

FEBRUARY 2024 ISSUE 001

#### THE GREEN ECONOMY

Meet the Companies impacting the green economy through innovative builds

#### **FUTURE SUMMIT**

What does GBCN have planned for 2024?

#### **EDUCATION**

Chart a future in Green Building Education

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### MESSAGE FROM THE PRESIDENT

DANJUMA WANIKO , Chartered Surveyor | Chartered Environmentalist | Green Star SA AP

#### WELCOME TO ECOPULSE

Dear Members, Partners & Stakeholders.

I'm thrilled to welcome you to the very first edition of EcoPulse, GBCN's monthly digest! At Green Building Council Nigeria, staying connected is so important to us. We believe that each of you plays a crucial role in our journey towards a more sustainable future. That's why this newsletter is so important to us! It's our way of staying in touch, sharing ideas, growing together, and sustaining the momentum for change. Think of it as our regular meet-up, brought directly to your inbox! So, what do you have to look forward to? Every month we'll deliver you a digest packed with the latest from the world of green building and urban sustainability. You'll learn about technological innovations and breakthrough materials and building methods from Nigeria and across the We'll publish thought leadership pieces - not just from experts, but also from everyday sustainability aficionados like you and I - with insights, stories, ideas and discoveries that can spark change and advance the movement. Moreover, we believe in celebrating our community and using our successes to inspire one another.

Therefore, we'll feature member profiles and standout products and projects, spotlighting your incredible work and contributions to the green ecosphere. And, of course, we'll share updates on upcoming GBCN events, initiatives, and projects, giving you a first-hand look at what we're up to. Our goal is to ignite discussion, catalyze innovation, and provide you with information and resources you need to drive meaningful change. So, keep an eye on your inboxes and thanks for being a part of our journey. So, let's keep the dialogue open, share our successes, and inspire each other to reach new heights in green building. Looking forward to our ongoing conversations!

Your partner-in-green building, Danjuma



### **EDITOR'S NOTE**

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#### FIRST AND FOREMOST...

As the first Edition of the Green Building Council's EcoPulse launches, I can't help but feel proud of all that the GBCN has achieved in a very short time.

I joined the GBCN years ago when efforts to establish it on the national scene eventually petered out.

In the last two years under the stewardship of Danjuma Waniko and some very dedicated professionals on the GBCN board, GBCN has achieved National and Global status with the application for World Green Building Council membership on the horizon.

EcoPulse is a production of the GBCN's Communication and Media Team. A group of sixteen volunteers committed to the advancement of the GBCN through contribution of time and skills. The GBCN CMTis committed to our mission of promoting green building practices in Nigeria.



The team will play a crucial role in advancing our strategic objectives, designed to enhance the effectiveness, reach, and impact of the GBCN message.

As this is our first edition we ask that you join us on this journey by giving us constructive feedback; (there is room for improvement with every edition)
We aim to be the go to newsletter feeling the "Pulse" of the Green building Industry in Nigeria.

#### TOP NEWS OF THE MONTH

- Look out for the next GBCN Knowledge series to be held in March! - Pg 9
- Find out how you can gain a Green
   Education in Nigeria and beyond Pg 6
- The Future Cities Summit 2024, make your plans now to attend - Coming in July

Looking Forward to a great year for Green Building in Nigeria. Regards



Lape Odekunle Saleh, Edge Expert, Graphisoft BIM manager, MNIA, ARCON, GBCN



#### **MEMBER OF THE MONTH:**

Ayodeji Emmanuel Oke Member for 2 years

Ayodeji Emmanuel Oke is an author and lecturer with several years of teaching and research involvement in higher institutions of learning across the world. Find out more about him in our spotlight feauture on page 8.

#### **CONTRIBUTORS**

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- AKINLAMI TIMILEHIN
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- LAPE SALEH



# MAD HOUSE BY TIKERA

This Month's Green Build Feature is MAD house by Tikera located in University of Lagos, Nigeria.

