جامعة ابن طفيل
ⵜⴰⵙⴷⴰⵡⵉⵜ ⵙⵓⵍ ⴱⵓⵃⴰⵢ
Ibn Tofaïl University

SUSTAINABLE DEVELOPMENT
IBN TOFAIL UNIVERSITY

A GREEN CAMPUS, A CLEAR VISION:

SUSTAINABILITY AT IBN TOFAÏL UNIVERSITY

2024



INTRODUCTION

Ibn Tofaïl University (UIT), located in Kenitra, Morocco, has emerged as a national and regional leader in higher education by embedding sustainable development at the core of its academic, scientific, and societal mission. Recognizing the urgency of global environmental degradation, social inequalities, and economic instability, UIT has adopted a holistic and systemic approach to sustainability. This approach aligns all institutional strategies—including governance, curriculum design, scientific research, community engagement, and campus operations—with the 17 Sustainable Development Goals (SDGs) set by the United Nations.

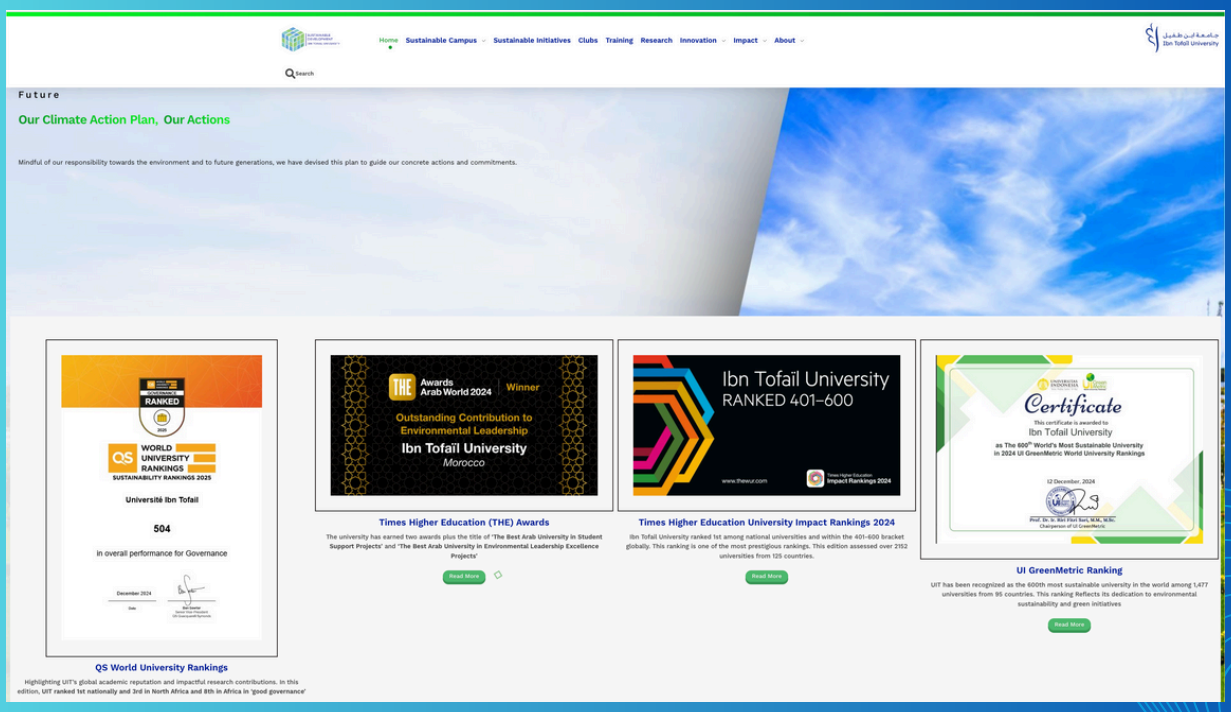
UIT's commitment to sustainability is not limited to policy declarations but is reflected in tangible actions and impactful results. The university has implemented green infrastructure, launched inclusive social programs, developed intelligent water and energy systems, and integrated sustainability into its educational and research programs. These efforts are coordinated by a dedicated Sustainable Development Center and supported by a publicly accessible digital platform (sd.uit.ac.ma), which hosts strategic documents, SDG progress reports, and institutional policies.

