

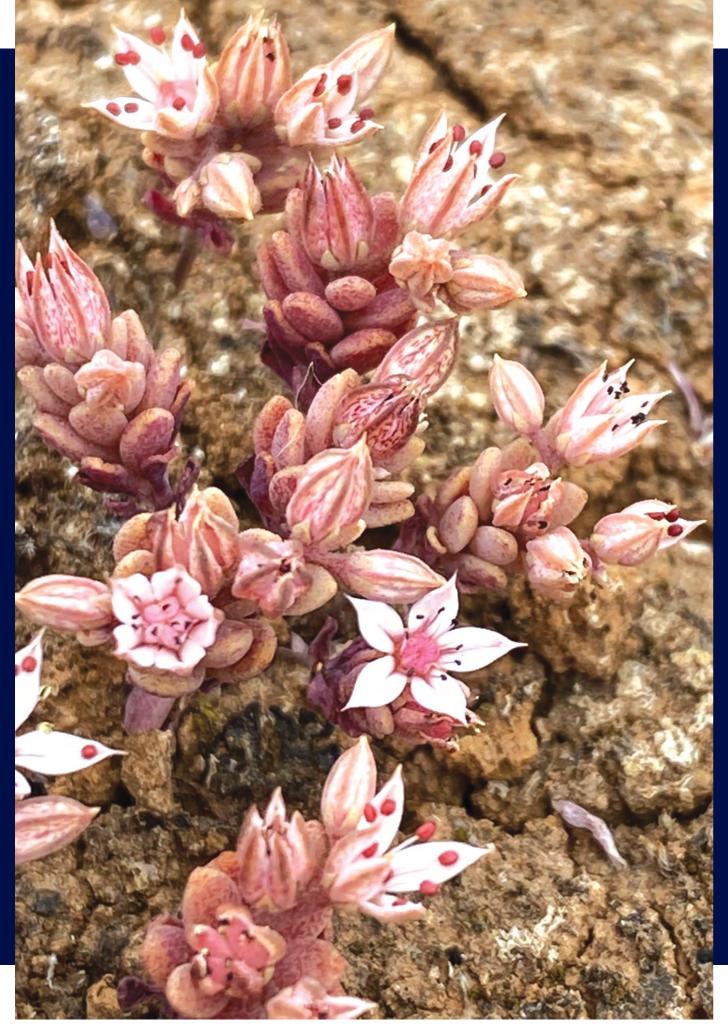
Frederick University:

Sustainability Report 2024





Cover Illustration: Anna Miltiadou, Frederick University Graduate



Sedum porphyreum: From Cape Cayo Greco area. The University participates in LIFE PANDOTEIRA project where one of the project's actions include the elaboration of an Action Plan for the priority habitat type '3170* Mediterranean temporary ponds', which host species such as Sedum eriocarpum subsp. porphyreum.

Foreword by the University President

As we present the 2024 Sustainability Report of Frederick University, I am once again filled with immense pride and gratitude for the extraordinary progress we continue to make on our journey towards a more sustainable future. This past year has been another remarkable chapter, one that further solidifies our University's reputation for making a meaningful impact on the world through research, teaching, outreach, and stewardship.

Globally, 2023 was defined by geopolitical conflicts, shifts in power dynamics, climate disasters, and the rapid advancements of artificial intelligence (AI). Rising global temperatures continued to disrupt ecosystems, threatening both human livelihoods and biodiversity, while the imperative to transition to renewable energy sources became more urgent. In higher education, the integration of AI presented both opportunities and challenges, with issues around ethical use, data privacy, and equitable access coming to the forefront. At Frederick University, we have navigated these complexities with resilience and adaptability.

A key highlight of 2024 has been our ranking among the top 201-300 universities worldwide in the Times Higher Education Impact Rankings. For the second consecutive year, we are proud to be the only university in Cyprus to achieve this distinction and one of only two institutions from Cyprus and Greece to do so. With over 2,152 institutions participating globally, this recognition is a testament to our unwavering commitment to the United Nations Sustainable Development Goals (SDGs) and our dedication to shaping a better future for all.

This 5th annual sustainability report details our enduring work across teaching, operations, research, and outreach, reflecting our response to the complex challenges of our time. Our commitment to the ambitious targets set for 2022-2025 remains steadfast, and this year's report not only captures our mid-term progress but also demonstrates how education continues to empower us to address global challenges head-on.

Frederick University's impact is evident in the research we conduct, the teaching we provide, the policies we implement, and the collaborations we foster. Our role as a founding member of the Sustainable Solutions Network Cyprus keeps us at the forefront of sustainability efforts in our country, driving strategies to achieve the SDGs.

As we approach 2025, I am confident that with the support of our university community, we will continue making significant strides towards a just and sustainable future. My heartfelt thanks go to all members of our Frederick University family —faculty, staff, students, and alumni whose dedication is the cornerstone of our success.

Together, we will keep moving forward, empowered by the knowledge that our collective efforts will continue to shape a more equitable and sustainable world.

Natassa Frederickou, President of the Council















Frederick University's Impact Acknowledged in Global Rankings

For the second consecutive year, Frederick University has been ranked among the top 201-300 universities worldwide in the Times Higher Education Impact Rankings 2024, reinforcing its position as the best performing university in Cyprus in terms of its impact on the world through research, teaching, outreach, and stewardship. Out of a total of 2,152 institutions from around the globe, Frederick University is the only university in Cyprus to achieve this distinguished ranking, standing among the highest-ranked institutions from both Cyprus and Greece.

This significant achievement is a reflection of the University's unwavering dedication to the United Nations' Sustainable Development Goals (SDGs), which form the backbone of its strategic initiatives aimed at contributing to a better and more sustainable future for all.

Frederick University achieved top 101-200 rankings in the following SDGs: · SDG 4: Quality Education SDG 7: Affordable and Clean Energy · SDG 10: Reduced Inequalities SDG 17: Partnership for the Goals

These rankings underscore Frederick University's strategic commitment to driving impactful change through education, research, stewardship and community engagement.

"I am particularly pleased to see Frederick University once again ranked among the top 201-300 universities globally. This achievement aligns with the mission of our institution, as we strive to have a lasting impact on both local and global communities. I congratulate everyone who has contributed to this success."

Natassa Frederickou. President of the Council

> "We remain dedicated to continuous improvement and to further enhancing our impact in the years to come. This recognition reinforces our commitment to creating a better world through our sustainability strategy, which is an integral part of our identity."

Professor George Demosthenous, Rector

University Contributions to the SDGs

At Frederick University, we understand that we have a critical role in helping the society achieve the United Nations (UN) Sustainable Development Goals (SDGs). We embrace our responsibility in the transition to a sustainable future. We are committed to ensuring that, through our research, our learning and teaching, our governance and operations and our outreach, our University will be a vehicle for change and will play an important role in the change we want to see in our world.



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TEACHING

- Incorporating SDGs in the content of the curriculum and enabling students to learn about sustainability whatever their program of study may be
- Offering action-based learning initiatives that are based on a student-centred learning and teaching (SCLT) pedagogical approach
- Incorporating in courses learning approaches for ESDGs enabling the students to develop sustainability competencies

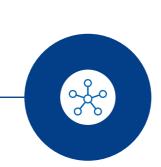
RESEARCH

- Promoting SDGs-related research
- Empowering researchers to find new approaches that improve lives and change the world we live in - Encouraging
- interdisciplinary approaches Encouraging consulting activities and collaborations with Government, NGOs and other stakeholders.

GOVERNANCE & OPERATIONS

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- Incorporating the SDGs in the University policies and operations - Adopting best practices
- and leading by example through our governance and operations in the effort to promote the SDGs



OUTREACH

- Actions aimed towards the local society and the interconnection of the University community with its environment including policy development and advocacy - Raising awareness of the SDGs among the wider community

Targets 2025 Interim Assessmer

The year 2022 marked a pivotal moment in our sustainability journey, as we solidified our commitment to the SDGs, as outlined in our University's 2022-2030 Strategic Plan, which is presented on the next page. This comprehensive blueprint laid the foundation for our current path, emphasizing the critical need to transform into a Sustainable Campus and actively address the global challenges presented by the 17 SDGs.

Building upon this framework, the University set more ambitious goals for each of its four key dimensions of activity-Research, Teaching, Outreach, and Governance & Operations-with targets to be achieved by 2025.

Progress toward our 2025 objectives

The targets for the 2022-2025 period remain focused on achieving significant impact across these four dimensions. In total, there are 22 targets aimed at fostering meaningful progress toward sustainability and the SDGs.

Summary of the progress for each target

The updated table on the right illustrates the current status of each target, indicating various stages of completion. A summary of the progress for each target is provided in the following pages, organized by dimension of activity. A comprehensive evaluation and detailed progress analysis for each target will be presented in the 2025 report.

Not started		- targets
Started	L	- targets
Somewhat Complete		12 targets
Mostly Complete	-	9 targets
Complete		1 target



Strategic Plan 2022 - 2030

In 2022 the University presented its 2022 – 2030 Strategy, outlining its aspirations and direction for the next decade. Sustainability holds a central role in the new Strategy as described below.

Purpose

Our purpose is to empower faculty, staff, and students to realize their full potential. We aim to advance knowledge for the betterment of society through research and to provide comprehensive education, enabling our students to tackle global challenges and drive positive change.

Vision

Our vision is to have a transformative impact on society through our operations, teaching, and research. We aspire to be recognized for the ethos of our people.



Mission

Our mission is to serve society through education, research, and community engagement. This encompasses:



Education: Fostering a holistic approach that enables learners to develop the necessary knowledge, skills, values and attitudes which will allow them to face the turbulent future ahead and become committed to building a more sustainable future.



Research: Actively supporting research and the creation of new knowledge, contributing to the betterment of humanity through exploration and innovation.



Contribution to Society: Engaging with society's needs on local and global levels, promoting knowledge, human values, and culture for the benefit of the broader community.

Values

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Integrity: We establish trust through responsible actions, honesty, and integrity in all our endeavors.



Community and Compassion: We are a caring and supportive community that values each member. Respect and inclusivity create a sense of belonging for all.



Innovation and Creativity: We strive to look at a problem from different angles, pushing the boundaries of what we know, to envision a better world.



Excellence: We believe in the pursuit of personal excellence for every member of our community.



Making an Impact: We are committed to advancing solutions for a sustainable future. We seek to make a positive impact locally, nationally, and internationally by applying the knowledge we create, fostering partnerships, and engaging with the public.



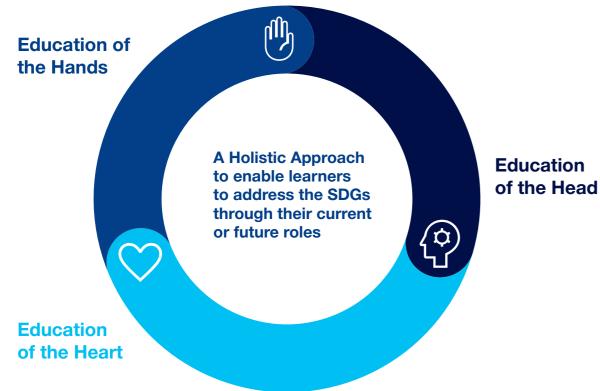
TARGET	STATUS
Revise curricula in all programs of study so as to increase and direct content towards support for SDGs.	Somewhat Complete
Monitor relevance of content of educational programs and courses with SDGs and aim for increase of engagement at all programs of study.	Mostly Complete
Embed in all programs of study elements that increase transferable skills, work placements and entrepreneurship.	Somewhat Complete
Offer programs of study specifically supporting SDGs, including programs that directly focus on the fields of sustainability, cultural heritage, climate, energy, environment, and justice.	Mostly Complete
Further expand and support lifelong learning activities for the society as well as enhancing short-term training programs with microcredentials for the University community and beyond.	Mostly Complete
Introduce novel, project-based, multi-disciplinary courses in various programs that are conducted in collaboration with the industry so as to enable students to address real-life challenges.	Somewhat Complete



Sustainability Education **Preparing Agents of Change**

Graduates today are faced with an uncertain and complex future. The way our students learn and are taught must also change to stay current and effective. We need to prepare our students not only with the appropriate **knowledge** but also with the curriculum and pedagogy that help students develop the knowledge, skills, values, and attitudes necessary for building a more sustainable future.

The 3H for a Sustainable Future



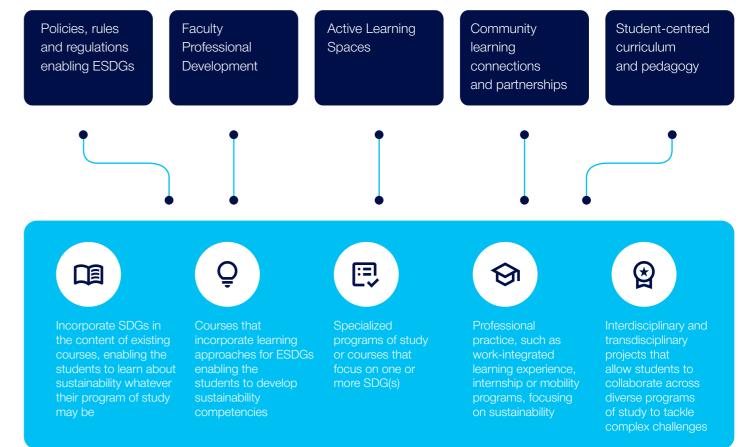
We want our students to have the necessary knowledge (head) but at the same time, to have the appropriate skills (hands) and care (heart) so that, upon their graduation, they are able to face the turbulent future ahead but also -more importantly- they have the desire to become agents of change.

All three components are very important, and at Frederick University there are different approaches by which they can be achieved: · Incorporating the SDGs: We integrate the Sustainable Development Goals (SDGs) into the curriculum, enabling students to learn about sustainability regardless of their program of study.

- Action-Based Learning Initiatives: We offer initiatives based on a student-centred learning and teaching (SCLT) pedagogical approach. By providing students the opportunity to work on real-world projects or solve real-life challenges, we support the development of their sustainability competencies.
- Specialised Programs: We offer programs or courses focused on one or more SDG(s).
- Professional Practice: We focus on work-integrated learning experiences, internships, and mobility programs that prioritize
- sustainability. Interdisciplinary and Transdisciplinary Projects: These initiatives allow students to collaborate across diverse programs of study to tackle complex challenges.

During the past three years, much emphasis was placed on:

- · Developing policies, rules, and regulations that enable student-centred learning and teaching.
- · Creating a student-centred curriculum and pedagogy that help students develop the knowledge, skills, values, and attitudes necessary for building a more sustainable future.
- · Designing active learning spaces that encourage student engagement and collaboration.
- · Empowering faculty members through professional development programs focused on integrating the SDGs into their curriculum and
- teaching practices and in providing competence-based education for sustainable development. Establishing collaborations and partnerships that enable learners to engage with the community



Frederick University ECOSYSTEM for ESDGs

FULL - Frederick University Living Lab

Welcome to FULL

FULL (Frederick University Living Lab) is a Frederick University pedagogical initiative that is based on a student-centred learning and teaching (SCLT) approach. It combines project-based, participatory and experiential learning through community connections and partnerships. It challenges students to use their disciplinary knowledge and skills and tackle real-world problems and issues through interdisciplinary approaches and activities. FULL projects are connected with the United Nations' Sustainable Development Goals (SDGs).

What is FULL?

The initiative builds partnerships between Frederick University courses and organisations (industry, corporate, non-profit, governmentsector organizations, institutions etc.). It takes the form of a project, or other task, that has to be performed by the students, in actual professional settings, during the semester, in collaboration with the representative(s) from the partner organisations and the course's instructors. The project is determined by the course instructor after considering the course's learning outcomes and the partner organisations' needs.

The project can constitute one of the means for coursework assessment and/or final assessment. This initiative represents a paradigm shift from teacher-centred learning to student-centred learning. Students in this model are not considered passive recipients of information but, on the contrary, they are given different opportunities to take responsibility for their own learning and to actively participate in the construction of knowledge, and to develop their autonomy as learners through self-reflection and improved learning skills.

FULL also enables a change in mindset for faculty members since it encourages internal collaboration amongst different faculty members as well as external collaboration with different stakeholders. The initiative is integrated within Frederick University's existing courses. During the semester, in every FULL course, a three-party relationship develops which involves faculty experts, industry mentors and students.



The student - faculty - organisation partnership helps students acquire knowledge, and develop skills and mindsets that will enable them to address the SDGs through their current or future roles

FULL for Students

- FULL courses help students develop in the following ways:
- (a) Integrate effectively and apply in appropriate ways previous learning and knowledge to make and justify decisions in a real-world context of work.
- (b) Demonstrate workplace competencies: professionalism, leadership, initiative, confidentiality, communication, responsibility for decision-making, and organisational, cultural & social awareness.
- problem-solving, creativity and innovation, values, empathy and decisiveness for action.
- (d) Reflect upon decisions, personal choices and actions in the workplace and critically appraise their appropriateness.
- (e) Enhance disciplinary and develop multidisciplinary knowledge of a wide range of perspectives, within a combination of subject areas.
- (f) Integrate within their professional decisions and behavior, principles and actions that promote the achievement of the SDGs.

