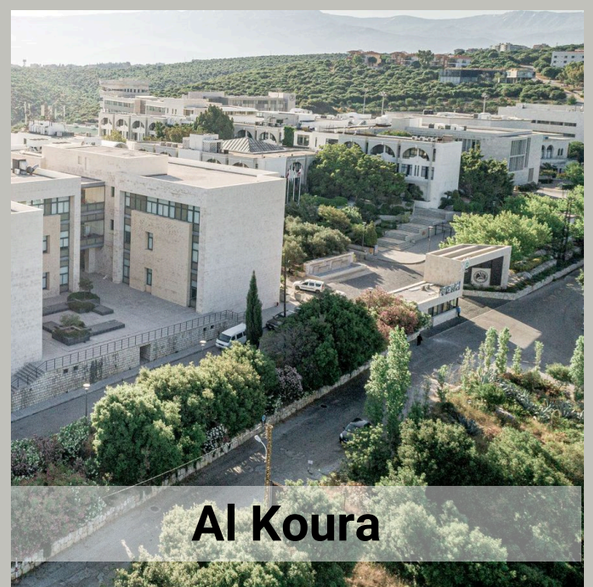
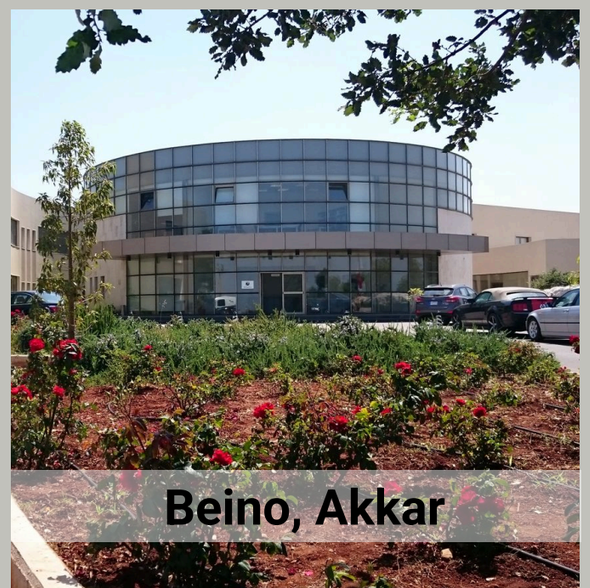
BALAMAND
CLIMATE ACTION PLAN UOB-CAP33

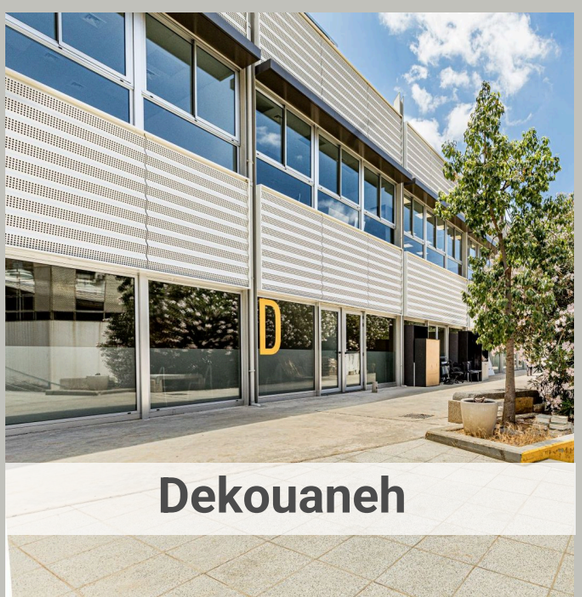


UOB 4 Campuses











PRESIDENT

DR. ELIAS L. WARRAK

"At the University of Balamand, we strive to contribute to nation building, environmental responsibility, and human development. While we nurture the education of our graduates in a multitude of fields, we are equally committed to the welfare of our community and its environment.

To achieve our mission, we work on prioritizing and investing in the preservation and sustainability of our natural habitat, and ultimately joining the fight against climate change.

Accordingly, UOB is keen on addressing, through its interdisciplinary academic programs and research activities, the devastating global climate change concerns, by developing approaches and undertaking long-term monitoring processes that serve this purpose.

Thank you to all the faculty and staff who generously contributed to the development of the UOB -CAP33 by dedicating their time, effort, and ideas

UOB-CAP33 | 2023-33



Sustainable Development Goal 13 (SDG 13 or Global Goal 13) is about climate action and protecting life. It's goal is to *"Take urgent action to combat climate change and its impacts"*.