This comprehensive strategy has enabled UIT to stand out in the global academic arena. In 2024, the university was ranked first among Moroccan universities and placed in the 401–600 bracket worldwide in the prestigious Times Higher Education Impact Rankings, which evaluate universities based on their contributions to the SDGs. Notably, UIT ranked 1st in Morocco, Africa, and the Arab world for SDG 6 (Clean Water and Sanitation) and SDG 7 (Affordable and Clean Energy).

This report outlines the university's key initiatives, research projects, infrastructure investments, community partnerships, and international collaborations that contribute to advancing sustainable development. It reflects UIT's vision of being not only a center of knowledge but also a proactive force for environmental justice, social equity, and economic resilience—preparing students to become responsible global citizens and change-makers.

SUSTAINABLE DEVELOPMENT CENTER AND THE SD.UIT.AC.MA PLATFORM

SUSTAINABLE DEVELOPMENT
IBN TOFAIL UNIVERSITY

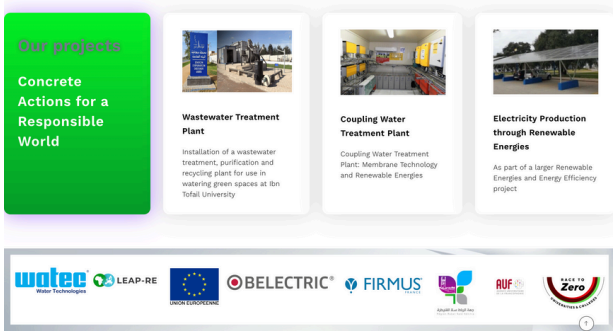


SUSTAINABLE DEVELOPMENT CENTER AND THE SD.UIT.AC.MA PLATFORM

Ibn Tofaïl University (UIT) has strengthened its commitment to sustainable development by establishing a dedicated Sustainable Development Center, supported by a public-facing digital platform available at sd.uit.ac.ma. This center plays a strategic role in coordinating, implementing, and monitoring the university's sustainability initiatives, while also serving as a central hub for information, awareness, and engagement for the entire university community.

A Digital Platform Dedicated to Sustainability

The website sd.uit.ac.ma is designed as a centralized portal that brings together all sustainability-related actions, policies, and resources at UIT. It provides transparent visibility into the university's commitments



regarding carbon emissions reduction, energy efficiency, waste management, biodiversity preservation, and more—reflecting a comprehensive institutional approach to sustainable development.

Strategic Publications and Resources

The Publications and Resources section
of the site makes available a wide range of essential documents, demonstrating UIT's strong commitment to transparency and accountability in its sustainability practices. These include:

SUSTAINABLE DEVELOPMENT CENTER AND THE SD.UIT.AC.MA PLATFORM

- Sustainable Development Goals (SDG) Reports: These annual reports highlight the university's alignment with the 17 SDGs through detailed coverage of its initiatives, research projects, and community activities, clearly illustrating UIT's contribution to global sustainability objectives.



SUSTAINABLE DEVELOPMENT CENTER AND THE SD.UIT.AC.MA PLATFORM

- Zero Carbon Strategy: This document outlines UIT's roadmap for achieving carbon neutrality. It includes emission reduction plans, energy efficiency measures, and strategic partnerships that support the transition toward a low-carbon, sustainable university model.

- Institutional Sustainability Policies: Key documents such as the Sustainable Investment Policy, the Responsible Procurement Policy, and the Social Responsibility Charter demonstrate how sustainability principles are integrated into the university's governance and decision-making processes.

