

NDU Sustainability Task Force

Yearly Progress Report 2017-2018

Table of Contents

	Pre	eamble4	
l.	Tas	sk Force Structure	
II.	Wo	orking groups	
Α	. '	Waste Management (Working Group I)	5
	1.	Members	5
	2.	Objectives	5
	3.	Tasks	5
В	. '	Water Conservation (Working Group II)	6
	1.	Members	6
	2.	Objectives	6
	3.	Tasks	6
	1.	Members	6
	2.	Objectives	6
	3.	Tasks	6
C	. 1	Land use and ecosystem preservation (Working Group IV)	7
	1.	Members	7
	2.	Objectives	7
	3.	Tasks	7
D	. :	Sustainable procurement (Working Group V)	7
	1.	Members	7
	2.	Objectives	7
	3.	Tasks	7
Ε	.	Environmental outreach and service to the community (WG VI – Annual Conference)	8
	1.	Members	8
	2.	Objectives	8
	3.	Tasks	8
F	. 1	Monitoring and Reporting	8
	1.	Members	8
	2.	Objectives	8
	3.	Tasks	ç
٧.	Act	tions and Initiatives9	
Α	. 1	Partnerships	. <u>c</u>

В.	Visual creative campaign and on ground activations	9				
C.	Community engagement	10				
D.	Competitions:	10				
E.	Meetings and Trainings: (Appendix for Technical Committee Progress Report 2017 Page 6)	12				
F.	Data Collection:	13				
G.	Key Performance Indicators	13				
Н.	Three year strategy plan (insert appendix for it)	13				
V. 1	7 Initiatives and Actions under the 17 Sustainable Development Goals	. 14				
Apper	ndix 1: Signed Memorandum	. 23				
Apper	ndix 2: Peer Training Towards a No-Waste Campus: Pictures	. 24				
Apper	ndix 3: Letter for the International Solid Waste Association	. 25				
Apper	dix 4: Summary of NDU Climate Actions 2018-2019	. 26				
Apper	dix 5: Agenda: Training Session Cleaning & Catering Services	. 28				
Apper	ndix 6: Janitorial Guidelines	. 29				
Appendix 7: Training Sessions for NDU employees						
Apper	dix 8: Waste Sorting	. 31				
Apper	dix 9: Data Collection Table	. 32				
Apper	dix 10: Three-Year Strategy (2018-2020)	. 33				

I. Preamble

As part of its mission, to be a committed and responsible guardian of our planet and people,

Notre Dame University-Louaize is abiding by Pope Francis' Encyclical Laudato Si, which is driven towards a change for the better. NDU has become a member of the United Nations Global Compact (UNGC) with the purpose of abiding all internal sustainability-related initiatives to the 10 universal principles, that fall under the umbrella of the 17 UN Sustainable Development Goals (SDG). The Signed Memo is provided in **Appendix 1.**

To this effect, NDU formed a Sustainability Task Force concentrating on 7 focus areas:

- I- Waste Management
- **II- Water Conservation**
- III- Carbon footprint reduction
- IV- Land use and ecosystem preservation
- V- Sustainable procurement
- VI- Environmental outreach and service to the community
- VII- Monitoring and Reporting

II. Task Force Structure

The environmental sustainability plan and anything related to past, ongoing, or planned environmental initiatives are adopted by two committees; the Technical sub-committee and the Outreach sub-committee. The committee is composed of NDU staff & faculty members who are charged with implementing internal projects and initiatives towards sustainability. Following are the members involved:

Technical sub-committee:

- Dr. Sophia Ghanimeh (co-chair for technical matters) Associate Professor, FE, Civil and Environmental Engineering
- Dr. Pauline Aad Assistant Professor, FNAS, Sciences
- Mr. Omar Sakr Lecturer, FBAE, Hospitality and Tourism Management
- Mr. Sayed Ghossain Director, Office of Campus Services
- Mr. Salim Iskandar Director, Office of Physical Plant

Outreach sub-committee:

- Mrs. Emma Shaffu Chacar (co-chair for outreach matters) Director, Office of Communications
- Mrs. Joyce Menassa AVP for Academic Support, Senior Lecturer, Office of Academic Affairs. FBAE,
 Management and Marketing
- Mr. Andre Fahed Creative Director, Office of Communications

- Ms. Nesrine Sfeir Assistant to the President for University Advancement
- Dr. Lara Khabbaz Director, Office of Marketing

III. Working groups

The committees, with the addition of faculty & staff members, are branched into 7 working groups with the purpose of raising sustainability awareness and engaging into the 7 focus areas mentioned above.

