

SDG #13: CLIMATE ACTION

13.3. Environmental Education Measures

13.3.3. Co-operative Planning for Climate Change Challenges

Ajman University is committed to participating in national initiatives to address climate change issues to ensure a sustainable future for the next generation. To accomplish this Goal, the university supports the UAE's strategic initiative for Net Zero 2050 following the Paris Agreement. Since 2022, Ajman University's representatives have participated in academic consultations, workshops, meetings, and discussions regarding the climate adaptation framework of the UAE.

The United Arab Emirates has risen to the occasion and became one of the first nations in the MENA region to support the Paris Agreement. As part of this, it has launched initiatives that tackle the problems posed by climate change. The UNFCCC COP28 in November–December 2023 is a significant turning point where the world can observe the advancements made in the Paris Agreement. UAE, which will host the first Global Stock Take and the COP28 this year, has adopted a set of plans known as a National Adaptation Plan (NAP). The UAE's National Action Plan (NAP) is expected to be the next significant step in proving its leadership in the fight against climate change. It will integrate adaptations for climate resilience across the Federal Government and help identify the vulnerabilities associated with climate risks across the seven national Emirates.

The screenshot shows a Microsoft Teams meeting interface. The main window displays a presentation slide with the following content:

- Title:** Initial Analysis: who should the key actors of climate adaptation governance be?
- KEEP SATISFIED:** Inform- Consult (includes Media)
- MANAGE CLOSELY:** Inform-Consult-Collaborate (includes Research and Development Teams, Farmers and Fisheries Groups, Youth Groups, Universities)
- MONITOR:** Inform (includes SMEs)
- ENGAGE AS NEEDED:** Inform-Consult (includes Food and Beverage Industry, Textile manufacturers, Waste Management)
- Key vulnerable groups, or groups related to climate technology, entrepreneurship:** (highlighted in yellow)
- Economic sectors potentially affected by climate hazards:** (highlighted in yellow)

The chat window on the right shows a message from 'Has...' dated 10/25/2023, 10:23 AM, asking: "what climate scenarios is the NAP targeting?". A response from 'KW' (Kasia Wake) states: "We will follow IPCC Guidelines (AR6) on selecting suitable scenarios relevant to the Middle East region and for the UAE." The meeting has 57 participants.

Participating in the UAE National Adaptation Plan Consultation Process

The commitment of AU to the plan can be accessed under the "**Co-operative Planning**" section at <https://ehs.ajman.ac.ae/en/pages/au-climate-action-learning-program>.

Intending to "build an economy that protects the environment and an environment that supports the economy's growth," the UAE government adopted the "National Climate Change Plan of the United Arab Emirates 2017-2050."

<https://www.moccae.gov.ae/assets/30e58e2e/national-climate-change-plan-for-the-united-arab-emirates-2017-2050.aspx>

With the objective of "Advancing the UAE's economic diversification agenda through innovative solutions," Ajman University joined the team in December 2022 with representatives from the Office of Sustainability. Since becoming the "Adaptation Champions," AU has participated in events, conferences, and symposiums organized online and in person with several initiatives and support needed to tackle climate change.

(5) Step-wise approach of developing UAE NAP:

A step-wise methodological approach to develop UAE NAP based on UNFCCC's Technical Guidelines

Element-A Laying the groundwork and addressing gaps for UAE's NAP	Element-B Preparatory Elements for the UAE's NAP	Element-C Development of Implementation Strategies of the UAE's NAP	Element-D Monitoring and Evaluation of the UAE's NAP
Outcome-1 Strengthen adaptation governance <ol style="list-style-type: none">1) Initiating UAE's NAP preparation process with tripartite workshops2) Stock take of Public, Private, Projects and Existing Capacity for Adaptation, alignment of NDC3) Adaptation Policy and Enhancing Capacity of National Institutions is Understood4) The state of current data availability, and the capacity of data management and collection institutions is understood5) A NAP strategy is developed based on current knowledge	Outcome-2 Evidence basis designed to produce Adaptation Options <ol style="list-style-type: none">1) Vulnerability and Gap assessment undertaken across key economic sectors2) Sub-national (Emirate-level) vulnerability assessments undertaken for each Emirate3) Risk Assessments from 2019; Expanded on other identified sectors4) Adaptation Options Defined and Prioritized5) Social and Gender Mainstream Assessment Developed6) A Private Sector Employment Forecasting Strategy Developed for Adaptation Investments	Outcome-3 Institutional Framework and Capacity <ol style="list-style-type: none">1) Institutional Mechanisms and Coordination Plan for Managing Adaptation is Developed2) Capacity building and a mainstreaming plan is developed based on Assessed Capabilities for Implementing Adaptation measures3) Legal Mandating of the NAP is designed	Outcome-4 Monitoring and Evaluation <ol style="list-style-type: none">1) Monitoring and Evaluation Approach Agreement2) Monitoring and Evaluation Structure Designed