In the 2023-2024 academic year, 16 courses were offered following the FULL methodology. Our aim is to offer all Frederick University students the chance to complete a FULL course during their studies. We look forward to creating a positive impact to business, government and society.



(c) Demonstrate transversal competencies: critical thinking, futures thinking, systemic thinking, collaboration and communication,





Interdisciplinary Collaboration for Real-World Impact through the FULL Methodology

The interdisciplinary project "Design for Play: Building Awareness for a Sustainable Future" was implemented during the Spring 2024 semester, bringing together students from two distinct courses:

- PEENV202: Education for Sustainable Development in Primary Education from the Primary Education program, and - GVC112: Digital Drawing from the Visual Communication program.

This collaborative project aimed to combine the educational insights of future primary teachers with the design skills of art students. The students worked closely with the Department of Fisheries and Marine Research of the Ministry of Agriculture to address a critical environmental challenge: raising awareness about the endangered Mediterranean monk seals. Through their cooperation, the students developed educational games designed to teach children about the importance of marine conservation and the protection of this rare species.

Working across disciplines, the students were tasked with developing creative, informative, and engaging educational tools that could effectively communicate complex environmental issues to young learners. This required ongoing collaboration, with students sharing knowledge from their respective fields-educators focused on learning outcomes and pedagogical strategies, while visual communication students brought design and creative expertise. Together, they merged their strengths to create a set of interactive, visually appealing games that not only educate but inspire children to take an active role in protecting the environment.

This hands-on project required students to collaborate closely and engage in a real-world challenge, testing both their individual expertise and their ability to work as a team. The development process involved frequent interactions between the two student groups, as they brainstormed ideas, refined designs, and aligned their approaches to ensure the games were both educationally effective and visually engaging. Throughout the project, they also collaborated with representatives from the Department of Fisheries and Marine Research, who provided valuable feedback to ensure the materials met the educational goals and addressed the environmental concerns effectively.

Ultimately, the project demonstrated the power of interdisciplinary collaboration, as students from different fields of study learned to appreciate the unique contributions of their peers while working towards a common goal. The result was a set of innovative educational tools that will be used to raise awareness among children about marine life conservation. This experience not only enhanced the students' teamwork skills but also underscored the importance of interdisciplinary cooperation in finding creative solutions to real-world problems.









TARGET	STATUS
Through specific KPIs, keep track on research output, both in terms of publications and implementation of research programs, in relation to the SDGs.	Complete
Maintain and expand the PhD sponsorship program for minorities and segments of society that are underrepresented in higher education.	Somewhat Complete
Directly fund through University resources research related to SDGs.	Somewhat Complete
Establish an Innovation and Knowledge Transfer Office with a specific focus on supporting members of the University community in implementing and bringing innovative ideas to the market. Additionally, foster connections between the industry and the University to provide and support solutions for real-world problems.	Somewhat Complete
Participate in the European University Alliance initiative through membership in EU-CONEXUS with the aim of developing pan- European research and solutions to the challenges of urban coastal development.	Mostly Complete
Develop and promote gender equality schemes for participation in and access to research.	Somewhat Complete

Mapping the University Research Activities

The University has developed a comprehensive mapping of its research activities against the SDGs. The aim of this activity is two-fold: firstly, to achieve a reliable system of data collection and assessment, and secondly to enhance the SDG dimension of research activity within our community. Research mapping has been conducted along three levels: 1. engagement of research units,

2. funded projects, and

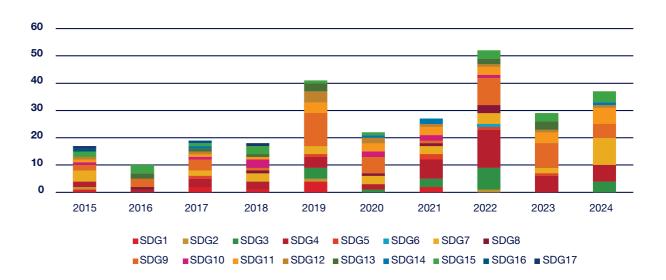
3. academic publications.

All active research units have been mapped in terms of relevance to SDGs and the mapping was confirmed in 2024 with the engagement of the units. Also, during the year some research units were restructured to more properly address the research activities of the University, which -combined with the confirmation of the relevance with the SDGs- resulted in some changes in the mapping. The following table indicates the areas of concentration of research on each SDG by the number of research units in the University engaging in relevant activity.

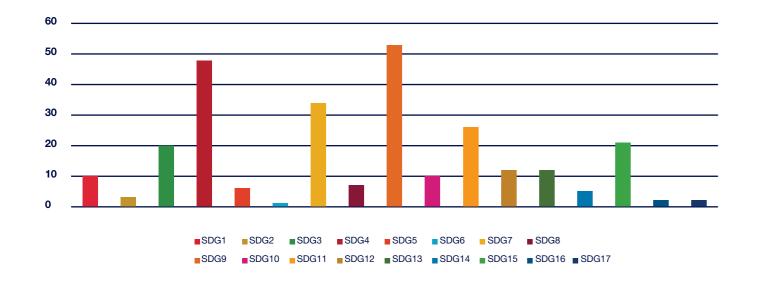
SDG	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
No. of Research Units	0	0	5	4	2	1	14	3	8	1	6	1	5	3	1	0

With respect to funded projects, we are mapping the number of funded projects granted on an SDG each academic year, as well as the total number of projects granted relating to each SDG since 2015. These data are provided in the following two charts, respectively.

New Projects by SDG per year



Total number of projects by SDG since 2015



The mapping is updated for 2024 and besides the variability in the number of projects per SDG that is also affected by the funding available through the various programs, similar conclusions are extracted as in past reports. The total number of research projects and correspondingly those related to SDGs has been increased in 2024 in comparison to 2023, where the focus has shifted to larger scale projects since 2022. The latter is evident also by the involvement of more of our research staff in the projects acquired, which has increased.

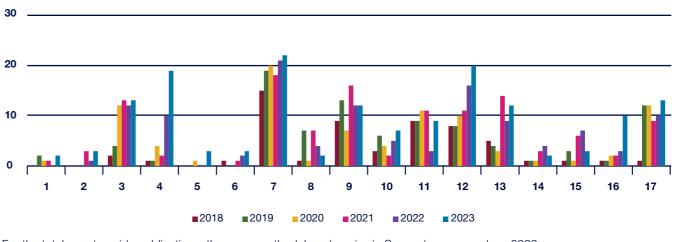
With respect to academic publications, we used the Sustainable Development Goals 2023 metrics available at the Scopus portal and retrieved our publication performance as depicted in the following chart which shows the total number of publications on all SDGs. The publications in 2023 have increased in comparison to 2022 by 30%, with an overall positive trend.

Total publications related to SDGs per year



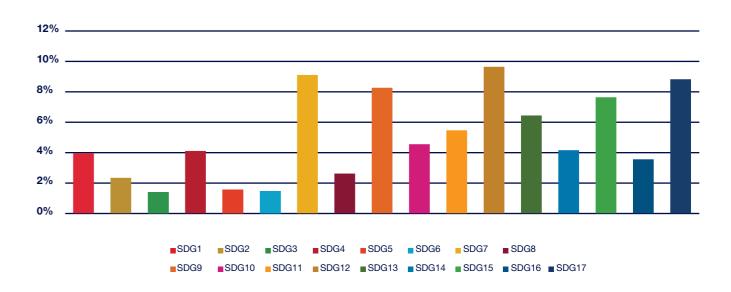
The chart below shows the number of publications for the period 2018 until 2023 per SDG. Examining the provided information, as expected, we see that there is a clear correlation between the areas of research activity and the funded research projects implemented with the number of publications. The main exception to the above seems to be SDG 12 (Responsible Consumption & Production), where the publications are relatively more than the recorded projects.

2018-2023 research article publications for SDGs



For the total country-wide publications, the same methodology (queries in Scopus) was uswed, as 2022.

Percentage of publications in Cyprus made by Frederick University between 2017-2022



Frederick University Advances Climate Adaptation through ClimEmpower Project

Frederick University is a key partner in the ClimEmpower project, which aims to boost climate resilience in five South European regions vulnerable to climate change and with limited adaptive capacity. The project will create regional Communities of Practice (CoPs) to collaboratively develop climate-resilient strategies tailored to each region's unique needs and strengths.

The ClimEmpower team will assist local administrations in forming CoPs that bring together representatives from various sectors to discuss climate adaptation needs and identify sustainable pathways. These efforts will be supported by data-driven decision support services for strategic climate adaptation planning and accessible educational materials to illustrate climate risks and adaptation strategies. Additionally, knowledge sharing will draw from successful European projects, providing practical insights and best practices.

As part of ClimEmpower, a new interface will be developed for the C3S Climate Data Store, along with data-driven climate hazard and risk assessment services. This infrastructure will combine open-source data with region-specific data collected during the project to enhance detail and validate predictions, ultimately enabling regions to evaluate and select the most effective adaptation strategies.

Case Study

Advancing Leadership for Climate-Resilient Buildings

Frederick University is an active partner in the CLIMRES project, which aims to foster "Leadership for Climate-Resilient Buildings" by assessing building vulnerabilities and enhancing resilience to disruptive events and climate-induced risks. The project seeks to develop and implement innovative solutions to safeguard buildings against a range of hazards intensified by climate change, including heatwaves, extreme flooding, fires, and earthquakes.

The CLIMRES approach will be tested through large-scale pilot projects in Spain, Greece, Italy, and Slovenia. These pilots will evaluate the effectiveness of resilience solutions across diverse environmental conditions, with an additional multi-hazard replication pilot planned in France. Insights gained from these pilots will guide the development of a "replication roadmap" that can be adapted and implemented in other regions facing similar climate challenges.

A core component of CLIMRES is its capacity-building program, designed to cultivate a new generation of leaders in climate-resilient building practices. Through targeted training sessions and resources, the program will equip building owners, policymakers, and industry stakeholders with the knowledge and tools needed to advance sustainable and resilient infrastructure.

By focusing on practical, tested solutions and training, CLIMRES will provide valuable guidance for decision-makers and practitioners, strengthening building resilience against climate impacts while supporting sustainable urban development. Frederick University's involvement underscores its commitment to advancing knowledge and action in climate resilience and sustainable building practices.









TARGET	STATUS
Establish programs for fully-funded scholarships for Least Developed Countries as well as the bottom-income families locally.	Somewhat complete
Increase, improve and modernize policies for rights protection in the University community.	Mostly Complete
Ensure gender equality with respect to representation in management and equal pay.	Mostly Complete
Invest in smart buildings and the adoption of energy efficient policies for the operations of the University. Pledge a 50% energy use target from renewable energy.	Somewhat complete
Review policies and deploy an action plan for waste reduction and adoption of e-work policies in the University.	Somewhat Complete
Invest in the development of affordable housing for students, especially international students.	Mostly complete



The Michael Frederickou Sustainability Awards

To demonstrate our commitment to the SDGs, in 2021 the University Council decided to dedicate a specific section of the annual 'Michael Frederickou Awards', the most prestigious awards granted by the University, to 'The SDGs Action Awards'.

The University recognizes:

- Practices or activities: Highlighting significant contributions by Frederick University faculty, staff, students, and alumni that have demonstrated a substantial impact in alignment with the SDGs.
- Outstanding individuals: Commending Frederick University faculty, staff, students, and alumni who exemplify the belief that inspiring and enacting change is within our collective responsibility.

Submissions need to demonstrate how the nominee's activities contribute to at least one of the following:

- Mobilizer: Mobilize others to take action for the SDGs.
- Inspirer: Inspire a shift in behaviour for the SDGs.
- Connector: connect people and/or diverse partners, bridging the gap between citizens and institutions, to increase progress on the SDGs
- Innovator / doer: have implemented an innovation/idea or have carried out a small project or made efforts towards achieving one or more SDGs





Case Study

Professional Development – A dedicated committee to the SDGs

Frederick University invests in ongoing staff development and has developed a Center (Personal and Professional Development @ Frederick) tasked with developing a comprehensive training scheme that includes formal and informal training on a range of topics.

The breadth of the Center's tasks is very wide, from improvement of pedagogical techniques, development and provision of quality education for academic and administrative staff that will facilitate the integration of Sustainable Development Goals in all the dimensions of the University's operation, training on new technologies and dissemination of policies and procedures, to promotion of values, communication of organizational goals, and personal well-being. To achieve this, the Center is governed by the P2DF Board and is supported by seven Sub-Committees with their own portfolio.

One of the Sub-Committees is the "Integration of SDGs in the Operations of the University Committee". The objectives of the Committee are: to inform the University community about the SDGs and raise awareness on the relevant issues, as well as to provide quality training that will transfer the competences and skills necessary for the academic and administrative staff to effectively integrate the SDGs in their professional practice.

The Committee's first seminar on the SDGs, led by Maria Cortes Puch. Vice President of SDSN, delved into the pivotal role of Universities in achieving the Goals. This seminar, addressing both academic and administrative staff, aimed to heighten awareness of the SDGs and the crucial role Universities play.

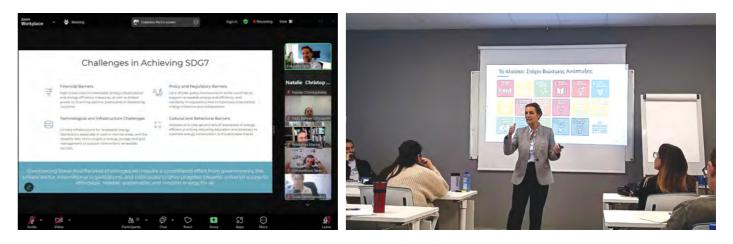
Building upon this foundation, the University extended its efforts beyond academic staff. In addition to insights from the "Courses and SDGs Mapping" in 2021-2022, which showed faculty's need for further SDG integration support, the University broadened its focus. Recognizing the significance of administrative staff in this process, a needs assessment was conducted, leading to tailored training sessions. These sessions aim to assist both faculty and administrative staff in seamlessly integrating SDGs into teaching and services/ operations, respectively, reinforcing our commitment to a comprehensive SDG understanding across university life.

Each academic year since then, two training sessions on sustainability topics are offered.

This ongoing initiative ensures that academic and administrative staff are continually empowered to contribute effectively to the achievement of the SDGs, fostering sustainable practices within our university community and beyond.







Building a Sustainable Future and Advancing Gender Equality through Advance HE and Athena Swan

Frederick University is proud to be a member of Advance HE, a global leader in supporting higher education institutions in governance, leadership, and educational transformation. Through our membership, we have access to invaluable resources, training, and expert guidance that enhance our governance practices and leadership capabilities, while also aligning with our commitment to sustainability and gender equality.

A key initiative that underscores our dedication to fostering an inclusive and equitable environment is our upcoming application for the Athena Swan Award. The Athena Swan Charter, developed by Advance HE, provides a globally recognized framework to promote gender equality in higher education and research. Originally established in 2005 to support women in STEMM fields (science, technology, engineering, maths, and medicine), the charter has since expanded to address broader gender equality challenges.

Athena Swan Cyprus, launched in 2023 through a partnership between the Cyprus Agency of Quality Assurance and Accreditation in Higher Education (CYQAA) and Advance HE, is designed to fit the specific needs of higher education in Cyprus, addressing gender inequalities and promoting inclusive practices. By participating in this charter, Frederick University joins a global community of institutions committed to embedding gender equality in their systems, policies, and practices. We are proud to be among the first universities in Cyprus to apply for the Athena Swan Award, aligning with our broader efforts to create a supportive and equitable working environment for all staff, while also enhancing retention and progression for women in academia and research.

By leveraging the expertise and resources offered by Advance HE, we are committed to driving transformational change that aligns with global best practices in sustainability, gender equality, and educational innovation. These efforts strengthen our governance and ensure that we are well-positioned to meet the evolving challenges of higher education.

"AdvanceHE Member 24-25





Case Study

Frederick University's New Halls of Residence: A Sustainable Addition to Campus

Frederick University's new Halls of Residence represent a significant commitment to sustainability and energy efficiency, aligning with alobal sustainability goals. The building is designed with high energy performance standards and incorporates bioclimatic design elements. Renewable energy sources supply at least 50% of its energy needs, demonstrating the university's dedication to reducing its carbon footprint.

Key features of the halls include:

- · High-Efficiency Windows and Glazing: The residence is equipped with high-performance windows and glass that reflect thermal energy from the sun during the summer months while allowing the thermal energy in during the winter months without inhibiting the amount of sunlight. This design ensures optimal natural lighting in the rooms, providing thermal comfort without negatively impacting the environment.
- Excellent Insulation: The building features a fully insulated external frame, including roof and wall thermal insulation, ensuring minimal heat loss. Each room is equipped with an insulated external door, further enhancing energy efficiency and occupant comfort. Energy-Efficient Air Conditioning: The air conditioning units installed are the most energy-efficient models available on the market
- today, maintaining ideal temperatures in the rooms while minimizing energy consumption. LED Linear Lighting: The building utilizes high-energy-efficiency LED linear lighting, providing effective illumination while reducing energy usage and environmental impact.
- Solar Water Heating: The hot water production system maximizes solar energy utilization, complemented by highly efficient heat pumps that enhance the building's sustainability.
- Sustainable Landscaping: The surrounding garden and green space create a microclimate that enhances the thermal comfort of the building's occupants. This not only contributes to the residents' well-being but also supports biodiversity and promotes a healthy ecosystem.