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DANIEL PELUMI GIDEON

As described, madhouse, that is, MAD (Make a Difference) house, is a "Creative Incubator, Accelerator and Research Institute dedicated to knowledge sharing, shaping, and sharpening, essential components for growth."

The building concept is quite intriguing as it features Sustainability through the use of recycled materials i.e. shipping containers. The creative and critical thinking truly reflects the beauty of sustainable architecture. It is quite obvious that the designers were passionate about futuristic, sustainable and thoughtful design which would positively impact the environment, not just in building form but also in use.

The "MAD House", disruptive in both its connotation and architecture, stands tall with a rustic exterior look and an unconventional, aesthetically pleasing and yet functional interior, all made from about twenty six (26) containers intricately interconnected to create myriads of portals into the world of creativity. (Unilag Communication unit, Dec 2023)





#### **SOURCES**

https://livinspaces.net/projects/architecture/maddhouse-innovation-hub-adopts-shipping-containers-in-an-inventive-way/

https://unilag.edu.ng/?p=31604

GREEN BULDRG EDUCATION

WRITTEN BY

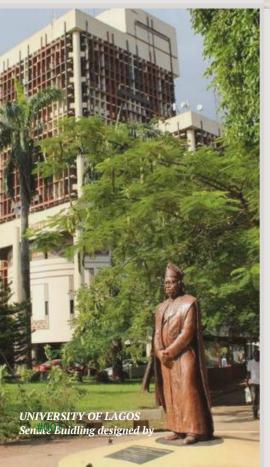
FATIMA SAKA

**EDITED BY** 

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by the outrage of human activities, by generating electricity, burning of fossil fuels such as coal, oil and natural gas causing a large mass of global emissions and heat waves heat waves with consequential effects on the environment. The United Nations, stated that "The world is now warming faster than at any point in recorded history."In order to tackle the effects of climate Change, and leverage on the mechanism in transforming the environment.

Climate change is induced





Green Building Council Nigeria (GBCN) introduced the "Green Building Education, as a panacea to adverse climate conditions." The theme for January 2024 to educate the societies on infrastructure for cooling the intensity of the planet.

#### The Importance of Green Building Education:

Green building education is crucial for fostering sustainable practices in the construction industry. It empowers professionals to implement eco-friendly design, construction, and operation methods, reducing environmental impact while enhancing awareness of energyefficient technologies, resource conservation, and overall environmental stewardship.

#### **Type of Green Building Education**

- 1. LEED Certification Training: Learning about the Leadership in Energy and Environmental Design (LEED) certification equips individuals with the knowledge to design and construct buildings that meet high standards of sustainability.
- 2. Renewable Energy Courses: Understanding renewable energy sources such as solar and wind helps professionals integrate these technologies into building designs to reduce

reliance on non-renewable resources.

- 3. Energy Efficiency Workshops: Workshops focusing on energy-efficient systems and technologies educate participants on how to optimize energy consumption in buildings through efficient lighting, HVAC systems, and insulation.
- 4. Sustainable Design Principles: Courses that cover sustainable design principles provide insights into using eco-friendly materials, passive design strategies, and green infrastructure to create environmentally responsible buildings.
- 5. Waste Management Training: Educating on effective waste reduction and recycling strategies in construction helps minimize the environmental impact of building projects.
- 6. Water Conservation Programs: Training in water-efficient design and technologies helps professionals implement systems that reduce water consumption in buildings, contributing to overall sustainability.

#### Green school Ondo, Nigeria <a href="https://greeninstitute.ng/greenschool">https://greeninstitute.ng/greenschool</a>

#### Who Needs to be Educated?

- 1. Architects and Designers: Integrating sustainable principles into architectural plans ensures a building's long-term environmental performance.
- 2. Builders and Contractors: Construction professionals play a crucial role in implementing green building practices during construction which is being imputed from the conception stage of the project.
- 3. Engineers: Structural, civil, and mechanical engineers need to apply sustainable design principles in their respective areas.
- 4. Real Estate Developers: Informed decisions about sustainable projects to meet the growing demand for eco-friendly buildings.
- 5. Government Officials and Regulators: Staying informed about sustainable practices helps shape policies that will promote environmentally responsible construction.
- By educating these key stakeholders, a more sustainable and resilient built environment can be created for future generations.

