

# **SDG13 Report**

# Measures relating to the fight against climate change

2024









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# SDG13 report : Measures to combat climate change

#### Greenhouse gas (GHG) emissions in Morocco

At the time of COP 27, what greenhouse gas emissions from energy in Morocco?https://www.researchgate.net/publication/355809620

In 2018, and according to official data, Morocco has a contribution of 1/500th of global greenhouse gas emissions, and is positioned in 47th place in the ranking of total emissions of 160 countries.

After increasing by +0.4% compared to the previous year, greenhouse gas emissions from energy consumed in Morocco would have reached 63,953 Gigajoules (Gg) in 2020 (million tonnes of CO2 equivalent)

In 2020, greenhouse gas emissions break down as follows:

- 34,650 Gg (+2.8% in 2020) due to oil, or 54.2% of the total
- 27,510 Gg (+0.5% in 2020) due to coal, or 43.0% of the total
- 1,793 Gg (-29.2% in 2020) of natural gas, or 2.8% of the total,

Emissions due to 6,988 GWh of renewable electricity from wind, solar and hydraulic sources are zero. As a result, greenhouse gas emissions due to energy consumed in Morocco lead to 1.78 tonnes of CO2 equivalent per year and per capita in 2020.

Climate change is an obstacle to development, particularly for emerging countries like Morocco. It leads to increased poverty and stunts economic growth, hence the need to help address it.

The process of combating global warming is a voluntary national commitment aimed at reducing GHG emissions in 2030 by 45.5% (of which 18% is unconditional and without international cooperation: <a href="https://www.ecoactu.ma/emissions-de-ges-maroc/">https://www.ecoactu.ma/emissions-de-ges-maroc/</a> and requiring a total investment of \$50 billion.

The European Union and Morocco have consolidated their cooperation in environmental protection, preservation of biodiversity and the fight against climate change with the launch of the EU-Morocco green partnership. This is the first EU Green Partnership with a partner country aimed at advancing the external dimension of the European Green Deal through action on the ground. The work will be structured around major thematic areas such as climate and energy, the environment, including marine and maritime issues, and the green economy.

https://www.lepoint.fr/afrique/climat-l-ue-et-le-maroc-signent-un-partenariat-vert-19-10-2022-2494505 3826.php





#### Climate change in the Fez Meknes region

"Adaptation to Climate Change in Maghreb Agriculture" Project (ACCAGRIMAG)

#### MAIN LESSONS

- o A rise in temperatures predicted by all climate projection models.
- o A downward trend in precipitation surrounded by more uncertainties.
- A crop growth period that will tend to narrow, shortening the production period by one to three months.
- o Olive and almond crops little impacted by 2050.
- o Spring crops, such as chickpeas, will be hit hard by the effects of climate change.
- o A significant reduction in the use of land for wheat cultivation, although with more favorable conditions in the North and in mountain areas

At the level of the Fez-Meknes region, yields which do not change on the scale of the region in a moderate scenario of climate change (RCP4.5), with geographically disparate effects: areas of heavily affected plains and possible production gains in mountain areas. Conversely, in a more pessimistic scenario (RCP8.5), yields fall sharply throughout the region with more frequent dry periods and more irregular yields increasing the risk for producers. The large-scale implementation of measures to adapt to climate change becomes necessary: agroforestry, direct sowing, agricultural insurance, the use of certified seeds, phytosanitary protection, supplemental irrigation and soil fertility management.

#### What is the university doing to help combat the harmful effects of climate change?

#### **Eco campus**



The UEMF project was designed with the Negawatt approach: The constructions at UEMF are new and less than 7 years old. The UEMF reconfirms its firm commitment to guarantee that all renovations, restorations or new constructions comply with the highest standards of energy efficiency and sustainable development:

The Eco-Campus respects the best international standards in terms of sustainable development.

The buildings are built according to the HQE "High Environmental Quality" approach limiting any harmful environmental impact through precise choices: low-energy local materials, materials ensuring good thermal and sound insulation, open architecture ensuring maximum natural light and

luminosity., clean and renewable energy sources: installation of photovoltaic panels on large areas of building roofs for the production of electrical energy with real-time measurement of the energy recovered, installation and thermal solar panels for the production of hot water, ongoing installation of pipes and basins for rainwater recovery, recirculation of gray water (in progress), construction/rehabilitation of positive energy buildings, implementation throughout the Eco-campus sorting bins for waste, creation of sports, leisure and relaxation spaces, use of a circular economy (minimizing waste by optimizing the value generated by resources), installation on the UEMF Eco-campus charging stations for electric cars. These terminals are the only ones in the Fez-Meknes region and the only ones on a university campus in Morocco. Advertising panels have been put up in several places in the city of Fez inviting motorists to come and recharge the batteries of their electric cars for free on the UEMF Eco campus, total accessibility and in all University buildings to people people with





reduced mobility (PRM), installation on all floors, in front of all doors, on staircases and in elevators of Braille signage for the blind and visually impaired, installation on all floors and in all sanitary buildings (toilets) for PRMs.