Below are the details of the working groups (Including titles, objectives, and attached individual reports):

A. Waste Management (Working Group I)

1. Members

Dr. Sophia Ghanimeh (Lead); Mr. Andre Fahed; Mrs. Karen Abou Jawdeh; Mrs. Rita el Aam

2. Objectives

- Developing the scope and approaches for a comprehensive, university-wide, lifecycle materials management
- Deviating the waste from landfills
- Developing a waste reduction policy
- Processing the biodegradable waste
- Promoting a sustainable food system
- Minimizing the generation of hazardous waste when possible
- Developing a complete strategy for storage, collection and disposal of hazardous waste
- Developing an integrated plan for management of e-waste
- Supporting and enhancing reuse programs
- Evaluating current status of wastewater treatment in all campuses
- Ensuring adequate wastewater treatment and/or discharge
- Reusing the treated water
- Managing the bio-solids properly

3. Tasks

- Initiating waste management at campuses
- Increase the efficiency of sorting
- Design & guidelines for e-waste, hazardous, FAAD waste

- Collection of metrics Job description of a supervisor
- Branding the e-waste plexi-glass container
- Adopting blue/black bag system and phasing out old bins
- Develop a systematic monitoring process for solid waste
- Develop key performance indicators
- Wastewater: Assess current status; Develop key performance indicators

B. Water Conservation (Working Group II)

1. Members

Dr. Pauline Aad (Lead); Ms. Maya Atieh; Dr. Jacques Harb

2. Objectives

- Evaluating water usage on campuses
- Reducing water consumption
- Reducing landscaping water use
- Diversifying the sources of fresh water

3. Tasks

- Monitor water consumption
- Design a strategy for water reduction; Develop key performance indicators Carbon footprint reduction (Working Group III)

1. Members

Dr. Dima Jawad (Lead); Mr. Salim Iskandar; Dr. Ghassan Kraidy; Dr. Fakherdine Keyrouz; Ms. Mariette Hazoury

2. Objectives

- Establishing a monitoring system for emissions of Greenhouse Gases
- Reducing energy requirements
- Improving energy conservation
- Switching to cleaner renewable types of energy
- Starting incentive programs to offset transportation related emissions

3. Tasks

- Initiate assessment of current status
- Draft a TO DO list of short-term action plan

Develop key performance indicators

C. Land use and ecosystem preservation (Working Group IV)

1. Members

Mr. Maher Ghostine (Lead); Dr. Tanos Hage; Mrs. Carole Assaf

2. Objectives

- Increasing green areas
- Adopting an Integrated Pest Management approach, which allows prevention, monitoring and control with a limited need for pesticides
- Optimizing water consumption
- Improving resource conservation

3. Tasks

- Assess current status
- Increase the percentage of the green area; Implement water conservation
- Design an Integrated Pest Management Plan
- Develop key performance indicators

D. Sustainable procurement (Working Group V)

1. Members

Mr. Omar Sakr (Lead); Mr. Edy Lteif; Dr. Nada Maalouf

2. Objectives

- Developing a sustainable supply chain system and establishing a management system
- Consulting with and assessing NDU suppliers and help them meet NDU sustainability goals
- Favoring products with lower life cycle impacts
- Favoring local sources and services, wherever possible, to encourage local business and cut down on the need for transportation and distribution
- Buying bulk to reduce the amount of packaging

3. Tasks

Initiate assessment of current status

Draft a list of short-term goals; Develop key performance indicators

E. Environmental outreach and service to the community (WG VI – Annual Conference)

1. Members

Mrs. Emma Chakar (Lead); Mr. Majed Bou Hadir; Mr. Omar Sakr; Dr. Sophia Ghanimeh; Dr. Pauline Aad; Dr. Lara Khabbaz

2. Objectives

- Turning NDU into a benchmark for environmentally sustainable institutions
- Educating the community through engagement opportunities with student, staff and faculty members
- Providing training and tools for assessment of environmental parameters
- Creating focused programs and competitions
- Providing incentives and rewards

3. Tasks

 Collate previous & current projects; Year round engaging activities; Public reporting; Plan for the annual conference/workshop in Fall 2018

F. Monitoring and Reporting

This working group assists the other WGs in assessing their performance by monitoring KPIs, analyzing the data and reviewing the adopted methods. It also compiles the data and develops semester and annual reports.

1. Members

Dr. Lara Khabbaz (Lead); Ms. Patricia Eid; Ms. Re-mi Hage; Dr. Doris Jaalouk; Mrs. Theresa Hajjar

2. Objectives

- Defining Key Performance Indicators
- Submitting bi-annual reports to the President of NDU
- Publishing an annual Environmental Sustainability Report online showing our objectives, methods, and progress
- Benchmarking NDU's performance against peer institutions

 Reviewing the action plan every two years and incorporating emerging challenges and opportunities

3. Tasks

- Follow up on key performance indicators & metrics
- Develop a website/webpage; Periodic reporting

IV. Actions and Initiatives

Below cited Actions and Initiatives are included under the subsequently mentioned 17 Sustainable Development Goals.