Ongoing Projects

Participating in the UAE National Adaptation Plan Consultation Process

Project Collaborators: Ministry of Climate Change and Environment (UAE) and The Global Green Growth Institute (GGGI)

Ajman University is committed to participating in national initiatives to address climate change issues in order to ensure a sustainable future for the next generation. In order to accomplish this goal, the university supports the UAE's strategic initiative for Net Zero 2050 in accordance with the Paris Agreement. Since 2022, Ajman University's representatives have participated in academic consultations, workshops, meetings, and discussions regarding the climate adaptation framework of the UAE.

The United Arab Emirates has risen to the occasion and became one of the first nations in the MENA region to support the Paris Agreement, and as part of this, has launched initiatives that tackle the problems posed by climate change. The UNFCCC COP28 in November–December 2023 is slated to be a significant turning point where the world can observe the advancements made as part of the Paris agreement. UAE, which will host both the first Global Stocktake and the COP28 this year, has adopted a set of plans known as a National Adaptation Plan (NAP). The National Action Plan (NAP) of the UAE is expected to be the next significant step in proving its leadership in the fight against climate change. It will integrate adaptations for climate resilience across the Federal Government and help identify the vulnerabilities associated with climate risks that can be seen across the seven national Emirates.

Project Timeline

Initiation of the AE03 UAE National Climate Adaptation Program

Initial Consultation

Consultation Session 1

Consultation Session 2.1

Consultation Session 2.2

Consultation Session 2.3

Deliverable of Consultations: draft version of UAE NAP

Consultation Session 3

Development of the UAE NAP: Inception Workshop

Workshop Details:

- 17th and 18th May 2022
- Zayed University, Dubai Campus
- MOCCA and GGGI

Aim:

To create awareness and build capacity of potential key stakeholders; support the exercise towards setting the "Adaptation Vision" and identify additional priority sectors for inclusion in developing the UAE NAP.

Objectives:

- Present the key takeaways from prior consultations across sectors and actors, as well as identify and initiate the exercise to establish the NAP stakeholders and their pivotal role in developing a robust NAP.
- Discuss, validate, and establish a shared "NAP Vision" across UAE's key stakeholders.
- Identify the "what, who, and how" of the NAP. Validating what the scope of the NAP should be, who should be involved, and how it should be developed.
- Identify additional priority sectors for inclusion in the NAP's Vulnerability and Risk Assessments.
- Raise awareness among stakeholders of the NAP and the NAP process.
- Launch the NAP development process.

From: [Shaemma Rashed Mebwana](#)
Cc: [Muna Ahmad Alamoody](#); [Ahmed Al Amra](#); [Sparkle Dionne Prentice](#)
Subject: RE: Developing the structure of the UAE's National Adaptation Plan (NAP)
Date: Friday, December 9, 2022 1:42:14 PM
Attachments: [imae001.pno](#)

****External Email****

Dear Adaptation Champions,

The Ministry of Climate Change and Environment (MOCCA) and the Global Green Growth Institute (GGGI) are in the process of developing the structure of the UAE's National Adaptation Plan (NAP), that will act as a strategic guide for undertaking climate adaptation.

As part of the process, a bottom-up approach is employed to ensure there is adequate consideration and understanding of the key actors involved in climate adaptation, challenges faced on the ground, and the impacts of climate data availability, governance structure and other factors on climate action.

We are therefore sending a Survey to public, private, academic and civil society actors on the ground that play a role in climate governance, climate science/data, financing of climate interventions, and social/gender/grassroots engagement to collect information and gain valuable insight on climate-related challenges, opportunities, governance, data availability and other climate-related areas.