2024



ENVIRONMENTAL INFRASTRUCTURES AND SOLUTIONS



CAMPUS STEP STATION – WASTEWATER TREATMENT AND SMART IRRIGATION

To address growing water stress, Ibn Tofaïl University implemented a state-of-the-art wastewater treatment plant (STEP) on its Kenitra campus. Using third-generation membrane bioreactor (MBR) technology, the system combines aerobic biological treatment, ultrafiltration, and UV disinfection. In 2024, it treated 145,000 m^3 of wastewater, reusing 85% for green space irrigation—saving approximately 1.2 million MAD annually.

With over 94% reduction in COD and BOD_5, and 99% of suspended solids, the treated water meets international standards. Sludge is dehydrated and reused as organic fertilizer, reinforcing circular economy practices.

The treated water is delivered via Mipotube, a subsurface irrigation system made from recycled automotive rubber, developed with German partner INNARI. It reduces water use by 50–60%, eliminates evaporation, and improves plant health—now irrigating 90% of the campus.

More than infrastructure, the STEP station is a living lab for students and researchers—blending technical innovation, environmental responsibility, economic efficiency, and academic excellence.

More info on the project

Smart irrigation with Mipotube







SIDI TAÏBI STATION – TREATMENT OF NITRATE-CONTAMINATED WELL WATER



Located in the semi-rural commune of Sidi Taïbi, this water treatment station addresses a serious public health issue: nitrate-contaminated well water, linked to thyroid disorders, especially in children. Ibn Tofaïl University responded with a pioneering solution combining high-precision membrane filtration and renewable energy production, in collaboration with BELECTRIC, FIRMUS, and the local educational community.

The system removes nitrates, bacteria, viruses, and salts through nanofiltration, followed by chemical-free electrochemical disinfection. Designed initially for 2,000 students, the station now serves over 4,000 beneficiaries, providing 3 liters per student per day with outstanding energy efficiency of 0.2 kWh/m^3.
The station is fully energy-autonomous, powered by 158 solar panels (24.3 kWp), a vertical wind turbine (UrWind2.2), and OPzV batteries that ensure round-the-clock operation. In 2024, it generated 13,900 kWh of clean energy.
Its impact is multi-dimensional: it reduces groundwater depletion and greenhouse gas emissions, improves health and school attendance, and serves as an educational tool on sustainable water management. For UIT students, it is a hands-on research platform in environmental engineering, renewable energy, and sustainable policy.

As a modular and replicable model, the Sidi Taïbi project contributes to SDGs 6, 7, 4, and 13, and stands as a beacon of community-based sustainability and territorial solidarity.

View the detailed project page
Watch the project video on Facebook





ENERGY AND MOBILITY: A SUSTAINABLE CAMPUS MODEL



SUSTAINABLE MOBILITY AND RENEWABLE ENERGY

Ibn Tofaïl University (UIT) is leading an ambitious strategy for energy transition and sustainable mobility, aligned with SDGs 7, 11, and 13. The university combines technological, behavioral, and structural solutions to reduce its carbon footprint while maintaining comfort and efficiency on campus.



To support this, UIT has equipped several parking areas with large photovoltaic canopies, installed a solar façade on the library, and built solar pergolas, generating over 1,000 kWh/day with 236 kWc installed capacity. These systems not only power campus operations but also supply charging stations for e-bikes and electric vehicles. For example, the Faculty of Science canopy alone produces 270 kWh/day, saving around 9,100 MAD monthly and cutting 4.3 tons of CO_2 emissions.







SUSTAINABLE MOBILITY AND RENEWABLE ENERGY

Ibn Tofaïl University (UIT) is leading an ambitious strategy for energy transition and sustainable mobility, aligned with SDGs 7, 11, and 13. The university combines technological, behavioral, and structural solutions to reduce its carbon footprint while maintaining comfort and efficiency on campus.

To support this, UIT has equipped several parking areas with large photovoltaic canopies, installed a solar façade on the library, and built solar pergolas, generating over 1,000 kWh/day with 236 kWc installed capacity. These systems not only power campus operations but also supply charging stations for e-bikes and electric vehicles. For example, the Faculty of Science canopy alone produces 270 kWh/day, saving around 9,100 MAD monthly and cutting 4.3 tons of CO_2 emissions.

