



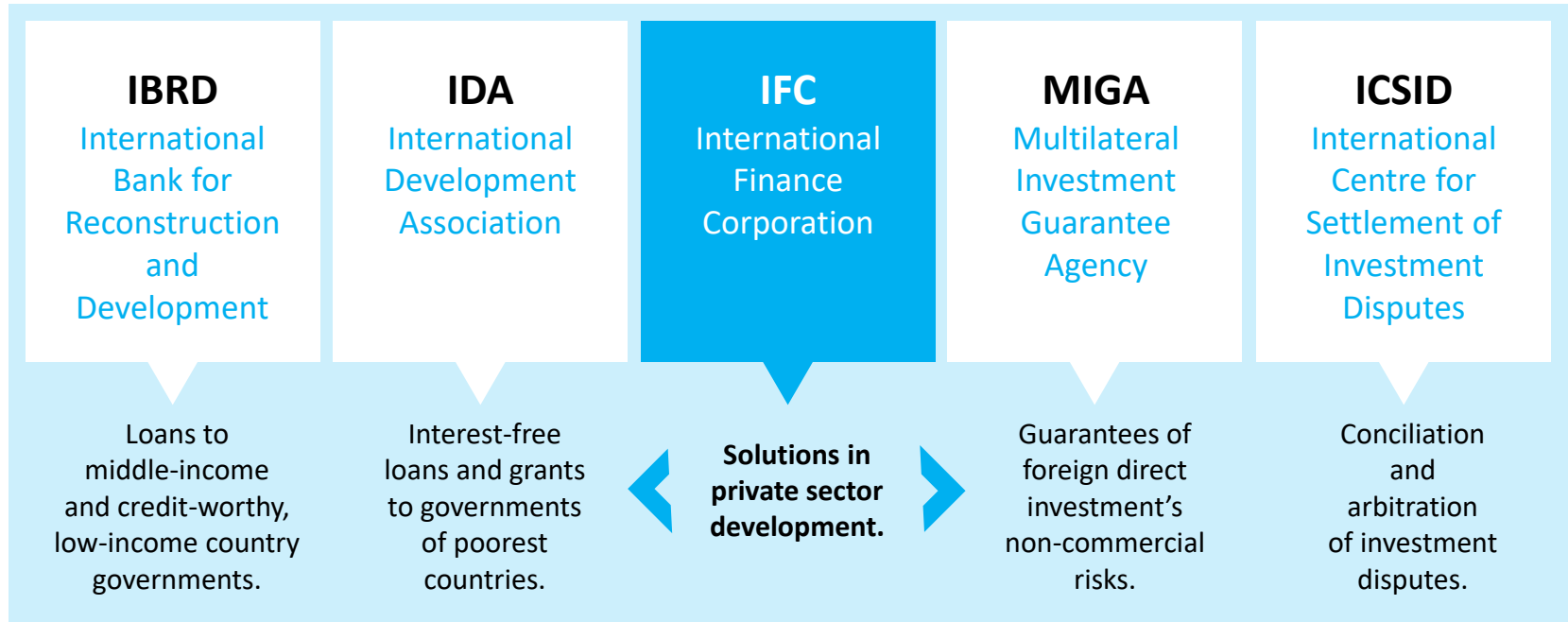
Creating Markets, Creating Opportunities

Energy Efficiency Improvements: Opportunities for existing buildings in Southeast Asia.

www.edgebuildings.com

EDGE is an innovation of IFC, a member of the World Bank Group.

IFC is a Member of the WORLD BANK GROUP



IFC's Green Building Investment

An aerial photograph of a dense urban skyline, likely New York City, showing numerous skyscrapers and buildings. A green callout box is overlaid on the left side of the image, containing text about IFC's investment.

\$1B

Per annum investment
of IFC in Green Buildings

On average over the last 3 years, IFC has been committing over \$1 billion a year for Green Buildings.

This is almost 5% of total annual commitments.

This accounts for nearly all IFC's real estate investment portfolio.

Green buildings is becoming IFC's biggest climate asset class.

IFC has a four-part strategy to support greater investment in green buildings.



IFC's green building code experience

1. Indonesia

National

Jakarta

Bandung*

Makassar*

Surabaya*

Green Building Code

2. Vietnam

Energy Efficiency Code

3. Bangladesh

4. Colombia

5. Philippines

National

Mandaluyong

Green Building Code

6. Peru & Costa Rica

About
10 Million m² of
new building
space has
complied with
these codes

Case study: Jakarta Green Building Codes

Goal of achieving 30% reduction in energy, water and CO₂ emissions by 2030



POTENTIAL:

- 1,084,262 metric tons of CO₂ emissions reduction.
- 1,406,641 MWh of energy savings.
- \$117,172,248 of energy cost savings.