#### Initiatives around Green Building Education.

Global Initiatives:

- 1. World Green Building Council (WGBC): Promoting sustainable building practices worldwide, the WGBC offers resources and initiatives like the "Advancing Net Zero" project.
- 2. LEED Certification (U.S. Green Building Council): The LEED certification program provides a globally recognized standard for green building, offering education and training worldwide.

Green building education is paramount for fostering a sustainable future in the construction industry. Green building is the pathway to achieve sustainable development goals

3. Green Building Initiative (GBI): Focused on promoting environmentally sustainable practices through initiatives like the Green Globes certification and educational programs.

#### **Initiatives in Africa:**

- 1. Green Building Councils (GBCs): Established in various African countries, GBCs like GBCSA and GBCN promote green building practices and provide educational resources.
- 2. African Sustainable Building Conference: This conference facilitates knowledge exchange and collaboration among professionals, policymakers, and researchers.



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#### Initiatives in Nigeria:

- 1. Green Building Council of Nigeria (GBCN): Playing a pivotal role in promoting green building practices, GBCN offers training, certification, and advocacy programs.
- 2. Nigerian Institute of Architects (NIA): Conducting seminars and workshops to educate architects on sustainable and environmentally friendly design practices.
- 3. University Programs: Some Nigerian universities offer programs and courses on Sustainable Architecture and Green Building Design.

#### **Strengthening Green Building Education:**

To strengthen green building education, several measures can be implemented through the following:

1.Integrate Sustainability in Curricula: Incorporate green building principles into formal education curricula for architecture, engineering, and construction management programs at universities and technical institutions.

- 2. Professional Development Programs: Offer continuous education and professional development programs for construction industry practitioners.
- 3. Certification and Accreditation: Encourage professionals to pursue certifications like LEED and ensure accredited educational institutions offering Green Building courses.
- 4. Research and Innovation: Support research initiatives exploring innovative and sustainable building technologies.
- 5. Partnerships and Collaboration: Foster partnerships between educational institutions, industry associations, and governmental bodies.
- 6. Practical Experience: Provide hands-on experiences through internships, workshops, and on-site training.
- Community Engagement: Raise awareness in local communities about the importance of Green Building practices.
- 8. Government Support: Governments can incentivize Green Building education through grants, tax benefits, tax rebates or subsidies.
- 9. Industry Collaboration: Encourage collaboration between educational institutions and industry players.
- 10. Continuous Learning Platforms: Establish online platforms for ongoing learning, providing access to webinars, online courses, and publications.

# **SPOTLIGHT**

Meet Dr Ayodeji Emmanuel Oke, a highly qualified GBCN member making an impact in the Green building industry

Dr. Ayodeji Emmanuel Oke is an Associate Professor at the Federal University of Technology Akure, Nigeria.

Ayodeji Emmanuel Oke is an author and lecturer with several years of teaching and research involvement in higher institutions of learning across the world. He founded the Research Group on Sustainable Infrastructure Management Plus (RG-SIM+) and he is currently the leader of the team. He has over 400 publications including eleven books in Sustainable Infrastructure Management (SIM) with a focus on Sustainable Development, Digital Construction, Quantity Surveying, Value Management and other multidisciplinary research areas.

He has led various research teams and is currently rated Y2 by the National Research Foundation of South Africa. He is the winner of the Research Excellence Award of BIM Africa Innovation Awards 2023 as an exceptional individual with research work in the deployment of innovative technologies and processes towards driving the building and infrastructure industry's transformation. He is also the recipient of the 2023 Intra-Africa Academic Mobility Scheme of the European Union under the Strengthening and Promoting Regional Engineering Education in Africa (SPREE).