As part of a broader energy optimization strategy, UIT is transforming its infrastructure into smart buildings—equipped with automated systems for lighting, heating, and ventilation, which adjust in real time based on occupancy. These intelligent systems help reduce energy waste and improve both operational efficiency and user comfort.









SUSTAINABLE MOBILITY AND RENEWABLE ENERGY

On the mobility front, UIT actively promotes low-emission transport by providing UIT-branded electric bikes, solar-powered charging stations, and dedicated parking. It also uses two electric vehicles for campus operations and city errands. A subsidized student shuttle service further reduces reliance on personal vehicles and traffic congestion near the university.

Since 2018, UIT has installed over 30 smart solar benches, enabling students and staff to charge phones, tablets, and laptops via solar energy. These benches serve as daily reminders of the value of clean energy and are among the first of their kind in Morocco.

🔗 Project: Smart Solar Benches

UIT also fosters community awareness through events like "Kénitra by Bike", encouraging cycling and energy-conscious lifestyles among students, staff, and local residents.

These initiatives reflect a comprehensive and integrated sustainability vision, positioning Ibn Tofaïl University as a national benchmark for smart, inclusive, and eco-responsible campuses.

🔗 UIT Renewable Energy Strategy

🔗 "Kénitra à vélo" – UIT in Action





SUPPORT CENTERS FOR A SUSTAINABLE UNIVERSITY COMMUNITY



CENTER FOR STUDENTS WITH DISABILITIES – INCLUSION, ACCESSIBILITY, AND EMPOWERMENT

Ibn Tofaïl University (UIT) has developed a comprehensive and inclusive ecosystem to ensure equitable access to higher education and digital innovation for students with disabilities. The Support Center for Students with Disabilities (2ESH) offers personalized support, adaptive technologies, and inclusive training opportunities—making it a national pioneer.

Each year, the center supports students and staff with visual, hearing, motor, or cognitive disabilities. Services include personalized accommodations for exams and classes, assistive equipment (Braille printers, screen readers, laptops), and specialized support. Platforms like HANDI-AMÉNAGEMENT and a volunteer support system enhance inclusion and solidarity on campus.

The center is also equipped with cutting-edge technology (Braille embossers, magnifiers, audio readers, transcription software) and is active in Erasmus+ projects (InSIDE, SWING, PACES), promoting accessible e-learning and digital upskilling.

UIT's impact is visible: students with disabilities have topped their graduating classes, and the university hosted Morocco's first remote thesis defense by a visually impaired PhD student. It also launched the country's first degree in adapted sports careers and a Master's in Disability Psychology.



CENTER FOR STUDENTS WITH DISABILITIES – INCLUSION, ACCESSIBILITY, AND EMPOWERMENT

In 2024, in partnership with CODE 212, UIT trained 360 students—including many with disabilities—in AI, coding, and data science, reducing the digital divide.

The center also leads awareness events, inclusive sports competitions, and exhibitions. The new Creative and Determined Club, launched in 2024, empowers students through art, innovation, and community support.

UIT's inclusive vision positions it as a national model aligned with SDG 10 (Reduced Inequalities) and the UN Convention on the Rights of Persons with Disabilities.

Visit the 2ESH website

Impact report: Fostering Inclusivity







CODE 212 CENTER – BUILDING SUSTAINABLE FUTURES THROUGH TECHNOLOGY AND SKILLS

CODE 212, based at Ibn Tofaïl University's solar-powered library, is a national model for inclusive and sustainable digital training. Open to all students—regardless of background, location, or disability—the center offers free, accessible programs in digital literacy, cybersecurity, AI, data science, and entrepreneurship.

In 2024, 360 students and over 600 staff members were certified, thanks to a flexible, project-based learning model. Students created impactful solutions like voice assistants for the visually impaired, rural smart irrigation systems, and mental health chatbots in Arabic.