Frederick University is proud to integrate these sustainable practices into its facilities, reinforcing its mission to create an environmentally conscious campus that supports the well-being of its community and contributes positively to global sustainability efforts.





Frederick University Achieves the Highest Recognition in Environmental Stewardship

Frederick University was honored at the "2023 Cyprus Environmental Awards for Organizations," held at the Presidential Palace. During the ceremony, the University received the "Gold Protector of the Environment" award and also earned the esteemed "Gold Cedar" distinction after achieving the highest score across all nominations in all categories, further emphasizing its commitment to sustainability. The awards were presented by the President of the Republic.

The Cyprus Environmental Awards aim to showcase organizations that actively contribute to environmental conservation. The categories include Bronze, Silver, and Gold Protector of the Environment. The Gold Protector of the Environment award is reserved for organizations that integrate environmental management into their core operations, implementing practices that support sustainable development and environmental enhancement.

Frederick University exemplifies this commitment through various initiatives:

- 1. Nature Conservation Unit: The first structure in the Cyprus academic system dedicated to developing and promoting responsible solutions to critical environmental issues through a holistic approach.
- 2. Curriculum Integration: The University integrates environmental awareness and responsibility into its undergraduate programs. Additionally, it offers specialized Master's and Doctoral programs in education for sustainable development and environmental education, fostering advanced expertise in the field.
- 3. Community Engagement: The university organizes environmental awareness campaigns and participates in voluntary actions within municipalities and communities, effectively raising awareness among thousands of citizens.
- 4. Research Initiatives: Frederick University is highly active in research related to the environment and sustainability, with various dedicated research groups focusing on alternative energy sources and other critical environmental issues. The university has received recognition for several research projects and initiatives, highlighting its commitment to advancing knowledge and solutions in this important field.
- 5. Recognition and Awards: The university's research efforts have been acknowledged through various awards, solidifying its role as a leader in environmental research and emphasizing its contributions to sustainable practices.

but also reinforces its commitment to sustainability as an integral part of its operational policy.

We aim to continue fostering environmental consciousness within our community and beyond, ensuring a sustainable future for generations to come. Through our pioneering initiatives, we are cultivating citizens who will serve as agents of change, significantly contributing to the protection of the environment and the enhancement of the quality of life.



- The recognition at the Cyprus Environmental Awards not only highlights Frederick University's achievements in environmental stewardship



TARGET	STATUS
The University plans and implements several campaigns and events, physically and online, to raise awareness on specific health and mental health issues. It also organises on-campus or online events (lectures, conferences, seminars) to raise awareness on human rights issues and discuss relevant topics (such as trafficking, wars, medical negligence), or to provide vocational training to professionals, such as lawyers, legal counsellors and others.	Mostly Complete
Maintain a migrant scholarship and support scheme for inclusion and reduction of inequalities.	Somewhat Complete
Be an active platform for supporting SDGs in the community.	Mostly Complete
Transportation remains a significant challenge for the University at both its campuses, as the main form of transport for students remains to be private cars. The University collaborated with the Municipality of Nicosia to plan an integrated bicycle route to serve the University. Additionally, campaigns for promoting other forms of transport apart from private car use are developed. Similar problems are faced in the Limassol campus.	Somewhat complete

Member of a European University Alliance committed to Sustainability

Frederick University is a full member in the European Universities alliance EU-CONEXUS. In 2022, the alliance was selected by the European Commission to continue receiving financial support and it is among the European University alliances selected to continue development for four more years.

EU-CONEXUS focuses on Smart Urban Coastal Sustainability, aiming to develop innovative educational methods and interdisciplinary approaches in the fields of Sustainability, Circular Economy and Blue Growth.

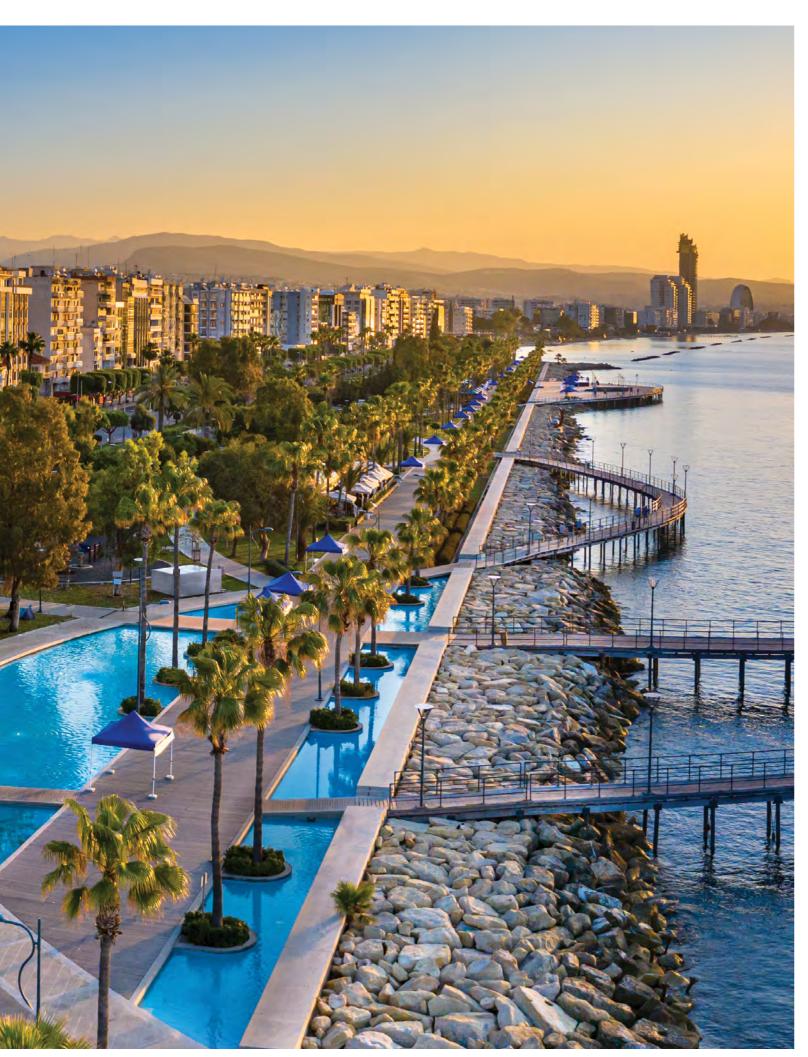
EU CONEXUS is a strong partnership between nine Universities developing science and innovation into a hub of excellence on Smart Urban Coastal Sustainability (SmUCS).

EU-CONEXUS Vision:

The European University for Smart Urban Coastal Sustainability is an integrated transnational higher education and research institution covering the smart urban sustainable coastal development from a holistic perspective. The thematic focus creates a unique competitive advantage for EU-CONEXUS which is well positioned to assemble and build on complementary thematic expertise from all its partners and regional ecosystems, through inter- and transdisciplinary based approaches.

Perfectly distributed across Europe, EU-CONEXUS covers all European coasts. Students, teachers, researchers, and staff are studying, teaching, conducting their research activities, innovating and working on a European scale.





A partner in the 100 Climate Neutral Cities initiative

Limassol has been selected as one of 100 cities in the European Union to participate in the EU Mission Cities initiative, aiming to achieve climate neutrality and smart city status by 2030. In this endeavor, Frederick University serves as the scientific advisor for the "Coastal and Port" thematic area, one of six focus areas in Limassol's action plan.

As a vibrant coastal port city, Limassol faces intensive social and economic activities that heavily impact its unique coastal ecosystems, as well as the local effects of climate change and human influence. Frederick University advocates a comprehensive approach to address these challenges, seeking to balance the preservation of ecosystems and residents' quality of life with the pursuit of sustainable urban growth.

A key outcome of this collaboration is Frederick University's proposal for a study on greening the Port of Limassol and reducing emissions across the city, which received approval from the European Commission. This EU-funded study will center on implementing cold ironing technologies at the port. Cold ironing, or the electrification of ships at berth, allows vessels to shut down their engines while docked, significantly reducing air pollutant emissions and noise pollution—an important advancement for Cyprus' marine and coastal environment.



European Missions

100 Climate-Neutral and Smart Cities by 2030







Empowering Youth through the Career Discovery Program

Frederick University's Career Discovery Program helps young people, aged 15 to 18, explore their interests and career paths while integrating sustainability into their decisions. Designed for students with clear career goals or those still exploring options, the program offers tailored workshops that incorporate sustainable practices across various fields like engineering, business, and environmental science. Supported by the Pancyprian Association of Parents of Secondary Education, the program also includes a workshop for parents, helping them guide their children through the transition from school to university.

Program Highlights:

- · Group A: For students with a decided career path, offering two interactive workshops to deepen their understanding of their chosen fields.
- · Group B: For students still exploring, providing three hands-on workshops to help identify career paths aligned with their interests and skills.

Both groups can also take the Career Gate Test to assess suitable career options.

The program is offered free of charge and provides participants with snacks, lunch, and a goody bag, making it accessible to all young people interested in discovering their potential.

By fostering connections with the academic community, offering practical tools for career decision-making, and emphasizing sustainability, Frederick University's Career Discovery Program plays a vital role in empowering the next generation of students in Cyprus. The program helps young people navigate their career choices with confidence and purpose, while also preparing them to contribute positively to the sustainable development goals (SDGs) in their future professions.















Frederick University, as a member of the EU-CONEXUS European University Alliance, co-organizes the annual international EU-CONEXUS School Contest Think Smart, Create Green.

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This contest invites students aged 12-18 from schools across Cyprus, Greece, France, Romania, Ireland, Spain, Lithuania, and Croatia to participate each year. The goal is to raise awareness about sustainability, with a special focus on the sustainable development of coastal zones.

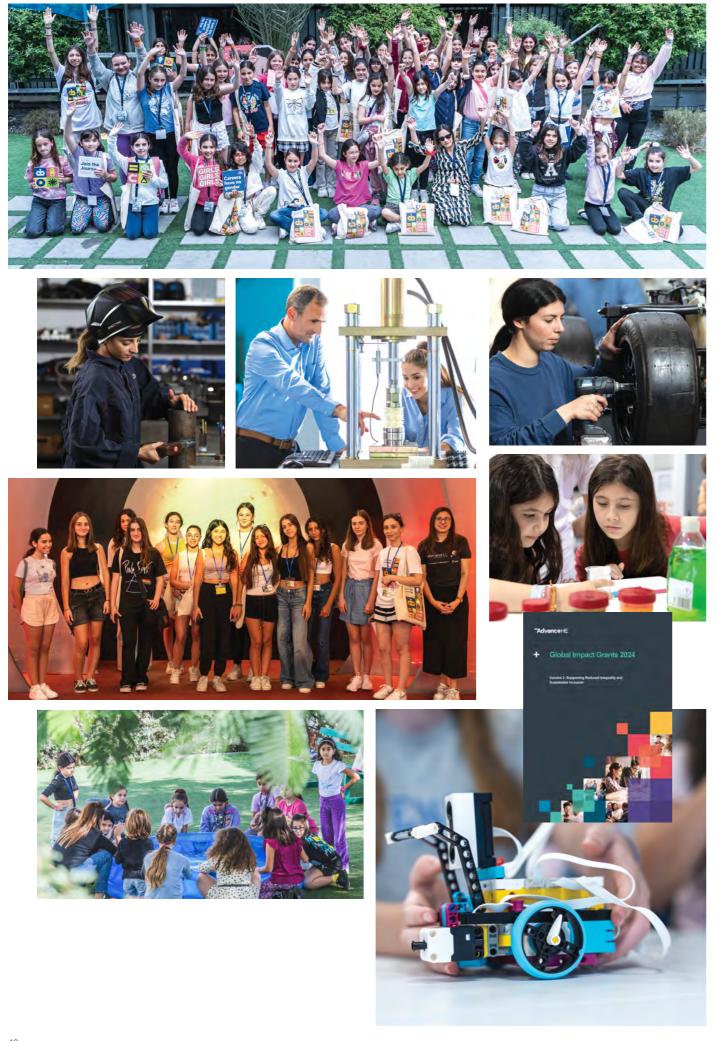
For this year's contest, which was the fifth edition, students explored themes of circular economy and were encouraged to present innovative ideas for sustainable, green, and smart environments. Participants aged 12-15 were challenged to create an object from recyclable materials, while those aged 15-18 developed a business plan and an awareness campaign centered on the circular economy to solve a sustainability issue in their community.

Schools from all over Cyprus submitted their proposals and in April 2024 the national finalists presented their projects to a jury at Frederick University. The Remake team from Kokkinokhoria High School "Panos loannou" stood out in the 12-15 age category, while the OR: Shoreline Salvation team from Pascal English School excelled in the 15-18 category. The Remake team presented a creative solution for repurposing a beach umbrella with a solar panel, while the OR: Shoreline Salvation team proposed a business plan focused on producing and utilizing green methanol to address the environmental impacts of the shipping industry at Limassol Port. Both teams presented their projects online before an international judging panel.

The contest is part of EU-CONEXUS' 'University to School' program which also includes workshops and seminars for high schools, such as Climate Fresk, a scientific workshop designed to raise awareness of climate change in a playful and collaborative way. It is based on a game with 42 cards representing the components of climate change based on the reports of the Intergovernmental Panel on Climate Change.







Frederick University's Women in STEM **Initiative Receives Global Impact Grant Recognition**

Frederick University is proud to be among 14 institutions worldwide awarded the Advance HE Global Impact Grants 2023-24 for its initiative, "To All Women and Girls: Join the Journey in Engineering and Technology." The grants are awarded with the aim to present 15 inspiring case studies of recent practice that align with the grant theme of contributing to the achievement of the UN Sustainable Development Goals (SDGs). Frederick University's initiative falls under the "Supporting reduced inequality and sustainable inclusion" subtheme.

The initiative is part of the University's broader effort to address the underrepresentation of women in Engineering and Technology fields. Implemented by the University's Center on Gender Issues, Diversity & Equality in collaboration with the School of Engineering, the program aims to eliminate prejudices, empower women and girls, and encourage them to pursue careers in STEM. This project highlights Frederick University's commitment to gender equality and its global contribution toward achieving the SDGs.

Key elements of the initiative include:

- Scholarships for Female Students in Engineering: Frederick University offers scholarships covering 50% of tuition fees for the first academic year to all female students enrolling in undergraduate programs at the School of Engineering. These scholarships can be renewed based on academic performance. Additionally, in collaboration with Chevron, Frederick University provides a number of full scholarships to new female students.
- STEM Days and Camps: Free activities for girls aged 9–16, led by female role models, aim to inspire young girls to explore STEM fields.
- STEM Days are organized for girls aged 9-12 at both campuses of the University. Additionally, an annual STEM Camp specifically designed for girls aged 13-16 is hosted at the Nicosia campus. These initiatives have seen the participation of hundreds of young girls, providing them with platforms to delve into the fascinating realms of science, technology, engineering, and mathematics.
- confidence in girls and breaking down stereotypes.
- awareness within the STEM industries about the critical need for gender diversity.

"Our dedication to the SDGs is evident not only through international rankings but also through this prestigious recognition. We need women and girls' diverse perceptions, experiences, and ideas in these fields to build a healthier planet and a fairer, more peaceful world." Natassa Frederickou, President of the Council

This initiative contributes to global efforts to empower women in STEM, supporting them to reach their full potential and ensuring that gender diversity strengthens innovation and sustainability in the fields of Engineering and Technology.

It is implemented under the auspices of the Commissioner for Gender Equality, Josie Christodoulou.





Workshops for Parents and Educators: Free workshops emphasize the importance of female representation in STEM, promoting

Mentorship and Industry Awareness: The University provides mentorship opportunities for women in engineering and raises



End poverty in all its forms everywhere

Scholarships to rural Schools

The University has built relationships with schools in rural regions across Cyprus and has been providing scholarships and fee reductions to low-income pupils to increase their access to higher education.

Scholarships to Least Developed Countries

In an effort to support disadvantaged communities from across the world by responding to their education needs, in 2021 Frederick University launched a new Scholarship Scheme for International Students. As part of the program, a number of full scholarships for undergraduate programs of study for the academic year 2021-2022 were offered to disadvantaged high-school graduates from low and lower-middle-income countries in collaboration with their embassies in Cyprus. The Scholarship Scheme continued in the following academic years, offering even more opportunities to lowincome international candidates.