A. Partnerships

In order to ensure a "no waste" path for NDU, a campaign was launched during fall 2017.

Considering this, the campaign included partnerships with three local NGOs: L'Ecoute,

Beeatuna, and Compost Baladi, which handle different types of waste management in Lebanon.

B. Visual creative campaign and on ground activations.

Throughout the academic year, the campaign included both a visual creative campaign and onground activations.

- Drop-down banners and digital versions
- Stickers were affixed on paper and plastic bins to encourage proper waste disposal
- Visual aids placed on top of sorting bins

The University, in collaboration with the Benedict XVI Endowed Chair of Religious, Cultural, and Philosophical Studies at NDU, organized a conference to evaluate and discuss several aspects related to environmental sustainability.

As a result of the above-mentioned actions, NDU established several student focus groups to retrieve student insights, regarding the awareness campaign's efficiency and effectiveness.

- Creating a box to process E-waste: (WG I)
- A Plexi box was made for batteries and a wooden box for large electronic items.
- To take part and create awareness among NDU students, a sorting presentation was done and imparted by students themselves pointing out sorting as an imperative matter. The aforesaid presentation was done for the purpose of encouraging

commitment and engagement in the sorting process in Notre Dame University – Louaize (NDU). Pictures of the peer training are shown in **Appendix 2.**

C. Community engagement

- Engaging with NDU students to partake in the sustainability taskforce actions by joining environmental clubs, such as the NDU Student Chapter of the Air and Waste Management Association (AWMA). Full participation details are mentioned in the University website on the sustainability taskforce page.
 - http://www.ndu.edu.lb/sustainability/take-action
- Operating under the umbrella of the Faculty of Engineering (FE) at NDU, The Center for Research on Sustainable Development (CROSD) at NDU aims to investigate sustainability concepts in general while laying special emphasis on regional challenges as regards water, energy, and the environment.
 - http://www.ndu.edu.lb/sustainability/take-action

D. Competitions:

Applying to the ISWA:

The International Solid Waste Association (ISWA) is a non-governmental, independent and non-profit association by decrees and follows the mission statement to promote and develop professional waste management worldwide as a contribution to sustainable development. The University in the effort of achieving full sustainability applied to the International Solid Waste Association, however the attempt was unsuccessful, and nevertheless applying towards the ISWA would be considered an initiative worth mentioning as a sustainable development goal.

The letter of application for the ISWA is provided in **Appendix 3**.

Winning the SDG Milestones Award

An international sustainability initiative, the Global SDG Awards is designed to increase private sector engagement with the United Nations Sustainable Development Goals (SDGs) framework through competition. NDU, with collaboration of the United Global Compact Lebanon, applied to the UNGC-GCNL SDGs Milestones Competition (Academic sector) including evidence and supporting documents upon the jury request. On October 18, 2018 NDU won the SDG Milestones Award during the Multi-Stakeholder SDG Forum.

Details and pictures of the aforementioned event are stated in the following link:

UI Green Metrics

Universitas Indonesia (UI) initiated a world university ranking in 2010, later known as UI GreenMetric World University Rankings, to measure campus sustainability efforts. It was intended to create an online survey to portray sustainability policies programs and in universities around the world. The rankings were based broadly on the conceptual framework of Environment, Economy, and Equity. As NDU has a strong commitment to sustainability issues, the participation in the annual UI GreenMetric World University Rankings took effect.

The WG VII placed a couple of sustainable development goals in the application to which the events related to sustainability took place including a couple of event pictures promoting the aforementioned initiative.

Lebanon Climate Act

The Lebanon Climate Act aims at creating economic growth in a way that also creates value for the society by addressing Climate Change challenges. It is also an opportunity to establish solid partnerships between leading business organizations who are showing headship in acting on climate change and are willing to commit to one or more innovative and practical climate initiatives. On that note, NDU was selected by the UNDP Climate Change Team to be included in the list of climate change champions 2018. NDU was also selected to be one of four panelists on the Lebanon Climate Act Panel during the International Beirut Energy Forum.

Following is the event link to the Beirut Energy Forum: http://beirutenergyforum.com
Details to the aforementioned event are provided in the following link:
http://www.ndu.edu.lb/news-and-events/news/ndu-joins-leading-climate-change-champions-2018

NDU Climate Action Plan

Following the Lebanon climate act event, Working Group III of the Environmental Sustainability Task Force initiated an NDU Climate Action Plan that was submitted to the Lebanon Climate Act, the table included the ensuing aspects: Energy, Transportation, Waste Management, Water Conservation, Land use & Ecosystems,

Purchasing, Outreach, Monitoring & Review. To each aspect a working group is assigned following target actions and initiatives; provided in **Appendix 4.**

Ministry of Energy: A meeting was held between the NDU Task force and the
consultant of the Ministry of Energy, whereby a discussion was held mentioning
potential NDU contribution towards a solution for Waste-to-Energy in Keserwan.