The UEMF eco campus was labeled by COP 22 and obtained the French-speaking responsible innovation label for its "sustainable UEMF" project, as well as receiving the "Responsible Campus of the Year" label in 2022.



https://snrtnews.com/fr/article/euromed-de-f%C3%A8s-dispose-d%E2%80%99un-label-par-la-cop22

 $\underline{\text{https://ueuromed.org/actualites/annonces-diverses/luemf-obtient-le-label-de-linnovation-responsable-lors-de-sa-premiere}$ 

 $\frac{https://www.ueuromed.org/actualites/annonces-diverses/luemf-laureate-du-prix-campus-responsable-de-lannee}{}$ 





#### Inclusion of renewable energies









#### Awareness and information conferences

Conference-Debate: Climate Change: Challenges for the Fez Meknes Region » November 10, 2021 (An event co-organized by the UEMF and the World Bank and the participation of the think tanks Policy Center for the New South and the Research Institute for European , Mediterranean, and African Studies (RIEMAS))

As indicated in the report on the New Development Model (NMD) (https://www.csmd.ma/rapport-en), the territories represent a key level for anchoring development in a sustainable and inclusive trajectory. Even though the challenges of climate change are global, it is obvious that local actors will have a leading role to play in defining and implementing the solutions best suited to the challenges but also to the opportunities of each territory. This event aims to collect from key Fès-Meknes plavers in the Region perspectives on the challenges posed by climate



change but also their recommendations for actions to be implemented locally to anchor the region in a trajectory of resilient and sustainable development.

The Fez-Meknes region has a powerful tool for this purpose: Regional Information System for the Environment and Sustainable Development<a href="https://siredd.environnement.gov.ma/fes-meknes/ChangementClimat/?idlCible=0">https://siredd.environnement.gov.ma/fes-meknes/ChangementClimat/?idlCible=0</a>

As the next 27th edition of the Conference of the Parties (COP27) approaches, scheduled for Sharm El Sheikh in Egypt from November 6 to 18, Mr. Mourinho Félix, Vice-President of the European Investment Bank (EIB), has reserved a visit to the UEMF to discuss with students and teacher-researchers on the challenges and opportunities of the climate transition as well as on the role of the EIB, as a Climate Bank, to promote sustainable models in Morocco and in the world.



https://ueuromed.org/actualites/visites/visite-du-vice-president-de-la-bei-mmourinho-felix-luemf-pour-un-echange-avec





#### **Training**

#### Master: DESIGN AND ENGINEERING OF GREEN BUILDINGS (CIBV)

#### Modules taught:

- Transfer phenomena;
- Fluid mechanics;
- General and applied thermodynamics;
- Materials for energy efficiency in buildings;
- Standards and climate:
- Ventilation and lighting of the building;
- Air conditioning, heating and energy integration;
- Renewable energies for buildings;
- Eco-design of a building;
- Energy analysis and economic evaluation of the building;
- Green and smart buildings;
- Sustainable development and waste management;
- Preliminary project for an efficient building;

#### Specialized Master: Environmental Engineering and Water Management

The sector aims to train executives with a transversal vision of environmental issues and water management in particular. The development of clean technologies (processes, methods or tools) in order to resolve environmental problems attributable to human activities is highlighted with a focus on the Euro-Mediterranean region.

To do this, the student acquires in this sector advanced knowledge in the field of the environment (scientific and technical methods, knowledge of ecosystems, techniques for analyzing and treating pollutants, water management and treatment, remote sensing tools and GIS, national and international policy, green economy, climate and climate change, .....) and energy efficiency





#### **Climate Continuing Education Project**

#### Title of the Training Module\*

**History of the UNFCCC process and IPCC Reports** 

State of knowledge on climate change, Conference of the Parties (COP) and Sustainable Development Goals (SDGs)

Establishment of National Greenhouse Gas Inventory Systems: Case of the SNI-GES of Morocco

The Role of the Water/Energy/Food Security NEXUS

Integration of adaptation to climate change in urban areas

Climate Change and Adaptation in the Rural World

Integrating climate change into national development planning and budgeting: NDC and PNA

Project financing tools to fight climate change: Example of the Green Climate Fund

The MRV system

Climate diplomacy

**Research Development: Renewable energies** 

#### Innovation structures

#### **Agro Energy TIC Valley**

It is a mixed platform for testing, research and training in the fields of bioenergy and energy storage, created jointly by the EuroMed University of Fez and the Institute for Research in Solar Energy and New Energies. (IRESEN).