Member of NicInAct Solidarity Network

Frederick University is one of the partners of Nicosia In Action Solidarity Network (NicInAct), a project implemented by the Nicosia Municipality Multifunctional Foundation. The Solidarity Network Hub provides innovative social services to the most deprived citizens. In its role as a hub, it integrates various social services of the Foundation and of other nongovernmental organizations (NGOs) who act within the area of Nicosia Municipality to create a network of social services. The overall objective of the project is to empower vulnerable people in Nicosia to become activated and become integrated in society. The project's purpose is to develop an integrated social service model to address the increasing needs of vulnerable and deprived populations in Nicosia. This integrated social service model aims to address the needs and challenges faced by vulnerable populations to become economically active, firstly by developing their entrepreneurship skills and employability profile, but also providing the social context for their access to their active economic population, and, secondly, by addressing first level needs such as food, financial independence, health, etc. and at the same time addressing psychosocial needs of all family members to enable them to participate in the social arena. The project is co-funded by the financial mechanism of Norway Grants (85%) and the Republic of Cyprus (15%)

Affordable **Housing for Students**

Limassol is the most expensive city in Cyprus for renting a house or apartment, making it increasingly difficult for students to find any type of affordable accommodation close to the campus. Addressing this issue, the University, for the academic year 2022 - 2023 and for the next five years, has concluded an agreement for affordable housing, providing its low-income students with access to subsidized studio apartments that are located close to the University's campus in Limassol and provide easy access to the city centre. A percentage of the rent is subsidized by the University, thus alleviating housing costs and expenses for low-income students for the duration of their studies.

Activities to relieve povertv

Frederick University organises and hosts activities aimed at alleviating poverty in its wider community. One of the University's flagship initiatives is the annual activity "You May Not Be Santa, But You Can Be A Great Giver". This event spans a full week in December and aims at providing immediate relief to those in need. During this special week, the Frederick University community comes together to collect and distribute essential items to families in need



Student on-campus Employment

Students can take a temporary part-time job at the University during their studies. Employment lasts for a predetermined amount of time. A variety of campus jobs are offered (more than 50) to undergraduate and postgraduate students every year, from administrative to technical positions, and from one-off opportunities to regular shift work. Working on campus enables students to fund their studies and lower their university fees, as the compensation for the hours they are working is deducted from their tuition fees. Working on campus also enables them to build a network with professionals in their field, improve their skills and gain valuable work experience. Students from lower socioeconomic status have priority access to these opportunities.

Discussing Child Poverty

According to the National Anti-Poverty Network Cyprus (EAPN Cyprus), child poverty is one of the most critical issues faced by modern societies. Successive economic crises, the COVID-19 pandemic, wars, rising living costs, housing shortages, high inflation, climate change, and declining wages and living standards all have a significant impact on children worldwide, including those living in Cyprus. In October 2024, Frederick University hosted the Annual Conference of the National Anti-Poverty Network Cyprus, titled "Child Poverty in Cyprus and

the World: Factors, Solutions, and Challenges". The conference was addressed by the Deputy Minister of Social Welfare and the Commissioner for Children's Rights. It included three parallel workshops discussing: (a) the National Action Plan (b) Children's Involvement in Public Decision-Making, (c) Institutional Childcare in Cyprus.

The conference was open to the general public and was attended by children experiencing poverty, independent state institutions, academics and students, nongovernmental organizations, civil society organizations, volunteer groups, youth organizations, women's organizations, social partners-such as trade unions and employer organizations-and many others.

Financial Aid to **Low-Income Students**

Frederick University is committed to establishing an academic environment that grants everybody an equal access to education. It provides an extensive financial assistance scheme which offers a partial reduction of fees or full scholarships to incoming students based on socioeconomic criteria, regardless of the students' academic performance. This includes refugee and displaced people whose access to education is limited because of poverty as well as their immigration status. Financial aid is also given to current students for a variety of reasons including: overall financial income in the family, health problems in the family, single-parent families, number

Conference on Child Poverty

of dependents in the family, distance of residence from the university, unemployed parents/guardians and other reasons. Overall, more than 15 different scholarship and financial aid schemes are offered to current and new students.

Contributing to policy making

Members of Frederick Univesity academic staff participate in policy making at local and national level to implement programmes and policies to end poverty in all its dimensions.

Feminization of Poverty

Frederick University's Department of Arts and Communication collaborated with the Association of Single-Parent Families and Friends to create the Association's 2025 Calendar, centered around the theme of the Feminization of Poverty and the Impact on Children. As part of the Image Making Processes II course, students had the unique opportunity to explore the concept of female poverty, investigate contributing factors, and analyze its impact on women and their children.

Their task involved creating the illustrations and designs featured in the calendar. This project was executed within the framework of the pedagogical initiative Frederick University Living Lab (FULL), emphasizing a student-centric approach to learning and teaching.



End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Collaboration with relevant organisations

Frederick University has signed a Memorandum of Cooperation (MoC) with the Cypriot Farmers Association, the biggest farmers' Union in Cyprus, and the Agricultural Research Institute (ARI), a governmental department conserving thousands of endemic seeds and conducting research aiming to create and transfer knowledge for the development of agriculture and to solve problems at the farmer's level. The collaboration with these two organisations includes research and other common activities in the area of agriculture development, food security and seed conservation.

Conserving native seeds

Frederick University is a member of ENSCONET (European Native Seed Conservation Network). The objective of the network is to improve quality, coordination and integration of European seed conservation practice, policy and research for native plant species and to assist EU conservation policy and its obligations to the Convention on Biological Diversity and its Global Strategy for Plant Conservation. The network is coordinated by the "Millennium Seed Bank" of the Royal Botanic Gardens, Kew, United Kingdom.

Food waste management in hotels

Hotels in Cyprus and Greece do not have a reliable system to effectively measure food waste thus they fail to address the issue of food waste. The project 'Food Waste Management IS for Hotels' (FW4H) developed a system and platform which will use innovative technologies, mainly machine learning and data analytics, that will automate (e.g. food recognition) and simplify the collection of data in the kitchen and make it as simple, fast and seamless as possible. This will produce the least amount of friction for the kitchen staff, therefore enabling the incorporation of the system in the kitchen workflow. By capturing and recording basic info of everything that is wasted (type of food, time, weight, reason), food-waste hotspots can be identified. Through the use of personalized dashboards, the hotel management will be able to use the data to statistically analyse, report, and visualise the impact towards the environment and the financial losses incurred. This empowers the management to take intelligent decisions towards optimizing operations and achieving pre-defined measurable targets.

Limiting food waste

The University implements several measures to minimize food waste across the food production, storage, and consumption stages. The cafeterias are equipped with sanitary storage systems and proper refrigeration to ensure food safety. They actively manage the production process by limiting the preparation of excess food, avoiding the display of unnecessarily large quantities, and refraining from serving oversized meal portions. Additionally, the University monitors and reduces the amount of food waste from external catering services, ensuring that discarded food is kept to a minimum.

Healthy and affordable food choices

The University's cafeterias provide on a daily basis fresh, healthy and affordable locally-sourced meals, including vegetarian and vegan food for all on campus.

Platform for food waste management

Radiation measurements in food and soil

Humans are continuously exposed to natural environmental radioactivity from soil, the food chain and other sources. The University's Environmental Radioactivity Unit conducts gamma radiation measurements on commonly consumed foodstuffs (such as cereals, nuts, dried fruits, pulses, etc.) in Cyprus. It also performs dose calculations and radon measurements in soil, covering a wide range of geological formations and terrains across the island.

Plant phenotyping

The Phenotypos project aims to establish an advanced plant phenotyping center in Cyprus. Plant phenotyping involves measuring the physiological and biochemical traits of plants to evaluate their growth, development, and responses to various conditions. The facility would enable the assessment of plant cultivars suited to local environments, aid breeders in selecting improved varieties, test agricultural chemicals, and accelerate research in plant and environmental studies. Given the predicted impacts of climate change in the Eastern Mediterranean, such a center becomes crucial in addressing challenges like droughts, floods, temperature extremes, and pests. By integrating genomics and molecular approaches, the project seeks

to enhance crop breeding programs, ensuring the development of stressadapted cultivars. The ultimate goal is to advance local agriculture, promote sustainability, enhance food security, and mitigate climate change's adverse effects on agricultural productivity.

AgriLoRa: A Digital Twin **Framework for Smart** Agriculture

Smart agriculture producing high yields with optimal use of resources has become a 'must' in the world due to the increasing population and scarcity and cost of resources, such as water, fuel and fertilizers. Use of advanced technologies in agriculture is especially needed in countries where agriculture is a major contributor to the economy and the population is increasing at a steady rate. The rise of Internet of Things (IoT) in the past decade has allowed physical devices of various types to be accessible via the Internet, making it possible to create automated monitoring and decision-making systems to reduce resource consumption and production costs in agriculture. Nevertheless, most developing countries have not been able to adopt these systems at large due to barriers, such as high cost and high power consumption. Considering these issues, the AgriLoRa project, in which Frederick University participates, proposes a high precision, low-cost loT-based smart





Conserving native seeds is one of the objectives of the European Native Seed Conservation letwork

agriculture framework. The proposed framework aims to create farmland digital twins, which allow for watching the status of farmlands in near real-time through their digital replicas and taking appropriate actions recommended by intelligent processing of the gathered data. The overarching goal of the framework is to create an extensible system architecture for sustainable precision agriculture, which provides early detection of crop diseases and nutrient deficiencies and improves irrigation and fertilization strategies to achieve the highest yield and lowest production costs in a highly automated manner



Ensure healthy lives and promote wellbeing for all at all ages

GUIDed

The project integrates existing opensource technologies, platforms and tools, and assembles a smart AR-enabled platform to offer a set of simple, plugand-play, assisted-living (AL) services for elderly adults and their care-givers. Frederick University's Mobile Devices Laboratory is responsible for the research and development activities related to the augmented and virtual reality functionalities of the GUIDed services.

Transforming Healthcare with AR/VR Innovation

AURA-Care project is developing an innovative AR/VR-based system that will improve communication, standardize training, and facilitate data-driven decisionmaking in healthcare settings. AURA will offer a user-friendly tool, targeting healthcare clinics and private practice professionals through subscription-based packages. It includes a 360° simulation module and customizable wearables.

BioNM Lab

Frederick University's Bioengineering and Imaging for Nuclear Medicine (BioNM) Lab focuses on optimising the diagnostic value of various nuclear medicine procedures in the framework of improving public health. Since 2010, the research group has

coordinated and participated in several funded research projects, has organized an International Conference and several seminars, and has published in several scientific journals and proceedings.

Health outreach programmes

Frederick University plans and implements several campaigns and events to raise awareness on specific health and mental health issues. Some examples: - The Department of Psychology and Social Sciences held a conference on the topic "Alzheimer's Disease: Early Symptoms, Prevention, and the Impact of Patient Care on the Family." Participants had the opportunity to hear from experts about the early symptoms of Alzheimer's disease, the importance of prevention, and the psychological impact caregiving can have on families and caregivers.

- EU Commissioner for Health and Food Safety, Stella Kyriakides, was the keynote speaker at a seminar organised by the School of Health Sciences. Addressing students, academics and health professionals, the Commissioner gave a speech on the creation of the European Health Union.

- The Department of Psychology and Social Sciences hosted a compelling talk on relationships, common challenges, and effective solutions with expert Professor Dr. Brian Canfield. The webinar was titled "Improving your marriage or relationship: common issues and solutions", and its aim was to provide participants with insights into common relationship challenges and discuss on improving communication and connection in marriages or partnerships. - Frederick University hosted an event and discussion featuring distinguished child

psychiatrist, psychotherapist, and author Dimitris Karayiannis, on the occasion of the release of his new book. The discussion delved into critical topics such as the crisis in modern relationships and the barriers to meaningful human connections and the importance of viewing others with a nonjudgmental gaze."

Research on health and well-being

A number of research units and laboratories are dedicated to promoting good health and well-being. These include the Synthesis, Formulation, and Evaluation of Pharmaceuticals Unit, the Biochemistry, Molecular Biology, and Biotechnology Unit, and units focusing on kinesiology, integrative physiology, nuclear medicine, and mental resilience.





CPR demonstration at the University campus



EU Commissioner for Health and Food Safety, Stella Kyriakides, speaking on the creation of the opean Health Union.

Collaborations with health institutions

The School of Health Sciences collaborates with private and public health institutions and health services providers to conduct research and implement various actions to improve health and well-being outcomes of the general public and specific patient groups.

One of these actions is the annual demonstration of Cardiopulmonary Resuscitation (CPR) and the use of an Automated External Defibrillator (AED). as part of an event organised by the University's School of Health Sciences in collaboration with the Resuscitation Services of the Ministry of Health in the framework of the "World Restart A Heart Day".

Healthy Sailing

'Healthy Sailing' supports substantially reducing the spread of communicable disease on board passenger ships through improved health and hygiene operations, while also addressing strategic goals for the overall safety and resilience of transport, climate neutrality and European leadership in key industries. It facilitates the development of evidence-informed guidelines and policies that incorporate infectious disease prevention, mitigation and management measures into routine operations by governmental authorities, the transport industry and the wider global community.

Health Literacy for disadvantaged adults

The DHeLiDA project aims to enhance digital health literacy, which is the ability to search, understand, and evaluate health information from digital sources. This initiative intends to empower citizens in managing their health, improving prevention, enhancing diagnosis and treatment, and facilitating communication with healthcare professionals. Additionally, it seeks to promote more equitable access to health information, particularly for adults with limited access to reliable health resources. By reducing the digital health literacy gap, the project aims to mitigate social exclusion and improve the well-being of potentially vulnerable groups, including older individuals, those with a migrant background, and their families.

Mental Health Support for students and staff

The University's Counselling Centre's primary purpose is to empower students so that they are able to perform productively both in academic tasks and in their personal lives. The Centre employs a registered professional social worker and a professional psychologist, providing free one-on-one counselling sessions to students. The Center regularly holds Seminars and Workshops related to wellbeing and mental health which are open to the entire University community.



Graduates in health professions

The University directly supports health professions by offering a range of undergraduate and postgraduate programs of study through its School of Health Sciences and its School of Education and Social Sciences. Degrees include Pharmacy, Nursing, Physiotherapy, Sports Science, Biomedical Sciences, and Psychology providing students with the knowledge and skills needed for careers in health-related fields. The University is committed to preparing competent professionals who can contribute to the healthcare sector, enhancing both public health and well-being.

CyFIT

Frederick University implements 'CyFIT', the national programme for the evaluation of the physical condition of students in secondary education. The programme aims at preventing and combating child obesity. The University has developed an online platform to collect and evaluate data and develop targeted actions to enhance children's health.



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Lifelong Learning Policy

Frederick University assigns particular importance to Lifelong Learning initiatives and has undertaken a series of actions to provide such opportunities. The University has set up the Frederick Training and Certification Center that systematically offers training programs on a wide variety of fields. In addition, special-focus initiatives for lifelong training have been established, such as the Cyprus Marine Technology Academy and the School of Greek Language. The University participates and promotes Erasmus+ activities, through which students and graduates gain invaluable education and training experiences. In order to educate a new generation of lifelong learning educators and activists, as well as promote research and knowledge in the field, the University offers the MA in Adult Education program of study. To provide lifelong learning opportunities to the general public, the University organises and hosts events and educational activities on campus, off campus and online that are open to the general public. In addition, the University, in cooperation with UNESCO, established an UNESCO Chair on Lifelong Learning and Adult Education. The purpose of the Chair is to promote an integrated system of research, training, information and documentation on lifelong learning and adult education in Cyprus and other countries in Europe, Asia and the Pacific.

Forest School

In 2021. Frederick University launched the Forest School in the Kornos forest where children aged 3-5 learn in a natural way, through free play and selfled outdoor activities. The Forest School, like the University's School of Nature which operated for years as a summer school, adopts forest pedagogy and the children's creative development is guided by the educators, who are primary school teachers, students and graduates of the University.

Student Success

The University operates the Peer Tutoring Center. Tutoring services are offered by Peer Tutors, students employed by the University that have excelled in the course they tutor. Their goal is to assist students with the course content and help them develop study skills.

Educational activities open to the public

The University allows members of the general public, i.e. non-registered students, to attend selected courses and lectures as audience participants at no cost. In addition, the University libraries are open to the general public. The University also runs a number of outreach programs for the community on and off campus. These include lectures, exhibitions, seminars and workshops aiming to raise awareness, build understanding and knowledge on several issues ranging from health to art and culture, and from humanities to science and technology.

Teaching Greek to underage migrants

Teaching the local language of the host country to migrants, is a key priority for many EU countries. The "Greek Minors IV" project's goal is the smooth and rapid integration of minor asylum seekers into the school environment and the host society. The program is co-funded by the Republic of Cyprus and the Asylum, Migration and Integration Fund and is implemented by Research Center CARDET and Frederick Unjiversity, under the guidance of the Ministry of Education, Sport and Youth. All children, whose both parents are third country nationals, are entitled to attend these lessons.

Addressing the learning needs of migrant students

European countries have not been able to address the language learning needs of migrant students. There are challenges in the implementation of the intercultural education, which leads to anachronistic, ghettoized schools.