EDGE Certifies New and Existing Buildings and a Wide Range of Typologies



EDGE: Excellence in Design for Greater Efficiencies

1.

Free Software



Further Resource:
[EDGE Software Demo](#)

2.

Achievable Standards



EDGE standard: 20% reduction in **energy** and **water** use in operation and energy in **materials** relative to local BAU baseline

3.

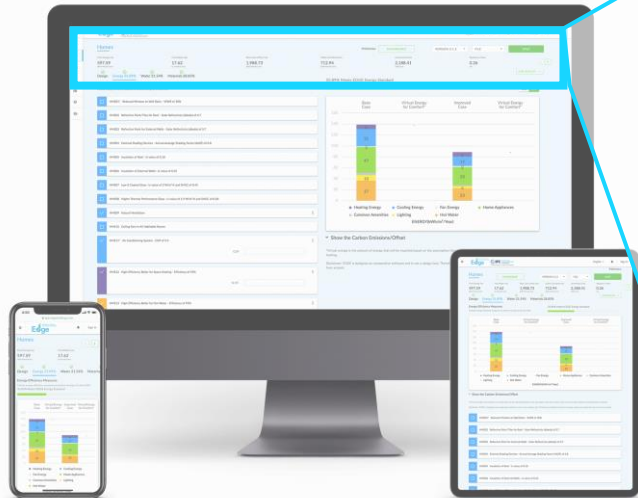
Third-party Verified Label



Administered by the largest network of green building certification providers in the world

The Free EDGE Software Shows the Payback for Each Efficiency Measure - Reducing Costs and Speeding up Design and Decision-making

Real-time Feedback on Performance



Energy 36.52%	Water 32.77%	Materials 47.67%	Progress Toward Certification
Utility Cost Reduction 9,788.45 PAB/Month	Incremental Cost 49,753.26 PAB	Payback in Years 0.42 Yrs.	Construction Cost, Utility Savings, and Payback
Embodied Energy Savings 1,056.04 MJ/m ²	Energy Savings 506.90 MWh/Year	Water Savings 4,520.42 m ³ /Year	Energy, Water, & Materials Savings
Operational CO ₂ Savings 155.89 tCO ₂ /Year	Carbon Emissions 265.92 tCO ₂ /Year		Carbon Tracking

EDGE Certificate

Key impact indicators displayed

- Operation Energy Savings %
- Operational Water Savings %
- Embodied Energy in Materials Reduction %
- GHG Footprint (tCO₂e)
- GHG Savings (tCO₂e)

1.44 tCO₂/unit/year
Operational CO₂ Emissions

3.19 tCO₂/unit/year
Operational CO₂ Savings

THIS CERTIFIES THAT
Praderas de Caranqui
12 Units
HAS ACHIEVED AN
EDGE ADVANCED CERTIFICATE
CERTIFICATE NUMBER
GP2-ECU-21012910101721-12

EDGE ADVANCED

Exemplifying achievement in the following areas:

59%

Energy Savings

35%

Water Savings

43%

Less Embodied
Energy in Materials

1.44 tCO₂/unit/year
Operational CO₂ Emissions
3.19 tCO₂/unit/year
Operational CO₂ Savings



DEVELOPED BY
SOCIEDAD CIVIL EMCOPRODE, EMPRESA DE CONSTRUCCION,
PRODUCCION Y DESARROLLO

CERTIFIED BY
Green Business Certification Inc. (GBCI)

Maresh Ramanujam

Maresh Ramanujam, President and CEO, Green Business Certification Inc.
DATE OF ISSUE: 20-APR-2021

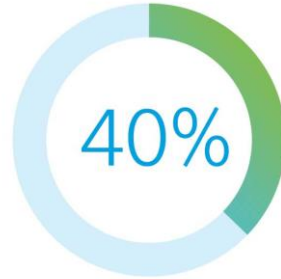


Three Levels of EDGE Certification Cater to All Ambition Levels



Level 1 - EDGE Certified

20% or more savings in energy, water, and embodied energy in materials.



Level 2 - EDGE Advanced

EDGE certified with 40% or more on-site energy savings.