Partnering with Huawei, Cisco, Oracle, GIZ, and the Empowerment Center, CODE 212 supports innovation and entrepreneurship through training, mentoring, and international certifications.

A graduate survey showed strong outcomes: 94% reported career benefits, and 40% found the experience transformative. Looking ahead, CODE 212 aims to certify 2,000 learners annually and expand into rural areas via mobile labs, solidifying its role as a national hub for inclusive digital education.

code212.uit.ac.ma



EMPOWERMENT CENTER – SUSTAINABLE ENTREPRENEURSHIP AND INCLUSIVE EMPLOYABILITY

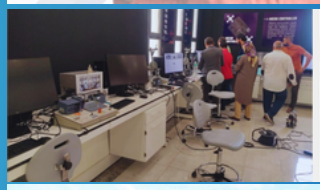
The Empowerment Center at Ibn Tofaïl University is a strategic initiative that prepares students for the job market and entrepreneurship by developing essential soft skills—communication, teamwork, leadership, and time management.

It offers training in entrepreneurship, including project design, business management, and fundraising, while also helping students connect with employers and navigate recruitment processes.
The center regularly hosts workshops, coaching sessions, and seminars in collaboration with national and international partners, including ANAPEC, to boost youth employability.
Through programs in personal development, entrepreneurship, and individualized coaching, the center empowers students to define and pursue their career goals.

Since its launch, the center has reached a wide student audience, enhancing employability and initiative. It continues to expand partnerships and develop new programs to meet evolving labor market needs.

https://empowermentcenter.uit.ac.ma/









SCIENTIFIC PUBLICATION SUPPORT CENTER (CAPS) – ADVANCING SUSTAINABLE AND IMPACTFUL RESEARCH

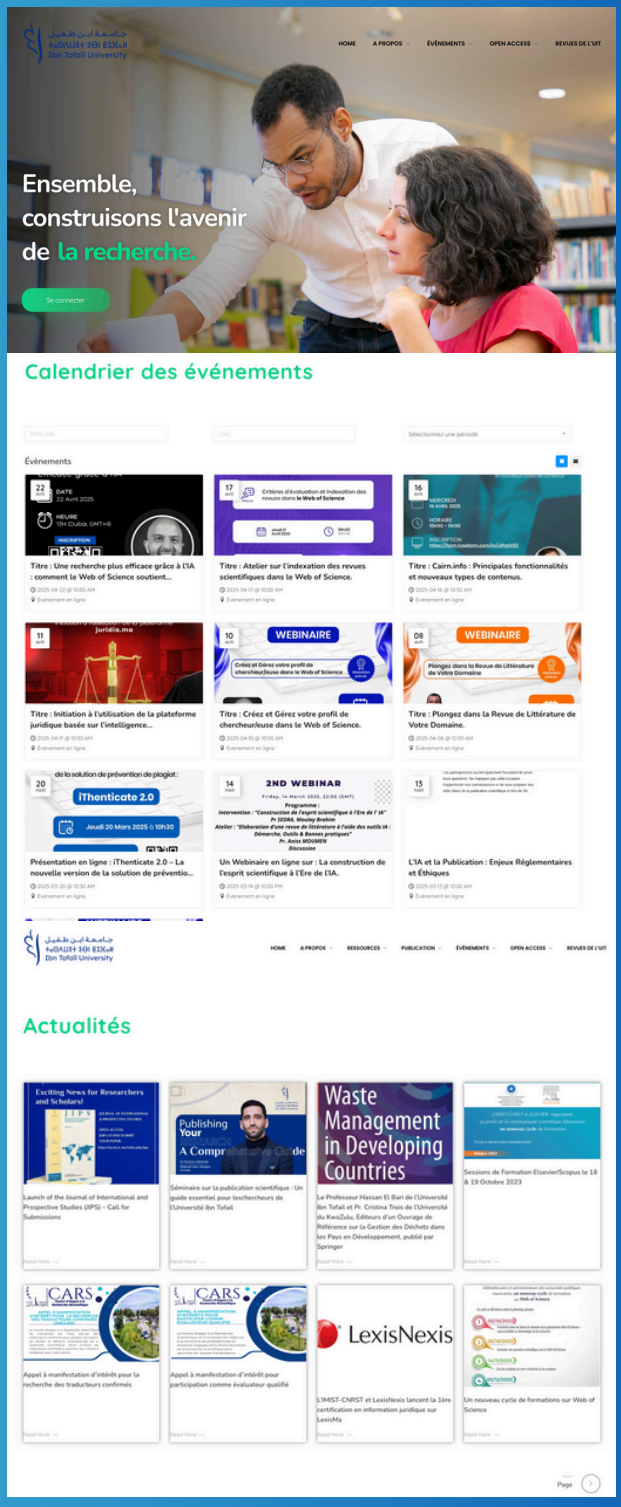
The Scientific Publication Support Center (CAPS) at Ibn Tofaïl University is dedicated to promoting and disseminating the institution's scientific output. It offers a range of services to assist researchers in preparing and publishing high-quality research articles in reputable academic journals.

