



Frederick University: Sustainability Report 2023



Frederick University



SUSTAINABLE
DEVELOPMENT

GOALS



Cover Illustration: Anna Miltiadou, Frederick University Graduate

“Our new targets for 2022-2025, as outlined in last year’s report, are a testament to our dedication to inspire change within society and contribute to a shared sustainable future. In this 2023 report, an interim evaluation of these targets will be made, offering a snapshot of our progress toward achieving them.”

Natassa Frederickou,
President of the Council



From Tripilos area, where Cedar Valley is located. The University's LIFE KEDROS Project aims to enhance the endemic Cedar habitat's resilience and increase its adaptation capacity to climate change.

Foreword by the University President

As we explore the 2023 Sustainability Report of Frederick University, I am filled with immense pride and gratitude for the remarkable journey we have embarked upon. Our commitment to sustainability, which was initially outlined in our first Sustainability Report in 2020, has not only endured but has flourished with each passing year.

Back in 2019 Frederick University became an institutional member of the UN SDSN, and it is one of the founding members of the Cyprus branch of the Sustainable Solutions Network which aims to assist Cyprus in creating the necessary roadmaps, strategies, and policies to achieve the SDGs.

Our unwavering commitment to the United Nations Sustainable Development Goals (SDGs) is evident through our remarkable performance over the years and it is highlighted in the Times Higher Education Impact Ranking 2023. We proudly stand among the top 201-300 universities worldwide, which reflects our dedication to the SDGs.

The year 2022 marked a turning point in our sustainability endeavors. We solidified our commitment to the United Nations Sustainable Development Goals, as outlined in our University's 2022-2030 Strategic Plan. This blueprint laid the foundation for our current path, emphasizing the need to address the global challenges presented by the 17 SDGs. The resonance of these goals now permeates our policy development process, guiding us with unwavering purpose.

In a world plagued by complex issues like climate change, biodiversity loss, wars and inequality, education remains our most potent weapon, equipping us to face these challenges with innovation and determination.

Meeting the SDGs requires creativity, adaptability, critical thinking, empathy, and teamwork.

This report is a glimpse of the multitude of activities that underscore our commitment to sustainability, in teaching, research, community engagement, and governance.

Our commitment is not just a vision; it's an ongoing journey. We are dedicated to a just and sustainable future for all. Our gratitude extends to every member of the Frederick University community – faculty, staff, students, and alumni. Your commitment is the foundation of our successes.

As we embark on this new chapter, I am profoundly proud of what we have achieved together. Our collective efforts will continue to drive us towards a more sustainable and just world.

Natassa Frederickou
President of the Council

Frederick University's Impact Acknowledged in Global Rankings

With a total of 1,591 institutions from all over the world joining the Times Higher Education Impact Rankings 2023, Frederick University has been placed among the top 201-300 Universities, for its commitment and progress on delivering the United Nation's Sustainable Development Goals.

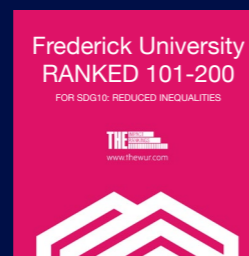
Frederick University shows significant year-on-year improvement in the Rankings, as it has been once again acknowledged for its unwavering dedication to providing quality education, a student-centric approach, and making a meaningful contribution towards building a sustainable future for all. Frederick University is the only University in Cyprus and Greece to be ranked among the top 201-300 Universities in the world.

“The progress in our overall ranking, positioning Frederick University as the leader in Cyprus and Greece, reflects our commitment to supporting the United Nations’ Sustainable Development Goals (SDGs) through our research, teaching, policies and collaborations, which are focused on achieving a better future for all.”

Natassa Frederickou,
President of the Council

“We remain committed to continuous improvement and will strive to further enhance our impact in the years to come.”

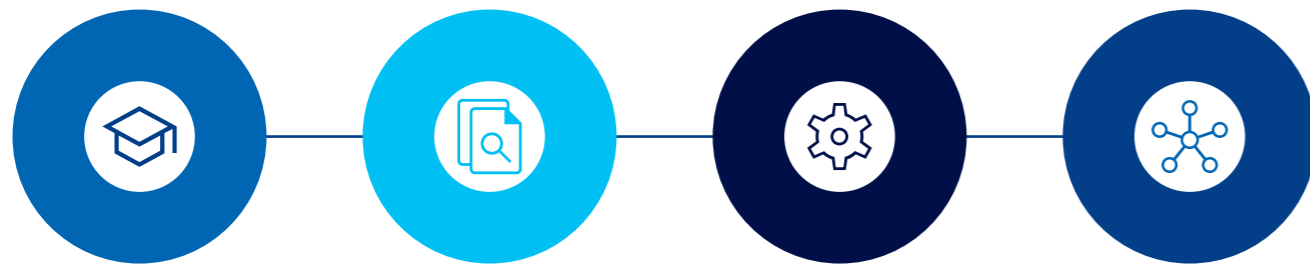
Professor George Demosthenous,
Rector



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.



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

- 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 Assessment



The year 2022 signaled a pivotal moment in our sustainability initiatives, solidifying our dedication to the SDGs as articulated in our University's 2022-2030 Strategic Plan.

This roadmap established the groundwork for our current trajectory, highlighting the imperative to transform into a **Sustainable Campus** and tackle the worldwide challenges outlined in the 17 SDGs. Building upon this, we established a more ambitious set of objectives for each of the four dimensions of our activity by 2025.

The targets set for the period 2022-2025 were detailed in the previous year's report. In total, there are 22 targets distributed across four specific categories: Research, Teaching, Outreach, and Governance & Operations.

Summary of the progress for each target





The table on the right summarizes the number of the targets at various stages of completion. A summary of the progress for each target is provided in the next pages at the beginning of each of the dimensions of activity section. Comprehensive evaluation and a detailed progress analysis for each target will be presented in the 2025 report.

