Achieving Sustainability in UN Common Premises

BOS 2.0 High-Impact Common Services

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Agenda

- Intro & High-Impact Services
- Sustainable UN-Facilities ‘IDEAS’ - UNEP
- Sustainable Journey of Green One UN House in Viet Nam
- Open discussion & Q&A

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High Impact Common Services

Cost Efficient

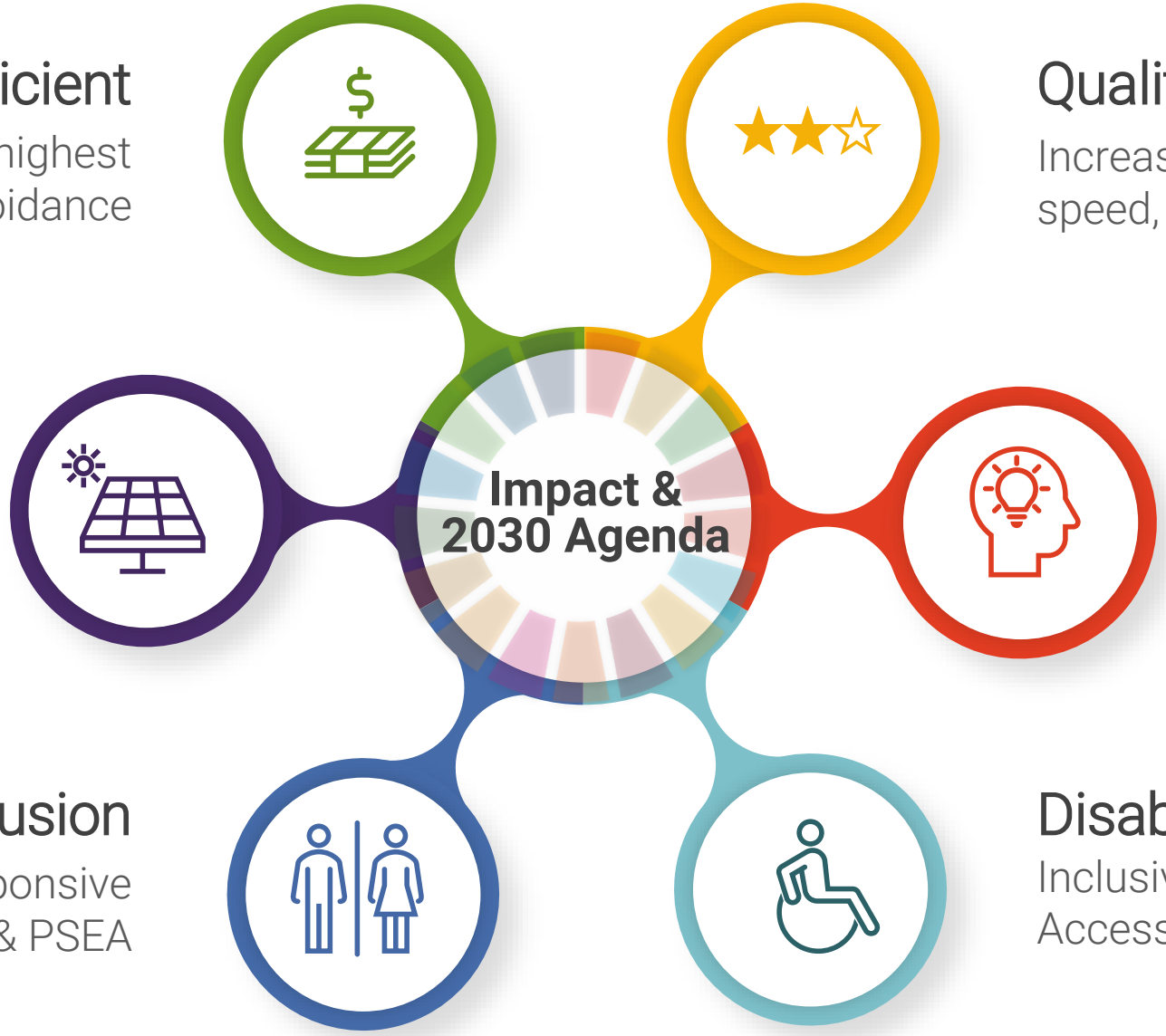
10-15 services w/ highest cost-avoidance