Please complete the following Survey by **Tuesday 13th December 2022** to provide your insight on the above, which will support MOCCA and GGGI in charting a strategic path for climate adaptation: <https://forms.office.com/r/Ck2GkeucM5>

Sincerely,
Shaemma

Shaemma Rashed Mebwana

Climate Change Analyst
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The Project timeline of the UAE National Adaptation Plan, as adopted by Ajman University, can be accessed at

https://ehs.ajman.ac.ae/upload/files/ehs/UAE_NAP_Inception_Workshop_Report_-_May%2C_2023.pdf

The scope and details of the initial consultation session can be found at

https://ehs.ajman.ac.ae/upload/files/ehs/Scope_and_Details_of_the_Informal_Consultation_Academic_Sector_UAE-_NAP.pdf

Greening Education Partnership with UNESCO

Ajman University is committed to being part of the Greening Education Partnership.

<https://cop28.ajman.ac.ae/en/memberships/greening-education-partnership-with-unesco>

This new Greening Education Partnership aims to deliver strong, coordinated, and comprehensive action that will prepare every learner to acquire the knowledge, skills, values, and attitudes to tackle climate change and promote sustainable development. Drawing upon ESD's holistic approach to learning, the Greening Education Partnership aims to inspire action from countries to empower learners with the skills required for inclusive and sustainable economic development in the transition toward digital and green economies.

The participation timeline and consultation meeting records can be found under "Co-operative" planning on:

<https://ehs.ajman.ac.ae/en/pages/au-climate-action-learning-program>

The screenshot shows a Zoom meeting interface. At the top, it says "Session: Plenary Session of the GEP Working Groups" and "You are viewing Oisín Gill (GEP Secretariat)'s screen". Below the title bar, there are several video thumbnails of participants: Maya Haddad- Ajman, Jun Morohashi, Rose Armour, Won Jung Byun (GEP Sec...), Linda Keane, FAIA, and Edith Hammer. The main content is a slide titled "COP28" with the following sections:

- Joint key asks**
 - Background document: compiled via GEP
 - Joint statement: led by GPE
 - Basis for joint advocacy of all GEP members in the lead up to COP28
 - Outcome document of highlevel event at COP28
- Highlevel events**
 - 1-2 Dec Leaders summit segment on education
 - 3 Dec Head of State event, 1st Annual GEP meeting (highlevel segment)
 - 8 Dec Ministerial session, 1st Annual GEP meeting (technical segment) ReWired Summit
 - Collaborate to maximize visibility including engaging Member States
- Greening Education Hub**
 - Legacy of COP28: Power of Education!
 - 12 days designed around 4 pillars of GEP
- GEP networking at COP28**
 - Events and list of participants: Excel list
 - Annual GEP meeting

The Zoom interface at the bottom includes controls for Unmute, Stop Video, Participants (244), Chat, Share Screen, Record, Show Captions, Interpretation, Reactions, Apps, Whiteboards, and a Leave button.

Partnering with Higher Education Sustainability Initiative

Ajman University (AU) is enrolled as a member of the United Nations Higher Education Sustainability Initiative (HESI). This initiative is an open partnership between several United Nations entities and the global higher education community, which was launched in 2012 to highlight the critical role that higher education plays in achieving sustainable development. It also aims to provide an interactive interface between higher education, science, and policymaking by highlighting the role of the higher education sector in supporting sustainable development, convening multi-stakeholder discussions and actions, and sharing best practices.

Higher education institutions play a crucial role in supporting the implementation of the United Nations' 17 Sustainable Development Goals (SDGs) by ensuring that future generations of learners have the skills, mindsets, and attitudes to transform organizations and societies truly.

<https://www.ajman.ac.ae/en/news/ajman-university-joins-the-renowned-united-nations-higher-education-sustainability-initiative>

Ajman University shall utilize this important membership to play an active role in the various global action groups that support SDG integration into curricula, research, programs, and campus practices, facilitate knowledge exchange, and strengthen partnerships for the goals.

<https://cop28.ajman.ac.ae/en/memberships/un-higher-education-sustainability-initiative-hesi>

Healthy and Sustainable Built Environment Research Centre

Ajman University's Healthy and Sustainable Built Environment Research Center (HSBERC) aims to do impactful research at the intersection of building, environment, and health to promote healthy living across communities and societies.

The research at HSBERC is focused on the following areas associated with building plan, design and construction:

- Indoor air quality and disinfection of indoor air
- Effect of Building Materials selection and construction on healthy living
- Light and health
- Architectural and Interior design and planning for healthy living
- Occupant behavior

The objectives of the research center are:

- ✓ To provide high-quality research and studies on how buildings' sustainable design, construction, and operations contribute to the health and well-being of occupants.
- ✓ To provide consultancy services to the public and private sectors
- ✓ To organize and participate in continuing education and training seminars and conferences for the community.
- ✓ To collaborate with international partners on areas relevant to the center's mission.