Not started		- targets
Started		8 targets
Somewhat Complete		7 targets
Mostly Complete		7 targets
Complete		- targets

Education

Targets 2025 Interim Assessment



TARGET	STATUS
Revise curricula in all programs of study so as to increase and direct content towards support for SDGs.	 Started
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.	 Started
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.	 Somewhat 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



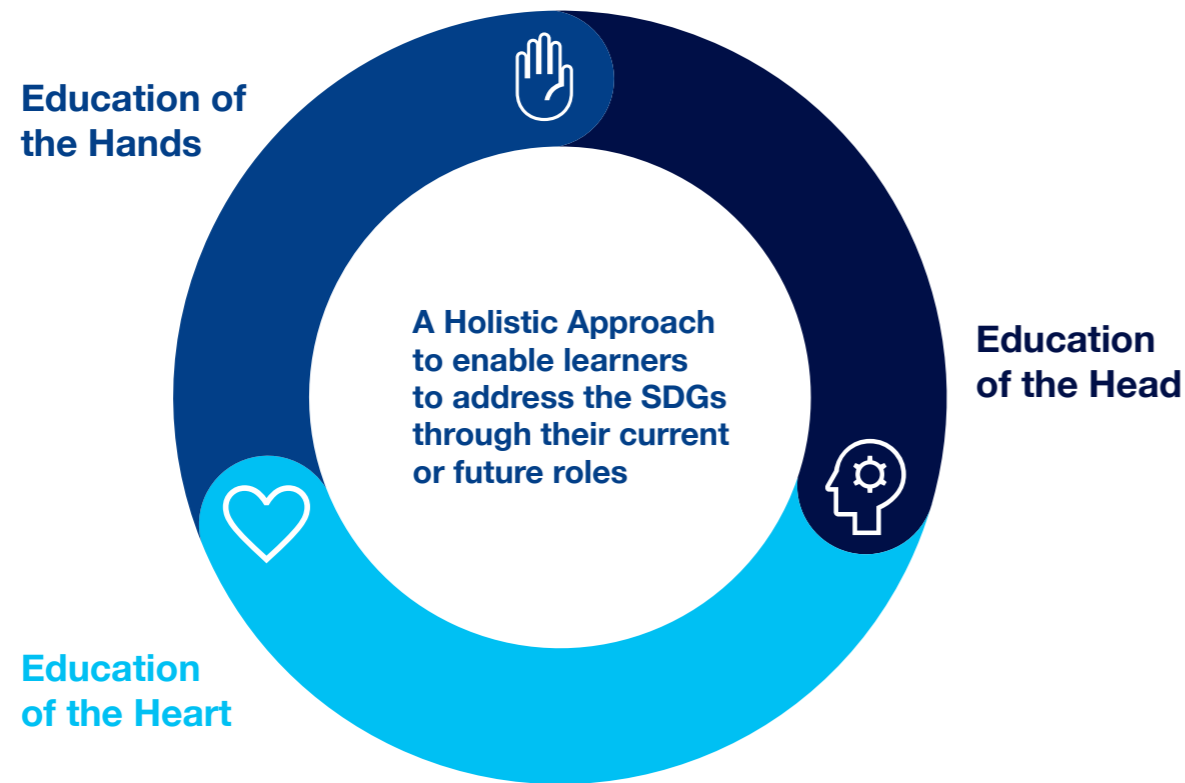
Sustainability Education: Preparing Agents of Change



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 necessary **skills, values, and attitudes** that will enable them to confront future challenges while actively and creatively contributing to human and planetary well-being and sustainable societies.

Here at Frederick University, we aim for the holistic development of our students through an education with an emphasis on the **3Hs: (Head, Heart, Hands)**.

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:

- By incorporating the SDGs in the content of the curriculum and enabling the students to learn about sustainability whatever their program of study may be.
- By offering action-based learning initiatives that are based on a student-centred learning and teaching (SCLT) pedagogical approach. By providing students the opportunity to work on real-world projects or to solve real-life challenges, we support students' development of sustainability competencies.
- By providing specialised programs or courses that are focused and address one or more SDG(s).

During the past two years much emphasis was placed on:

- Developing policies, rules and regulations that enable student-centred learning and teaching.
- Developing student-centred curriculum and pedagogy that help students develop the knowledge, skills, values and attitudes which allow them to become committed to building a more sustainable future.
- Developing active learning spaces: learning spaces at the University were adjusted and redesigned to encourage active learning
- Empowering faculty members through professional development programs in intergrating SDG's in their curriculum and teaching and in providing competence based education for sustainable development.
- Developing collaborations and partnerships that will enable learners to engage with the community.

Frederick University ECOSYSTEM for ESDGs



Case Study

FULL - Frederick University Living Lab

Welcome to FULL

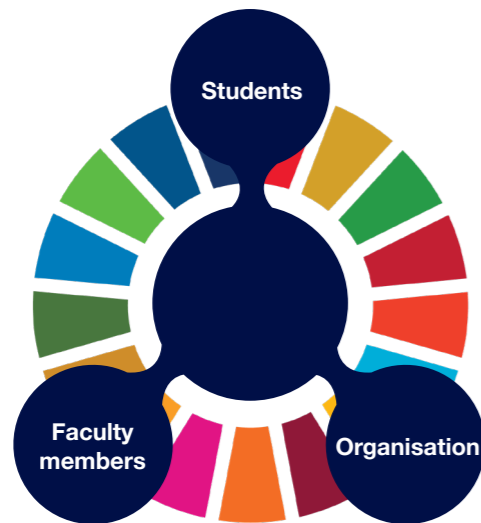
FULL (Frederick University Living Lab) is a Frederick University pedagogical initiative that is based on a student-centred learning and teaching (SCLT) approach. It combines project-based, participatory and experiential learning through community connections and partnerships. It challenges students to 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, government-sector 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:

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

In the 2022-2023 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.