Energies Renouvelables	Stockage de l'Energie	Efficience Energétique, Digitalisation et IA
Solaire et Applicatifs	Stockage Thermique/Thermochimi que	Agro-Industrie '4.0'
Biomasse: Biogaz & Combustion	Stockage Electrochimique & Applications	Agriculture Efficiente et Intelligente – 'Smart Farming'
Hybridation et Systèmes de Gestion Intelligente de l'Energie (EMS) (TIC. Al. IoT. D2D. V2G. etc.)		





#### Renewable Energy, Storage and Energy Efficiency Platform

The "Renewable Energy, Storage and Energy Efficiency" Platform includes several design, manufacturing and characterization equipment for devices meeting sustainable development criteria in energy matters. In addition to this intramural infrastructure, the university also has open-air laboratories including a house equipped with several types of sensors for research on energy efficiency.



#### **Research topics**

#### Renewable energies and energy efficiency

- Technological and operational development of solar thermal, photovoltaic, wind and hydroelectric production technologies. This work will cover both possible technical developments in current energy production and storage technologies as well as the development of new materials aimed at increasing energy efficiency in the production, storage and distribution of renewable energies.
- Conduct and control of the different phases of studies (implantation, operation, maintenance of installations and electrical equipment);
- Improvement of processes and devices related to energy engineering;
- Integration of renewable energies into industrial processes;
- Mastery of different calculation methods for energy and thermal systems;
- Development of identification and prognosis methods for wind generators (Project to be developed with the EDF Energies Nouvelles group);
- Cleaning, alignment and maintenance systems for solar parks to preserve high transformation efficiency (Project to be developed with the EDF Energies Nouvelles group).
- New classes of nano-composite and bio-composite polymers (Project to be developed with the PSA group for the design of materials with minimal ecological impact and mechanical characteristics suitable for the construction of automobile shells);





#### **Cooperation projects**

#### AgriTech

The French Development Agency (AFD) and the Euromed University of Fez (UEMF) signed a financing agreement for the design and implementation of aAgriTech cluster in the Fez-Meknes region. This is a unique project in Morocco which consists of the structuring of a regional hub of innovation and entrepreneurship in the agriculture and agro-industry sector. To this end, AFD is providing the UEMF with a grant amounting to 16.3 million dirhams (1.5 million euros) intended for the design and implementation of this project within of its Ecocampus. In the Fès-Meknes region, this pilot project aims to support the move upmarket in the agro-industrial sector. Several capacity building actions, through support for entrepreneurs, the promotion of research and development and the adaptation of the local agricultural fabric to international standards and the fight against the effects of climate change, will be financed by this technical assistance. The ambition is to see the emergence of an agro-industrial cluster driven by entrepreneurship and the digitalization of economies.

#### **Eumed Climate Hub (in cooperation with the UfM)**

#### Euro-Mediterranean Hub Project for Climate Change Capacity Building

Functions and justification.

The Euro-Mediterranean region - challenged by an urgent need to reduce emissions and adapt to climate change - has relevant and considerable know-how, but nevertheless fragmented and differentiated between communities, difficult to intelligible outside of universities or specialized institutions, poorly shared, not shared as a common set of resources, and rarely accessible to professionals called upon to realize progress in mitigation and adaptation in their ordinary professional lives: across the region, actors in areas such as agriculture, fisheries, urban management, construction, infrastructure, water, energy, transportation, finance, trade, manufacturing, etc. have unequal access to training, information and the exchange of essential good practices.

The Euro-Mediterranean Center for Capacity Building on Climate Change – "EuMed Climate Hub" – is therefore designed as a physical location and online web resource to link regional knowledge and best practices and provide pragmatic training to climate change stakeholders, field at all levels, with the aim of accelerating sustainability through widespread skills strengthening.