He is a member of The International Society of Energy and Built Environment; Green Building Council of Nigeria; The Association of South African Quantity Surveyors; Industrial Engineering and Operations Management Society International, USA; the Quantity Surveyors Registration Board of Nigeria; and Nigerian Institute of Quantity surveyor among others.

He was recognised as the 2021 Best Lecturer and 2023 Best Researcher by the management of the Federal University of Technology Akure, Nigeria. He is an Associate Professor in the Department of Quantity Surveying and an Associate Director at the Centre for Research and Development (CERAD) of the institution. He is also a Research Associate at the University of Johannesburg, South Africa and an Academic Fellow at Universiti Sains Malaysia.

Describe your current work role and responsibilities. How does it relate to green building and sustainability?

With focus on Sustainable Infrastructure Management and Built Environment, Ayodeji has pioneered and executed research works in key areas of social, financial, technical and environmental sustainability as it relates to the Architecture, Engineering, Construction and Operation (AECO) industry

#### Can you share a significant achievement or milestone from your career?

Ayodeji is in the Top 2% of most-cited Scientists in the world in 2023 by Stanford University (single year for 2022) and among the top 50 Authors by Scholarly Output in Nigeria (SciVal/Scopus, 2020 to 2023).

His latest book on "Digital Paths to Sustainable Infrastructure Management" published by Emerald Publisher in January 2024 explored various opportunities and roles of Fourth industrial Revolution tools in the planning, execution and management of projects in the AECO sector of the economy.

He has received various recognitions for his works and outputs by local and international bodies and he has been a recipient of several local and international awards, grants, scholarships, and fellowships.

### How have you seen green building and sustainability evolve over the years, and what trends do you foresee in the future?

The industrial revolutions have led to changes in the way things are done over the years. With the advent of the digital age (industry 4.0) and a look towards the fifth industrial revolution, which incorporates the human and environmental aspects of production into industrial activities, there is a need to tailor the delivery of buildings and other infrastructural developments to meet both the current and future needs of the society This implies that delivery of projects should be measured holistically beyond the three areas of cost, time and quality, to include other sustainability related factors and variables like functionality, satisfaction, energy efficiency, carbon neutrality, etc.



**Ayodeji Emmanuel Oke** Associate Professor, FUTA Nigeria

Can you share a favourite book, podcast, or resource that has had a significant impact on your personal or professional growth?

With interest in research and publications, Ayodeji has been writing and publishing articles in journals and conferences until 2016 when he was inspired to venture into book writing. His first research book on "Sustainable Value Management for Construction Projects" published by Springer International Publishing in 2017 had a significant impact on his professional development and has stirred him to author and co-author nine others. He has been a strong advocate for the adoption of value management principles for enhancing the sustainability of projects in the AECO industry.

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# GBCN KNOWLEDGE SERIES

Dive deeper with GBCN Knowledge Series, an engaging lineup of educational webinars continuing the conversation from Future Cities Summit 2023 and building momentum towards the 2024 Summit. Uncover innovative insights, continue the dialogue, and be part of the collective stride towards sustainable, future-ready urban landscapes. Watch out for more information on our website and social media pages!

#### CERTIFIED CARBON ASSESSMENT PROFESSIONAL TRAINING

Buildings are a major contributor to global carbon emissions. Without effectively measuring and managing carbon in buildings, efforts to combat climate change will fall short. This course offers a comprehensive understanding of carbon management in the building sector, emphasizing the necessity of integrating sustainable practices in building design, construction, and operation. It provides practical tools and strategies to reduce carbon footprints, aligning with the global push to a net zero built environment.

