From Green Ambition to Bankable Assets: De-risking Africa's Built Environment through Standards, Resilience and Finance



AUHF Conference 2026

Kushinga Kambarami
Green and Resilient Built Environment Lead for Africa at the World Bank Group

November 2026

WORLD BANK GROUP

Edge | Building Resilience Index | Apex Advanced Practices for Environmental Excellence in Cities | EIP Certification

IFC's COMPREHENSIVE APPROACH TO GREEN & RESILIENT BUILDINGS

Edge 2015–2025 A Decade of Impact

We transform green and resilient practices in emerging markets with a holistic four-pronged approach.



CLIMATE INNOVATIONS FOR THE BUILT ENVIRONMENT

Edge 2015–2025 A Decade of Impact

Low-carbon solutions for buildings in emerging markets.

GREEN BUILDING CERTIFICATION SYSTEM (MITIGATION)

EDGE, launched in 2015, provides a measurable way for builders to cost-effectively optimize designs for buildings, with a free digital tool to facilitate quantification of efficiency benefits and access to green finance.

RESILIENCE BUILDING VERIFICATION SYSTEM (ADAPTATION)

Building Resilience Index, launched in 2021, provides web-based hazard mapping and a resilience assessment framework.

GREEN CITIES TOOL (MITIGATION and ADAPTATION)

APEX, launched in 2022, provides evidence-based analysis to help design a roadmap and predict the future costs and benefits of climate action for cities.

ECO-INDUSTRIAL PARK CERTIFICATION (MITIGATION AND SOCIAL)

New ESG global certification for eco industrial parks (EIP), focusing on park management quality. Soft launch planned for 2026.

High-carbon infrastructure could be locked-in for the next 50+ years

Natural disasters could cause more than 17k deaths and US$320B in losses

WBG has invested in innovative big data digital tools and globally-recognized certifications

EDGE - EXCELLENCE IN DESIGN FOR GREATER EFFICIENCIES

Edge 2015–2025 A Decade of Impact

EDGE is recognized by all major international green finance standards including the International Capital Markets Association (ICMA).