On site and online it will host:

- EUMED CLIMATE SEMINARS pragmatic training on adaptation, resilience and mitigation through adaptation, for central and local administrations, the private sector and NGOs
- EUMED ENERGY FOR CLIMATE SEMINARS pragmatic training on SDG-oriented energy efficiency, the transition to renewable energies and systems integration;
- THE EUMED TECHNOLOGY CLEARING CHAMBER a virtual and on-site meeting space to share, compare and integrate diverse know-how and promote reciprocal technology transfer, based on the awareness that technology also includes all the fruits of experience millennium owned in the South in the management of arid zones, urban and rural landscapes, infrastructure, construction, energy efficiency solutions, etc.
- THE EUMED CLIMATE SCIENCE AND POLICY PLATFORM responding to the pragmatic needs for data, information and science-based solutions emerging from central and local institutions, based on the contribution of existing scientific networks, including MEDECC
- THE EUMED CLIMATE PORTAL a web portal helping with the coordination and communication of the activities mentioned above, but also serving as a separate driver





for capacity building and access to climate finance, particularly for local governments and stakeholders

#### **UEMF** and commune of Tantan partnership on climate

https://www.ueuromed.org/actualites/accords-et-partenariats/signature-de-laccord-cadre-emadu-uemf-tantan

#### **UPM Partnership**

https://ueuromed.org/actualites/annonces-diverses/de-nouvelles-opportunites-de-partenariat-entre-luemf-et-lunion-pour-la

#### **UEMF** activities

Scientific research published in the media under the title: "Business and climate change: a structural relationship for a clear reduction of carbon emissions", carried out by Professor Othmane BENMOUSSA. Média 24. Edition of July 26, 2022



Othmane Benmoussa

Enseignant-chercheur en systems thinking et Directeur de l'Euromed Institute of Technology

#### Tribune

### Entreprises et changement climatique : une relation structurelle pour une réduction franche des émissions de carbone

Most greenhouse gases come from electricity production, transport and industrial and agricultural exploitation, three "levers" that we can activate to reduce carbon emissions in particular.

- When it comes to electricity, the cost of renewable energy has fallen much faster than expected. With certain energies such as wind and centralized solar, we are starting to reach the threshold where it is now cheaper to build new facilities than to operate existing infrastructure using fossil fuels. The fact remains that we must continue to invest in energy storage solutions that are less expensive, more efficient, and update our energy networks while finding ways to circumvent certain well-established lobbies that slow down the transition to renewable energy.
- Transport represents a more thorny technological challenge. While there has been some momentum in the transition to greener passenger vehicles, other transportation vectors like freight trucking, shipping and air travel are not as easy to electrify. These modes of transportation require incredibly dense and portable energy sources. It will therefore be





necessary to continue to develop new technologies such as "green hydrogen", that is to say hydrogen produced by electrolysis from renewable energies, while highlighting a limiting factor which is the resource water, which is becoming increasingly scarce in several countries, regions, subcontinents and continents.

- The last lever that can be activated concerns industry and agriculture. The industries that produce the most greenhouse gases are those that consume a lot of energy and heat, mainly those that use iron, steel and cement. For agriculture, fertilizer production, methane (from livestock) and deforestation are major emissions concerns.

https://medias24.com/chronique/entreprises-et-changement-climatique-une-relation-structelle-pour-une-reduction-franche-des-emissions-de-carbone/

Participation in the Learning Planet Festival with the Green My Eco-campus project



https://festival.learning-planet.org/fr/event/green-my-eco-campus/





#### Pr. Hafsa El Bekri represents the UEMF at COP 27 in Sharm el-Sheikh November 17, 2022



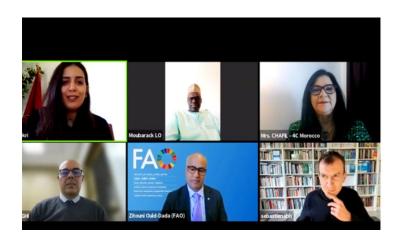
Pr. Hafsa El Bekri went to Sharm el-Sheikh on the occasion of COP 27 to represent the Euromed University of Fez in this global meeting which brought together around 200 countries, delegations, media, NGOs, companies, observers, and researchers. The objective of this African COP is to put new actions to combat global warming and its impacts on the negotiating agenda.

Pr. Hafsa El Bekri also released a pre-cop column entitled "From Marrakech to Sharm El-Sheikh: Africa at the center of the climate agenda" published by challenge magazine in which she raises, among other things, the role of RIEMAS (Research Institute for European, Mediterranean and African Studies) UEMF Think Tank in the study of the new narrative of climate action in Africa and for Africa.