Frederick University coordinates RE.MA.C. a project bringing together native language students, migrant students and mainstream (language) teachers to collaboratively engage in common intercultural, language learning and teaching tasks using new and emergent technologies and digital tools by applying a blended learning model. The aim is to tackle the challenges and difficulties (language) mainstream teachers face trying to address students' diversified needs and interests.

Graduates with teaching qualification

The Department of Education offers wellestablished programs of study at both the undergraduate and postgraduate levels, designed to prepare graduates for a wide range of teaching and educational roles (Primary Education, Early Childhood Education, Special Education, Adult Education. Intercultural Education and more).

Education for all pupils in STEM disciplines

Frederick University is a member of the Fairness in Teaching (FIT) alliance, a new Erasmus+ project which aims to develop and advance teaching practices using an intersectional and fair approach especially in STEM disciplines (Science, Technology, Engineering, Mathematics), and give equal opportunities and access to STEM to a diverse range of pupils (boys, girls, less advantaged audiences, refugees, migrants, etc). The project targets primary and secondary level Education. Through the Project, the five partners in Luxemburg. Italy, France and Cyprus aim to create a Competencies Framework for fair teaching in primary and secondary education, which is expected to become a reference in education, and to also develop workshops and training sessions (online as well as face-to-face) for this Framework.

Member of Advance HE

Frederick University is a member of Advance HE, a member-led charity dedicated to enhancing higher education globally. Advance HE collaborates with partners worldwide to improve education for staff, students, and society, focusing on key areas such as teaching and learning, governance, leadership development, and equality, diversity, and inclusion (EDI). Their mission is to help higher education institutions become more inclusive, sustainable, and high-performing.







Peer tutoring centre

Educational Exhibitions to inspire learning

Through educational exhibitions on specific topics, the University aims to make scientific matters accessible to young people and the general public and inspire learning. The exhibitions are open to the public and offer free admission. Currently, the University runs the "The Sun and Us Space Weather Exhibition" which is a collaboration between Frederick University and the European Space Agency. The exhibition aims to introduce the public to Space Weather, the changes that occur in the Sun and affect both space technology systems and the Earth itself.



Achieve gender equality and empower all women and girls

Gender Equality Awareness Campaigns

Every year, for the past 12 years, the University organises seminars, public lectures, community events, conferences and workshops to raise awareness on gender equality within the University community and the general public. It has implemented several successful campaigns on promoting and raising awareness on gender equality and fighting gender-based violence and human trafficking.

Supporting **Trafficking Victims**

The University has close links with NGOs that are supporting trafficking victims and offers scholarships to victims of sexual exploitation.

Equality and Awareness at Frederick

The University established EnAF, a Center on Gender Issues, Diversity and Equality. EnAF comprises faculty and administrative staff with the primary aim of conducting research and raising awareness amongst the University Community and the society at large on gender equality and diversity issues. The Center also functions as an advisory body to the Council, the Senate and the Schools and Departments for

all levels of operation and academic life. It has developed a Code of Conduct on Harassment and Sexual Harassment in the workplace, which serves as a guide for all members of the University community and outlines the procedures that are to be followed in case of harassment and sexual harassment. The Center is currently developing a Code of Conduct on Language Use, which will promote the use of gender-sensitive language and reduce gender stereotyping. The University has also included training on gender bias and other gender issues in its training plan.

the promotion of equality and diversity in

Combating sexual harassment and gender based violence in Sports

Frederick University participates in iSports (Integrated Approach for the Prevention, Detection and Combat of Sexual Harassment in Sports), an Erasmus+ programme aiming at establishing mechanisms to protect and support young athletes from any form of sexual harassment, developing a set of tools to detect cases of sexual harassment and creating a safe environment so that they can be reported. The University also participates in TEachers' TRraining to combat genderbased violence In Sports (TETRIS), an Erasmus+ KA2 project which will educate Physical Education (PE) teachers, coaches and athletes on the prevention and combating of gender-based violence in sports

Annual campaign on **Gender-Based Violence**

Frederick University conducts an annual awareness campaign in recognition of November 25th, the International Day for the Elimination of Violence Against Women, which also marks the start of the United Nations' "16 Days of Activism" campaign aimed at raising awareness and informing the public about gender-based violence. As part of this year's initiatives, the university launched an awareness campaign to educate its students and staff about harassment and sexual harassment. The campaign aimed to ensure that the entire university community is well-informed about the relevant Code of Conduct and the procedures available for filing complaints, seeking support, and accessing counseling services.

Women in STEM Campaign

The University launched a dynamic, long-term campaign to tackle the underrepresentation of women in engineering and technology, titled: "To all women and girls: Join the Journey in Engineering and Technology". The campaign was launched in June 2021 under the auspices of the former Commissioner for Gender Equality, Josephina Antoniou. It aims at educating girls from an early age about the

prospects of engineering and technology, areas in which women's participation is disproportionate, even though these sectors have excellent employment prospects and offer attractive pay packages. In this context, special scholarships are offered to all girls who choose to study undergraduate programs in Engineering and Technology at Frederick University. In addition, the University organizes interactive, hands-on workshops and other activities focused on empowering young girls and motivating them to follow a career in STEM. STEM Days for girls aged 9-12 are organised regularly at both campuses of the equal University, while a STEM Camp for girls aged 13-16 takes place once a year at the Nicosia campus. Hundreds of young girls

STEM workshops for girls, as part of Women in STEM campaign

have participated in these initiatives which serve as platforms for them to explore the exciting world of science, technology, engineering and mathematics, with the aim of breaking down barriers and inspiring them to pursue STEM careers. The campaign is one of 15 projects that were selected worldwide and awarded the Advance HE Global Impact Grants 2023-24 with the aim to present inspiring case studies of recent practice that contribute to the achievement of the UN Sustainable Development Goals. Frederick University's initiative falls under the "Supporting reduced inequality and sustainable inclusion" subtheme.

RIGE Research Unit

and staff about harassment and sexual harassment

The University's Gender Equality and Inclusion Research Unit - RIGE aims to identify and analyse gender inequalities in Higher Education and the society at large through academic research and implementation projects. The main activities of the Unit include:

- Gender equality and inclusion in Higher
- Education Institutions (HEIs)
- Research on gender-based violence - Women and girls in STEM - Implementing projects for making Higher
- Education and society more inclusive and
- quantitative and qualitative studies and surveys about equity in Higher Education and the society - Inclusive Design
- The team members of the RIGE Unit have interdisciplinary backgrounds to address all aspects of research on gender equality and inclusion.







Speak Up. Stick it Up!

ενόχληση: Έχεις βιώσει σεξουαλική πα



- Analysing quantitative data and perform

Development of inclusive Gender **Equality Plans**

Frederick University participates in NEXUS, a Horizon project which focuses on bridging inclusivity gaps in nine research organisations and their respective R&I ecosystems with the aim to bolster institutional change through the development of inclusive Gender Equality Plans (GEPs) in intersectional and intersectoral directions.

As part of this project, an open event was organised in September 2024 by Frederick University. Entitled "Integrating Inclusive Principles in Cyprus' Higher Education and R&I Ecosystem", the inspiring event featured a powerful lineup of speakers and experts, including Ms. Josie Christodoulou, Commissioner for Gender Equality in Cyprus, who delivered a keynote address on integrating inclusivity into higher education and research institutions. Participants explored crucial topics, such as how to drive institutional change, design inclusive actions, and close the gaps in gender equality within higher education and research.



Ensure availability and sustainable management of water and sanitation for all

Enriched academic programs

The University's BSc in Civil Engineering Program includes courses (both required and elective) that cover, among other subjects, the processes and techniques applied to understanding the requirements for the provision of stable, high quality and sustainable water resources, the role of hydrological knowledge in securing safe and sustainable water supplies, ecological engineering and green technologies such as constructed wetlands for wastewater treatment:

- Hydrology and water resources engineering
- Water and water waste engineering
- Environmental pollution control

Protection and promotion of water elements

Frederick University participates in Waterways, an Interreg project which aims at the enhancement and improvement of the attractiveness of areas of natural and cultural interest through the protection and promotion of important "water elements" on the E4 path in Crete and Cyprus. The project's objectives are: a) improving the attractiveness and increasing the number of visitors to the intervention areas that are disadvantaged in terms of economic development and are more prone to climate change, b) their utilization and promotion as cultural and geological tourist destinations all year round, thus extending the tourist season. The increase of traffic will be achieved through the upgrade of the tourist product with the introduction of the water element as an important factor shaping both the natural landscape and culture in these areas.

Promoting conscious water usage on campus

Posters and signs are placed in key locations in the campus and student halls to remind students of the importance of conserving water.

SERG awarded the ISO 14001 certification

Our University's Sustainable Energy Research Group (SERG) has been awarded the ISO 14001 Environmental Management System (EMS) certification, following a successful third-party audit by TÜV NORD GROUP Cyprus.

The successful audit was conducted by TÜV Nord at the research group's premise.

ISO 14001 is a global and sectorindependent standard for the introduction and continual improvement of EMS in companies around the world.

It promotes responsible water use, wastewater management, and pollution prevention, directly supporting efforts to improve water quality and availability.

Also, through the EMS framework, organizations are encouraged to manage energy use more efficiently, conserve energy, and adopt cleaner energy sources.

Finally, it aids organizations in reducing greenhouse gas emissions and improving resilience to climate impacts.

Water-conscious building standards and planting

Frederick University applies building and planting standards to minimise water use and waste. For example:

- Conventional faucets have been replaced with proximity sensor controlled taps in all wash areas to prevent unnecessary water loss
- A plumbing team is available on-campus for routine maintenance and to correct water leakages
- Dual syphon flush tanks are used in toilets for cautious water usage
- The majority of the plants in the University's outdoor areas are native, drought-resistant plants that have lower water requirements. The design of the University's gardens is overseen by the Nature Conservation Unit of the University, which ensures that waterconscious techniques are applied.
- The University's plants are watered using drip watering systems that use available water with maximum efficiency, eliminating unnecessary waste and evaporation.

Radon measurements of water samples

Radon measurement equipment

Since 2019, the Environmental Radioactivity Unit of Frederick University, on behalf of the Radiation Protection and Control Services of the Cyprus Government, has been performing radon measurements of water samples covering all water drinking resources in Cyprus. The corresponding interactive radon maps of Cyprus were also developed.

Radon measurements are also performed in groundwater.



Protecting water-related ecosystems

The University's Nature Conservation Unit implements various projects that protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes, and improve water quality by reducing pollution and eliminating dumping. Most of these projects are implemented for or in collaboration with the Ministry of Agriculture, Rural Development and Environment.



Ensure access to affordable, reliable, sustainable and modern energy for all

Green Technologies in Public Transportation

The Cyprus public bus transportation consists of about 2600 buses consuming around 60,000,000 liters/year diesel fuel. Fuel consumption is a major cost for the transportation companies and it causes environmental pollution. The general objective of the project BUS-Fuel-Savings is to develop an innovative HHO gas generator, integrate it onto the Internal Combustion Engine of existing public transportation buses, test it and prove that it is capable of achieving fuel savings of 5 to 30% and major reductions (>20%) in exhaust gas-emissions. Frederick Research Center is the main Research Partner in this project, through the Conventional and Alternative Energy Sources Research Group.

Clean energy transition plans for authorities

Frederick University participates in Step-WISE, a project that empowers Local and Regional Authorities in reducing energy consumption and greenhouse gas emissions through the development of customized Clean Energy Transition Plans.

Shaping tomorrow's sustainable building standards

Frederick Research Center has been the scientific and technical coordinator in the recently completed research project "Next-generation Dynamic Digital EPCs for Enhanced Quality and User Awareness" (D^2EPC). The D^2EPC project worked on a novel rating system for assessing the energy performance of buildings considering not only the energy efficiency aspects, but also indicators related to economic factors, human comfort, and general well-being to provide a more holistic evaluation of a building's energy performance. The project has promoted the creation of the new CEN/TC 371/ WG 5 'Operational rating of energy performance of buildings', which is currently working on a prEN on 'Energy Performance of Buildings — Operational rating — Requirements for assessing Operational rating' based on the project outcomes. Moreover, two use cases of digital twins created during the project have been submitted to CEN/TC 442/WG 9 'Digital twins in built environment', to be considered in a prCEN/TR on 'Building information modelling — Digital twins applied to the built environment - Use cases'. This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 892984.

The project won in the 'Project' Category in the 2023 edition of the CEN and

CENELEC Standards+Innovation Awards, presented in October 2023 as part of the EU stakeholder event "Making research results work for society".

Energy **Efficiency projects**

PRECEPT is a project using cutting-edge technologies to transform conventional residential buildings into highly efficient and proactive residential buildings. The project will facilitate the smooth and almost zero operational costs of transformation, increasing the buildings' performance, energy efficiency, and the occupants' well-being. SmartLivingEPC project aims to deliver a certificate which will be issued with digitized tools and retrieve the necessary assessment information for the building shell and building systems from BIM literacy, including enriched energy and sustainability related information for the actual performance of the building. SmartLivingEPC will provide information in relation to the operational behaviour of the building, by introducing a new rating scale, based on a weighted approach of life cycle performance aspects, building smartness assessment and information on the actual performance of the technical systems of buildings provided by technical audits.

Active Research on Renewable Energy

At least three of the University's research groups are actively involved



Educating pupils on renewable energy

with sustainable and renewable energy applications. These are:

- The "Sustainable Energy Research Group"
- The "Conventional and Alternative Energy Sources Group"
- The "Electrical Energy and Power Systems Group".

Collectively, these groups have been involved in more than 20 projects on subjects relating to renewable and sustainable energy applications, energy conservation in buildings, and biomass.

Energy-efficient campus buildings

Frederick University treats energy efficiency as a key factor in any decisions taken for renovation or new building construction for the University. According to the Energy Policy of the University, all buildings in which the University operates and are owned by the University shall reach 80% renewable energy use, and existence of renewable energy will be a key factor in renegotiation of new leases. Furthermore, by 2040 the University will use 100% of its energy from renewable sources.

Educating the youth on clean energy

As part of its commitment to raise awareness on the importance of energy efficiency and clean energy, Frederick University has included a dedicated section on renewable energy in its annual Summer

School programme for local pupils. During the summer school, pupils are informed of the various types of renewable energy sources and have the opportunity to observe the use of photovoltaics and attend a handson workshop. They also visit Tersefanou Wind Farm and Mech, a state-of-the-art factory, where Hydrogen Technologies are being developed.

Cyprus Hydrogen Association

Frederick University has co-founded the Cyprus Hydrogen Association, an organization that advocates for the use of green hydrogen and raises awareness of its benefits through meetings and events with relevant stakeholders.

Consulting local industry

The University's "Sustainable Energy Research Group" provides direct consulting services to local industry aimed at improving energy efficiency and clean energy.

Contribution to policy development

Frederick University provides consulting services to the Ministry of Energy, Commerce and Industry, the Ministry of Transport, Communications and Works, the Ministry of Agriculture, Rural Development and Environment, and other government bodies and local authorities, for energyrelated policy development.

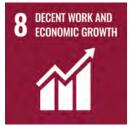


Research groups actively involved in research related to renewable energy systems.

The consultancy projects include identifying problems and challenges, collecting and measuring data, revising existing processes, methods and systems, developing policies and strategies, preparing feasibility and cost benefit analysis, developing action plans, developing guides, standards and methodologies, developing educational material and organizing trainings. In addition, the University participates in several consultancy projects on energy efficiency.

Redefining energy sharing within communities

The DYNAMO project, in which Frederick Research Center participates, aims to develop a decentralized platform for energy exchange in microgrids, which will be implemented in a pilot location by the Electricity Authority of Cyprus, promoting the participation of producer-consumers (prosumers) and enhancing both green technologies and social welfare. At the same time, a new scheme for energy management and pricing will be developed, with the aim of maximizing the use of energy produced within the microgrid and reducing imports from the central grid. This scheme will use machine learning techniques to enhance energy storage and accurately predict energy profiles and prices, ensuring optimal energy management and cost reduction for consumers.



Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Students and graduates employability

The University's Career Office provides professional, high-quality career services for students, in collaboration with employers. Its aim is to help students enhance their employability by providing the necessary tools and training, through workshops and mentoring. It also supports them in exploring career opportunities and creating contacts with the job market through career events and a dedicated job listings service which posts job, training and continuing education opportunities in Cyprus and abroad. The University is dedicated to supporting graduates as they continue their journey and helping them connect with the University, fellow alumni and the industry. The Alumni Office provides targeted benefits and services to them, as well as regular updates on career and networking opportunities. To boost their employability, the University's Career Office provides career counselling sessions to graduates through seminars, lectures and workshops focusing on training and professional skills development.

Certified Good Practices Employer

Frederick University's workplace culture is respectful and inclusive, ensuring all employees feel valued and have the opportunity to contribute to innovation and growth. In 2015 the University participated in the project "Actions to Reduce the Remuneration Gap between Men and

Women", was evaluated by the Ministry of Labor, Welfare and Social Insurance, and was one of the first organisations to be certified as "A Good Practices for Gender Equality in the Work Environment Employer".