Case Study

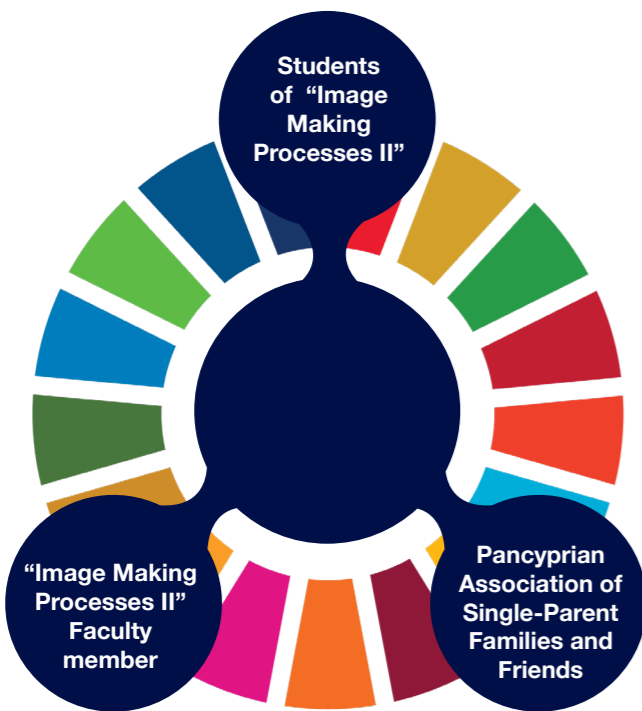
FULL – Women & Poverty

In the Spring 2023 Semester, in collaboration with the Pancyprian Association of Single-Parent Families and Friends, second-year students from the Arts and Communication Department enrolled in the course “Image Making Processes II” were provided with a project-based learning opportunity through FULL (Frederick University Living Lab).

The project allowed them to investigate the issue of women’s poverty and create posters communicating the concept, its contributing factors, and its impact on women.

Throughout the semester, the students interacted with representatives of the Association to understand the challenges faced. They engaged in reflection and brainstorming sessions, presented their ideas to both faculty and the Association, and received valuable feedback.







The outcomes of their efforts were showcased in an exhibition held in November 2023 and have been incorporated into the Association’s 2024 calendar.



RESEARCH

Targets 2025 Interim Assessment



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.	 Mostly Complete
Maintain and expand the PhD sponsorship program for minorities and segments of society that are underrepresented in higher education.	 Started
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.	 Started
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

Case Study

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:

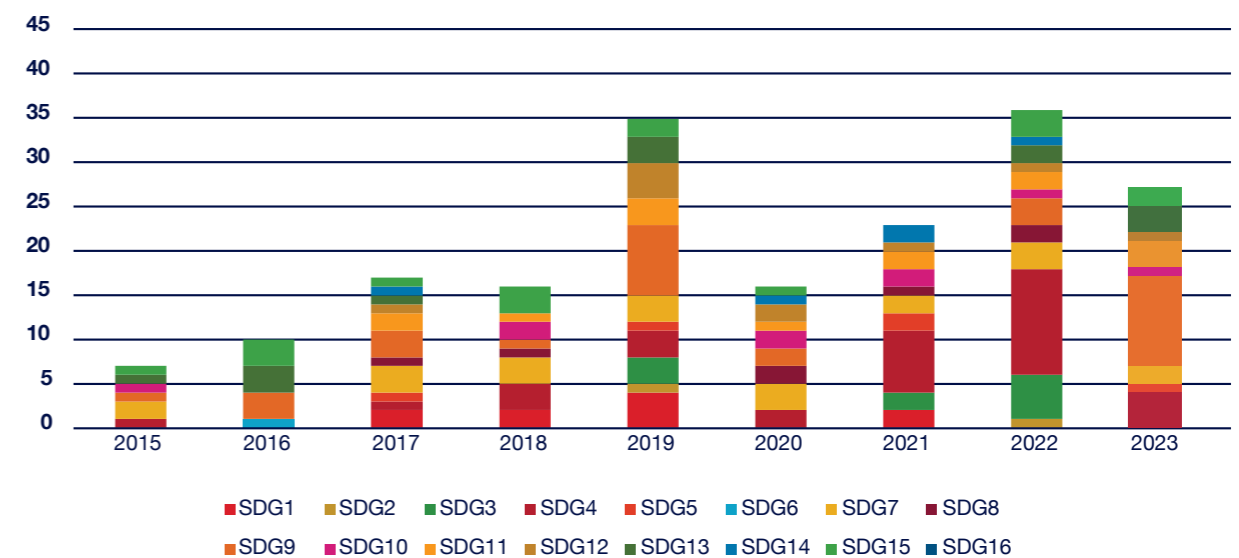
1. engagement of research units,
2. funded projects, and
3. academic publications.

All active research units have been mapped in terms of relevance to SDGs. 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.