Level 3 - Zero Carbon

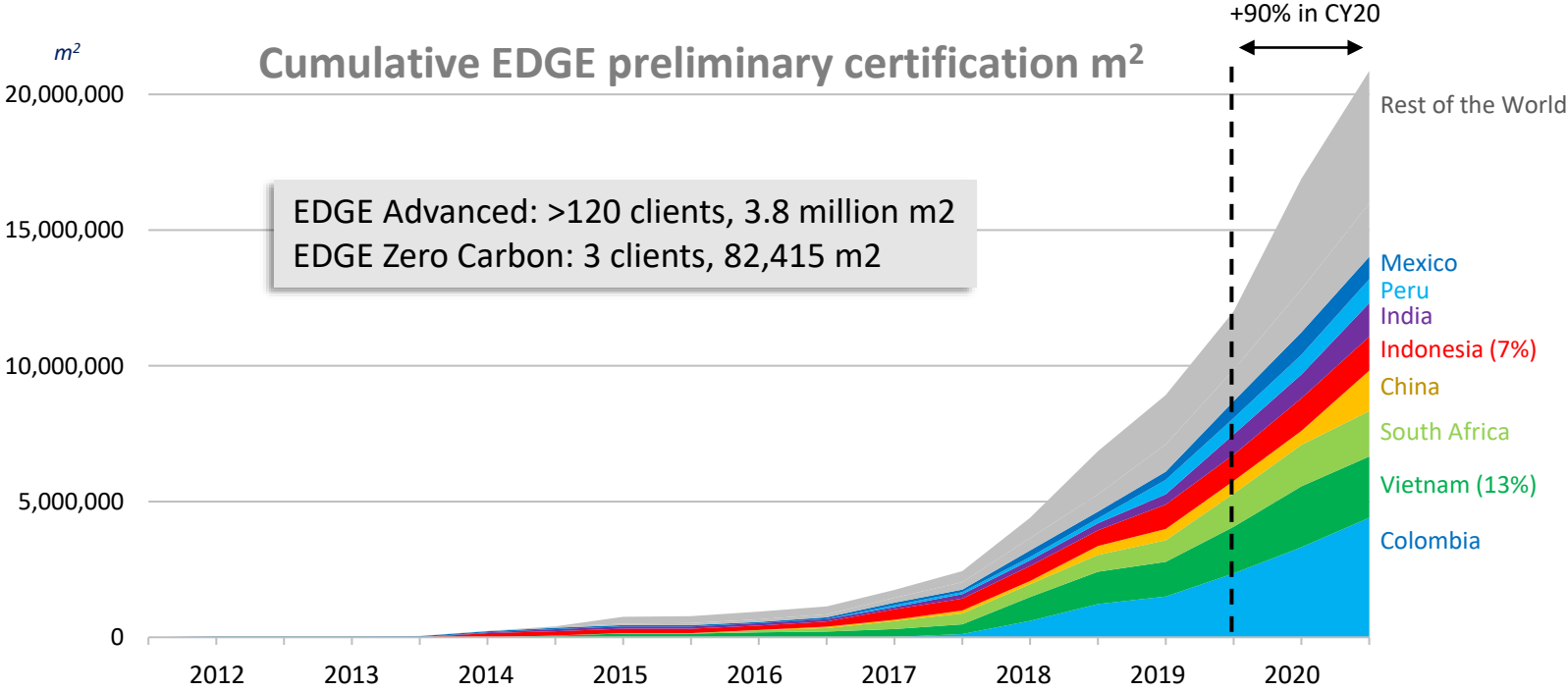
EDGE Advanced with 100% renewables or purchased carbon offsets.

Projects can be Certified Anywhere

EDGE-certified projects can be found in 45 countries



Growth in EDGE (Excellence in Design for Greater Efficiencies)



CASE STUDY

Government of Indonesia is incentivizing green homes through higher loan-to-value ratio



Government Entity:
Central Bank of Indonesia

Building Typology:
Residential

Incentive:
Lowered down payment requirement by allowing 90% loan-to-value ratio for green homes.

Further Resource: [Indonesia's Progress on Green Buildings](#)



BALAI BERDE program

90,000 sqm

4 projects

- 69,000 sqm certified
- 21,000 sqm registered



- Liquidity facility available to public or private housing loan originators (developers or banks)
- With incentives for both originators and home buyers
- Scaling up the program to other KSAs



Case study:

NEO Group retrofits
300,000 SQM office
space aiming for EDGE
Zero Carbon certificate



NEO Group's motivation

- Key commercial real estate developer, part of SM Group – one of the oldest and biggest conglomerates in the Philippines.
- Market leadership in sustainability in the Philippines.

EDGE is currently funded by the UK Government with original funding by Switzerland's State Secretariat for Economic Affairs (SECO)



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO

Additional support has been provided by Austria, Canada, Denmark, ESMAP, EU, Finland, GEF, Hungary, and Japan.



IFC

**International
Finance Corporation**
WORLD BANK GROUP

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www.edgebuildings.com

Diep Do

ddo1@ifc.org