Ongoing staff training

Frederick University invests in on-going staff training and skillset development and has developed a dedicated Center (Personal and Professional Development @ Frederick) tasked with developing a comprehensive training scheme that includes formal and informal training based on specific needs that have been identified.

Student internships

To prepare students for the world of work, the University introduced internship as a course in all programs of study. This gives students the opportunity to put their skills to practice and gain valuable work experience during their studies. Types of practical training include paid work placements in organizations in Cyprus and abroad, summer internships in Cyprus and abroad, and on-campus employment.

Union and labour rights

The University actively recognizes unions and labor rights for all its employees, including the freedom of association and the right to collective bargaining. This ensures that employees can organize and advocate for their rights within the institution. Additionally, the University has taken

proactive steps to establish a Staff Committee that provides a formal platform for employees to discuss and appeal any issues regarding their rights.

Further to this, employee representation is embedded within the University's governance structure. A representative of the academic staff and a representative of the administrative staff participate in the University Council, giving staff a voice in decision-making processes. These representatives are elected by the staff.

Through these measures, the University demonstrates its commitment to upholding labor rights and ensuring a collaborative and inclusive work environment.

Preparing businesses for ESG reporting

Frederick University's Department of Business Administration and the Centre for Research in Entrepreneurship, Finance, and Strategy (CERFS) organised a workshop on the Corporate Sustainability Reporting Directive (CSRD) and the impact of ESG (Environmental, Social, and Governance) on corporate risk and financing. The workshop was offered free of charge and was designed for company executives who need to prepare for the upcoming implementation of the European CSRD Directive, which requires companies to submit an annual Sustainability Report on their performance and practices in three key areas: environmental sustainability, social responsibility, and corporate governance.

Entrepreneurial Skills for Social Sciences

"Yenesis" project aims at creating local green jobs

Frederick University coordinates the ESSS project, which aims to assist social scientists in acquiring new skills, knowledge, and competences related to social entrepreneurship. The project's goal is to help participants develop innovative ideas and act as social entrepreneurs. ultimately enabling them to identify career paths in this new field and successfully integrate into the labor market as entrepreneurs.

Modern Slavery prevention

The University is committed to ensuring that there is no modern slavery or human trafficking in its supply chains or in any part of its business. It is committed to acting ethically in all its business relationships and to implementing effective systems to ensure slavery and human trafficking is not taking place. The University undertakes the following to prevent modern slavery: (a) Effective Human Resources policies, (b) Ensuring major contractors have undertaken appropriate action, and (c) Including appropriate clauses in purchasing and contracting contracts.

Fostering Business and Education Innovation

Frederick University participates in the Erasmus+ Alliances for innovation entitled

"Alliances for Fostering Business and Education Innovation through Digital Supply Chain – BE-Digital" which aims at identifying the digital needs and opportunities within the Supply Chains ecosystem, developing an innovative HE and VET program which will provide pupils with digital competences and skills.

Eliminating gender pay gap

Inclusivity & Interdisc

The University has a clear policy on ensuring pay scale gender equity (equal pay for work of equal value). This policy includes specific measures aimed at the measurement and elimination of the gender pay gap, alongside consistent tracking to ensure ongoing equity in salaries across all levels.

The University strives to maintain a gender pay gap of less than 5% across all posts, with a focus on reducing the gap during salary increases.

In terms of tracking gender pay gaps:

- The university shows positive results in management, where women earn 9% more on average than their male counterparts.
- gap is nearly negligible.
- For academic positions, the gender pay gap stands at 4%. Though this gap is deemed acceptable, it largely stems from the underrepresentation of women at the Professor level. A detailed analysis of salaries by academic rank reveals a more balanced gap of less than 2%.

Frederick University's Center on Personal and Professional Development offers on-going staff training



Workshop on the CSRD and the impact of ESG on corporate risk and financing

- Among administrative staff, the gender pay

This demonstrates the University's commitment to gender equity and ongoing efforts to close any remaining gaps, particularly by encouraging the advancement of women in higher academic ranks.

Creating green jobs

Islands experience high year-round unemployment, particularly among young people. These young professionals face challenges, such as limited job opportunities that require extensive experience, creating a cycle of joblessness. The YENESIS (Youth Employment Network for Energy Sustainability in Islands) project aims to educate, network, and prepare young individuals to access and create green jobs. The first phase, which began in 2018, offered entrepreneurial innovation training, foreign study tours, and six-month internships to young people. In 2022, YENESIS received additional funding for its second phase, YENESIS 2.0. This phase will continue helping island youth find sustainable employment, focusing on climate adaptation, sustainable food and water systems, the circular economy and interpersonal skills. YENESIS 2.0 will provide innovative training to 175 young people aged 19-30 from across Europe in these five critical areas.

- Προσαρμογή στην κλιματική αλλαγή
- Κυκλική οικονομία
- Βιώσιμη διαχείριση υδατικών πόρων
- Βιώσιμα συστήματα τροφίμων
- Ανάπτυξη των διαπροσωπικών δεξιοτήτων



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Research & Innovation activities

Frederick University places great emphasis on the development of R&I activities that, besides contributing to science and knowledge, directly benefit the society (businesses, government, citizens). These R&I activities are in the form of applied research for optimally addressing technological, economic, social and other challenges. Therefore, Frederick University encourages its members to continuously seek contacts and collaborations with relevant institutions and companies in the country. Overall, technology and knowledge transfer to the industry is practiced by the University through the promotion and support of the following functions:

- Consulting services to companies and other organizations
- Contract Research for companies and other organizations
- Participation in collaborative research and innovation proposals and projects with companies
- Establishment of collaborations with Incubators / Accelerators for supporting start-up ideas
- Participation in innovation and entrepreneurship competitions or hackathons
- Training programs responding to industry/ business needs through the University's Training and Certification Center (EKEK)

Frederick University Living Lab

The Frederick University Living Lab (FULL) fosters partnerships between the university and various organizations, including industry, corporate, non-profit, and government entities. It involves students in real-world projects aligned with their coursework, working alongside representatives from partner organizations and instructors. These projects align with course learning objectives and may serve as a means of assessment. FULL shifts the learning paradigm from teacher-centered to student-centered, promoting active engagement, autonomy, and self-reflection among students. It also encourages collaboration among faculty members and external stakeholders. This initiative is integrated into existing university courses, forming a three-party relationship involving faculty experts, industry mentors, and students.

Active Students

Through the 'Active Students' initiative, the University engages students in cocurricular activities. Students have the opportunity to apply theory to practice in real working conditions, develop and test innovative ideas, work with companies and organizations, and develop soft skills and competencies that are important for their future careers.

Spin-offs

A number of spin-offs have been established to exploit intellectual property that has originated from within Frederick University:

- Kyamos, a start-up that develops software to design and optimize engineering systems and facilities.
- HyStore Tech, with activities that cover H2 production, purification, storage and the use of H2 in applications such as green electricity production with H2/Fuel Cells.
- RF and Microwave Solutions, offering modelling, simulation, measurement, characterization and design of RF components in various technologies, circuits and antennas, as well as technical assistance and consultancy. Cloud Water, an R&D start-up focusing on low-cost GNSS receiver development and on high-level research on GNSS receiver's software and hardware development, as well as on GNSS Meteorology, Geodesy and Positioning, Atmospheric Remote Sensing and Weather Prediction.
- Alnfinite, exploiting specialised software developments, starting with the DineTours platform, a virtual tour and online booking platform.
- Euphyia Tech, which launches a brand new, innovative service for organizations in Europe: the Smart Readiness Audit.

Start-ups founded by students

Supporting SMEs in uptaking Additive Manufacturing

Frederick University actively supports student startups. Members of the University's academic staff are engaged as consultants, mentors, and research associates. One example is MammoCheck, which is developing a mechanism for women to perform painless examinations at home for the early detection of breast cancer, utilizing thermography and MammoCheck's Artificial Intelligence system. The startup recently secured funding from Cyprus Seeds, a non-profit organization with a mission to help commercialize innovative academic research.

Student competitions

The University actively encourages student participation in industry-sponsored competitions aimed at empowering the younger generation to contribute positively to the local society and economy. One such example is "HackAlthon: Al in Fintech", one of the most significant hackathons in Cyprus. In this year's edition. two Frederick University students in the Computer Science and Computer Engineering programs, were part of the team that won. In the event 24 teams and over 70 participants from Cyprus and abroad, including professionals, competed.

Supporting SMEs in uptaking Additive Manufacturing

Frederick Research Center participates in AMable, a consortium bringing together different organisations that aim to create a new eco-system for the uptake of additive manufacturing, providing a wide base of expertise from technology, business and training. The European Commission supports this consortium under the framework of I4MS with funding from the H2020 framework program and with guidance towards an open platform for European companies. The prime target groups are small and medium sized companies (SMEs) that need support in the uptake of additive manufacturing. AMable aims to empower these companies to enhance their skills.

Promoting innovation in the business world

The University's Centre for Research in Entrepreneurship, Finance and Strategy is dealing with corporate finance and strategy relating to the management of knowledge, organizational networks and franchising.

This knowledge is made accessible to the business world through talks by renowned international speakers with the objective of changing businesses' mindsets and spurring innovation in the business world.



Students participating in innovation competitions



Students from various disciplines participate in the FUF (Frederick University Formula) Racing Team and apply theory to practice

Building innovation capacity and entrepreneurship skills

HEInnovaSport is one of 26 projects that have secured funding from the European Institute of Technology, with the participation of six universities, including Frederick University. The project's vision is to improve the innovation and entrepreneurial capacity of the participating institutions. H ElnnovaSport calls for innovation and entrepreneurial capabilities and aims to convert them to business opportunities and societal impact. As part of the project, students have the opportunity to participate in workshops focused on design thinking, innovation and the development of entrepreneurial skills.



Reduce inequality within and among **countries**

Accessible System and **Social Media Application** for Deaf Users

The University's Mobile Devices Laboratory is involved in Asm4Deaf, a project which developed a cloud-based system and an innovative mobile application that supports the use of multiple sign languages within mainstream social media and networking platforms (e.g. WhatsApp, Viber etc.).

Non-discriminatory admissions policy

The University's decisions on student recruitment are based on individual merit and are free from any form of discrimination. Candidates are considered for admission on the basis of their academic qualifications, regardless of sex, gender, race, colour, ethnic or social origin, genetic features, religion or belief, political or any other opinion, membership of a national minority, disability, age or sexual orientation. This Policy also applies to access to scholarship schemes and access to the rights, privileges, programs, and activities made available to students. The University also applies positive discrimination policies in admissions for specific underrepresented and vulnerable groups as clearly stated in the relevant policy. One such example is Women in STEM Scholarship Scheme.

Supporting Refugee Students

Frederick University is committed to providing equal opportunities for students from refugee backgrounds. The University's Scholarship Scheme supports refugee students financially and the Counselling Centre helps improve the wellbeing of students from refugee backgrounds.

Inclusion of persons with disabilities in sports

The issue of recruiting, supporting and training students with disabilities is a recurrent one in higher education institutions. Sports Disability Inclusive Experience (SHIE) is an Erasmus+ project that aims to offer students with disabilities training abroad, coupled with the discovery and/or practice of one or more sports activities, and more generally to promote their international mobility. The main elements of the project foresee that the beneficiary students will be considered in the same way as the "able-bodied" students in mobility, and will be mixed with them in the exercise of the sports activities

and the follow-up of the training courses.

Digital Health Literacy for disadvantaged adults

The project DHeLiDA: Digital Health Literacy for Disadvantaged Adults is a European cooperation project aimed at improving the digital health literacy among vulnerable target groups, especially elderly people and people with migrant background, by helping them gain new digital skills and learn how to access reliable sources on a topic as important as health. DHeLiDA developed tools to enable citizens to better manage their health and illness online, improve prevention, enable accurate diagnosis and treatment, and facilitate communication between patients and health care professionals. The project filled the digital health literacy gap through the production of three main outputs:

- Crowdsourcing Platform on Digital Health Literacy
- DigCompHealth Foundation Framework - DHeLIDA Training and Sustainability Toolkit
- Supporting underrepresented groups

The University offers comprehensive services to enhance access to educational activities and self-development opportunities for students of all backgrounds, identities and experiences.

Anti-discrimination

Policy

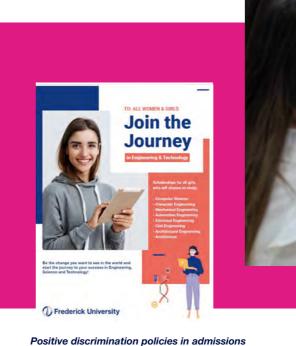
The University adopts a no-discrimination policy as explicitly expressed in article 4(c) of its Charter and does not accept any discrimination or bias, whether obvious or tacit, in its community in relation to ethnicity, race, color, religion or belief, disability, gender, or sexual orientation.

Diversity Charter

The University has signed the Diversity Charter Cyprus (DCC) to promote inclusivity in the workplace and is committed to following the Practical Guide of DCC and the accompanied online training, in collaboration with both the national and European Platform of Diversity. It is also committed to enhancing its long-term efforts to maintain a workplace that is open to everyone, regardless of nationality, ethnicity, race, disability, age, sexual orientation, gender identity, religion and any other characteristics. The principles of nondiscrimination are also included in the University Charter.

Students with Learning **Difficulties & Disabilities**

Frederick University is committed to establishing an academic environment that grants everybody an equal access to education. The Counselling Centre is responsible for providing support to students with learning difficulties or disabilities and has developed clear policies in order to safeguard an inclusive environment for all. Its primary role is to determine eligibility and to provide academic accommodations for students with disabilities. Newcomers with disabilities are required to participate in specialized workshops focused on enhancing their study skills. The workshops are provided by specialized professionals and cover topics such as time management, planning, stress management and goal setting. They also have priority access to support services such as peer tutoring. Finally, teaching staff is trained on inclusive teaching and learning practices and is supported on how to adjust the delivery of their classes to accommodate students with disabilities and support them. In addition, University facilities and public spaces are accessible for people with disabilities. Ramps and elevators are available in all teaching buildings. Elevators have both raised numerals and braille signage. Classroom settings are inclusive and can easily



60



Frederick University's Counselling Centre provides support to students with learning difficulties or disabilities

accommodate students with disabilities. Toilet facilities are accessible for disabled students. All buildings have accessibility signs with appropriate symbols and guidelines. There are also dedicated parking spaces for disabled students, staff or visitors.

First generation students

More than half of Frederick University's new undergraduate students are firstgeneration students, meaning they are the first in their immediate family to attend university. This highlights Frederick University's commitment to providing access to higher education for underrepresented and disadvantaged groups.



Make cities and human settlements inclusive, safe, resilient and sustainable

Smart urban coastal sustainability

Frederick University has joined EU-CONEXUS, a consortium of European Universities focused on Smart Urban Coastal Sustainability. EU-CONEXUS has been selected by the European Commission as one of four European University Alliances in the framework of the European Universities' initiative. EU-CONEXUS' mission is to develop innovative educational and research methods and interdisciplinary approaches covering societal challenges faced by urbanised coastal areas and sustainable development.

Safeguarding our Cultural Heritage

Recognising the imperative need to preserve, protect and promote the cultural heritage, Frederick University offers the Postgraduate Program MSc in Conservation and Restoration of Historical Structures and Monuments which aims at training scientists of different specialisations in this field. The program covers not only the principles and methodologies concerning the protection and restoration of historical buildings, but also the sustainable restoration techniques and practices. Through the process of close examination of the subject-matter, students acquire the necessary assets to repair, reinforce, restore or even change the use of a historical building in a sustainable way.

Open library policy

The University libraries, which are among the largest libraries in Cyprus, are open throughout the year to the general public and are considered a focal point for the local community. There are fully equipped libraries at both University campuses (Nicosia and Limassol) with generalpurpose PCs, uninterrupted internet access, comfortable and inspiring study spaces, meeting and conference tables and informal seating areas.

Making Limassol climate-neutral

Limassol was selected as one of the 100 cities in the European Union to participate in the EU Mission: Climate-Neutral and Smart Cities with the goal of becoming climate-neutral and smart cities by 2030. The Municipality of Limassol and Frederick University cooperate in the development of the City Climate Convention through an ambitious plan that will incorporate new technologies for implementing innovative actions for the green and digital transformation of Limassol, which will have environmental, economic, and social impact and multiple benefits for its residents. Frederick University will focus on issues related to the city's marine and coastal zone and will contribute to the areas where the entire mission for a climateneutral and smart Limassol by 2030 will be concentrated: transportation, circular economy, energy efficiency, protection of the terrestrial and marine environment, urban planning, culture, and tourism of the city.

Student Call for cultural and artistic projects

For the 2nd year, EU-CONEXUS, the European Universities Alliance that Frederick University is a part of, launched an annual call for cultural and artistic project proposals enhancing Smart Urban Coastal Sustainability. The selected projects will be exhibited at the nine EU-CONEXUS partner universities in 2025.