2024

#### A NET ZERO CARBON ROAD MAP FOR THE NIGERIAN BUILT ENVIRONMENT

An exploration of how to get to a Net Zero Carbon built environment in Nigeria, covering the built environment & the NETP, defining & envisioning net zero carbon, challenges & barriers to net zero, setting targets & milestones, exploring pathways & solutions, policy & regulatory imperatives, and potential financing mechanisms

MAR. 2024

#### CIRCULAR ECONOMY FOR THE BUILT ENVIRONMENT

A dive into how the principles of circular economy can be applied to the building and construction industry, covering basic principles of the circular economy, importance of circularity in the built environment, definitions & key characteristics of circular buildings, principles of circular design & planning, circular business models, barriers & solutions to circularity, the role of innovation & technology, policy & regulatory imperatives

#### BUILDING TODAY FOR TOMORROW: URBAN RESILIENCE IN NIGERIA

An examination of urban resilience in a developing country context, covering definitions & characteristics of building and urban resilience, climate resilience challenges in the developing world, key drivers of vulnerability, building & urban resilience metrics, resilience planning strategies, governance & policy frameworks, and developing city case studies

2024

#### **FUTURE CITIES SUMMIT 2024 PRE-EVENT**

A lead-up event that will set the stage for the discussions & collaborations that will ensue at the highly anticipated Future Cities Summit 2024, by beginning the dialogue on innovative urban solutions and delving into the spectrum of topics central to the creation of Nigeria's urban future

2024

#### LIFE CYCLE ASSESSMENTS FOR BUILDINGS

An overview of environmental impact of building materials, construction processes, use & end-of-life stages, including an exploration of the building life cycle, LCA methodologies, benefits, fundamentals, challenges & limitations, an introduction to LCA software & tools, and an LCA case study of a building project

#### For more information:



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# GBCN NEWS

An Overview of upcoming events in the Green Building Industry

#### 16th February

#### PARTNERS' COCKTAILS, MEET & GREET

Hosted by the GBCN, the event was held at Lagos Oriental Hotel for Green Building Council's Partners to network and plan collaborations for 2024 and beyond. The event also gave recognition to our existing partners in an engaging and relaxed atmosphere.













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### The Upcoming Future Cities-Africa Green Building Summits 2024



This second edition of the Future Cities Summit is poised to significantly advance the conversation on sustainable urban development in Nigeria, and the wider Africa. The Summit theme, "Building Resilient Futures: Integrating Carbon Neutrality, Circular Economy & Inclusive Urban Development," is inspired by the World GBC's Global Policy Principles for a Sustainable Built Environment, and its Building the Transition campaign. Both these initiatives draw on and extend the vision set forth in the earlier Africa Manifesto for Sustainable Cities and the Built Environment, embodying the Manifesto's call for "...a net zero carbon, healthy, equitable, resilient, environmentally-sustainable and economically-inclusive built environment for every African, everywhere."

This year's Summit, co-located with World GBC Africa Regional Network's Africa Green Building Summit, will explore the truth that Africa's rapid urban transformation represents both challenge and opportunity.



"Our struggle for global sustainability will be won or lost in cities...
Our goal is a fundamental "reset" of the global development agenda.
Cities have a central role to play in making this paradigm shift a
reality."

**BAN KI MOON** 

Former Secretary-General of the United Nations

#### **Testimonials from Past Attendees**

"Thank you for the great work.

I hope to see more intellectual solutions in the sector, using green building as a platform to advance systems for sustainable value in the building sector."

"Interesting and quite interactive.

I learnt a lot from this summit.

I look forward to more of such
events in the future."

#001 GBCN ECOPULSE





## BUILDING RESILIENT FUTURES

INTEGRATING CARBON NEUTRALITY, CIRCULAR ECONOMY, AND INCLUSIVE URBAN DEVELOPMENT

- JULY 16 19 2024
- 9:00AM (WAT)
  DAILY
- ◆ LAGOS ORIENTAL HOTEL, VICTORIA ISLAND, LAGOS, NIGERIA ONSITE AND VIRTUAL