Key Services:

- Manuscript Writing and Editing Assistance: Providing support to enhance the clarity and quality of research manuscripts.
- Translation Services: Assisting in translating research papers to overcome language barriers and reach a wider audience.
- Access to Resources: Facilitating access to scientific knowledge and research tools.
- Promotion and Valorization of Scientific Output: Helping researchers increase the visibility and impact of their work.
-

CAPS also organizes seminars and training sessions to guide researchers through the publication process and to foster a culture of scientific excellence within the university community.

🔗 Visit the CAPS Website



ADVANCING SUSTAINABILITY THROUGH RESEARCH, EDUCATION, AND COMMUNITY ENGAGEMENT



SUSTAINABILITY IN RESEARCH, EDUCATION, AND ENGAGEMENT

Ibn Tofaïl University (UIT) demonstrates leadership in sustainable development through a comprehensive approach combining academic training, interdisciplinary research, field-based learning, and community involvement. The goal is to prepare students to tackle today's environmental, social, and economic challenges.

Sustainability education at UIT includes ECTS-accredited modules in climate science, environmental policy, ecosystem management, renewable energy, and conservation. It is supported by specialized programs and active research labs such as the Natural Resources and Sustainable Development Lab and the SETIME Lab for intelligent energy systems.

Experiential learning plays a key role through workshops, field trips, student-led projects, and awareness campaigns like African Week for the SDGs and community initiatives organized by the Anir association. These foster practical skills and civic responsibility.
Research projects such as BIOTHEREP (bioenergy from slaughterhouse waste) and smart greenhouse management systems showcase UIT's commitment to solving real-world sustainability issues.

Conferences like the Corrosion Inhibitors Congress and Big Data & AI Forum further amplify UIT's scientific impact.
UIT also leads in social and inclusive education, offering accredited programs in social action, disability inclusion, public policy, and health—aligned with national priorities like the training of 10,000 social workers.

With 139 continuing education programs and 6,000+ annual learners, the university promotes lifelong learning. Its commitment to carbon neutrality is reflected in its participation in the Race to Zero campaign.

By embedding sustainability in education and research, UIT is shaping responsible citizens and advancing solutions for a fairer and more sustainable world.



PARTNERSHIPS FOR SUSTAINABLE DEVELOPMENT



PARTNERSHIPS FOR SUSTAINABLE DEVELOPMENT

Ibn Tofaïl University (UIT) has made partnerships a cornerstone of its sustainable development strategy, guided by openness, shared innovation, and a commitment to enhancing its scientific, economic, and social impact. In 2024, the university significantly strengthened its collaborative ecosystem, with over 200 active partnership agreements at the regional, national, and international levels—demonstrating strong alignment with Sustainable Development Goal 17 (SDG 17): Partnerships for the Goals.