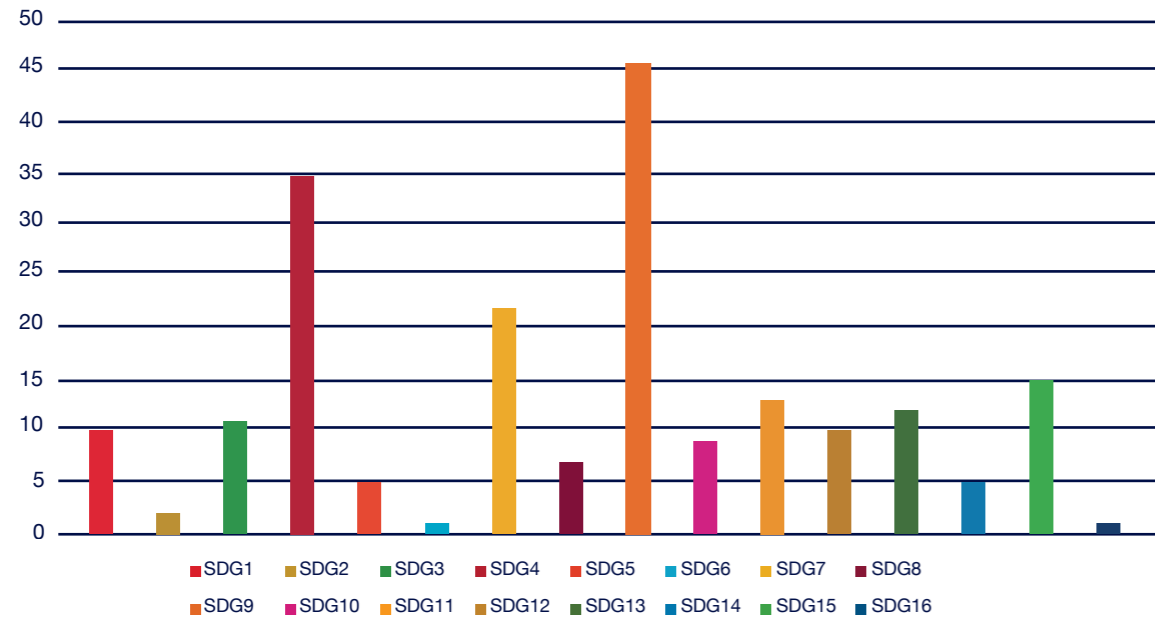
SDG	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
No. of Research Units	2	1	5	11	2	1	12	4	7	2	6	4	4	3	1	1

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



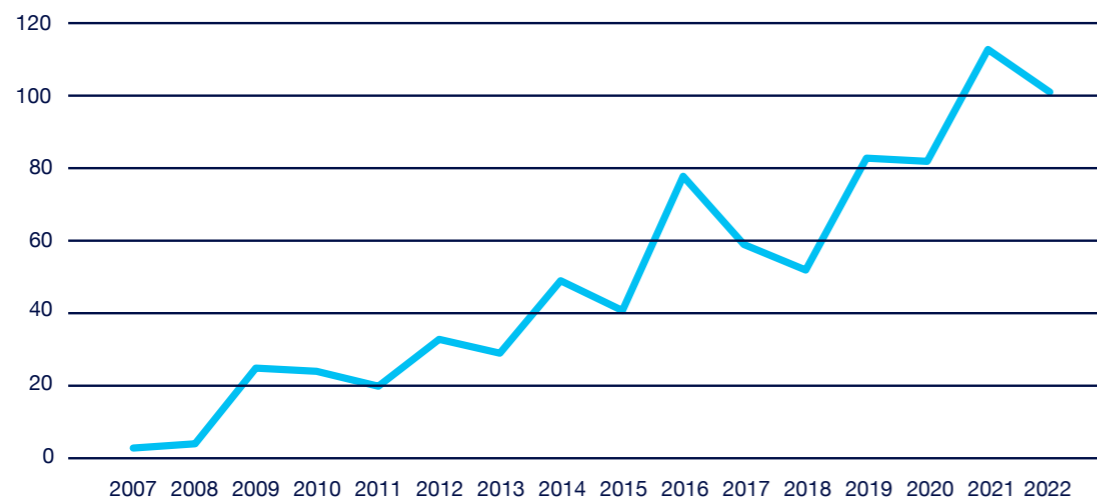
Total number of projects by SDG since 2015



The mapping is updated for 2023 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 reduced in 2023 in comparison to 2022, as the focus has shifted in larger scale projects. The later is evident also by the involvement of our research staff in the projects acquired, which has increased.

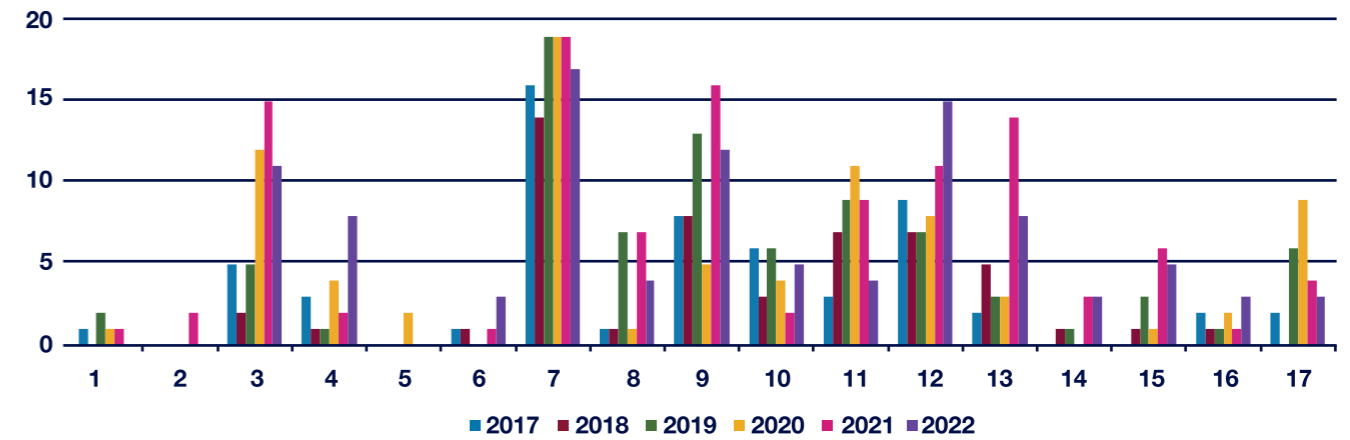
With respect to academic publications, we used the same methodology and retrieved our publication performance as depicted in the following chart which shows the total number of publications on all SDGs. Despite the small reduction in publications for 2022, the overall trend is positive and will be closely monitored for signs of significant deviation.