As a reminder, the first African COP was held in Marrakech in 2016 following which the UEMF eco-campus received the COP 22 Label for its ecological assets and compliance with environmental standards and sustainable development (lower energy consumption). energy, integration of renewable energy technologies, maximum natural light, recycling, green spaces, etc.).

https://ueuromed.org/actualites/annonces-diverses/pr-hafsa-el-bekri-represente-luemf-dans-la-cop-27-charm-el-cheikh

Round table: water, agriculture and food security, building a Nexus approach for the climate change narrative in Africa February 2, 2023







The Research Institute for European, Mediterranean, and African Studies (RIEMAS), Think-Tank of the Euromed University of Fez organized its first round table of the 1.5 Hours for Climate - Africa Moonshot Initiative, which focused on the theme "Water, Agriculture and Food Security: Building a Nexus Approach to the Climate Change Narrative in Africa".

1.5 hours for Climate - Africa Climate Moonshot Initiative, is a project supported by RIEMAS, 4C Morocco, Euro-Mediterranean Economists Association - EMEA, Mercure Cab Fatima B. NDOYE and Positive Agenda Advisory. These monthly thematic meetings aim to bring together high-level guests and regional experts around major issues related to climate action in order to contribute to the creation of a dynamic conducive to advocacy in favor of a climate agenda anchored in African realities ahead of COP28.

This round table was moderated by Professor Hafsa El Bekri, teacher at Euromed Business School and Co-Director of RIEMAS.

https://ueuromed.org/actualites/ateliers-workshops/table-ronde-eau-agriculture-et-securite-alimentaire-construire-une

https://www.youtube.com/watch?v=MCPCJ-UocqA&t=2s

Webinar: "Climate emergency in the Mediterranean: what action should the University take? » March 8, 2023



With a view to presenting the important role of universities in raising awareness among university communities and the actions they can take to act in favor of sustainable development, Alumni for the Planet and the AUF - North Africa are co-organizing a free webinar on the theme: "Urgence climatique en Me diterrane e:quelle action de l'Universite ?Agir en faveur du climat dans son organisation"

Indeed, in order to encourage Higher Education graduates to commit to the climate and the environment in their university, this webinar aims to:

• Present the issues of climate change;





- Provide access to specialized resources and networks to obtain information and act in favor of your university;
- Show that it is possible to deploy climate awareness actions

#### Speakers:

- Dr. Philippe Drobinski, Climatologist, director of the Dynamic Meteorology Laboratory and the Energy4Climate Interdisciplinary Center
- Teacher. Mustapha BENNOUNA, Advisor to the President of Euromed University of Fez, will share his testimony. He will present the actions he has taken within his University to take climate and environmental issues into account.

https://ueuromed.org/actualites/ateliers-workshops/webinaire-urgence-climatique-en-mediterranee-quelle-action-de

UEMF students leave for Tel Aviv for Jamweek in Shenkar to try to solve problems linked to climate change February 27, 2023



The impact of global warming is already irreversible and environmental issues today represent a strategic issue at all levels. At the current rate of population increase and intensification of industrial activities, among other things, major challenges must be met. Faced with these concerns, Shenkar College of Engineering, Design and Art in Tel Aviv is keen to organize annually the "JAMWEEK", a creative Hackathon which aims to bring together students and experts to propose solutions capable of reducing CO2 emissions and limit global warming.

This year, the 11th edition of JAMWEEK, which took place from February 27 to March 2, 2023, was very special because it saw the participation of around ten students from the Euromed University of Fez, who attended moved to Tel Aviv to meet students from Israel, Germany and New York to work hand in hand and lead a collective brainstorm. Zooming in on specific





regions such as the Mediterranean Sea, the Red Sea and the desert, the aim is to find ideas that promote awareness of environmental problems and propose measures to mitigate them.

Various academic profiles from UEMF were represented: Artificial Intelligence, International Business, Management, and even Human and Social Sciences. Participants were invited to propose, in teams, solutions applicable in several areas: water pollution, preservation of biodiversity, or even protection of fauna and flora.

https://ueuromed.org/actualites/ateliers-workshops/les-etudiants-de-luemf-partent-pour-tel-aviv-au-jamweek-shenkar-pour

UEMF participates in the third edition of the Mediterranean Climate Forum June 22, 2023



The third edition of the Conference of the Parties of Mediterranean countries on climate change (MedCop Climate) took place from June 22 to 23, in Tangier, Morocco.

This contribution calls for accelerating the pace of the fight against climate change on the one hand, and on the other hand to intensify actions to preserve ecosystems in the territories.