Annual call for cultural and artistic projects promoting coastal sustainability

Contrybution to arts and culture

The Arts and Communication Department has a valuable contribution to the arts and culture of Cyprus due to its dynamic and outward-looking approach. During its 40 years of operation, it has educated more than 2000 graduates and has won more than 150 awards and distinctions in international and local competitions. The Department's academics have participated in more than 600 exhibitions and have strong links with the industry and the community.

Urban planning research

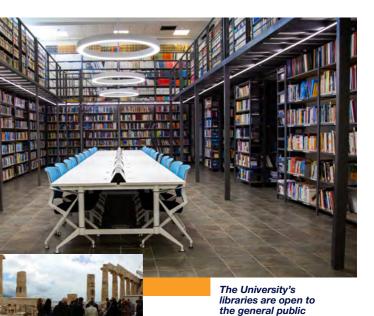
The University's Urban Planning & Development Unit deals with every aspect of built environment in its three dimensions (social, economic and environmental). The Unit's research focuses on how spatial changes to the built environment affect the social and cultural life, the economy and the environment. The Unit also provides a variety of consulting services in the fields of Built Environment, Planning and Urban Design.

Platform for mapping of cultural heritage

Europe's Cultural Heritage is at risk, endangered by environmental processes enhanced by climate change and anthropogenic pressure. STABLE (STructural stABiLity risk assEssment) addresses the design and development of a Thematic Platform, combining structural stability models, damage assessment simulation tools, advanced remote sensing, in-situ monitoring technologies, geotechnics and cadastral data sets with WebGIS application for mapping and long term monitoring of CH. This will enable effective monitoring and management of the CH to prevent, or at least reduce, catastrophic damages.

Portal for heritage buildings

The project "Portal for heritage buildings integration into the contemporary built environment" (PERIsCOPE) developed an innovative portal comprised of reliable and efficient technology-ready tools for the identification, classification, documentation and renovation of heritage buildings which can be exploited by a variety of stakeholders related to the conservation and retrofit of heritage buildings.



Frederick University offers the MSc in Conservation and Restoration of Historical Structures and Monuments, recognising the need to preserve, protect and promote the cultural heritage

School Contest "Think Smart, Create Green"

Frederick Univesity is one of the coorganisers of the international annual school competition "Think Smart, Create Green". In 2024 Secondary Education students were invited to create an object from recyclable materials and present it or create a business plan and an awareness campaign about circular economy. The contest is implemented by the EU-CONEXUS European University for Smart Urban Coastal Sustainability. Frederick University, a full member of EU-CONEXUS, coordinates the competition's implementation in Cyprus.

Public Transport

Frederick University encourages its community to use public transport and organises on-campus events to promote its benefits, in collaboration with Cyprus Public Transport, the organisation that is responsible for the operation of buses in Nicosia.



Ensure sustainable consumption and production patterns

Consulting projects

The University's Sustainable Energy Research Group is conducting a number of consulting projects on waste management, commissioned by the Ministry of Agriculture, Rural Development and Environment:

- Quantification of the amounts of food waste generated at each stage of the food supply chain in accordance with the Commission Delegated Decision (EU) 2019/1597.

- Development of an Action Plan on Green Public Procurement, identification and recording of green products and services that are available in the local market, identification and recording of similarities and differences among the popular European green standards and other standards, and development of an electronic Green Procurement database that will include a list of green products and services, standards, as well as a Register of Green Contracts for the preparation of the Action Plan on Green Public Procurement (PPC).

- Quantification, recording and development of Quality Control reports on single-use plastic products and waste, alternative options and development of a database of single-use plastic products.

Waste Management in Tourist Areas

Increasing the level of recycling for particular waste streams poses a significant challenge for highly touristic areas. Frederick Research Centre participates in the project Invalor 101 the aim of which was to create a network of touristic areas exploring ways of collaborating in joint glass waste management actions. The project aimed to achieve the transfer of glass up-cycling technology and construct a Pilot Unit for Municipal partners that would valorize glass waste to produce building products, through geopolymerization

techniques, thus enhancing recycling of this waste stream. A mobile infrastructure was shared by the members of the network, i.e. a small container-size unit that was easily and economically transferred from one partner to another and treat peak waste in off season periods. A Sustainability Plan was developed to define the conditions under which the network would operate efficiently and attract more members.

Skateboard decks from recycled material

Frederick Research Centre participated in CapsuleX, a research project that aimed to support Capsule Skateboards in becoming the first circular-economy compliant skateboard deck manufacturer. Capsule Skateboards has developed, tested, and validated a prototype skateboard deck made from 100% recyclable fabric material waste, and a tailor-made process for production, that could be used to manufacture cruisers and kid skateboards. The process involved a combination of transportation robots, manipulators, automated processes, and moulds. The key objectives of the CapsuleX project are: (a) to advance the developed TRL4 prototype decks and their production process to TRL7,

(b) to assess the quality and to demonstrate the 100% recycled prototype decks in real environment, and (c) to establish a compound dissemination and exploitation plan.





Frederick Research Center is involved in a number of research projects on the conversion of waste material from the construction industry

On-campus waste reduction

As stated in its Enrironmental Management Policy, Frederick University is committed to reducing the waste it produces, through actions focusing on reducing waste production, reuse and recycling of products and the adoption of the principles of the circular economy.

I am a T-shirt bag

Old and used T-shirts undergo a sustainable transformation into tote bags, skillfully crafted by the experts from Frederick University's Fashion and Image Design Program. This initiative not only minimizes waste but also breathes new life into discarded garments, aligning with eco-friendly principles. This activity is part of various eco festivals and events held across Cyprus throughout the year, showcasing the University's commitment to environmental consciousness and innovative re-use practices. The public is encouraged to bring their old T-shirts, slated for disposal, to have them skillfully transformed into stylish tote bags at no cost.

Conversion of waste material

Frederick Research Center is involved in a number of research projects on the conversion of waste material from the construction industry. It coordinates DEFEAT (Development of an innovative insulation fire resistant facade from the Construction and Demolition Waste). The general goal of the project is the conversion of waste from excavations construction and demolition into a new. innovative thermal insulation and fireproof material, which can be applied to building facades.

Another example is the DIAVAL project, transforming the diabase mud from waste to secondary raw material for the production of innovative binders and. hence, of marketable pre-casted building materials, mainly applied as paving blocks. Frederick Research Centre also participated in the RAPCON project, which aimed at converting an otherwise waste material, recycled concrete aggregates (RAC), into a high-value material, recycled aggregate concrete (RCA). The effective introduction of RCA into the production processes will enhance the state-of-the art knowledge concerning the reuse of waste materials in construction industry and boost the recycling process in Cyprus with all possible economic, technical and environmental benefits. Another project that uses waste material from the construction industry is Blast and

Capsule Skateboards: the first circular-economy compliant skateboard deck manufacture

Xmas second-hand bazaar promotes slow fashion

Fire Resistant Material (BAM). The project aims at the development of two innovative smart materials, which will be fire and blast resistant and will be manufactured with two different methods: i) the conventional precast method and ii) 3D printing manufacturing, using waste material from construction works. 3D printing is a novel method that offers faster and easier manufacturing, along with less waste generation.

Xmas second-hand bazaar

In December, Frederick University organized a second-hand bazaar, giving the university community an opportunity to shop for pre-owned clothes and accessories donated by fellow members of the community. Alongside the bazaar, an awareness-raising campaign highlighted the environmental impact of fast fashion and shared practical tips on supporting sustainable consumption in daily life. All proceeds from the event were contributed to the University's fund for underprivileged students.



Take urgent action to combat climate change and its impacts

Monitoring natural disasters

The Eastern Mediterranean region is one of the most prominent hot spots of climate change in the world. Extreme weather and climatic phenomena in this region, such as extreme and heavy precipitation events, are expected to become more frequent and intense. Frederick University's Cyprus Ionospheric Research Group conducts research focused on developing systems that monitor and provide forecasts of climate-related hazards and natural disasters that occur due to climate change. Monitoring of severe and abrupt weather events is extremely important due to their detrimental impact on a wide array of economy sectors. The projects assist local authorities to adopt and implement disaster risk management strategies. The main aim of the recently completed project PREWAM was to establish CloudWater. a start-up company to develop a low-cost nearreal time monitoring of PWV (Precipitable Water Vapor) over an area based on GNSS systems. PREWAM exploits low-cost dual frequency GNSS technology and rapid prototyping for the development of an affordable PWV monitor to facilitate nowcasting of PWV over a certain area of approximately 25 km². Water Vapour is the most abundant of greenhouse gases (accounting for ~70% of global warming) and is a direct indicator of severe weather events such as heavy precipitation and floods as it can change rapidly.

and is now capable of augmenting the operation of meteorological stations in order to enhance monitoring of local weather conditions and provide realtime information on various spatial and temporal scales in the context of "Big-data" processing. Another project, currently in progress, is Satellite Water VApour Service Cyprus (SWVASCY) Cloudwater Ltd which aims at developing a GNSS satellite Integrated Water Vapor (IWV) monitoring service that will be used for short-range weather forecasting and early warning of severe precipitation events over Cyprus. Finally, the newly funded project Cyprus Gnss Meteorology Enhancement (CYGMEN) will establish a Cyprus Meteorological cluster (CyMETEO) to promote scientific excellence in the field of operational weather prediction and meteorology in Cyprus through the strategic augmentation of existing Frederick University infrastructure. This will also enrich severe weather monitoring capabilities at the Cyprus Department of Meteorology, through assimilation of relevant datasets in Numerical Weather Prediction, for more comprehensive nowcasting and short-term forecasting of fast-developing intense storms over the eastern Mediterranean region.

The monitor was successfully developed

Engagement among citizens on climate change

The GREAT project focuses on digital games, game-making and games technologies, as a realisable sustainable solution to actively engage citizens in meaningful dialogue with governments to address the global challenge of climate change

Educational activities on climate change

The University develops and implements awareness-raising activities on climate change risks, impacts, mitigation, adaptation, impact reduction and early warning, such as open discussions and documentary screenings. As an example, Professor Kostas Kadis, in his capacity as Vice President of the Frederick University Council, spoke about the EU Green Deal and Education for Sustainable Development, addressing issues such as climate change, biodiversity loss, and environmental pollution, at the National Students and Teachers Conference on Sciences.



The University participates in awareness raising events on climate change and its impact on biodiversity.

Enhancing Climate Change resilience

Frederick Research Center participates in ClimEmpower, which will empower five south-European regions with high Climate Change (CC) risk and exceptionally low adaptive capacity to enhance their CC-resilience, establish the regional Communities of Practice (CoP) and cocreate the resilient development strategies adapted to the regional needs and potentials. This will be achieved through a combination of user-driven climate applications, capacity building and best practices transfer from other European projects and regions.

Integrating the New **European Bauhaus** into Art and Design Education

Futures Designed aims to develop and integrate Art & Design micro-credential courses into existing Higher Education programs focusing on skills and knowledge for design-based solutions to climate change, thus equipping current students with the skills deemed necessary for the Green Transition. The courses will essentially work as complementary courses to their already obtained skills, enhancing their employability and their ability to implement environmental and sustainability elements in their work.

Climate Action Plan

The University has developed an Energy Policy to steer decisions related to energy use and is upgrading existing buildings to higher energy efficiency, while it has completed the requirements for the 50001:2018 Energy Management System.

Importantly, it pledges that by 2030 all buildings in which the University operates and are owned by the University (more than 80% of used premises) shall reach 80% renewable energy use and that by 2040 the University will use 100% of its energy from renewable sources.

To support this commitment, a Climate Action Plan has been developed, which is reviewed and updated on an annual basis to reflect the progress made, internal or external factors that may have changed and new strategies. The plan outlines the strategic targets of the University in relation to its energy use and monitors the implementation of relevant actions.

Actions are organized into the following target areas:

- framework, policies, trainings - Facilities: Building construction and
- renovation - Energy Use: Energy production and use
- of renewable energy.

- Governance: Compliance with regulatory

Managing natural disasters and building safety

The recently completed ISTOS project (funded by Horizon 2020) managed to strengthen scientific excellence and innovation capacity in the area of the structural safety of buildings and infrastructure, disaster risk reduction (e.g. earthquakes, floods, medicanes), and post-disaster management, amidst climate challenges. The project addressed the complex issues related to climate change and promoted a solutions framework aimed at improving climate resilience through innovative research and actions, highlighting the importance of maintaining civil infrastructure safety.

Advancing Climate-**Resilient Building Practices**

Frederick University is a key partner in the CLIMRES project, which aims to strengthen climate resilience in buildings by identifying vulnerabilities and enhancing resistance to climate-related hazards like heatwaves, floods, fires, and earthquakes. The project will pilot resilience solutions in Spain, Greece, Italy, and Slovenia, with a multihazard replication pilot in France. Insights from these pilots will inform a "replication roadmap" adaptable to other regions.



Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Blue Limassol Forum

Environaut

The Department of Maritime Transport and Commerce, in a strategic collaboration with Limassol Municipality, organizes the annual Blue Limassol Forum which aims at promoting maritime and environmental awareness amongst local citizens and engaging them in decision making for Blue Growth and Environmental Sustainability. The Forum is a broad-based platform in which all stakeholders have a floor to speak. This year's Forum, titled "Limassol, an EU Mission City 2023: Actions on Coast & Sea to improve quality of life", featured discussions on the transformative potential and benefits for coastal communities and marine ecosystems under the EU Mission for Climate Neutral Cities. Within the framework of the Forum, Frederick University and Limassol Municipality conducted a research study on the environmental risks and economic benefits of sector activities within the coastal and marine area of Limassol bay. Analysis and findings provide strategic recommendations on risk mitigation practices. This is the first integrated research study intended to identify priorities and action for the benefit of Limassol and its citizens and it suggests a roadmap for future environmentally focused research projects for the coastal city of Limassol.

the "ENVIronmental Officer in the NAUTical Tourism Industry" (EnviroNaut) project, during which the first ever environmental qualification for nautical tourism companies is being developed. The project aims to bridge the gap between the training and skills needed in the boating industry, while enhancing the positive environmental impact that the recreational boating sector can have. It is associated directly with the marine environment in both open seas and coastal zones, as it aims at developing and disseminating a training program that codifies and presents the legislative framework as well as ways of safe compliance. The resulting course will be online, free and accessible to all. The curriculum will respond to targets set by the European Green Deal and the UN Sustainable Development Goals (SDGs). The EU funded Erasmus+ project is formed by a multidisciplinary consortium, coordinated by the German Maritime Federation (BVWW), which represents around 450 companies in the recreational boating industry in Germany. EBI (European Boating Industry), representing the national organizations of the recreational boating industry in Europe, also participates in the consortium along with the German Ocean Foundation (Germany), the Sea Teach educational center (Spain), the National Technical University of Athens (Greece) and Frederick University (Cyprus)

Frederick University is one of six partners in

Marine Environmental **Risk Assessment**

The EMMERA project, which Frederick University coordinates, brings together partners from the area of Eastern Mediterranean to share knowledge and expertise and develop both a methodology that can support and develop cross-border risk assessments and an e-platform to cooperatively share information, process and analyse data on marine environmental incidents, and provide warnings for detecting marine pollution events. This presents a novel proposal for the Eastern Mediterranean region to establish joint action plans for identifying, assessing, and communicating marine pollution hazards. Frederick University will focus on issues related to the city's marine and coastal zone and will contribute to the areas where the entire mission for a climateneutral and smart Limassol by 2030 will be concentrated: transportation, circular economy, energy efficiency, protection of the terrestrial and marine environment, urban planning, culture, and tourism of the city.

Enriched academic programs

The University has enriched its BSc in Maritime Studies Programme with new courses on maritime and marine environment, coastal risk assessment, etc.

Monitoring maritime activities

Development of board games designed to raise awareness about the endangered Mediterranear

monk seal. Monachus monachus.

Limassol has witnessed unprecedented development in recent years which threatens the water quality and can affect the provision of ecosystem services such as rich biodiversity, healthy and sustainable fisheries, safe recreation, and the growing tourism industry. The mission of IRSAI, a project coordinated by Frederick Research Center, is to develop and employ a multi-agent dual use technology that will be able to identify pollution infringements, point the origin, collect evidence, foresee the trajectory and guide appropriate response by management. The adoption of IRSAI is expected to significantly reduce illegal discharges in the Sea that remain largely undetected and undocumented. Biofouling, the accumulation of marine organisms like seagrass and algae on ship hulls, increases drag, fuel consumption, and emissions. The HACCS (Hull Antifouling and Continuous Cleaning System) project proposes a sustainable solution to tackle biofouling by using robotic brushes that actively clean the hull during transit. Unlike traditional, invasive cleaning methods, HACCS prevents harmful impacts on marine ecosystems and reduces the risk of transporting invasive species across ports. Funded by the Cyprus-Israel Bilateral Collaboration program, the project is a joint effort between Frederick University (RAS Lab, Mobile Devices Laboratory, and the Department of Maritime Transport & Commerce) and the Israel Institute of Technology.