Quality Improvement

Increasing service delivery speed, quality, & volume

Environmental Sustainability

Renewable energy & decarbonization



Good Practices

Leverage entity expertise & capacity

Gender Inclusion

Gender Parity, Responsive Procurement & PSEA

Disability Inclusion

Inclusive HR, ICT, Physical Accessibility & Procurement

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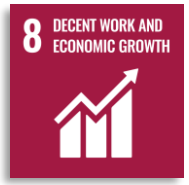
Leveraging Efficiencies & Impact

Create **proof of concept** to scale change, good practices, & resources by partnering with private & social orgs.

Disability Inclusion

- Physical Accessibility
- Inclusive HR
- ICT/Digital Accessibility



Green & Renewable Energy

- Energy Mgt., Monitoring & Consumption
- Assessment & Business Case
- Solar Solutions (Home, Street, H20)

Gender Inclusive Operations

- Supporting Women Owned Businesses
- Gender Equity & Staff Wellbeing
- Gender Responsive Procurement

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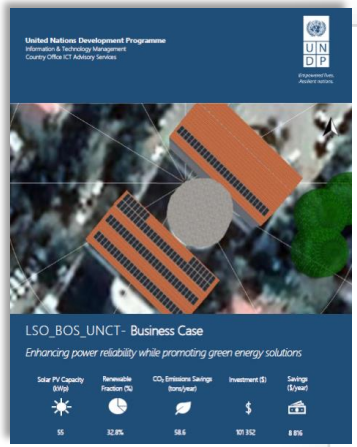
PROOF OF CONCEPT
RENEWABLE ENERGY & DISABILITY INCLUSION



Business Cases for renewable energy in UN Premises

1. Facilitate implementation with real data & IoT devices
2. Reduce CO2 footprint, increase energy efficiency, reliability
3. **Pilot UNCTs:**
   AFR: Ghana, Lesotho, Namibia, Nigeria, South Sudan, Zambia, Zimbabwe;
   LAC: Haiti
   AS: Lebanon
   ECA: Kazakhstan, Kyrgyzstan, Turkmenistan

Disability Inclusion Seed Funding

1. **Seed funding to UNCTs** to advance UNDIS & make operations inclusive
2. Create **inclusive HR practices** with accessible premises & digital tools
3. **Pilot UNCTs:**
   AFR Lesotho, Namibia, Nigeria, Sao Tome & Principe
   APA: Indonesia, Iran, Nepal, Fiji
   AS: Lebanon
   ECA: Albania, Montenegro, Tajikistan
   LAC: Costa Rica, Dominican Republic, Guatemala, Uruguay

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Greening UN Common Premises: Viet Nam's Green One UN House journey in attaining certifications & standards of environmental performance

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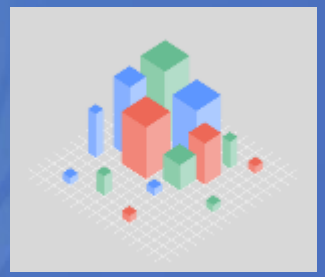
VIET NAM



VGBC | Vietnam Green Building Council

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THE GREEN ONE UN HOUSE, VIETNAM

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1 Sustainable UN facility's 'IDEAS' FOR ESTABLISHMENT OF RESILIENT AND EFFICIENT UN OFFICES

Sustainable United Nations (SUN)

Sustainable UN (SUN) is an initiative of UNEP launched in 2008 to assist UN system to reform towards climate neutrality and environmental management...

