Achieving Sustainability in UN Common Premises

BOS 2.0 High-Impact Common Services
Agenda

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

- **Cost Efficient**: 10-15 services with 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

**Impact & 2030 Agenda**
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
Business Cases for renewable energy in UN Precisens

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

IDEAs for Resilient and Efficient UN Offices

The Green One UN House in Viet Nam Sustainable Journey to LOTUS PLATINUM

Green Efficiency Results and Lesson’s Learned
1 Sustainable UN facility’s ‘IDEAS’ FOR ESTABLISHMENT OF RESILIENT AND EFFICIENT UN OFFICES
Sustainable United Nations (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
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*
In 2020, the UN system generated ~1.5 million tonnes CO$_2$eq GHG emissions, with per capita emissions of 5 tonnes CO$_2$eq.

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.
Events

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

https://greeneventstoool.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
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

**OCCUPANT WELLNESS**
- Indoor air quality
- Natural lighting
- Visual comfort

**EFFICIENT RESOURCE USE**
- Energy saving
- Water saving
- Material with low embodied energy

**ENVIRONMENTALLY FRIENDLY**
- Waste reduction
- Reused & recycled materials
- Climate change adaptation

**THE GREEN ONE UN HOUSE, VIETNAM**
CERTIFICATIONS & STANDARDS OF ENVIRONMENTAL PERFORMANCE ACHIEVED

- Vietnam Green Building Council
  - Lotus Gold: 2014
  - Environmental Management System (ISO 14001): 2017-2023
  - Lotus Platinum: 2017-2022
  - Vietnam Green Building Council: 2018

- Vietnam Green Building Council
  - Lotus Platinum: 2021
  - Lotus Platinum: 2022-2025

THE GREEN ONE UN HOUSE, VIETNAM
WORLDWIDE CERTIFICATION SYSTEMS

LEED
BREEAM
CASBEE

3 star
LEED In
TREES
Greenmark
GB Index
Greenship

Korea
Japan
Hong Kong
Taiwan
China
India
Vietnam
Singapore
Malaysia
Indonesia
Australia
New Zealand

ASIA-PACIFIC REGIONAL NETWORK

CASBEE
HK Beam
BERDE
LOTUS
Green Star
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
LOTUS is a set of market-based green building certification systems developed by the VGBC specifically for the Vietnamese environment.
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
<table>
<thead>
<tr>
<th>Category</th>
<th>Points available</th>
<th>Points awarded</th>
<th>Certification Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOTUS NC 2017</td>
<td>118</td>
<td>84</td>
<td>83-118 points PLATINUM</td>
</tr>
<tr>
<td>LOTUS BIO 2022</td>
<td>108</td>
<td>83</td>
<td>75-108 points Platinum</td>
</tr>
</tbody>
</table>
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
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
- 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
Use of domestic, native low-water plants
Install and maintain the green roof

35% Vegetated Site
35% Green Roof
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
Full house covered with Air filtration/Ventilation + AQI measurement system + Fresh Air & CO2 monitoring
No indoor smoking
Daylight factor maximized

AQL inhouse below 50
94.7 % area reach daylight level
93% spaces have outdoor view
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
Accessible and friendly building for People with Disabilities recognized by local authorities
Occupant Behavior project
Public Awareness Campaign
Commissioning /Management of systems
Compliance with preventive maintenance
Green Management – ISO 14001
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

UN in Viet Nan – Common Back Office Manager
Maria Helena Mizuno Moreira mh.mizuno@one.un.org

UNEP - Senior Programme Management Officer
Isabella Marras isabella.marras@un.org
greeningtheblue@un.org
Or visit: https://greeningtheblue.org

THE GREEN ONE UN HOUSE, VIETNAM
Thank You