It is one of 17 Sustainable Development Goals established by the United Nations General Assembly in 2015.

Climate Action meets many of the objectives of the UN SDGs.

UOB-CAP33 Priority Sectors

- Governance
- Energy
- Research, Development and Capacity Building
- Transportation
- Sustainable Procurement and Food
- Waste
- Outreach and Awareness
- Water

Governance



Goal 1: Institutionalize Climate Action

Goal 2: Coordinate and Support the Implementation of all Climate Actions and Sustainability Efforts

Goal 3: Progress Measurement, Monitor, and Evaluation Plan

Goal 1: Institutionalize Climate Action

01 Incorporate climate planning into university governance and operations

02 Establish the CARD to coordinate, network, and support the UOB-CAP implementation

03 Provide a diagram / chart to outline the governance structure within the UOB-CAP

04 Encourage academic units to adopt policies, plans, procedures and guidelines that further support climate action goals

05 Encourage service units to adopt policies, plans, procedures, and guidelines that further support climate action goals

Goal 2: Coordinate and Support the Implementation of all Climate Actions and Sustainability Efforts

01 Create permanent functions/staff positions to coordinate and implement UOB-CAP and sustainability intiatives

02 Ensure there is clear leadership and governance for implementation of the UOB-CAP within each activity

03 Build a network of stakeholders to develop funding structures to finance UOB-CAP and sustainability initiatives

04 Integrate the UOB-CAP performance monitoring into staff training

05 Yearly revise the UOB-CAP to ensure it continues to be aligned with the present achievements and remains open to new possibilities.

Goal 3: Progress Measurement, Monitor, and Evaluation Plan

01 Develop a comprehensive monitoring framework to monitor all climate change indicators and initiatives

02 Measure progress of climate change indicators and initiatives

03 Develop, measure, perform, and publish report on indicators in each sector

04 Track required financial data

05 Review of record-keeping related to the 8 sectors and explore the feasibility of improving the data collection and analysis capability using current systems

Energy



Goal 1: Improve Energy Efficiency

Goal 2: Diversify Renewable Energy Sources

Goal 1: Improve Energy Efficiency

01 Establish a baseline of energy use at UOB

02 Analyze the data of energy consumption and production at UOB

03 Add extra insulation to buildings

04 Switch to energy efficient lighting system (e.g. smart LED)

05 Update the heating, ventilation, and air conditioning (HVAC) system

06 Install modern energy saving appliances

07 Create a live- tracking system for energy use

Goal 2: Diversify Renewable Energy Sources

01 Identify renewable energy potential for each campus

02 Invest in on-campus wind energy

03 Invest in on-campus biomass energy (charcoal, briquette, pellets)

04 Invest in on-campus solar energy

Research, Development and Capacity Building



Goal 1: Research Various Topics on Climate Change Adaptation and Mitigation

Goal 2: Infuse Climate and Sustainability Learning and Capacity Building Opportunities

Goal 3: Develop and Support Community-Based Climate Actions

Goal 1: Research various topics on Climate change adaptation and mitigation

01 Establish and interdisciplinary advisory committee to orient research, advance and expand current research CARD

02 Stock-take of all climate related research and projects at the university level

03 Inventory all greenhouse gas emissions and removals from all sectors at the university (GHG Budget)

04 Assess and analyze the Inventory

05 Promote research and projects to reduce GHG emission and to increase its removal

06 Leverage new research opportunities by using UOB Campuses and properties as a climate action lab

Goal 2: Infuse climate and sustainability learning and capacity building opportunities

01 Conduct review of environmental sustainability content, courses, projects, seminars across taught programs

02 Assess and analyze the conducted review

03 Develop or adapt a sequence of options for interdisciplinary, problem-centered courses focused on climate change and related environmental crises

04 Integrate a multi-disciplinary course required for all students (similar to culture studies) focused on climate change and related environmental crises

05 Offer lifelong learning options

Goal 3: Develop and support community-based Climate actions

01 Establish partnership/collaboration with municipal, national, and local authorities to support decision making and policy development on climate related matters

02 Support communities in introducing approaches to adapt to climate change impacts

03 Build the capacity and resilience of communities to mitigate climate impacts

04 Implement climate actions through external funding

05 Build capacities on climate change monitoring tool

Transportation



Goal 1: Establish a UOB Sustainable Transportation Program to Reduce Commuting Emissions

Goal 2: Prioritize and Support a Pedestrian and Bike-Friendly Campus

Goal 3: Strengthen Efforts to Transition to Electric Vehicles (EVs)