During this international conference, Pr. Hafsa El Bekri, teacher-researcher at UEMF and Co-Director of the Think Tank Research Institute for European, Mediterranean and African Studies (RIEMAS), moderated the Side Event "Assessment of environmental considerations in Regional budgets" by addressing several issues related to the implementation and promotion of climate governance at the local level. Pr. El Bekri also spoke in the "Local Stocktake and way forward" Panel.

This event saw the participation of ministers, public organizations, donors, businesses, territories and NGOs to address the various challenges encountered by the Mediterranean under climatic pressure.





https://ueuromed.org/actualites/annonces-diverses/luemf-participe-la-troisieme-edition-du-forum-mediterraneen-pour-le

Webinar: "The participation of African women in climate action"



https://www.facebook.com/UniversiteEuromed/videos/943901773283893/?extid=NS-UNK-UNK-UNK-AN GK0T-GK1C&ref=sharing&mibextid=2Rb1fB

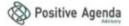
 $\frac{https://ueuromed.org/riemas/evenements/les-round-tables-du-riemas/15-hours-climate-genre-et-changement-climatique}{}$ 





#### 1.5 HOURS FOR CLIMATE: PLASTIC WASTE MANAGEMENT















https://ueuromed.org/riemas/evenements/les-round-tables-du-riemas/15-hours-climategestion-des-dechets-plastiques

#### Intervention by Professor Azzouzi on climate change



As part of the preparations for the "COP28" events, which will be held from November 30 to December 12, 2023 in the United Arab Emirates, Professor Azzouzi, president of the chair of the Alliance of Civilizations and member of the board of directors of the Euromed University in Fez, was invited by Emirati television in Abu Dhabi to discuss the evolution of global climate change.

During this meeting, Prof. Azzouzi highlighted the seriousness of the situation facing our planet due to global warming resulting from gas emissions and environmental pollution which threatens the future of the Earth on earth. and at sea.





He also stressed the need for positive action and to activate proposals and recommendations that would reduce this phenomenon and take the necessary measures, at national and international levels, to reduce the negative effects resulting from climate change, like what countries like the United States are doing. This is what the Emirates and the Kingdom of Morocco are doing, which are making tireless efforts to develop the fields of renewable energy and green technologies.

In his intervention, Professor Azzouzi underlined the importance of the participation of all actors, in particular industrialized countries which directly contribute to the exacerbation of this environmental crisis, and propose realistic solutions which would contribute to reducing the levels of carbon dioxide emissions.

https://www.youtube.com/watch?v=PUyhHTclflY

# CLUB WE GREEN IN ACTION: » IMPROVE THE IFRANE NATIONAL PARK: LET'S OPEN OUR EYES! »



Saturday October 28, 2023; the "We Green" club of students from the Euromed University of Fez (UEMF) organized an awareness day for the benefit of its members through the visit of several environmental centers as well as a cleaning action in the national park from Ifrane.

As part of these social activities, the "We Green" club kicked off this day aimed at raising awareness among the general public regarding environmental issues with the main objective: To encourage reflection around environmental issues, create ecological habits through a cleaning action and an awareness of biodiversity issues through a visit to the Ifrane national park, its fish farming station in Ras El Mae and its cedar house. The day was marked in particular by a cleaning action in the forest of the Zerouka I water body of Ifrane with the aim of reducing the negative impact of waste and residues which affect the environment.

Note that Zerrouka I is a small, shallow drainable artificial fish pond. It is located on the Zerrouka wadi (or Zrouka), the main tributary of the Tizguite wadi. The dike is located approximately 300m from the source, so that the waters from it flow directly into it. The





reservoir is limited by a concrete wall, at least on the west bank. The waters of the spring are also used to supply the city of Ifrane with drinking water.

At this body of water which is an integral part of the Oued Tizguite Ramsar Site; The vegetation is not very varied (around fifteen species with a wide geographical distribution) and is very limited in space, the edges of the lake being concreted and mowing is frequent.

It is a fairly protected trout body of water, somewhat interesting for birds. It is home to few winter residents (less than 400 birds), the population being mainly composed of divers: coots and crested coots, little grebes, pochards, tufts and nyrocas, with sometimes shovelers and/or mallards. Among the breeders, the Eurasian Coot (20-25 pairs), the Crested Coot (around 10 pairs) and the Little Grebe (5-8 pairs) are the most regular.