1. Free Software



2. Achievable Standards

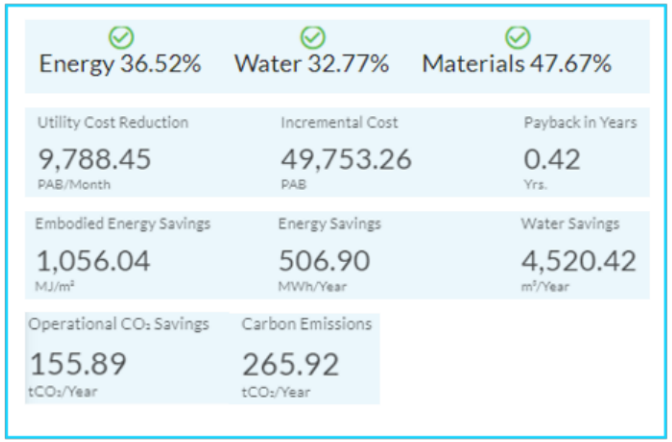


20% minimum Energy, water and materials savings over a local baseline

3. Verified Green Label



4. Simplified Impact Reporting



EDGE - EXCELLENCE IN DESIGN FOR GREATER EFFICIENCIES

Edge 2015–2025 A Decade of Impact

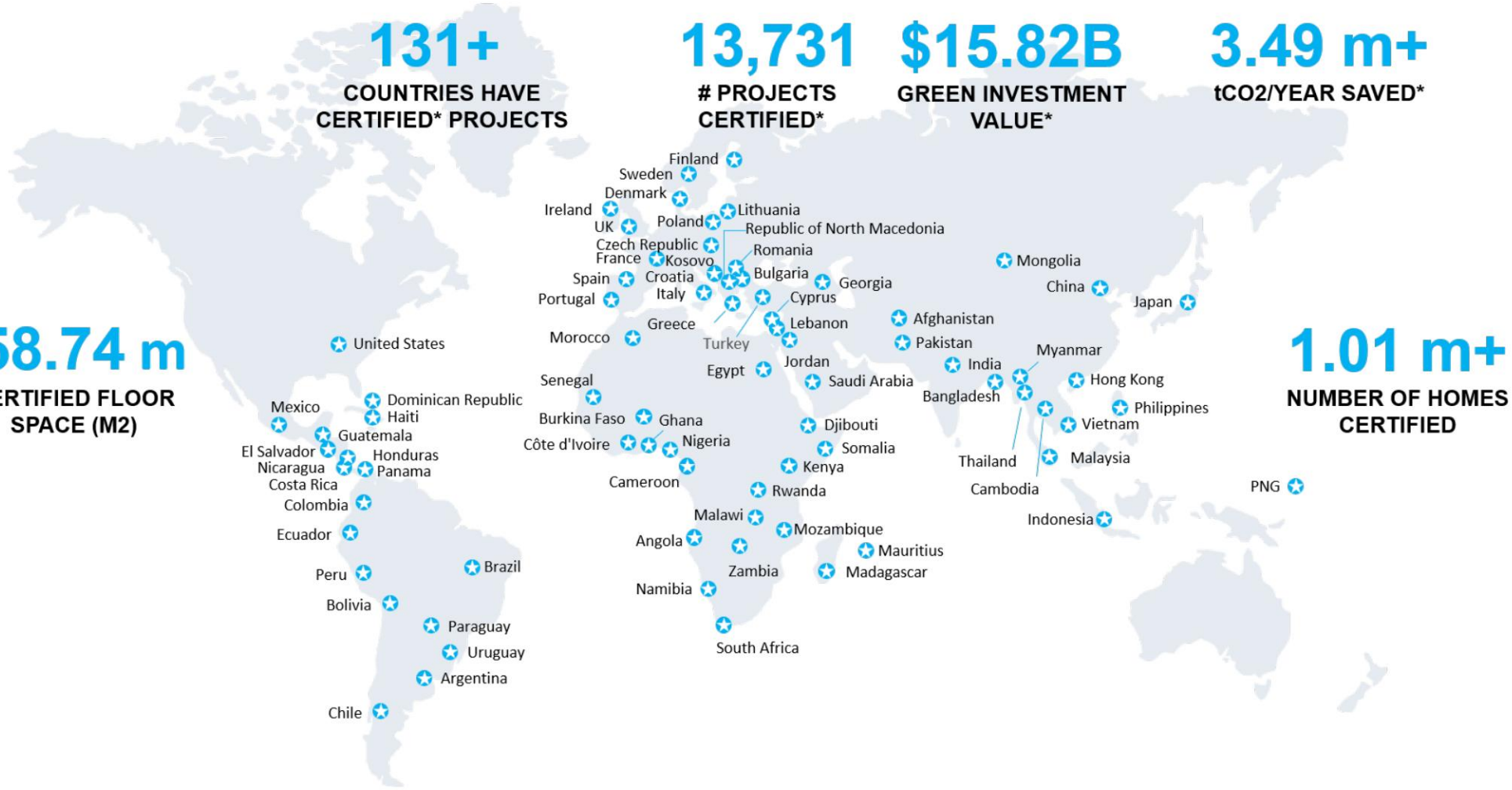
Edge is making an impact on a global scale.

131+
COUNTRIES HAVE CERTIFIED* PROJECTS

13,731
PROJECTS CERTIFIED*

$15.82B
GREEN INVESTMENT VALUE*

3.49 m+
tCO2/YEAR SAVED*



158.74 m
CERTIFIED FLOOR SPACE (M2)