...with tools, methodologies and technical assistance to enable the integration of sustainable development principles by:

MEASURING their environmental performance

REDUCING their environmental impacts

OFFSETTING their unavoidable greenhouse gas emissions

REPORT and COMMUNICATE via Greening the Blue

Focuses on mitigating the environmental footprint resulting from facilities and operations

GREENING THE BLUE | UN environment programme | UNITED NATIONS SUSTAINABLE DEVELOPMENT GROUP

Greening the Blue Report 2021

GREENING THE BLUE | UN environment programme

UNITED NATIONS SUSTAINABLE DEVELOPMENT GROUP

UNEP annually publishes environmental impact data in the Greening the Blue Report: the UN system's environmental footprint and efforts to reduce it

The Report reflects the progress of the Strategy for Sustainability Management in the United Nations System 2020-2030, Phase I: Environmental Sustainability in the Area of Management

Greening the Blue Report 2021

In 2020, the UN system generated ~1.5 million tonnes CO^2eq GHG emissions, with per capita emissions of 5 tonnes CO^2eq

The sources of the emissions were 32% from air travel, 12 per cent from other travel (rail, road, sea, etc.) 55% from facilities

19% of UN electricity worldwide came from the use of renewable energies either purchased from the country grid or self-generated

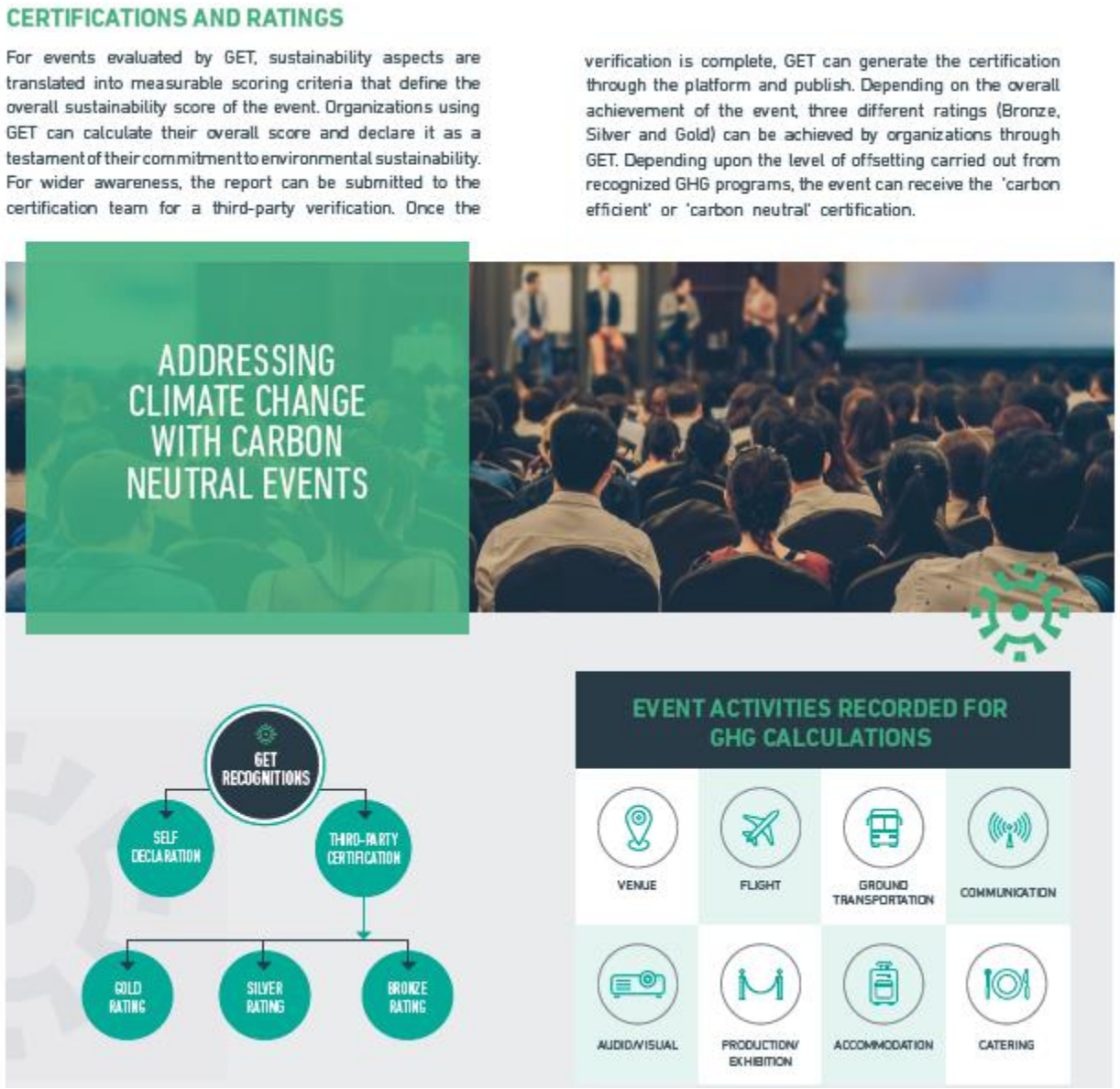
99%

of the UN system's reported 2020 greenhouse gas emissions are offset

GREENING THE BLUE | UN environment programme | UNITED NATIONS SUSTAINABLE DEVELOPMENT GROUP

Events

- Virtual and hybrid meetings and events to reduce travel and increase inclusiveness
- Green events tool to reduce impact from for in person meetings



GET GREEN EVENTS TOOL

GORD

United Nations Framework Convention on Climate Change

GREENING THE BLUE | UN environment programme | 50