E. Meetings and Trainings: (Appendix for Technical Committee Progress Report 2017 Page 6)

Catering and Cleaning Services:

Two yearly training sessions have been held for the Catering and cleaning services pointing out follow up on sorting activities and sorting guidelines.

Outcomes of the meeting were: (1) designating a color coding system for the trash generated at NDU where black is organic, yellow is paper and blue is all other, (2) a brief guiding table for collection of the waste. A PowerPoint presentation was provided to the Catering and Cleaning Services. Agenda of the presentation, Janitorial Guidelines, and Pictures are provided in **Appendix 5, 6, and 7.**

FAAD:

Meetings were held with the Dean of FAAD to initiate a specific sorting project for their workshops and design rooms.

Computer center:

A meeting was held with Dr. Fawzi Baroud and Mr. Ziad Azzi in order to assess the current practices in handling NDU's e-waste. Dr. Baroud's recommendations were taken into account in designing an e-waste collection scheme, to be adopted starting Spring 2018.

Laboratories:

Inventory of chemical waste is being developed, as an agreement is being reached with private companies to ship the aforementioned waste according to the requirements of the Basel Convention.

F. Data Collection:

In late Spring 2018, preliminary data collection was initiated. The characterization of the "general waste" was performed, at the sorting point, by three groups of students the quantity of recovered material was monitored over three weeks. Pictures are provided in **Appendix 8**. During the first six months of campaign implementation, about 3500 kg of landscaping waste was converted into organic (contaminant free) compost; and 6000 kg of paper, 1600 kg of plastic, and 300 kg of aluminum were sorted and delivered to L'Ecoute association. The income from selling the recovered material to the recycling industry was used to buy a Super Power hearing aid kit (\$750) for Serge, an underprivileged Lebanese young man suffering from cerebral motor infirmity. Table of aforementioned data is included in **Appendix 9**.

G. Key Performance Indicators

Any successful organization or institution requires the ability to meet their organizational objectives successfully; hence KPIs will be provided in the forthcoming semester as numbers and reports are being studied and analyzed.

H. Three year strategy plan (insert appendix for it)

The three-year Environmental Sustainability Task Force sustainability summary plan, approved by the President of NDU, regarding the years 2018 – 2020 IS provided in **Appendix 10**.

V. 17 Initiatives and Actions under the 17 Sustainable Development Goals

Notre Dame University incorporates environmental sustainability within their activities whether it being academic or non-academic. Following are the internal Initiatives and Actions that fall under the 17 Sustainable Development Goals:

SDG 1 - No poverty



- Donation Campaign (Old shoes, clothes, etc...) SAO/CSA
- Bake sale fundraising event SC: FNHS
- Underprivileged children Christmas party Campus Ministry
- Help refugees and youth achieve potential through programs in education FH/DPED

SDG 2 - Zero Hunger



"Together Against Hunger" event and conference part of Zero Hunger Challenge - FNHS + SAO/CSA

SDG 3 - Good Health and Well-being



- Elderly Caregiving Conference FNHS
- World Mental Health Day FH/DPED + Library
- Counseling & Calorie Count Workshop NLC/FNHS
- "Youth & Marijuana" awareness lecture FNHS
- Food, Nutrition, & Health building workshops FNHS
- Nutrition Fair SC/FNHS
- Family Violence lecture FNHS
- Drug Addiction Conference FNHS + SAO/CSA + FLPS
- Attending & assisting at the Elderly Home Campus Ministry + Pastoral

- Fluoride FNHS Vital Food Safety and Environmental Toxins with Fluoride Action Network (FAN), and Executive Director of the American Environmental Health Studies Project (AEHSP)
- Food safety and new food product development workshop at Rayak Air Base FNHS
- Lecture on STDs FNHS (NDU SC)
- Seminar on maintaining food safety in hospitals FNHS
- Launching the Holistic Presidency Initiative to prevent and mitigate risks related to Internet and technology addiction. The first-of-its-kind Lebanese Institute for Internet and Technology Addiction (INTA) seeks to continue in its noble quest to research, raise awareness, and prevent Internet and technology addiction.

SDG 4 - Quality Education



- Accreditations:
 - NECHE Accreditation
 - ABET: Faculty of Engineering
 - ABET: Faculty of Natural and Applied Sciences / Computer Science Department
 - CILECT: Faculty of Humanities / Department of Audio Visual Arts
 - ACCA: Faculty of Business Administration and Economics / Department of Accounting and Finance
- Introduce Open Educational Resources (OER) for teaching & research
- The Father Walid Moussa Award in Civic Engagement LDI
- SAIL Exchange Program FH/Benedict XVI Chair
- FE Students Win "Charles T. Main Leadership Award"
- Project Exhibitions Global Grad Show 2017 Dubai Design week- RC-FAAD
- Highest Number of Accepted Funding Proposals at National Council for Scientific Research of Lebanon (CNRS-L)
- Exchange Student at UCC Denmark
- Student Wins "Christopher Andrew-Michael Handel Prize" for best article
- "YES NDU": Entrepreneurship competition for high school students FBAE/DMM
- NDUer selected as part of the Global UGRAD program to study in the U.S. for one semester
- "Computer Science Summer Camp" for school students NLC and main campus FNAS