Total publications related to SDGs per year



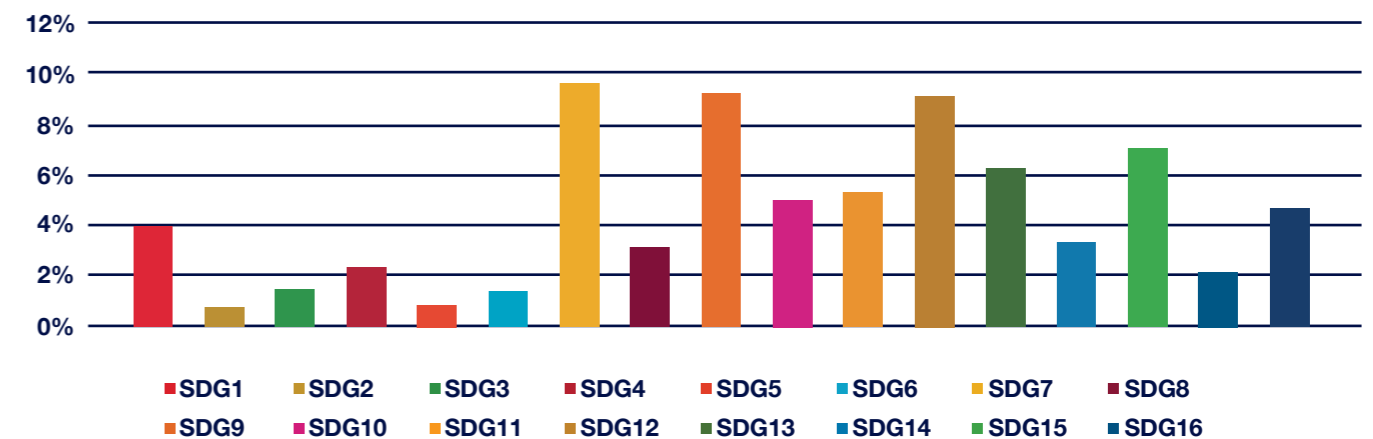
The chart below shows the number of publications for the period 2017 until 2022 per SDG. Examining the provided information, as expected, we see that there is a clear correlation between the areas of research activity and the funded research projects implemented with the number of publications.

2017-2022 research article publications for SDGs



Finally, the following chart provides the total number of publications generated by our University compared with the total number of publications in Cyprus, again using the same 2021 methodology, for the same period.

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



Case Study

D²EPC project: Winner of the European Commission's CEN-CENELEC Standards + Innovation Awards 2023

The D²EPC research project, in which Frederick Research Center (FRC) is a partner, has been selected as the winner of the CEN-CENELEC Standards + Innovation Awards 2023 in the Project category.

The D²EPC project was nominated by the Cyprus Organisation for Standardisation (CYS) and was selected among 15 other candidate projects proposed by similar European standardization organizations, such as DIN, BS, AFNOR, UNI, UNE, ASI, ELOT, and others. The award was presented by Mr Stefano Calzolari, President of the European Committee for Standardization.

Dr Paris Fokaides, Associate Professor at Frederick University's School of Engineering and Lead Researcher of the Sustainable Energy Research Group (SERG), accepted the award as the project's scientific and technical manager.

D²EPC aims to set the grounds for the next generation of dynamic Energy Performance Certificates (EPCs) for buildings. The proposed framework sets its foundations on the smart-readiness level of the buildings and the corresponding data collection infrastructure and management systems.

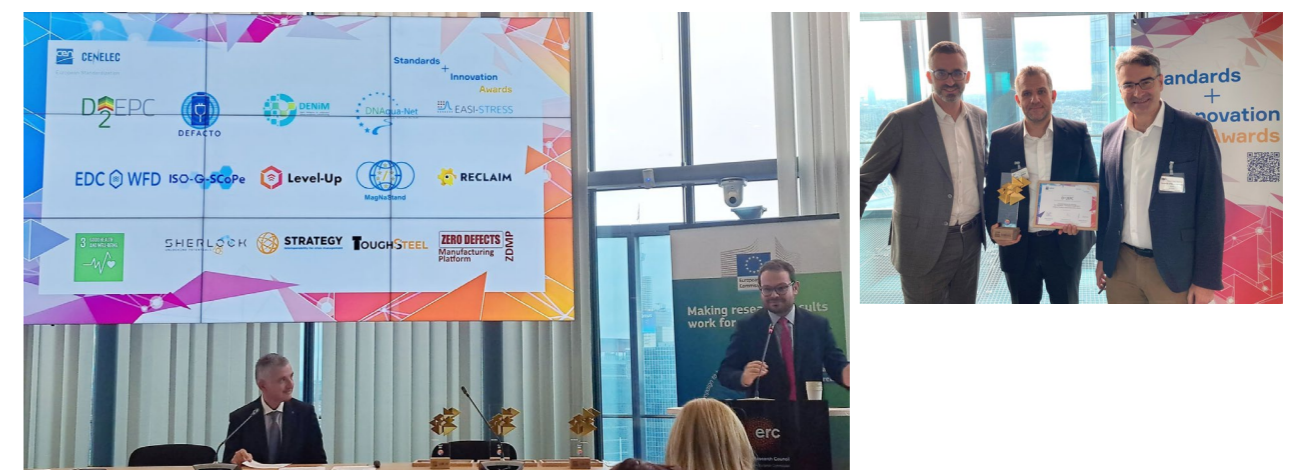
The D²EPC project worked on a novel rating system for assessing the energy performance of buildings considering not only the energy efficiency aspects, but also indicators related to economic factors, human comfort, and general well-being to provide a more holistic evaluation of a building's energy performance.

D²EPC's innovative approach proposes a new generation of EPCs that integrate dynamic sensors and Building Information Modeling (BIM). By leveraging these technologies, D²EPC enables the creation of a digital twin that accurately represents the building's energy characteristics.

Through its dynamic approach, integration of sensors and BIM, and emphasis on comprehensive performance indicators, D²EPC is poised to revolutionize the field of energy performance evaluation for buildings, paving the way for more efficient and sustainable built environments.