https://greeneventstool.com/

IDEAs

Environmental Sustainability when Establishing a New UN Office Premises

What is IDEAS? Why this is important?

Use of UN benchmark standards X independent, third-party certification

For more information visit: https://greeningtheblue.org or write greeningtheblue@un.org

2 THE GREEN ONE UN HOUSE SUSTAINABLE JOURNEY TO LOTUS PLATINUM

VIET NAM GREEN ONE UN HOUSE BACKGROUND

- ✓ *Delivering as One (one of the pillars): Establish a UN Common Premise*
- ✓ *Full support from the local Government*
- ✓ *Product of the UNCT in Vietnam vision to create a shared 'green' premises and to support the UN-wide, 'delivering as one', initiative*
- ✓ *Inaugurated on May 2015 by UN SG and Vietnam's Deputy Prime Minister and Foreign Minister*
- ✓ *Early considerations towards a Green Building design and construction*

BENEFITS

- Financial benefits
- Non-financial benefits
- Sustainable development

EFFICIENT RESOURCE USE

- Energy saving
- Water saving
- Material with low embodied energy

ENVIRONMENTALLY FRIENDLY

- Waste reduction
- Reused & recycled materials
- Climate change adaptation

OCCUPANT WELLNESS

- Indoor air quality
- Natural lighting
- Visual comfort

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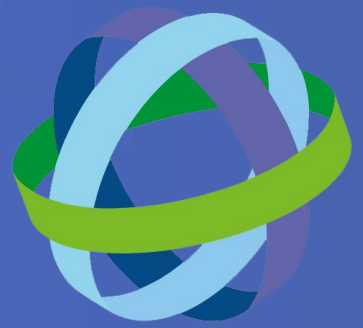
CERTIFICATIONS & STANDARDS OF ENVIRONMENTAL PERFORMANCE ACHIEVED

2014

2017-2023

2017-2022



2018

2021

2022-2025

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THE GREEN ONE UN HOUSE, VIETNAM

WORLDWIDE CERTIFICATION SYSTEMS

LEED

BREEAM®

ENERGY STAR

BEAM

BCA-IDA GREEN MARK

CASBEE™

LIVING BUILDING CHALLENGE

GREEN GLOBES

WORLD GREEN BUILDING COUNCIL

ASIA-PACIFIC REGIONAL NETWORK

VGBC Vietnam Green Building Council
Hội đồng Công trình xanh Việt Nam

WHAT IS A GREEN BUILDING CERTIFICATION SYSTEM AND WHY THIS IS IMPORTANT?