NDUers winning Competition/Awards:

- FAAD: Chadurji, Photography Byblos

- FBAE: KPMG

- FLPS: Moot Court

- Student Wins "Christopher Andrew-Michael Handel Prize" for best article
- Student Wins Rhodesworks Design Studio (Rhodesworks) competition for best proposal in response to "Resolute Arch," the new sculpture by studio principal Richard Rhodes
- FE Students win first prize in the "Alfa-Ericsson IoT Awards 2018
- FBAE students win Agence Universitaire de la Francophonie (AUF) for Lebanese
 Student Entrepreneurship" project
- RC-FAAD students win second prize in "IBDAA 2018" for a project that creates a sustainable solution
- FE: Popsicle Stick Bridge Competition
- FE: Students win the 2018 National ACI Eco-Concrete Student Competition organized by the Lebanese Chapter of the American Concrete Institute (ACI), Advanced Construction Technology Services (ACTS), and the Lebanese Concrete Society.
- The graduate division became the first Project Management Institute Registered Education Provider
 (PMI R.E.P.) in Lebanon, offering courses at the graduate level FBAE
- NDUers will be participating in a Confucius Institute-organized Summer Camp in China this month.
- FBAE NDU winning students for the AUF-organized "Lebanese Student Entrepreneurship" project to spend three weeks in a PEPITE centre (pôles étudiants pour l'innovation, le transfert et l'entrepreneuriat) in France to develop their entrepreneurship skills
- Media Studies Forum (MSF18) Countering Digital Extremism Through Activism FH DMS
 Cyber-violence and the negative social implications of technology at The Media Studies Forum (MSF18)
- Alumni Briefcase
- "Computer Science Summer Camp" for school students NLC and main campus FNAS
- 15 selected architecture students take part of the "Bauhaus100" study trip to Germany, as part of the traveling studio tradition at the department FAAD

SDG 5 - Gender Equality



- Gender Based Violence Studies Workshop FLPS
- Child Bride Campaign FH/DMS
- Gender Based Violence Studies FLPS (gender studies initiative titled, "Gender Based Violence (GBV)." It was will piloted in NDU
- Launching of a Code of Conduct (CoC) and a pioneer toolkit regarding protection and mitigation of GBV against women and girls – GIR – FLPS
- Campaign against extremism "Box Out Extremism" FH/DMS

SDG 6 - Lean Water and Sanitation



- Environmental Sustainability Plan (Faculty of Engineering):
 - Water Conservation:

Evaluating water usage on campuses

Reducing water consumption

Reducing landscaping water use

Diversifying the sources of fresh water

- Waste Management:

Developing the scope and approaches for a comprehensive, university-wide, life-cycle materials management

Deviating the waste from landfills

Developing a waste reduction policy

Processing the biodegradable waste

Promoting a sustainable food system

SDG 7 - Affordable and Clean Energy



- NDU hosted two emerging start-ups, Lebanon Buses and Smart Bus Stops, that work on the Bus Map Project, a grassroots initiative to fix Public Transport in Lebanon – RC-FAAD
- Solar Power Heating (This is on the wall and check the list created for Lebanon (Green)
 Opportunities to add them as well)

SDG 8 - Decent Work and Economic Growth



- Winning KPMG Leb. case business strategy competition FBAE/DMM
- NDU MUN SAO
- Signed (MOU)s with companies for recruitment purposes:

ITG Holding

Minor Hotels

KPMG

Internship agreement with astronomy research institute in Portugal

SDG 9 - Industry, Innovation, and Infrastructure



- Street Renovation Architectural Competition RC-FAAD
- Students Partake in Restoration of Monuments RC-FAAD
- Passageway Shelter Competition for Students Free Parking RC-FAAD
- Students Win Saida Festival Kiosk Design Competition RC-FAAD

SDG 10 - Reduced Inequalities



 Counseling & Psychotherapy Training session to help faculty members identify students with learning difficulties and to provide instructors with the necessary tools to support those students, depending on their learning difficulties

SDG 11 - Sustainable Cities and Communities



- Sustaining a Green and "Clean" Campus Conference President's Office
- NDU hosted two emerging start-ups, Lebanon Buses and Smart Bus Stops, that work on the Bus
 Map Project, a grassroots initiative to fix Public Transport in Lebanon RC-FAAD
- Initiative to renovate the Phoenicia Hotel Canteen RC-FAAD

SDG 12 - Responsible Consumption and Production



- Environmental Sustainability Plan (Faculty of Engineering):
 - Sustainable Procurement:

Developing a sustainable supply chain system and establishing a management system

Consulting with and assessing NDU suppliers to meet NDU sustainability goals

Favoring products with lower life cycle impacts

Favoring local sources and services to encourage local business and decrease need for transportation and distribution.