“Standardization is crucial for driving innovation and ensuring the efficiency and sustainability of our built environments. I am honoured to be part of shaping tomorrow's sustainable building standards.”







Dr Paris Fokaides



GOVERNANCE AND OPERATIONS

Targets 2025 Interim Assessment



TARGET	STATUS
Establish programs for fully-funded scholarships for Least Developed Countries as well as the bottom-income families locally.	 Started
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.	 Started
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.	 Started



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 mission 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



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.

Case Study

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.

In the academic year 2022-2023, two training sessions were successfully conducted, laying the groundwork for ongoing support. Notably, as of the academic year 2023-2024, three additional training sessions are in progress. This continuous effort ensures that both academic and administrative staff are continually equipped to effectively contribute to the achievement of the SDGs, fostering sustainable practices within our university community and beyond.



Case Study

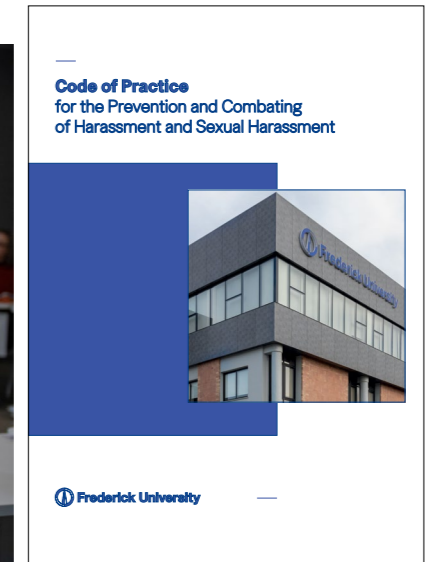
Frederick University: Championing a Campus of Zero Tolerance Against Gender-Based Violence

Frederick University is deeply committed to the welfare of its community and staunchly opposes gender-based violence, encompassing verbal, physical, sexual, or any other form of harassment. In order to proactively prevent and address harassment and sexual harassment, Frederick University has developed and adopted a Code of Practice in alignment with Article 12, Paragraph 4, of the Equal Treatment of Men and Women in Employment and Vocational Education Act of 2002 (205 (I) / 2002).

In the academic year 2022-2023, a seminar on this crucial subject was attended by all full-time faculty members and administrative staff at the University. The seminar facilitated an in-depth understanding of the legislative framework surrounding harassment and sexual harassment, including the definition and legal obligations of employers. Participants were empowered to assess the risks and conditions that could contribute to the occurrence of harassment within the work context. Additionally, discussions focused on the prevention of such incidents at both individual and collective levels, as well as strategies for combating them within their respective spheres of influence.

During the Freshers' Orientation Week in the 2023-2024 academic year, first-year students were apprised of the University's unequivocal zero-tolerance policy towards any form of violence within its community. They were also introduced to the University's "Code of Practice for the Prevention and Combating of Harassment and Sexual Harassment," recognizing signs of abusive dating behavior, and informed about available support services should they require assistance.

The university's overarching objective is to provide students with the knowledge and tools to identify behaviors and attitudes conducive to fostering safe and positive relationships. This proactive approach underscores Frederick University's unwavering commitment to cultivating a secure and inclusive environment for all its students.



OUTREACH

Targets 2025 Interim Assessment



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.	 Somewhat 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.	 Started

Case Study

Member of a European University Alliance committed to Sustainability

Frederick University is a full member in the European Universities alliance EU-CONEXUS Plus. 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.

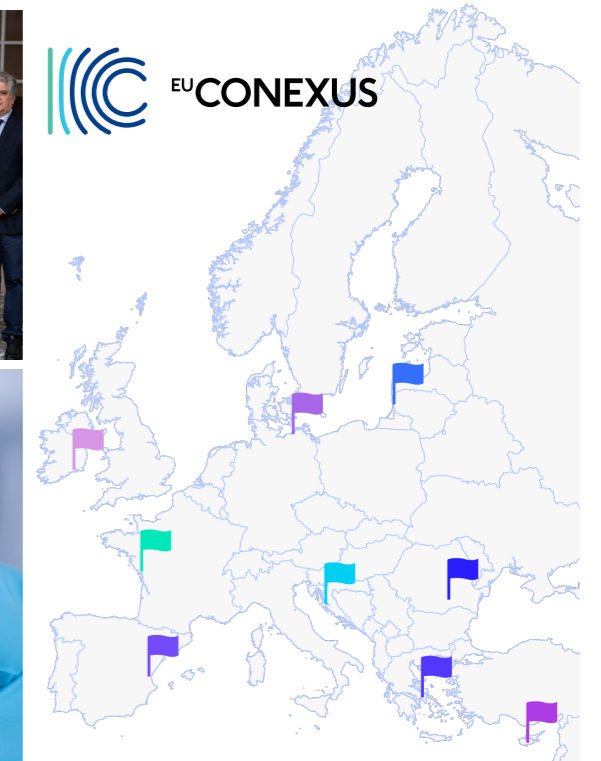
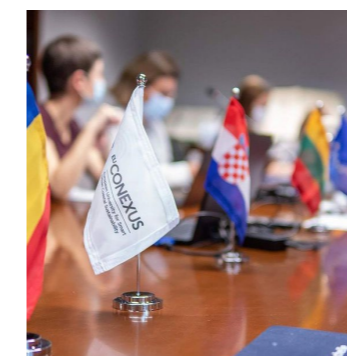
EU-CONEXUS Plus focuses on Smart Urban Coastal Sustainability, aiming to develop innovative educational methods and interdisciplinary approaches in the fields of Sustainability, Circular Economy and Blue Growth.

EU CONEXUS Plus 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.