Internationally, 35% of UIT's scientific publications result from international collaborations. The university participates in over 39 Erasmus projects (KA1, KA2, Mundus, Intra-Africa) and is involved in key European programs such as Horizon 2020, Horizon Europe, PRIMA, and TEMPUS. UIT is also a member of influential networks including UNIMED, AUF, the Climate-U Network, the Mediterranean Universities Union, and the Race to Zero for Universities and Colleges campaign. These affiliations boost UIT's global visibility and its capacity to contribute to major global challenges like climate change, social justice, and food security.

RACE TO Zero
UNIVERSITIES & COLLEGES

PRIMA
PARTNERSHIP FOR RESEARCH AND INNOVATION IN THE MEDITERRANEAN AREA

Unione delle Università del Mediterraneo
Mediterranean Universities Union
Union des Universités de la Méditerranée
إتحاد الجامعات المتوسطية
unimed

Climate-U
Transforming Universities for a Changing Climate

AUF
Agence UNIVERSITAIRE DE LA FRANCOPHONIE

PARTNERSHIPS FOR SUSTAINABLE DEVELOPMENT

At the national and regional level, UIT maintains strong ties with over 70 Moroccan partners, including universities, public agencies, local authorities, NGOs, and major companies such as Yazaki, PSA Peugeot Citroën, Huawei, Decathlon, Accor, and Xiezhong. These partnerships enable the creation of internships, joint training programs, applied research projects, and technology transfer, thus fostering graduate employability and an innovative academic ecosystem.



UIT is actively involved in research projects that tackle key sustainability issues—such as BIOTHEREP, FUNZYbio, PyroBioFuel, SAFOOD4MED, SUPREM-MILK, and SysOrg—focusing on renewable energy, sustainable agriculture, and natural resource management. It also contributes to participatory research projects like its collaboration with University College London on climate change, under the British Council's REL program.

LEAP-RE

ERA LEARN

SaFood4Med

PRIMA
PARTNERSHIP FOR RESEARCH AND INNOVATION IN THE MEDITERRANEAN AREA

UCL

SysOrg

PARTNERSHIPS FOR SUSTAINABLE DEVELOPMENT

The university plays a leading role in organizing international scientific events, including the International Congress on Health Vigilance, the Franco-Moroccan Symposium on Renewable Energy, and the African SDG Week in partnership with the Next Einstein Forum. These events position UIT as a hub for knowledge exchange and sustainable practice.

Strategic public and industrial partnerships are also central to UIT's approach. In 2024, the university signed key agreements with institutions such as the Ministry of Justice, Bank Al-Maghrib, ANAPEC, SAFRAN, and Cégep de Saint-Laurent (Canada) for water treatment projects. These partnerships integrate scientific research, training, skills development, and technological innovation.



Overall, these actions reflect UIT's firm commitment to being a globally connected, socially responsive, and sustainability-driven university. By aligning with SDG 17, Ibn Tofaïl plays a pivotal role in networking knowledge, merging expertise, and mobilizing collective action for a more sustainable future.







SUSTAINABLE RESEARCH PROJECTS



SUSTAINABLE RESEARCH PROJECTS

Ibn Tofaïl University (UIT) conducts engaged, interdisciplinary research aligned with the United Nations Sustainable Development Goals (SDGs). Its projects span diverse fields, including health, biodiversity, sustainable agriculture, risk management, waste valorization, artificial intelligence, and social inclusion.

sd.uit.ac.ma/recherche

a. Health, Well-being, and Life Sciences

- Phytotherapy for stress and memory: Studies on medicinal plants with cognitive benefits.
- Parkinson's disease research: Recognized nationally at the Ma Thèse en 180 secondes competition.
- ActinOmics: Marine biodiversity bioprospecting in the Marchica lagoon for pharmaceutical innovation.

b. Environment, Energy, and Circular Economy

- BIOTHEREP: Bioenergy production from slaughterhouse waste.
- PyroBioFuel: Converting plant-based waste into sustainable fuels.
- Plant-based tanning: Eco-friendly alternatives to chemical tanning in the leather industry.
- VLORMAC: Organic waste recovery through methanization and gasification.

c. Natural Hazards and Digital Solutions

- Seisme Data: Award-winning smart app for earthquake detection and risk prevention.
- Intracranial aneurysm modeling: AI-based detection using neural networks.
- 3D mesh analysis with CNNs: Combining AI and computer vision for medical modeling.