Buying bulk to reduce the amount of packaging.

Waste Management:

Developing the scope and approaches for a comprehensive, university-wide, life-cycle materials management

Deviating the waste from landfills

Developing a waste reduction policy

Processing the biodegradable waste

Promoting a sustainable food system

- NDU hosted two emerging start-ups, Lebanon Buses and Smart Bus Stops, that work on the Bus
 Map Project, a grassroots initiative to fix Public Transport in Lebanon RC-FAAD Sustaining a Green and "Clean" Campus Conference President's Office
- Four NDU Projects selected for LIRA Industrial Oriented Project Funding FE
 Projects were: Asthma Device Calibration, Shotgun Cartilage Recycling Machine- CARL, Vertical Axis
 Wind Turbine- VAWT, and Internet of Trees- IO Tree

- Christmas Fiesta: (Upcycling) Christmas Tree Competition
- International Solid Waste Association Seminar about Solid Waste Management FE

SDG 13 - Climate Action



- Environmental Sustainability Plan (Faculty of Engineering):
 - Carbon Footprint Reduction:

Establishing a monitoring system for emissions of Greenhouse Gases

Reducing energy requirements

Improving energy conservation

Switching to cleaner renewable types of energy

 Organized oil and natural gas (ONG) event, addressing technical, operational, environmental, and public policy issues to raise awareness – FE - DCEE + FLPS – GIR

SDG 15 - Life on Land



- Saving the Planet One Cedar Tree at a Time FNAS/ENS 201
- Seminar on Agriculture in Hasbaya FNHS
- Sustaining a Green and "Clean" Campus Conference President's Office
- Environmental Sustainability Plan (Faculty of Engineering):
 - Land use and ecosystem preservation:

Increasing green areas

Adopting an Integrated Pest Management approach

Optimizing water consumption

Improving resource conservation

• An NDU-supported invitation to clean up our beaches for the "National Beach Cleanup" campaign planned by Operation Big Blue Association (OBBA)

SDG 16 - Peace and Justice Strong Institutions



- Human Rights Trivia Competition FLPS/GIR
- Monroe Price Media Law Moot Court Competition + Oxford University FLPS (Freedom of speech)
- Young LeaderShe Program SAO / Human Rights Club + Int. Rel. Club
- Gender Based Violence Studies FLPS
- Switching off all electrical devices before departure
- FLPS and German NGOs Pilot Service Learning FLPS/GIR
- NDU MUN SAO
- A Media Perspective on how to vote for the Elections 2018 from a Media Perspective FH
- Youth and Elections in Lebanon 2018 FLPS
- Introducing the US Electoral System Primaries, Midterm Elections, Out-Of-Country Voting debate session – FLPS/GIR
- Launching the Holistic Presidency Initiative to prevent and mitigate risks related to Internet and technology addiction. The first-of-its-kind Lebanese Institute for Internet and Technology Addiction (INTA) seeks to continue in its noble quest to research, raise awareness, and prevent Internet and technology addiction.

SDG 17 - Partnerships for the Goals



Signed (MOU)s with companies for recruitment purposes:

ITG Holding

Minor Hotels

KPMG

- Internship agreement with astronomy research institute in Portugal
- Signed Memorandum of Understanding (MOU)s with NGOs

Association l'Ecoute

بيئتنا - Beeatuna

Compost Baladi

جمعية أمّ النور - Oum El Nour

Teach for Lebanon

- Participation (IAA) Apprentice Conference in Dubai
- European Union's Erasmus and funded exchange program to support education, training, youth, and sport, between NDU and UOC (Ovidius University of Constanta)
- Full departmental membership in the American Political Science Association (APSA) FLPS GIR
- Collaboration between MTV Lebanon channel and NDU to shed light on Lebanon's current entrepreneurial ecosystem.
- NDU and Lebanese American University LAU sign MoU on educational, training, and research cooperation.
- The Notre Dame University-Louaize International Film Festival (NDUIFF) is an official member of the Belt and Road (B&R) Film Festival Alliance

Appendix 1: Signed Memorandum

PRESIDENT





MEMORANDUM

To : All Deans and Heads of Departments

From : Fr. Pierre Najem, President

: October 12, 2017 Date

: Announcement of Environmental Sustainability Task Force Subject

Ref : Pr.O/013/F17

"We are all responsible for the protection and care of the Environment. This responsibility knows no boundaries" Pope Emeritus Benedict XVI.