- It is rating systems used to assess a building performance from a sustainability and environmental perspective.
- Promotes the UN Sustainable Development Goals (SDG's)

- Considers approved and agreed benchmarking on building performance
- Third party verification of environmental credentials
- Encouraging integrated building design, construction and operation
- Meet local legal obligations

VGBC Vietnam Green Building Council
Hội đồng Công trình xanh Việt Nam

VGBC AND LOTUS CERTIFICATION IN VIETNAM AND RATING

LOTUS is a set of market-based green building certification systems developed by the VGBC specifically for the Vietnamese environment.

VGBC Vietnam Green Building Council
Hội đồng Công trình xanh Việt Nam

CATEGORIES

LOTUS monitors buildings throughout the design, construction, as built and operation stages measuring their environmental impact, energy efficiency & impact on occupants, according to the following **10 categories**

Energy

Water

Purchasing/ Material

Ecology

Waste & pollution

Health & Comfort

Adaptation & Mitigation

Community

Management

Innovation

LOTUS PLATINUM CERTIFICATION BY VGBC

Category	Points available	Points awarded	Certification level
LOTUS NC 2017	118	84	83-118 points PLATINUM
LOTUS BIO 2022	108	83	**75-108 points** **Platinum**

40% Certified	55% Silver	65% Gold	75% Platinum

3 GREEN EFFICIENCY RESULTS AND LESSON'S LEARNED

Energy

Solar PV covers 13% office needs
PV surplus transferred to grid = green revenue
LED lightening project implemented
BMS optimizing use of HVAC and lightening

34% of energy reduction
46.5% lighting density power reduction

Water

100% water: Wastewater treatment system since 2018

Reduction through fixtures during construction

Use of domestic low-water/ low-irrigation Landscape

52% Water Reduction

13% water consumed is Grey Water

Material/ Purchasing

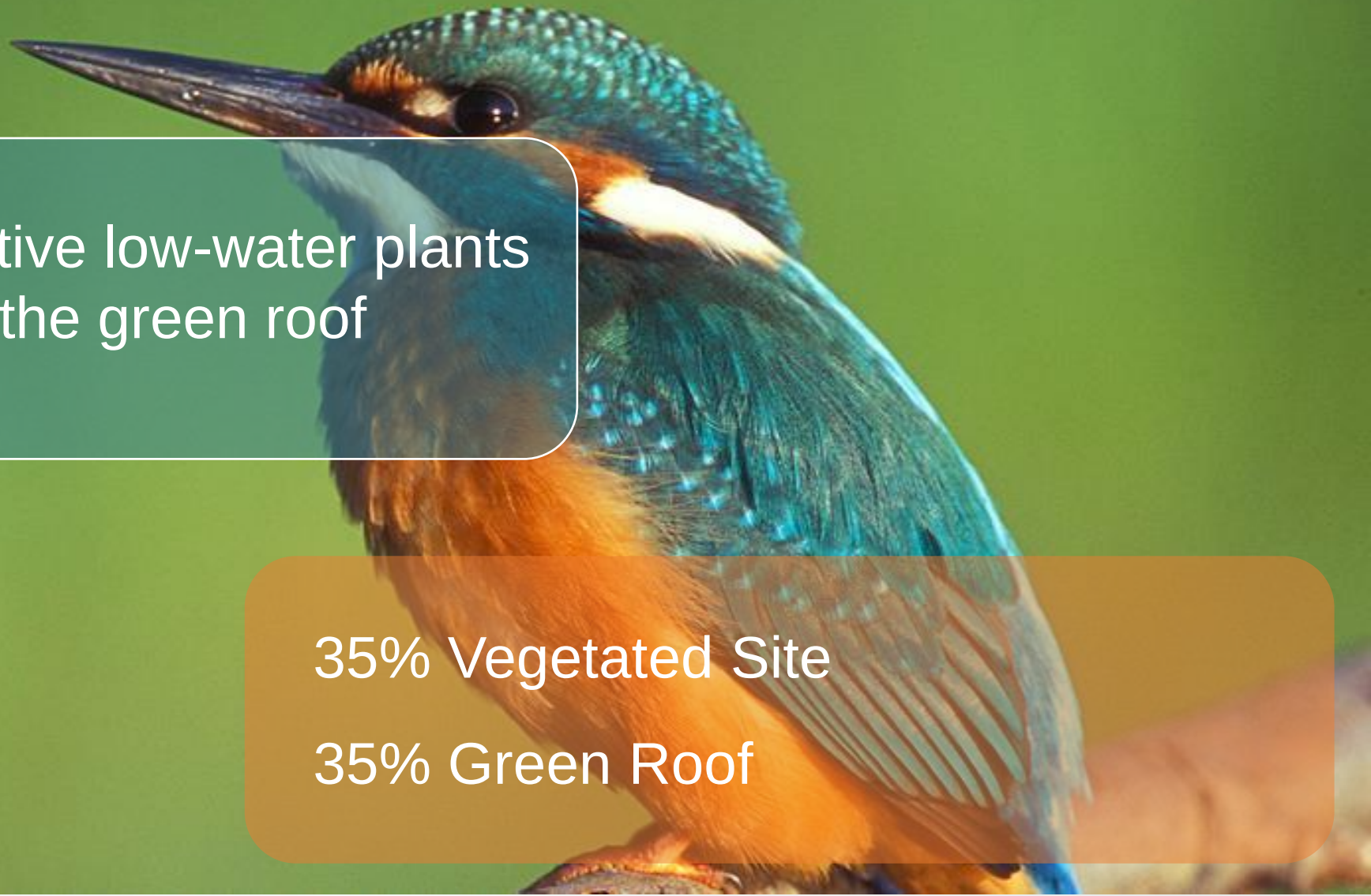
- Reuse and recycle of the main structure
- Use low-embodied material in construction and operation
- Use of renewable material like composite in new installation