Finally, it should be noted that the Euromed University of Fez is a public utility, non-profit institution with an eco-campus meeting international standards which constitutes a pleasant and stimulating environment for its students coming from more than 40 nationalities.

UEMF winners are equipped with training on soft skills, study skills, life-skills and professional skills and this profile; based on several pillars; allows students to acquire numerous skills linked in particular to multilingualism, multiculturalism, innovation and entrepreneurship, the digital environment, international mobility, and sustainable development in addition to the pillar of social responsibility and eco-citizenship through which we instill in students the values of respect for the environment, sustainable development and civic responsibility.

https://www.oujdacity.net/national-article-157654-fr/club-we-green-en-action-sublimez-le-parc-national-difrane-ouvrons-les-yeux.html

https://premiumtravelnews.com/2023/10/30/club-we-green-parc-national-difrane/

#### Other event

• Organization of visits on May 30 (Shenkar) and May 31 (EU) in particular, with scheduling of a training session on climate change including modeling and supporting simulations, in preparation for the workshop in the matter forming part of the activities of May 31, 2022.





#### 2024: Euromed University of Fez at the heart of action for the SDGs

Conference on the theme: "Power to X: Opportunities and Challenges" by Mr. Andreas Meurer



The Euromed University of Fez had the pleasure of organizing, on the occasion of World Environment Day, the conference "Power-to-X: Opportunities and Challenges", which was held on June 5, 2024 at the University's eco-campus. This conference is part of the University's commitment to protecting the environment and promoting the eco-responsible approach through the adoption of civic and ecological actions on a daily basis within an ideal setting offered by the UEMF Eco-campus.

The conference was moderated by Mr. Andreas Meurer, a leading expert from the German Aerospace Center (DLR). The Power-to-X (P2X) theme covered a wide range of technologies that convert electricity into various forms of energy or chemicals. These innovations are essential for the integration of renewable energies and the reduction of carbon emissions in industrial sectors. Mr. Meurer shared his expertise on recent advances and challenges to maximize the potential of P2X technologies.

The event was aimed at a diverse audience, including teachers, researchers and students, all engaged in the field of energy and sustainable development. The conference offered a unique opportunity to exchange ideas, discuss future perspectives and create partnerships to promote sustainable energy technologies.

https://ueuromed.org/actualites/journee-specifique/conference-sur-le-theme-power-x-opportunities-and-challenges-par-m





#### Visit of Swedish Ambassador HE Jörgen Karlsson to Euromed University of Fez



Euromed University of Fez hosted HE Jörgen Karlsson, Ambassador of Sweden to Morocco, to discuss potential future collaborations with the President of the University, Prof. Mostapha Bousmina. The meeting focused on themes of mutual interest and explored opportunities for cooperation in areas such as climate change research, immigration, intergenerational dialogue, as well as innovation and entrepreneurship.

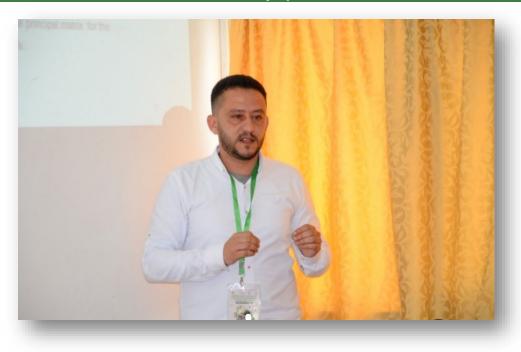
Sweden, with its strong diplomatic relations, seeks to strengthen contacts and cooperation with the countries of the MENA region, as shown by a dialogue initiative launched in 1997. Euromed University of Fez shares values of dialogue and multiculturalism with the Swedish Dialogue Institute for the Middle East and North Africa. In 2023, the Institute conducted a participatory process on intergenerational dialogue, aligned with the University's commitment to promoting intercultural dialogue in its research and development projects.

 $\frac{https://ueuromed.org/actualites/visites/visite-de-lambassador-suedois-se-jorgen-karlsson-luniversite-euromed-de-fes$ 





# Wahid BENKHADDA wins the Best Oral Communication Award at the ISMESH 2024 International Symposium



We are proud to announce that Mr. Wahid BENKHADDA, a fourth-year doctoral student, won the prestigious award for best oral communication at the ISMESH 2024 International Symposium. This distinction was awarded to him for his exceptional presentation during the event, which was held on May 7 and 8 at the Ecole Supérieure de Technologie in Fez.

Mr. BENKHADDA's participation in this symposium was part of his thesis project in the field of materials and environmental chemistry, in which he raises the issue of olive margins; a widespread problem at the regional, national level but also throughout the Mediterranean basin region.