Case Study

A partner in the 100 Climate Neutral Cities initiative

The importance of climate-neutral and smart cities

Cities play a pivotal role in achieving climate neutrality by 2050, the goal of the European Green Deal. They take up only 4% of the EU's land area, but they are home to 75% of EU citizens. Furthermore, cities consume over 65% of the world's energy and account for more than 70% of global CO2 emissions.

Since climate mitigation is heavily dependent on urban action, we need to support cities in accelerating their green and digital transformation. In particular, European cities can substantially contribute to the Green Deal target of reducing emissions by 55% by 2030 and, in more practical terms, to offer cleaner air, safer transport and less congestion and noise to their citizens.

Frederick University and the Municipality of Limassol signed a Protocol of Cooperation with the aim of making Limassol a climate-neutral and smart city by 2030. Limassol has recently been selected as one of the 100 cities of the European Union that will participate in the EU Mission Cities, with the aim of becoming climate neutral and smart cities by 2030.

Through the Protocol of Cooperation, the Municipality of Limassol and Frederick University declare their intention to cooperate for the development of the City's Climate Convention through an ambitious and realistic plan that will incorporate new technologies to implement innovative actions for the green and digital transformation of Limassol, which will have environmental, economic and social impact and multiple co-benefits for its residents.



Case Study

Educating the Community: Transforming old T-shirts into Reusable Bags for a Greener Tomorrow

Over the past 15 years, Frederick University's unwavering commitment to educating the community has manifested through its dedicated efforts to promote the concept of reuse. Central to this initiative is the long-standing project "I am a T-shirt Bag," wherein individuals are invited to contribute their old T-shirts for transformation into reusable bags.

Throughout these years, the University's collective endeavors have resulted in the transformation of hundreds of T-shirts into functional bags. Our active participation in eco-festivals and engagements with schools has been instrumental in spreading awareness about the significance of reducing single-use items and incorporating reusable alternatives into daily life.

By actively participating in these events and organising actions in educational settings, we aim to foster a community that values sustainability, emphasizing the positive impact each individual can make in mitigating environmental challenges.



Case Study

Empowering Youth for a Sustainable Future

Frederick University as a member of the EU-CONEXUS European University Alliance coordinates the EU-CONEXUS School Contest: Think Smart, Create Green in Cyprus and hosts the national final.

Students aged 12-18 years old from public and private schools in Cyprus, Greece, France, Romania, Ireland, Spain, Lithuania and Croatia can participate in the school contest. The aim of the Contest is to raise awareness on sustainability, mainly focusing on the sustainable development of coastal zones. The contest also aims to strengthen children's creativity, teamwork and resourcefulness. In the last two years, teams from schools in Cyprus have been participating in the contest with excellent results. In 2022, the Kokkinohoria High School's 'Green Team', won 3rd place in the international final in the age category 14-16.

As a result, the team members traveled to Bucharest, Romania where they participated in a workshop designed by Bucharest's Technical University of Civil Engineering (UTCB) on the construction of buildings with zero energy consumption. They also visited the EFdeN Sustainable City, a sustainable city prototype in Romania, as well as cultural attractions of the country, while also taking part in experiential workshops. In the same year, in the international final of the age category 12-14, the Xylofagou Regional High School stood out in the national final. In 2023, 'The Shellhive' team of Kokkinohoria Gymnasium took 2nd place in the Contest's international final.



Case Study

Frederick University's Pioneering Environmental Risk Assessment for the Gulf of Limassol

The research study conducted by Frederick University holds paramount importance as it sheds light on the critical necessity for vigilant monitoring of escalating risks to Limassol's coastal environment. Pioneering as the first comprehensive environmental risk assessment in the region, the study meticulously examines all developmental and operational activities in the coastal Limassol area, including energy, oil and gas, commercial shipping, marinas and yachts, construction, sewage and litter, and aquaculture and fisheries. By identifying and assessing potential threats, the study delivers imperative recommendations for best practices to safeguard the sea and coastal environment. It urges collaborative action from all stakeholders to collectively address the challenges. While the environmental pressures in individual sectors may not be deemed significant, their cumulative impact poses a substantial risk of environmental degradation, emphasizing the need for integrated data, enhanced technology utilization, and a robust yet flexible environmental protection strategy.

The study reveals regulatory fragmentation, emphasizing the need for a central agency with an independent scientific supervisory board. Equally crucial is the need for rapid transformation of citizen awareness into responsible stewardship, encouraging preventive behavior and active participation in transparent incident reporting processes. Addressing citizen concerns expressed in a comprehensive opinion survey during the inaugural Blue Limassol Forum in May 2020, the Risk Assessment Study involves a consortium of seven reputable institutions and over 30 specialists, including the Limassol Municipality, DNV Greece, the Marine and Environmental Research Lab (MER), the Cyprus Marine and Maritime Institute (CMMI), and the Development Agency of Limassol (ANELEM), with Frederick University at the forefront.



“Enhancing the potential of the blue economy is a primary focus for our City Council. In line with this commitment, we have established the annual Blue Limassol Forum, an initiative strongly endorsed and co-organized in collaboration with Frederick University. The first forum addressed various challenges including the protection of our sea and coastal areas, the pursuit of sustainable development and the formulation of a dynamic maritime agenda for growth, competitiveness, and job creation. A direct outcome of this forum was the decision to conduct a comprehensive Risk Assessment Study for Limassol Bay. The study aimed conducted by Frederick University, engaged over 30 scientists and involved the collaboration of 110 stakeholders, including government authorities, organizations, and companies. I extend my congratulations and heartfelt thanks to all involved in this vital initiative.”

Nicos Nicolaides, Mayor of Limassol

Case Study

Scholarships and other activities to combat the underrepresentation of Women in STEM

Despite the global effort to encourage girls and women to choose studies related to Engineering, Science and Technology, their involvement in these areas remains disproportionate. This means that women are excluded from the sectors with the highest growth; the sectors that present excellent employment prospects. By 2030, it is estimated that 40-160 million women will need to change careers and take on roles that require more sophisticated digital skills. If women do not make the necessary transition to technology and science, they will not have access to the job market and will be disproportionately affected by unemployment.