1.01 m+
NUMBER OF HOMES CERTIFIED

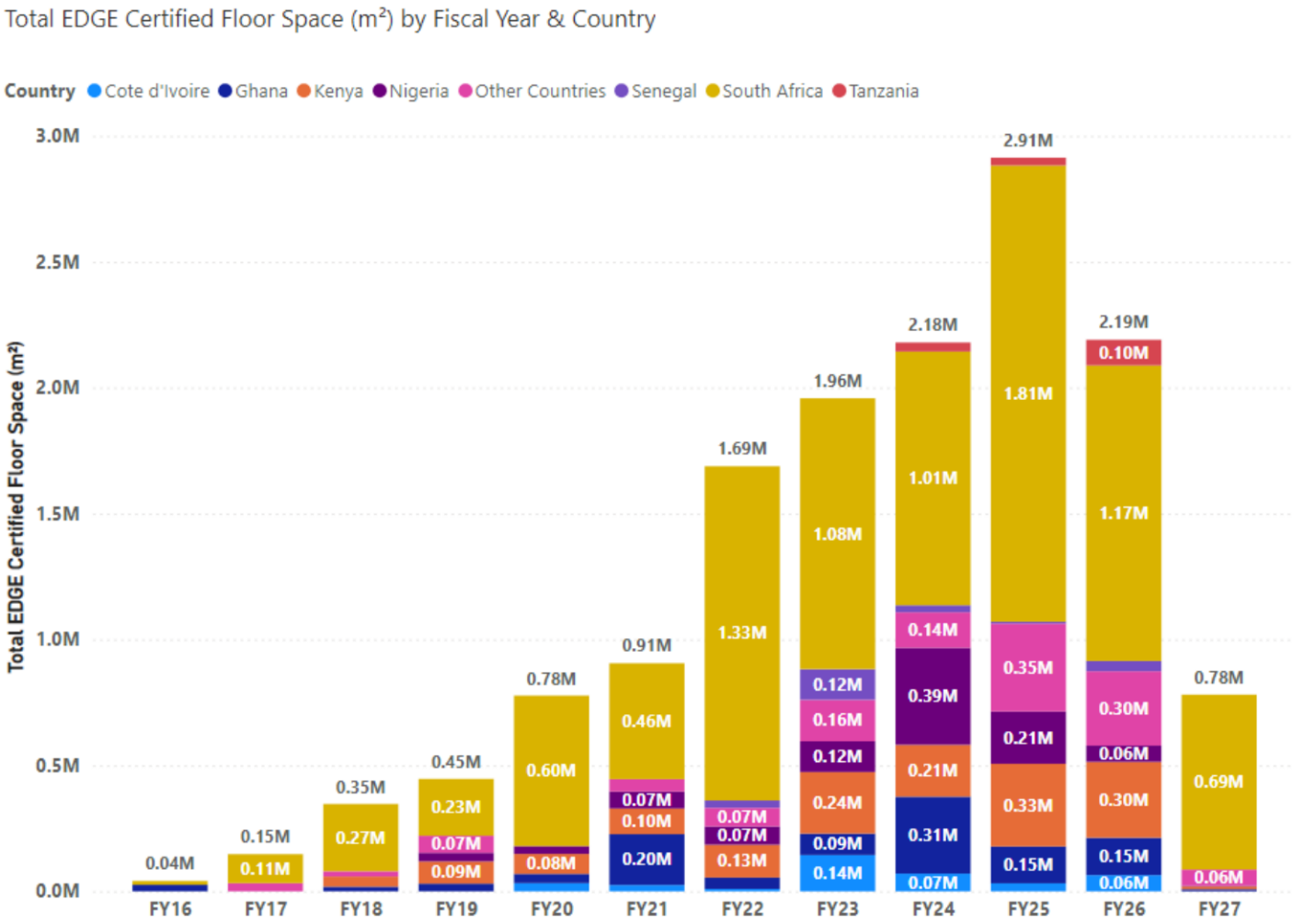
* Data as of 30th September 2026

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EDGE - EXCELLENCE IN DESIGN FOR GREATER EFFICIENCIES

Edge 2015–2025 A Decade of Impact

EDGE certification is growing exponentially across all sectors in Africa



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EDGE V1: MAKING GREEN BUILDINGS ACCESSIBLE

Edge 2015–2025 A Decade of Impact

EDGE transformed green building from a niche sustainability concept into a scalable business proposition across emerging markets.

2014 was the global launch of EDGE

20% Savings required across energy, water, and materials

Designed specifically to scale green buildings where traditional certifications were often too complex or costly

DEMOCRATIZING GREEN BUILDING

EDGE was designed to make green building practical and affordable, particularly in emerging markets where traditional certifications often proved too costly or complex.



ESTABLISHING A CLEAR BENCHMARK

The 20% savings requirement across each category created a simple target that developers, banks, and governments could easily understand and adopt.



PROVING THE BUSINESS CASE

Integrated cost and payback calculations helped developers identify measures that delivered both environmental and financial returns.



UNLOCKING MASS MARKET ADOPTION

EDGE enabled affordable housing, retail, industrial, and commercial projects to participate in green certification for the first time at scale.



EDGE ADVANCED: RAISING THE BAR

EDGE Advanced challenged developers to move beyond efficiency and pursue industry-leading performance.



MOVING FROM COMPLIANCE TO LEADERSHIP

EDGE Advanced rewarded projects that significantly outperformed standard practice.



ENCOURAGING INNOVATION

Developers increasingly adopted high-performance façades, advanced HVAC systems, and integrated sustainability design strategies.



SUPPORTING INVESTOR DEMAND

EDGE Advanced became a strong market signal for climate-conscious investors and lenders.



DRIVING MARKET DIFFERENTIATION

Projects increasingly used Advanced certification to demonstrate environmental leadership.

40%+ Energy Savings Required

Zero Carbon Ready Recognition Pathway

Leadership Tier Best-In-Class Projects

AFRICAN PROOF POINT

Muzi Stawi by IHS at Garden City - Kenya





CONNECTING CERTIFICATION TO FINANCE

The development showed how EDGE performance standards can support access to green housing finance and attract impact-focused investment.

REDUCING COSTS FOR RESIDENTS

Efficient building design lowers utility expenses, improving long-term affordability for homeowners and tenants.

CREATING A MODEL FOR AFRICAN URBAN HOUSING

Muzi Stawi demonstrates how rapidly growing African cities can deliver housing that is affordable, resource-efficient, and aligned with climate objectives.

EDGE ADVANCED IS NOT ONLY ABOUT BUILDING EFFICIENCY

It can improve affordability, attract finance, and deliver better outcomes for residents.