Indeed we are all responsible, and change starts from within. These words of Pope Benedict XVI were re-emphasized by Pope Francis who calls upon all of us to drive change and safeguard our "Common Home" in his encyclical on the environment Laudato

I was committed as Vice President for Administration and am still committed, today, as President to this. NDU has started years ago environmental initiatives across its 3 campuses, these initiatives should become coordinated and serve one goal: the environmental sustainability action plan. For that, I am announcing the creation of the University "Environmental Sustainability Task Force" that I will chair personally with the support of professional and knowledgeable staff and faculty members who are all passionate about the Environment.

This University-wide Task Force committee will support all 3 campuses. Its main mandate is to finalize our environmental sustainability plan (in line with the Strategic Plan section 5.6.8 of Goal V), to monitor, review and evaluate any existing environmental initiative, be it academic or non-academic, to facilitate the creation of synchronized efforts towards the mentioned plan, to lead the way and support all entities as need arises.

The task force will require support from everyone: faculty, staff and students. It is, as of today, your official reference in all matters related to sustainability and will be accountable to leading NDU towards meeting sustainability goals addressing:

- Waste Management
- Water Conservation
- Carbon footprint reduction
- Land use and ecosystem preservation
- Sustainable procurement
- Environmental outreach and service to the community

www.ndu.edu.lb

MAIN CAMPUS ZOUK MOSBEH LEBANON

BARSA - KOURA, LEBANON T: +961 6 416 101/2/4 F: +961 6 416 103

NORTH LEBANON CAMPUS SHOUF CAMPUS DEIR EL KAMAR - SHOUF, LEBANON T: +961 5 511 202

WASHINGTON DC OFFICE SUITE 300, 1629 K STREET, NW WASHINGTON, DC 20006

Appendix 2: Peer Training Towards a No-Waste Campus: Pictures





Appendix 3: Letter for the International Solid Waste Association

Notre Dame University-Louaize (NDU) is a private, Lebanese non-profit Catholic institution of higher education, which adopts the American system of education

Aligning the mission of Notre Dame University-Louaize (NDU) with Pope Francis' encyclical on the environment and human ecology: "Care for Our Common Home (Laudato Si')," NDU is now officially a member of the United Nations Global Compact (UNGC).

NDU's membership strengthens the internal commitment to embrace and align all University sustainability-related initiatives to the 10 universal principles, falling under the umbrella of the 17 UN Sustainable Development Goals (SDG).

The University started initiating sustainability projects in 2013 where a team of internal experts worked, under the European Union's TEMPUS program, on a self-study to evaluate and report all potential areas for development and growth in that direction. Nonetheless, a new Environmental Sustainability Task Force has been created to develop an action plan and ensure that these sustainability projects are considered a top priority across all three campuses. One of the latest initiatives that is being rolled out is a waste management project that includes the sorting and handling of general waste, hazardous waste and e-waste products with the aim of redirecting NDU toward the long-term path of "no waste".

This campaign, titled "Sort Properly – for all the right causes" was developed in partnership with three NGO's, L'Ecoute, Beeatuna and Compost Baladi that handle different types of waste management in Lebanon.

The objective behind the campaign was two-fold – to tactically explain how one should sort on-campus and to spread awareness about the importance of sorting and the good causes that will be supported in the process.

The campaign was rolled out in phases in order to have it spread across the semester of Fall 2017 and reinforce it periodically while targeting different stakeholders every time.

Phase 1 was the visual, creative campaign that included the following items:

- Drop down banners hung around faculties
- Digital visuals on internal LED screens
- Sorting directions hung on the actual bins serving as visual aids
- Inside classroom activation: stickers of bins that say "moved out" sort properly to encourage students to dispose of the classroom waste in the sorting bins

In parallel, different emails were sent out to faculty members, staff members and students – each containing details that are relevant to that audience segment.

Phase 2 moved into on-ground activations where different student focus groups were established to retrieve student insights about the efficiency and effectiveness of the Phase 1 of the campaign. A presentation that answers these student concerns was created and a number of students volunteered to go around classes to spread more awareness inside the classroom about sorting properly and the causes behind them. Reminder emails were also sent out to the community during this phase as well.