Sustainable Research Projects

d. Sustainable Agriculture and Food Systems

- SAFOOD4MED and SUPREM-MILK: Sustainability in Mediterranean agriculture and dairy systems.
- SysOrg: Smart management of agricultural resources.
- Smart greenhouse: Integration of connected greenhouses with hybrid microgrids.





e. Culture, Society, and Inclusive Education

- InSIDE, SWING, PACES: Inclusive digital education and training for students with disabilities.
- MA¿REB IN PIXELS: Innovative teaching project using cultural heritage in learning.
- Student well-being tech tools: Development of a voice assistant and psychological chatbot (via CODE 212).



International Distinctions and Recognitions

Ibn Tofaïl University (UIT) has established itself as a leading institution in sustainable development through an integrated strategy that combines academic excellence, environmental innovation, and societal engagement. This approach has earned the university numerous prestigious international awards and recognitions.



Times Higher Education (THE) Impact Rankings 2024:
UIT ranked first among Moroccan universities and placed within the 401–600 band globally. This ranking assesses universities' commitment to the 17 United Nations Sustainable Development Goals (SDGs).

































International Distinctions and Recognitions

Prestigious International Rankings

- **QS World University Rankings:** UIT has been recognized for its global academic reputation and significant research contributions. It ranks first nationally, third in North Africa, and eighth in Africa in the category of "Good Governance."



- **UI GreenMetric Ranking:** UIT was ranked the 600th most sustainable university in the world out of 1,477 universities from 95 countries, reflecting its commitment to environmental sustainability and green campus initiatives.



Special Awards





Times Higher Education (THE) Awards, UIT received two major accolades:

1. Best Arab University for Student Support Projects,
2. Best Arab University for Excellence in Environmental Leadership.

These distinctions highlight UIT's ongoing commitment to delivering quality education, producing high-impact research, and adopting sustainable practices. They also solidify its role as a key contributor to the global implementation of the Sustainable Development Goals.

CONCLUSION

Ibn Tofaïl University stands out as a pioneering institution in the advancement of sustainable development within higher education. Through a comprehensive and integrated approach, it has successfully embedded the United Nations Sustainable Development Goals (SDGs) into its academic, research, governance, and operational frameworks. This commitment is not only strategic but deeply embedded in the university's identity and daily practices.

UIT's strong performance in international rankings—most notably its top position in Morocco in the Times Higher Education Impact Rankings—highlights the relevance and effectiveness of its sustainability efforts. These achievements affirm the university's ability to translate its vision into action, delivering measurable benefits for the environment, society, and its academic community.

The initiatives outlined in this report—spanning innovative research in bioenergy, public health, and AI, sustainable infrastructure projects, inclusive education programs, and transformative partnerships—demonstrate how UIT is preparing a new generation of leaders to face global challenges with knowledge, creativity, and responsibility.

Centers such as CODE 212, the Sustainable Development Center, the Empowerment Center, and the Support Center for Students with Disabilities reflect the university's holistic commitment to equity, innovation, and social impact. These spaces foster empowerment and inclusion, ensuring that no one is left behind in the transition toward a sustainable future.

By maintaining this dynamic and ambitious trajectory, Ibn Tofaïl University reinforces its role not just as a place of learning, but as a living laboratory of sustainability—a space where solutions are created, tested, and shared for the benefit of both the local community and the wider world. As such, it positions itself as a national and international model, inspiring other institutions to align excellence in education with global responsibility.

جامعة ابن طفيل
ⵜⴰⵙⴷⴰⵡⵉⵜ ⵙⵉ ⵄⵉⵖⵓⵍ
Ibn Tofaïl University

SUSTAINABLE DEVELOPMENT
IBN TOFAIL UNIVERSITY

“Leading the Change, Shaping a Sustainable Future”