EDGE ZERO CARBON: FROM EFFICIENCY TO DECARBONIZATION

Edge 2015–2025 A Decade of Impact

EDGE expanded from reducing resource use to advancing net-zero operational carbon ambitions.

100% Renewable Energy Coverage

Operational Carbon Neutrality Highest EDGE Achievement

Net-Zero Pathway Global Climate Alignment

MOVING BEYOND SAVINGS

While earlier versions focused on reducing resource consumption, EDGE Zero Carbon challenged projects to address their operational carbon emissions.

ACCELERATING RENEWABLE ENERGY

Developers increasingly combined efficiency measures with onsite and offsite renewable energy solutions to achieve carbon neutrality.

RESPONDING TO INVESTOR EXPECTATIONS

Net-zero assets are becoming increasingly attractive to investors, occupiers, and financial institutions seeking climate-aligned portfolios.

ESTABLISHING THE NEXT MARKET BENCHMARK

EDGE Zero Carbon demonstrated that the future of green building is not simply consuming less but ultimately operating without net carbon emissions.

EDGE V3: MATERIALS TAKE CENTER STAGE

EDGE v3 marked a major evolution by shifting the focus from embodied energy savings to reducing embodied carbon, aligning green building certification with global decarbonization goals..



FROM EMBODIED ENERGY TO EMBODIED CARBON

EDGE v3 expanded the materials measure beyond resource efficiency, enabling projects to directly address the carbon impacts of construction materials.



ALIGNING WITH THE NET-ZERO AGENDA

As operational emissions decline, embodied carbon represents an increasing share of a building's lifetime footprint.



EXPANDING DEVELOPER CHOICE

Projects gained greater recognition for lower-carbon material strategies, encouraging innovation in concrete, steel, masonry, and alternative construction systems.



PREPARING THE MARKET FOR WHAT COMES NEXT

EDGE v3 laid the foundation for the more advanced whole-life carbon and circularity approaches later introduced in later versions.

Major v3 Update Embodied Carbon Introduced

Market Impact Materials Become a Climate Solution

Legacy Foundation for the Future of EDGE

EDGE V4: THE NEXT EVOLUTION

EDGE V4 moves beyond efficiency alone and introduces resilience, carbon accountability, and operational performance.

INTEGRATING RESILIENCE

Integration ensures resilience and operational continuity capabilities alongside energy performance, water use, and materials embodied carbon and users are required to complete a full BRI self-assessment, at minimum.

EXPANDING TYPOLOGIES

Two new building typologies: Data Centers and Life Sciences

FOCUSING ON OPERATIONAL PERFORMANCE

EDGE Operations extends certification beyond design and construction into real building performance. Operational emissions breakdown into Scope 1, 2, and 3 (Category 13) in line with the GHG Protocol.

ALIGNING WITH FUTURE FINANCE

Greater alignment with ESG frameworks, climate taxonomies, and sustainable finance requirements.

BRI Integration Resilience Becomes Core

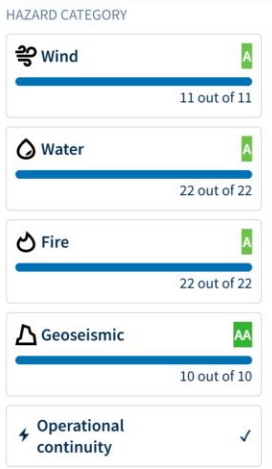
Whole-Life Carbon Expanded Carbon Accounting

EDGE Operations Performance Beyond Construction

BRI – BUILDING RESILIENCE INDEX

Case Study: Agility Warehouse Park - Mozambique





FIRST OF ITS KIND

The Agility Logistics Park warehouses in Maputo are the first warehouses in Mozambique to receive EDGE Advanced certification, consisting in 14,000 SQM Warehouse 1; 9,000 SQM Warehouse 2; and 9,000 SQM Warehouse 3 at its 320,000 SQM Maputo park.

KEY MEASURES:

Primary structure designed to comply with more recent national code, Lowest occupied floor elevated more than 5m, Defensible building perimeter (>10m).

SCORING:

The buildings achieved the following ratings:

1. Wind = A
2. Water = A
3. Fire = A
4. Geoseismic = AA



EDGE V4: EMBODIED CARBON

Embodied carbon of new materials are being taken into consideration.

Enhanced Calculation Capabilities While Maintaining Ease of Use

Integration of Insights Gained from Over 10 Years of EDGE Experience

Improve Calculation Engine Runtime

MATERIAL CARBON ESTIMATES

Develop regionalized embodied carbon estimates for structural building materials: concrete, steel, timber and bamboo



UPDATED EDGE USER GUIDANCE

Develop guidance for EDGE users on including less carbon intensive materials on projects.



NEW STRUCTURAL ASSEMBLIES

Update the EDGE Materials Reference guide with new structural assemblies for users to select from in EDGE.



THANK YOU

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