Appendix 4: Summary of NDU Climate Actions 2018-2019

Climate Topic	Target	Measures	Initiatives	
	Determine energy baseline and identify hotspots	Assess NDU's energy profile	- Collect and analyze the data of energy consumption and production at NDU	
	Initiate preliminary energy conservation actions	Shift toward energy efficient appliances and systems	 Phase out conventional light bulbs and gradually replace them with LED Install motion detection sensors Upgrade heating and cooling equipment for higher energy efficiency 	
Energy	Involve NDU community	Encourage energy saving behavior	 Launch a campaign to educate the community on the importance and impacts of energy-saving actions, including, but not limited to: Turning off the lights when not needed Relying on natural means to stay comfortable in cold or hot seasons (window ventilation, convenient clothes, rugs, etc.) Turning down/off air conditioners when not necessary Adopt sleep mode when computers are idle and turn them off overnight 	
		Initiate a "Green Office Program"	- Develop a list of actions to be undertaken by offices, departments and faculties to contribute to achieving NDU's sustainability goals	
Transportation	Reduce indirect GHG emissions Reduce indirect travelled by students, staff and faculty members		 Review parking pricing to affect behavior Promote carpooling, pedestrian and biking to campuses Increase vehicle occupancy rates through encouraging rideshare programs and mechanisms between campuses by faculty members and students Encourage class time management and telecommuting to reduce commute distances Initiate consultations with authorities regarding the planned BRT system as an alternative transit mode to ensure its access to/from NDU. Park and ride facilities are integral to this. Investigate implementing employee commuter programs and other programs aimed at reducing trips from campuses 	

Climate Topic	Target	Measures	Initiatives	
Waste Management	Reduce waste- related emissions (GHG & SLCPs)	Deviating NDU waste from landfills and open dumps	 Sort recyclable items and send them for recycling Collect e-waste and hazardous waste separately; and ship them accords to Basel convention on transboundary movements & disposal of hazardwaste Compost and reuse the landscaping waste Assess the potential reuse of on-campus treated wastewater 	
Water Conservation	Reduce energy needed for water pumping	Reducing water consumption	- Identify major contributors to high water consumption - Recommend water efficient solutions	
Land use & Ecosystems	Protect the surrounding ecosystems	Adopt low- impact management methods	 Reduce the impact of landscaping activities by converting gradually to drip irritation and Integrated Pest Management approach Assessing the potential of increasing green areas in NDU main campus 	
Purchasing	Reduce indirect GHG emissions	Adopt sustainable procurement methods	- Favor products with low impact on the environment	
Outreach	Involve the community outside NDU	Educate the community and providing tools for contribution	 Organize a yearly conference on selected topics of sustainability Provide opportunities for students to take part of planned initiatives Develop an awareness/communication plan 	
Monitoring & Review	Secure continuous improvements	Adopt a dynamic approach	 Define key performance indicators and monitor them Review the outcomes and suggest improvements to the plan 	

Appendix 5: Agenda: Training Session

Cleaning & Catering Services

Agenda

1.	Review of Janitorial guidelines	\rightarrow
2.	The new plan of twin plastic bins (with stickers)	\rightarrow
3.	What to throw in blue and black bags	\rightarrow
4.	Changes in the sorting method	\rightarrow
5.	Inspection and Supervision	\rightarrow
6.	Ways and frequency of collecting special waste	\rightarrow
7.	Waste in cafeterias	\rightarrow
8.	Janitors test on collection/sorting	\rightarrow

Appendix 6: Janitorial Guidelines

Loc	cation	BAG COLOR	Frequency	Measure	Other
SI	Twin Bins	Black	Once a day	Food, tissues, dirty paper	Keep Blue and Black Separate at all times
eria & Campus		Blue	As needed	Anything other than food, tissues, and dirty papers	
	Blue Paper Bin	White	Once a day	Paper only	Take with blue bags to sorting station
Cafet	Red Bin and Liquid dispenser	Liquid Dispenser	As needed	Drain	
		Blue	As needed	Only plastic bottles and cans	Place with other blue bags
Offices	Cardboard boxes	No bag	Once a week or as requested	Paper and Books Only	A white bag is needed to collect from offices
Q	Trash bin	Black	as usual	Black Bag	Merge with other Black Bag Trash
Toilets		Black	as usual	Collect all in black	Send with black bags for disposal

Appendix 7: Training Sessions for NDU employees





Appendix 8: Waste Sorting





Appendix 9: Data Collection Table

SPRING 2018: Data Collection

• Summary

Recovery during the first 6 months (April-May 2018)

	Paper	Plastic	Aluminum
Total recycled material in six months	6025 kg	1663 kg	265 kg
Quantity purchased at cafeterias		7561 bottles	1261 cans
Quantity recovered		3848 bottles	714 cans
Recovered proportions		51%	57%

Appendix 10: Three-Year Strategy (2018-2020)

	Campus	Year 1 2018	Year 2 2019	Year 3 2020
Solid Waste	All	Implement	Follow up	Follow up
Wastewater	Main	Assess/Design	Fund seeking	Initiating
Water conservation	All	Monitor Reduce	Design	Implementing
Renewable energy	Main	Assess/Design	Fund seeking	Initiating
Carbon footprint	All	Reduce	Reduce/mitigate	
Landscape management Green areas	All Main	Implementing Assess/Design	Implementing Fund raising	Implementing Initiating
Procurement	All	Assessment	Design	Initiating
Community Service	All	Ongoing	Ongoing	Ongoing
Monitoring & Review	All	Ongoing	Ongoing	Ongoing
Communication		Ongoing project collating	Webpage	