<https://www.ajman.ac.ae/en/research/research-at-au/research-centers/healthy-and-sustainable-built-environment-research-center-hsberc>

https://www.youtube.com/watch?time_continue=3&v=BBJTlomRqmY&embeds_referring_euri=https%3A%2F%2Fwww.ajman.ac.ae%2F&source_ve_path=Mjg2NjY&feature=emb_logo

Some of the remarkable projects in 2022 by HSBERC in the field of sustainable Healthy Buildings, impacting the climate and environment:

Head of Healthy Buildings Research Center				
Research Center publications				
Title	Journal	Publisher	Quartile	Authors
Evaluating the Color Scheme for Elderly Depression in United Arab Emirates	Buildings	MDPI	Q1 (94%)	1. C. Jung, 2. N. Mahmoud, 3. G. El Samanoudy
Investigating the Emission of Hazardous Chemical Substances from the Mashrabiya in Hot Desert Climate	Sustainability	MDPI	Q1 (84%)	1. C. Jung, 2. N. Al Qassimi
The Improvement of Users' Satisfaction for Neighborhood Parks in Dubai, United Arab Emirates	Sustainability	MDPI	Q1 (84%)	1. C. Jung, 2. N. Al Qassimi, 3. M. Arar, 4. J. Awad
Simulation of Natural Lighting Scenes for a Healthy Residential Environment in Dubai, United Arab Emirates	Ain Shams Engineering Journal	Elsevier	Q1 (92%)	1. N. Mahmoud, 3. G. El Samanoudy, 3. C. Jung 2022
Extracting the Important Factors of Emission Patterns to predict CH ₂ O Emission Model in Hot Desert Climate	Air, Soil and Water Research	Sage	Q2 (57%)	1. C. Jung, 2. N. Mahmood
An evaluation of a sustainable contrast-based metric for roadway lighting design.	Proceeding of the 19 th International Conference on Sustainable Energy Technologies – SET 2022, Istanbul, Turkey, 16 th – 18 th of August.		Conference	AbouElhamd, A. R., Sarajji, R., Hassan, A., AlFaki, I.A. (2022).
A new metric for roadway lighting design based on Relative Visual Performance.	Proceeding of the 2021 IES virtual annual conference, 9-13 August.		Conference	AbouElhamd, A. R., Sarajji, R. (2021)
Human metabolic emissions of carbon dioxide and methane and their implications for carbon emissions.	<i>Science of the Total Environment</i> , 833, 155241.	Q1		Li, M., Bekö, G., Zannoni, N., Pugliese, G., Carrito, M., Cera, N., Moura, C., Wargocki, P., Vasconcelos, P., Nobre, P., Wang, N., Ernle, L., Williams, J. 2022.
Ventilation strategies and indoor air quality in Swedish primary school classrooms	<i>Building and Environment</i> , submitted	Q1		Cabovska, B., Bekö, G., Teli, D., Wargocki, P., Dalenbäck, J.-O., Ekberg, L., Psomas, T., Langer, S. 2022.
A Deep Learning-based detection of Fall Portents for Lone Construction Worker	38th International Symposium on Automation and Robotics in Construction	conference		<i>Numan Khan, Sharjeel Anjum, Rabia Khalid, Junsung Park and Chansik Park</i>
Tag and IoT based safety hook monitoring for prevention of falls from height	Automation in Construction	Q1		Muhammad Khana , Rabia Khalida, Sharjeel Anjuma , Numan Khana , Seungwon Choa , Chansik Parka 2022

Rigorous analysis of safety rules for visionintelligence-based monitoring at constructionjobsites	International Journal of Construction Management	Q1		Doyeop Lee, Numan Khan & Chansik Park 2021
Issah M Alhamad; Riad Saraji (2022) Indoor Illuminance Selection Procedure Using Fuzzy Techniques, (Scopus Q1, 98% in architecture).	Journal of Building Engineering	Q1		
Issah M Alhamad; Riad Saraji (2022) Fuzzibility: A new approach to modeling visibility using fuzzy techniques, accepted in the Journal of Architectural Engineering, DOI: 10.1061/JAEIED/AEENG-1405. (Scopus Q1, 97% in architecture).	Journal of Architectural Engineering	Q1		