Developing an open sea aquaculture industry

Frederick Research Centre participates in OS Aqua (Open Sea Aquaculture in the Eastern Mediterranean), a national project that aims to establish a road map for the future development of marine aquaculture in Cyprus and the Eastern Mediterranean, thus enabling the strategic development of a sustainable open sea aquaculture industry. In addition to significantly increasing food production, the project aims to minimize impact to the natural environment. The project will define and designate maritime zones, design aquaculture stations, develop protocols and tools for cost effective ongoing monitoring of offshore aquaculture stations and conduct a financial sustainability study. The Open Sea Aquaculture in the Eastern Mediterranean (OS Aqua) Project is co-financed with €800.000 by the European Regional Development Fund and the Republic of Cyprus. More specifically, the project will:

- in environmental impact assessments of aquaculture in the Open Sea of the Cypriot territorial waters and an information system that will be able to record environmental parameters.
- Develop a Marine Spatial Plan to designate zones of Open Sea aquaculture areas. The National Marine Spatial Plan of Cyprus will reduce environmental impacts and conflicts with



Enabling the strategic development of a sustainable open sea aquaculture industry through

The University and Limassol Municipality co-organize the annual Blue Limassol Forum which promotes naritime and environmental awareness

- Develop an integrated model for use

other coastal/marine activities as it will promote marine aquaculture in open sea fish cages.

- Design aquaculture stations and select fish species considering state-of-the-art aquacultural technologies.
- Develop protocols and tools for cost effective ongoing monitoring of offshore aquaculture stations in Cyprus.
- Investigate the financial feasibility of expanding aquaculture activities further away from coast.

Raising Awareness on the Mediterranean Monk Seal

Students from Frederick University's Department of Arts and Communication and the Department of Education have created board games designed to raise awareness about the endangered Mediterranean monk seal, Monachus monachus.

The project, titled "Design for Play: Building Awareness for a Sustainable Future", was developed in collaboration with the Department of Fisheries & Marine Research, as part of the Pandoteira project. These games were created under the Frederick University Living Lab (FULL), an educational initiative that allows students to collaborate with social organizations, governmental bodies, and companies to work on real-world challenges.



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, & halt & reverse land degradation & halt biodiversity loss

Nature **Conservation Unit**

The University's Nature Conservation Unit specializes on biodiversity conservation, natural resources management and environmental education and awareness in Cyprus. The Unit constitutes the de facto point of reference in the environmental conservation sector in Cyprus. Its infrastructure includes a Plant Ecophysiology Laboratory and a Plant Genetics Laboratory, while -to date- it has been involved in more than 45 projects. nine of which are European LIFE projects. These projects focus on two main thematic areas:

- Biodiversity conservation. The Unit projects in this area aim at the implementation of the Natura 2000 Network, the conservation of endemic, rare and threatened species, the impacts of climate change on nature and biodiversity, the management of ecosystems and the rehabilitation of ecologically degraded areas.
- Environmental education and education for sustainable development. Projects in this area aim at enhancing education and raising awareness about the rich biodiversity of Cyprus and the importance of nature conservation. Moreover, they aim at promoting favourable environmental attitudes among the people. Some activities also focus on educating and training young educators on issues relating to conservation and sustainable development.

Contribution to National Policy Making

The University plays an important role in the promotion and implementation of related policies. Specifically, through the participation in research projects that involved Governmental Departments and NGOs, the implementation of the Habitats and Birds Directives in Cyprus was promoted, as well as the adaptation of forest policies, dealing with invasive alien species, sustainable use of genetic resources and management of natural resources.

Biodiversity protection

The EU-funded GUARDEN project will use environmental observations to monitor the status and trends of biodiversity and the supply of multiple ecosystem services. GUARDEN will exploit information and data from European data infrastructures, programmers, and GEO initiatives, to develop a suite of methods and tools for assessing the status and trends of biodiversity and ecosystem services.

Using IoT for forest management

Frederick University participates in Green-HIT project, which will develop a holistic IoT platform for forest management and monitoring using cutting-edge Information and Communication Technologies to promote digital and green technology. The platform will support (a) prevention, detection, and reaction to forest fires, (b) afforestation and/or reforestation recommendations, (c) protecting forests from illegal logging and hunting, (d) monitoring forests and forest areas, and (e) forest mapping and inventory by collecting, combining and analyzing field data and remotely- sensed data. Green-HIT will fundamentally transform how forests are managed and monitored, supporting forest departments and dependent communities, scientific communities and regulatory authorities. The project will enhance the effective collaboration between enterprises and the research community.

Golden Protector of the Environment

Frederick University has been honored with the Golden Protector of the Environment Award for the year 2023, granted by the Environmental Research and Education Centre and the Environment Commissioner. The award is annually presented to an organization that incorporates the environmental dimension as an integral

Winner o the 'Golde Protector of th Environment



to protect coastal dunes, sublittoral sandbanks and marine reefs along the coastline of Italy and Cyprus.

part of its policy framework, implementing practices that protect the environment and promote sustainable development. Frederick University stands out for its dedication to respect and preserve the environment, integrating the environmental dimension in the entire range of its activities. Further, the University implements campaigns to raise environmental awareness among its faculty, students, partners and the society at large, demonstrating a profound commitment to environmental responsibility.

Achieving conservation status

Cyprus is among the top EU countries in terms of land area covered by the Natura 2000 network. The primary objective of Pandoteira (LIFE-IP PHYSIS) project is to achieve and maintain a favourable conservation status for important species and habitat types in Cyprus, through actions in the whole Natura 2000 network. The project will fill knowledge gaps for species and habitats, improve the governance of the network, exploit ecosystem services and implement action and management plans for species and habitats. It also aims to positively influence land users, owners, local population and other stakeholders in understanding the importance of the Natura 2000 network and embracing it.

Protecting dune ecosystems

Along the central Adriatic coast of Italy and the northwestern coast of Cyprus, large dune ecosystems and sublittoral marine habitats are seriously threatened by human activities. The aim of LIFE CALLIOPE, in which Frederick University participates as a partner, is to protect coastal dunes, sublittoral sandbanks and marine reefs along these areas, to mitigate direct and indirect human threats. The project will implement integrated management for coastal and marine areas to conserve target habitats and species, in line with the European Integrated Coastal Zone Management strategy. Wooden walkways will be placed to reach the beaches to reduce the impact of foot traffic, dune vegetation will be restored by planting seedlings of local species, juniper maquis will be restored, the alien species acacia saligna in Cyprus will be eradicated, and the biodiversity of marine reefs and submerged prairies will be protected. Awareness raising activities will also be implemented.

Surveying bird communities in biodiverse agricultural farmlands

Frederick University coordinates the project BIOMON, which aims at developing an



protecting species and habitat types in the Natura 2000 network.

innovative passive acoustic monitoring protocol that can be used to survey bird communities in biodiverse agricultural farmlands across Europe using acoustic sensors and AI techniques. The EU is home to many species the persistence of which depends on low-intensity agricultural areas, and consequently, developing appropriate monitoring tools for these areas remains a key research priority. The methods and monitoring protocol developed within the BIOMON project have the potential to contribute to the objectives of the EU's Biodiversity Strategy for 2030 and other related policies such as the Common Agricultural Policy.

Plant Ecophysiology Lab

Frederick University's Plant Ecophysiology Lab was developed by the University's Nature Conservation Unit in 2006. It is equipped with modern research infrastructure and maintains one of the three seed banks of Cyprus, which currently hosts more than 100 lots of Cyprus' flora (more than 90% of these lots come from endemic plants of the island). The Lab's continuous involvement in numerous projects has enabled it to increase its know-how and excel on the use of various techniques for seed processing (cleaning, storage), seed germination (including simulation of environmental conditions), seedling growth, and more, regarding plant species of Cyprus.

Mock trials for pupils and Law students



Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Principles on corruption and bribery

Frederick University pledges to maintain an ethical conduct, both internally relating to its operations and investments, as well as externally. It adopts a zero tolerance approach to bribery, money laundering and any other form of corruption. Statements of ethical conduct are signed by all officials of the University, forbidding the direct or indirect offer of payments to a public official or other individual in the private sector that may be considered to fall within the definition of bribery. In addition, a strict framework is enforced on the University conduct relating to gifts and/or facilities to public bodies, foreign government representatives and individuals from the private sector. All such activities are transparently recorded in the organization's accounts. The University accounts are externally audited by reputable accounting firms to ensure due practices are followed.

Human Rights Events

The University organises on-campus or online events (lectures, conferences, seminars) to raise awareness on human rights issues and discuss relevant topics (such as trafficking, war in Ukraine, medical negligence), or to provide vocational training to professionals, such as lawyers, legal counsellors and others.

Discussing legal matters

The Department of Law regularly organises conferences, seminars and symposiums on legal matters.

In April 2024, it successfully organized a seminar on legislative developments concerning the issue of money laundering in Europe.

The seminar, held at a high scientific level, featured distinguished speakers from Greece and Cyprus.

In their institutional, professional, and academic capacities, the speakers shed light on all aspects of the complex issue of money laundering.

Seminar on ethics and deontology

The Department of Law at Frederick University and the Cyprus Public Employees Union co-organized a seminar titled "Ethics and Deontology as the Compass of Administrative Action." The seminar addressed issues of ethics and deontology in relation to the role of modern public administration and the unique position of public servants. Inclusive representation

The University strongly believes in inclusive representation of its community in the operations. This is clearly embedded in its Charter which implements the following principles: all academic bodies are headed by elected representatives, in all bodies of governance adequate representation from students is present, the Senate, the supreme academic body, comprises solely of students and elected academics with the exception of the inclusion of the Director of Administration and Finance, at the University Council, the supreme administrative body, there is equal representation between appointed members and elected representatives from students, academics and administrative personnel. The University facilitates the existence of a student union. Students are provided adequate office space and facilities so that they can undertake their different functions, including elections.

Academic freedom

The University allows the free and open exchange of ideas and it is thus committed to upholding the values of academic freedom and freedom of expression. These values are specifically safeguarded in the University's Charter under article 4(a) which specifies that all members of the university community can develop new ideas without fear of sanctions or censorship, and article 4(b) which specifies that all members of the University can freely express themselves.

The Online Context to the Protection of Human Rights

The Department of Law participates in the GDHRNet COST Action which will systematically explore the challenges posed by the online context to the protection of human rights. The network will address whether international human rights law is sufficiently detailed to enable governments and private online companies to understand their obligations vis-à-vis human rights protection online. It will evaluate how national governments have responded to the task of providing a regulatory framework for online companies and how these companies have transposed the obligation to protect human rights

and combat hate speech online into their community standards. The matters of transparency and accountability will be explored. It will propose a comprehensive system of human rights protection online, in the form of recommendations of the content assessment obligation by online companies, directed to the companies themselves, European and international policy-making bodies, governments and the general public. It will also develop a model which minimises the risk of arbitrary assessment of online content and instead solidifies standards which are used during content assessment; and maximises the transparency of the outcome. It will achieve scientific breakthroughs (a) by a gualitative and guantitative assessment of whether private Internet companies provide comparable protection of human rights online in comparison with judicial institutions, (b) in the form of a novel holistic theoretical approach to the potential role of artificial intelligence in protecting human rights online, and (c) by providing policy suggestions for private balancing of fundamental rights online.



Conference on immigration and asylum legal framework



Discussing legislative developments concerning the issue of money laundering in Europe.

Mock trials for pupils

Frederick University organises and hosts mock trials for its Law students but also for high school pupils, helping them develop essential skills and a deeper understanding of the legal system.

These educational experiences prepare them to become advocates for justice, ultimately fostering stronger, more resilient communities.

Discussing immigration legal framework

The Department of Law organized a Conference on the immigration and asylum legal framework and its application in Cyprus. Invited speakers included the Deputy Minister of Immigration and International Protection, Dr. Nicholas Ioannidis, the Greek Justice Watch President, Mr Panayiotis Perakis, Visiting Professor at the Department of Law, Dr Theodoros Papatheodorou, and more.



Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

International **Networks**

Frederick University is currently leading three international projects on integrating SDGs in Education, funded by the European Commission involving more than 20 partners from Europe, Asia and Africa. It has been involved in cross-sectoral dialogue about the integration of the SDGs in formal (course curricula), non-formal (capacity building) and informal (e.g. public campaigns, advocacy through social media) education sectors. In the context of this collaboration, Frederick University has contributed to the integration of SDGs and ESD in multiple academic disciplines through the development of innovative Toolkits and Pedagogical Methods applying transformative learning pedagogies.

Member of SDSN

Since 2019, the University has been an institutional member of the UN SDSN. which brings together Universities, NGOs, research institutes, international organisations and governments to develop and promote solutions, policies and public education for sustainable development.

Founding Member of SDSN Cyprus

The University is one of the founding members of SDSN Cyprus which aims to assist Cyprus in creating the necessary roadmaps, strategies, and policies to achieve the SDGs. By cooperating through education, research, and policy analysis and by involving the people through reliable information and SDG awareness projects, Frederick University aims at maximizing Cyprus' contribution to the global effort for achieving Sustainable Development.

Sustainability strategy

The SDGs are embedded in the University's strategy, and incorporated in its teaching, research and daily operation. The University is committed to integrating the SDGs in a holistic way. In this framework, a category in the University training plan is dedicated to the SDGs and includes workshops aiming at empowering academics to be able to incorporate the SDGs in their courses content, teaching practices, research, and community actions, but also enabling administrative staff to embed the SDGs in daily operations, policy making and university reporting.

Collaborating with universities and industry to advance green skills

Frederick University participates in the research project HEI GreenPath: Shaping HEI Environment for a Sustainable Tomorrow, which aims to strengthen environmental awareness among all members of its university community: students, academic, administrative, and research staff. The goals of the project include integrating green skills and the concept of sustainability into the university's existing curricula, providing faculty and research staff with the knowledge and tools to effectively teach green skills, and fostering stronger collaboration between universities and

commitment to the SDGs, Frederick University annually presents the SDGs . Action Awards.



activities related to the Goals

industry partners in the field of green skills. The project emphasizes collaboration between universities and industry partners to advance green skills, supporting partnerships that drive sustainability and innovation.

Educating the Community

The University plans and implements on and off campus outreach activities related to the SDGs. It has implemented several successful campaigns on promoting and raising awareness on issues such as gender equality, gender-based violence, human trafficking, human rights and more.

Public, private and civil society partnerships

Frederick University has established relationships with local, regional and international NGOs, local authorities and government bodies for SDG policy development. It also initiates and participates in cross-sectoral initiatives that facilitate dialogue about the SDGs, such as conferences involving local authorities, government or NGOs. Through its research, the University also participates in international collaboration on gathering or measuring data for the SDGs, reviews comparative approaches and develops educational material and international best practices on tackling the SDGs.

Sustainability Awards

To demonstrate its commitment to the SDGs. Frederick University Council decided to dedicate a specific category of the annual Michael Frederickou Awards, the most prestigious awards granted by the University, to 'The SDGs Action Awards' which recognise:

- practices or activities from Frederick University faculty, staff, students and alumni that show significant impact with respect to contributing to SDGs or - outstanding individuals (Frederick
- University faculty, staff, students and alumni) who are demonstrating that it is up to us to inspire and enact change.

The awards are presented every year during an official ceremony and any member of the University community is eligible to apply (faculty members, administrative staff, students & graduates).

Integration of SDGs in Programs of Study

The University's policy is to integrate dimensions of the SDGs into all programs of study. All programs include courses relevant to SDGs and/or ESD dimensions. Great importance is placed on PhDs, where students from different disciplines develop their research on various SDGs in formal, informal and non-formal education. Examples that showcase how the University addresses SDGs through its programs of study: Integrated Master of Architect Engineer, MSc in Education for Sustainable Development and Social Change, MSc in Energy Engineering, MSc in Conservation and Restoration of Historical Structures and Monuments.

Free elective courses focused on the SDGs are also available to all students.

Examples:

- PEENV100: ISSUES OF SUSTAINABLE DEVELOPMENT
- DLSESC501: SUSTAINABLE DEVELOPMENT ISSUES, PRINCIPLES AND GOALS
- PEELE121: OUTDOOR EDUCATION
- ECENV300: ISSUES OF SUSTAINABLE DEVELOPMENT
- VCS300: VISUAL CULTURE AND SUSTAINABILITY

Sustainable Development Goals Steering Committee

Ms Natassa Frederickou President of Frederick University Council

Dr Chrysanthi Kadji Associate Professor, Department of Education

Dr Marios Pelekanos Associate Professor, Department of Architecture

Prof. Costas Mantzalos Professor, Department of Arts

Prof. Miltos Demosthenous Professor, Department of Civil Engineering

Dr Nikoletta Christodoulou Associate Professor, Department of Education

Mr Alexis Onoufriou Director of Research and Interconnection Service

Mr Constantinos Kounnamas NCU Leader

Ms Andrea Athanasiou Director of Studies and Student Welfare Service

Ms Natalie Christophides Director of Communications and Outreach Service

Dr Aravella Zachariou

External Collaborator, Chair of the UNECE ESD Steering Committee and Head of the Unit of ESD Cyprus Pedagogical Institute

Mr Charalambos Theopemptou, External Collaborator, Member of Parliament

Mr Loizos Potamitis, Frederick University Student



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