Goal 1: Establish a UOB Sustainable Transportation Program to reduce commuting emissions

01 Develop a comprehensive Transportation Management program and market research of commuter patterns

02 Create an accessible, integrated, and multimodal transportation system for UOB students, staff, and faculty

03 Upgrade the UOB Connect commuting solution for all staff, faculty, and students to cover more areas and at different time slots

04 Increase the percentage of commuters who choose alternative transportation for daily commuting

Goal 2: Prioritize and Support a Pedestrian and Bike-Friendly Campus

01 Publicize the UOB path of learning for pedestrians on UOB main campus and other campuses

02 Encourage walking and create a UOB app for walking time vs waiting for the UOB Bus Shuttle

03 Develop a UOB bicycle policy and introduce biking services including racks, parking, and coordinate initiatives with the greater community

04 Provide bicycle awareness and training events on all campuses and promote safe cycling practices and resources through regular communications

Goal 3: Strengthen the efforts to transition to electric vehicles (EV)

01 Improve energy efficiency in parking facilities operations

02 Favor electric vehicles when purchasing new vehicles for campus fleet

03 Install electric parking spots on all campuses and create incentives to use electric vehicles

04 Develop long-term EV fleet replacement strategy

Sustainable Procurement & Food



Goal 1: Implement Internal Approach with Teams and Departments

Goal 2: Implement External Approach with Suppliers

Goal 3: Implement Safe and Healthy Agricultural Habits

Goal 1: Implement Internal Approach with Teams and Departments

01 Through a participatory approach, develop with, and communicate sustainable procurement policy and action plan to teams and departments

02 Increase employee engagement and innovation

03 Purchase eco-friendly material and goods at all levels

04 Purchase local organic food

05 Update the purchasing process at UOB to integrate the new waste reduction intiative

Goal 2: Implement External Approach with Suppliers

01 Guide suppliers towards eco-certified products

02 Guide suppliers towards marketing eco-friendly local production

03 Guide suppliers to green their distribution and operations

04 Select green suppliers to compete for bids and favor as a main factor for award

Goal 3: Implement Safe and Healthy Agricultural Habits

01 Purchase pesticide free products to promote organic agriculture and safe landscaping

02 Promote the purchase of agriculture products that use electric tools

03 Favor the purchase of agriculture products using animal organic waste fertilizer

WASTE



Goal 1: Accommodate Waste Sorting Techniques in all UOB Facilities

Goal 2: Adequate Hauling of the Waste to the Waste Treatment Facilities

Goal 3: Develop Waste Reduction Actions, Policies, and Regulations Across all Campuses

Goal 1: Accommodate Waste Sorting Techniques in all UOB Facilities

01 Conduct waste generation assessment in all UOB campuses

02 Ensure collaboration with waste management entities

03 Place and maintain recycling waste bins in all strategic areas across campuses

04 Place and maintain biowaste containers across all UOB laboratories

05 Collect chemical waste across all UOB laboratories based on their composition

06 Place e-waste containers across designated UOB areas

07 Place containers across designated UOB departments to collect paper related waste

08 Conduct waste training and Awareness Session

09 Conduct a waste sorting assessment

Goal 2: Adequate Hauling of the Waste to the Waste Treatment Facilities

01 Train house keeping staff about waste management

02 Designate a focal point in each campus

03 Designate a monitoring officer in each campus

04 Transfer and transport of waste to concerned entities

05 Conduct waste transport assessment in all UOB campuses

Goal 3: Develop Waste Reduction Actions, Policies, and Regulations Across all Campuses

01 Decrease the use of paper, plastic, glass, alumimium, and other types of waste

02 Develop a waste sorting unit at UOB

Outreach and Awareness



Goal 1: Promote Student Involvement in Development and Implementation of UOB-CAP33

Goal 2: Serve as a ‘HUB’ For Creating and Disseminating Knowledge About Climate Adaptation

Goal 3: Track and Report on the UOB-CAP33 and Other Sustainability Initiatives

Goal 1: Promote Student Involvement in the Development and Implementation of the UOB-CAP33

01 Align student and club activities with CAP and sustainability objectives

02 Develop and support student led sustainability initiatives on all UOB campuses

03 Organize competitions related to climate change topics and promote student innovation in this respect

04 Develop a formal network of Sustainability Champions, who serve as both advocates and ambassadors of sustainability at UOB

Goal 2: Serve as a 'Hub' for Creating and Disseminating Knowledge About Climate Adaptation