We extend our most sincere congratulations to Mr. Wahid BENKHADDA for this well-deserved recognition which highlights the commitment of UEMF and its community to academic excellence and innovative research.

https://ueuromed.org/actualites/cedoc/wahid-benkhadda-rommage-le-prix-de-la-meilleure-oral-communication-au-symposium





## UEMF students make the voices of young Africans and Euro-Mediterraneans heard before the Parliamentary Assembly of the Union for the Mediterranean



Students from the Euromed University of Fez organized a summit on February 14, 2024 under the theme "Euro-Mediterranean and Transatlantic Opening" with more than 200 participants from 30 countries. This summit addressed topics such as energy ethics, sustainable development, transport, climate change, and the challenges of Africa.

The summit culminated in the Call for Investment in the Future, read out on 16 February at the 8th Summit of Speakers of Parliaments of the Union for the Mediterranean. The call highlights the need to strengthen cooperation between Europe and Africa through concrete projects, to allocate the funds promised for climate resilience, and to support initiatives such as the Nigeria-Morocco gas pipeline.

The students also welcomed Morocco's initiatives for economic integration, infrastructure and education in Africa, while calling for a "Marshall Plan" for education and research in Africa, as an investment in the future to combat poverty, terrorism and illegal immigration.

https://ueuromed.org/actualites/annonces-diverses/les-etudiants-de-luemf-font-heure-la-voix-des-jeunes-africains-et





#### Conference by Mr. Ghazi Gherairi: What alliances for what world in 2024?



As part of its conference cycle, the Euromed University of Fez organized a meeting led by Mr. Ghazi GHERAIRI on February 7, under the theme "What alliances for what world in 2024?". Mr. GHERAIRI, a doctor of public law and former Tunisian Ambassador to UNESCO, led a collective reflection on the alliances of civilizations and the need for a new, more just and united world order, taking into account the diversity of contemporary societies.

During this conference, Mr. GHERAIRI addressed crucial issues related to international relations, including the climate crisis, humanitarian crises, and the emergence of new technologies. He stressed the importance of constructive dialogue and international cooperation to address these challenges and build a peaceful world.

The event also allowed students of the Master's degree in "Conflict Management and Alliance of Civilizations" to exchange directly with the speaker on the topics discussed. This meeting is part of the activities of the Alliance of Civilizations Chair, created during the World Forum of the United Nations Alliance of Civilizations in November 2022, with the aim of stimulating reflection and intellectual exchange among UEMF students.

https://ueuromed.org/actualites/cycle-de-conferences/conference-de-m-ghazi-gherairi-quelles-alliances-pour-quel-monde-en





#### **International Conference: "Techniques and Environment"**



On January 25, 2024, the ICESCO-Euromed Chair "Arts, Societies and Civilizations" organized an international symposium in collaboration with CETCOPRA of the University of Paris 1 Panthéon-Sorbonne on the theme of "Technology and Environment". The event brought together Moroccan and international personalities, including Dr. Mohamed Zinelabidine of ICESCO, as well as a panel of researchers from the University of Paris 1.

The conference explored multidimensional approaches to address social and humanitarian crises, focusing on the interactions between technology, society, ethics and the environment. Two discussion sessions were organized: one on the use of technology in emergency situations, and the other on social issues related to technologies.

This meeting offered a platform for enriching debates between speakers, teacher-researchers and students from the Euromed University of Fez.

https://ueuromed.org/actualites/annonces-diverses/colloque-international-techniques-et-environnement





#### **UEMF** at the World Power-to-X Summit: Green Hydrogen and Innovation



At the World Power-to-X Summit in Marrakech, Professors Tijani Bounahmidi and Othmane Benmoussa represented the Euromed University of Fez (UEMF). The UEMF-HACE Side Event, held on October 9, brought together experts, decision-makers and industrialists to discuss green hydrogen technologies, highlighting innovations and value chain optimization in this booming sector.

Participants, including members of the HVM (Hydrogène Vert Marin) Consortium, discussed global trends in green hydrogen and its benefits, providing their expertise on sustainable solutions for carbon-free energy production. The presence of UEMF professors made it possible to showcase their expertise in sustainable development and establish promising partnerships during the B2B meetings. These collaborations aim to develop technological solutions to make green hydrogen accessible and efficient.

https://ueuromed.org/actualites/congres-et-colloques/luemf-au-world-power-x-summit-hydrogene-vert-et-innovation