94% of the former structure reused

84% Low-Embodied Materials

2% Rapidly Renewable Materials

Ecology



Use of domestic, native low-water plants
Install and maintain the green roof

35% Vegetated Site

35% Green Roof

Waste & Pollution

Non GHG Refrigerants

Solid Waste Management (recycling)

Wastewater treatment

Organic compost in house

1,500 kg of paper/cardboard recycled/2021
Recycle 1,200 cbm of water/2021
250kg fertilizer for gardening/2021

Health & Comfort

Full house covered with Air filtration/Ventilation + AQI measurement system + Fresh Air & CO2 monitoring

No indoor smoking

Daylight factor maximized

AQI inhouse below 50

94.7 % area reach daylight level

93% spaces have outdoor view

Adaptation & Mitigation

Disaster Resilience preparedness measures in place

Flood prevention

Heat Island Effect projects

Green transportation

No flooding
77% heat island effect reduced
21.1% occupant exercises Green Commuting

Community

Accessible and friendly building for People with Disabilities recognized by local authorities

Occupant Behavior project

Public Awareness Campaign

CÔNG TRÌNH ĐẢM BẢO TIẾP CẬN
CHO TẤT CẢ MỌI NGƯỜI
ACCESSIBLE BUILDING FOR ALL

Management

Commissioning /Management of systems

Compliance with preventive maintenance

Green Management – ISO 14001

Innovation

Significant reduction compared to benchmark on : Energy use, Sustainable energy solution, Water efficient fixtures and Occupant comfort

LESSONS LEARNED

Early commitment and buy-in from both UN senior management and the local Government towards a green building initiative.

Green standards shall be applied **from the design stage**: enable integration of opportunities that would have been missed or would not be practical or cost effective to implement a later stage.

Maintaining Green High Standards requires tenacity, house keep monitoring, consistent and long-term view, mobilizing all stakeholders toward behavior change and frequent change/adaptation (evolving process)

Efficiency and Effectiveness: UN premises footprint lowered down, cost avoidance achieved, staff wellness improved and contributed towards the **achievement of the SDG's**

THANK YOU

FOR MORE INFORMATION, PLEASE CONTACT

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Or visit: https://greeningtheblue.org

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