01 Create an expert list for, and further develop opportunities with media to promote UOB as a leader in sustainable development

02 Engage leaders in local communities and businesses to leverage UOB educational resources to improve climate resilience

03 Engage private and public organizations to advocate for public policies that support climate action

04 Create a recognition program for students, staff, and faculty as Sustainability Champions

05 Launch and sustain Climate Action Awareness Campaign

06 Share best practices and lessons learned

Goal 3: Track and Report on the UOB-CAP33 and Other Sustainability Initiatives

01 Develop a communication strategy to educate internal and external audiences about UOB's efforts to address climate change and other sustainability challenges

02 Develop a database of sustainability-related projects that have been conducted by students and faculty

03 Develop recommendations on strategies to engage UOB students, faculty and staff on campus in the implementation of UOB-CAP33

Water



Goal 1: Ensure Responsible Water Consumption

Goal 1: Ensure Responsible Water Consumption

01 Identify opportunities for water source from rainwater,surface water, groundwater, greywater or wastewater including pool water, and off campus bulk water

02 Develop and introduce a system to monitor water use across all campuses

03 Issue a policy and a procedure to identify and measure water reuse across the University

04 Introduce water saving technologies in all campuses and at all levels the Inventory

05 Introduce water saving technologies in all campuses and at all levels

Working Groups

Climate Action Plan Writing Working Group
- To draft the 2023-2033 Climate Action Plan

Climate Action Plan Governance
- To identify means to incorporate climate planning and implementation into university governance and operations

Research Development and Capacity Building
- To identify and evaluate Education, Research, and Capacity Building in the area of Climate Change

Water
- To promote, identify, and evaluate responsible water consumption in all campuses

Energy
- To identify and evaluate carbon reduction in Energy consumption and alternative renewable energy sources

Sustainable Purchasing and Food Systems
- To identify and evaluate environmentally preferable purchasing guidelines and Campus Food services

Transportation
- To identify and evaluate carbon reduction strategies for university-based transportation

Waste
- To identify and assess campus waste diversion and reduction opportunities

Outreach and Awareness
- To identify opportunities to engage and outreach local and external communities and to develop communication and marketing plan

Commitment and Actions

UOB is committed to the UN Climate Action Plan and to make the world a better place.

All the working Groups created short, mid, and long-term strategies.

The UOB-CAP 33 will be reviewed on a yearly basis.



Thank you to the working groups:

UOB-CAP33 was initiated and is overseen by *Prof. Rami Abboud*, Vice President for Internationalization and Engagement, and the Committee for the Working Groups was chaired by *Dr. Manal Nader*, Director, Institute of the Environment.

1. Water (waste water management, water consumption, and water conservation)
The group to lead regarding Water is: Dr. Yasmine Jabali (Chair), Dr. Makram Bachawati, Dr. Marianne Saba, and Mrs. Cherine Nawfal.

2. Energy (reduction of use, renewable energy, air pollution and emissions)
The group to lead regarding Energy is: Dr. Ibrahim Chambour (Chair), Dr. Elie Karam, Dr. Adib Kfoury, Dr. Georges Mitri, Dr. Makram Bachawati and Mr. Fadi Roufayel.

3. Waste (solid waste, organic waste, liquid waste, electronic waste)
The group to lead regarding Waste is: Dr. Myriam Mrad (Chair) and Dr. Yasmine Jabali.

4. Transportation
Transportation will be overseen by the COO Office.

5. Research, Development and Capacity Building
The group to lead regarding Research Development and Capacity Building is: Dr. Manal Nader (Chair), Dr. Antoine Abche, and Ms. Rania Al Najjar.

6. Outreach and Awareness
The group to lead regarding Outreach and Awareness is: Dr. Oumaya Kuran (Chair) and Mr. Michael Salem.

7. Procurement Sustainability and Food
The group to lead regarding Procurement is: Mrs. Afifa Semaan (Chair), Dr. Rodrigue Balaa, Dr. Nour Rachkidi, and Mr. Bassam Serhan.

8. Governance
The group is led by Prof. Rami Abboud.

Units Involved

Vice President Office for Internationalization and Engagement

Institute of the Environment

Chief Operating Officer - COO office

Faculty of Business and Management

Faculty of Engineering

Faculty of Health Sciences

Issam M. Fares Faculty of Technology

Office of Data and Institutional Research

Office of Landscaping, Gardening and Agriculture

Office of Procurement and Campus Services

Office of Student Affairs

School of Tourism and Hotel Management