive)



Anelisa Keke (non-executive)



Lisa Reynolds Executive Director and CEO



Jaci HarrisonCompany Secretary

Executive Committee

- GILES PENDLETON

 Board Chair (Resigned 06/12/2021)
- BRIAN UNSTED
 Deputy Board Chair Appointed
 Board Chair 06/12/2021)
- KEVIN JAMES
 Chair of Governance, Audit and
 Social & Ethics Committee
- LISA REYNOLDS
 CEO and Executive Director

Remuneration Committee

- GILES PENDLETON
- Board Chair (resigned 06/12/2021)
- BRIAN UNSTED
 Deputy Board Chair
 (Appointed Board Chair 06/12/2021)
- KEVIN JAMES
- Chair of Governance, Audit and Social & Ethics Committee
- ILSE SWANEPOEL
 Immediate Past Chair
- MELANIE TROLLIP
- LISA REYNOLDS

CEO and Executive Director

tee Governance, Audit And Social & Ethics Committee

- GILES PENDLETON
 - Board Chair (resigned 06/12/2021)
- BRIAN UNSTED
 - Deputy Board Chair
 (Appointed Board Chair 06/12/2021)
- KEVIN JAMES
- Chair of Governance, Audit and Social & Ethics Committee
- MANFRED BRAUNE
- GAVIN KODE
- ANDRE THEYS
- GARETH PIKE
 External Consultant
- LISA REYNOLDS
 CEO and Executive Director

STAFF

EMPLOYEE NAME & SURNAME	EMPLOYMENT Date	POSITION
Shaundre Abrahams	15/03/2011	Marketing Coordinator
Jacqueline Harrison	01/09/2012	Company Secretary & Human Resource Manager
Thumeka Tshanyela	01/11/2012	Training Coordinator
Jo Anderson	01/06/2013	Research & Knowledge Management Coordinator
Pardon Mutasa	01/10/2013	Managing Executive: Finance and Operations - Resigned in February 2021
Cassim Mansoor	01/03/2014	Finance & IT Officer
Jennifer Lombard	06/06/2014	Technical Manager
Babalwa Tshandu	15/06/2016	HR Generalist
Michelle De Nysschen	11/05/2017	Business Development & Key Accounts Specialist
Kirwan Daniels	15/05/2017	Debtors Finance Officer
Ann-Mari Malan	01/04/2018	Technical Specialist (EDGE)
Georgina Smit	01/02/2019	Head of Technical
Levinia Roslyn Palmer	01/03/2019	Finance & Operations Manager
Lisa Kay Reynolds	01/06/2020	CEO
Christy Moiya Borman	01/07/2020	Head of Marketing, Comms & Membership
Jean Rodel	01/07/2020	Head of GBCSA Academy
Mthobisi Masinga	20/07/2020	Sustainability, City Resilience & Stakeholder Business Relations
Emma Walker	01/11/2020	Senior Technical Coordinator
Anja Thompson	01/04/2021	Events Project Manager
Mischa Tessendorf	01/06/2021	Business Development Specialist
Manti Seleka	08/02/2021	Research & Knowledge Management Intern
Samuel Fraser	10/05/2021	Data Intern



GOVERNANCE

B-BBEE CERTIFICATE

Independent Credible Assurance



VERIFICATION SERVICES

AQRate (Pty) Ltd (Reg no. 2002/001364/07) | Unit OL012 Ground Floor Oak Leaf Terrace, Old Oak Office Park, 1 Edmar Street, Bellville, 7530 | Tel: 086 12 77 283 | www.aQrate.co.za

Tel: 086 12 77 283 | www.aQrate.co.za

Company Name The Green Building Council of South Africa NPC

Trade Name The Green Building Council of South Africa

Location Ground Floor, Birkdale House 1, River Park

Gloucester Road, Mowbray Cape Town, 7700

 Registration Number
 2007/029477/08

 VAT Number
 4930243151

 Certificate Number
 GBC009919-REV9

B-BBEE SCORE PER ELEMENT

 Management Control
 13.08

 Skills Development
 30.00

 Enterprise and Supplier Development
 30.00

 Socio Economic Development
 15.00

 Additional Y.E.S points
 0.00

 Total Score
 88.08

B-BBEE STATUS

Final B-BBEE Status
Level Four Contributor
Final B-BBEE Recognition Level
100%
Empowering Supplier
Yes
Discounting Principle Applied to final level
Participation in Y.E.S and tier achieved
N/A

Level & Points from Y.E.S. Initiative No additional levels or points

Exclusion Principle applied to Ownership N/A

Modified Flow-Through Principle Applied N/A

Black Ownership Not applicable

51% Black Owned N/A
30% Black Women Owned N/A
51% Black Designated Group Supplier N/A
Black Youth

 Black Youth
 N/A

 Black Disabled People
 N/A

 Black Unemployed People
 N/A

 Black People living in rural/under-developed areas
 N/A

 Black Military Veterans
 N/A

rement Period Financial Year Ended 31 December 2021

Applicable Scorecard Amended Codes Specialised QSE Scorecard

Applicable BEE Code Gazetted Codes 38766

Issue Date 25 July 2022
Original Issue Date N/A

Expiry Date 24 July 2023

William Smith

William Smith Technical Signatory

ACRate has assessed and verified the relevant B-BBEE Elements of the above mentioned entity, to provide an independent and impartial option on the B-BBEE Status of the entity, based on the Broad-Based BEE Codes of Good Practice (Codes 600-500), as amended by Gazzette No. 38928 (11 October 2013), Gazette No. 38766 (6 May 2015), Gazette No. 41866 (28 August 2018), and Gazette No. 42496 (31 May 2010), as Company 2010, and Code 10 May 2010 (19 August 2018), and Gazette No. 42496 (31 May 2010), and Code 10 May 2010 (19 August 2018), and Gazette No. 42496 (31 May 2010), and Code 10 May 2010 (19 August 2018).



After the resilience shown in 2020, GBCSA stayed agile and flexible in 2021, proving that we are a robust and well managed organisation. The appetite for sustainability and the commitment to building green have grown in 2021 and the GBCSA will stand firm in its commitment to climate resilient communities and to transform the built environment for people and planet to thrive. GREEN BUILDING CONVENTION 2021

.0 GREEN BUILDING COUNCIL OF SOUTH AFRICA | Integrated Annual Report 2021



021 486 7900 • 08610 42272 info@gbcsa.org.za • www.gbcsa.org.za