In June 2021, Frederick University launched the “To all women & girls: Join the journey in Engineering, Science and Technology” campaign.

The campaign, which is under the auspices of the Commissioner for Gender Equality, Josie Christodoulou, aims at educating girls from an early age about the prospects of engineering and technology. In this context, special scholarships are offered to all girls who choose to study undergraduate programs in Engineering and Technology at Frederick University. The scholarships cover 50% of the tuition fees and apply to the first academic year with the possibility of renewal for the duration of the studies, based on the academic performance of the student at the University.

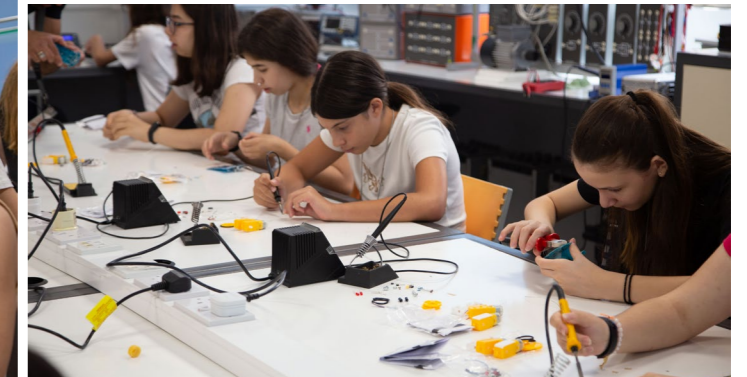
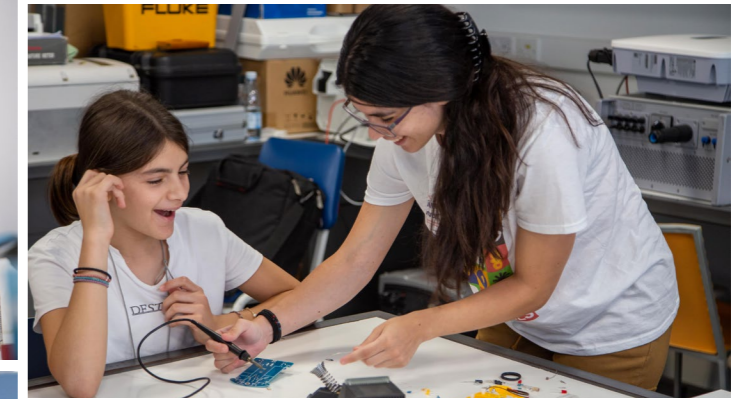
In addition, the University organises interactive, hands-on workshops and other activities focused on empowering young girls and motivating them to follow a career in STEM.

For example 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. The overarching goal is to dismantle barriers and ignite inspiration, encouraging these young participants to pursue careers in STEM fields.



Women's representation in Engineering, Science and Technology is crucial for the reduction of the gender gap in these areas

Frederick University offers 50% Scholarships to ALL girls who will choose to study a program in the University's School of Engineering





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.

Full 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 will continue in the coming academic years, offering even more opportunities to low-income 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 non-governmental 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 poverty

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 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.



Subsidized student housing in Limassol



On-campus Student Employment



Member of Solidarity Network

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.

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 of dependents in the family, distance of residence from the university, unemployed parents/guardian 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 University 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 2024 Calendar, centered around the theme of the Feminization of Poverty. As part of the Image Making Processes II course, second-year students from the Visual Communication and Fashion and Image Design programs had the unique opportunity to explore the concept of female poverty, investigate contributing factors, and analyze its impact on women. Their task involved creating the illustrations and designs featured in the calendar, which were also showcased in a three-day exhibition. 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.

IoT-based low-cost hydroponics system

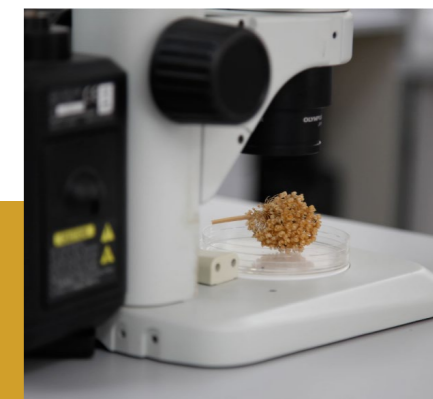
Water shortage and pollution are environmental threats affecting large parts of the EU as well as the entire world. Climate change is expected to further increase water shortage and threaten food production. This problem must be addressed on many levels. Frederick University's iPONICS start-up project developed an offgrid, IoT-based low-cost hydroponics system for small-scale farmers and even hobbyists, to help them adapt agricultural production to climate change and limited water supply, converting a low-productivity agricultural land to high-productivity. The vision of the start-up is to advocate sustainable agriculture and combat climate change.

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



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



Healthy and affordable meals at the University's cafeterias

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 in commonly consumed foodstuff (such as cereal, nuts, dried fruit, pulses etc) in Cyprus and dose calculations, as well as radon measurements in soil covering all from geological formations and terranes in Cyprus.

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 stress-adapted 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 IoT-based smart 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



Platform offering assisted-living services, developed by "GUIDed" project

Collaborations with health institutions

Promoting physical activity in schools

HEPA (Health Enhancing Physical Activity) is a project coordinated by Frederick University and funded by the European Commission in the framework of Erasmus+ Sport Action programme. Seven organizations in six European countries participate in HEPA, which adopts a school-based holistic approach to promote leisure time physical activity and the wellbeing of children. As the coordinator of HEPA, Frederick University is responsible for managing and organizing the project, developing relevant and targeted educational material and promoting it to educational authorities and education policy makers. The purpose of the project is to promote physical activity not only through physical education classes but across all school subjects.

GUIDed

The project integrates existing open-source technologies, platforms and tools, and assembles a smart AR-enabled platform to offer a set of simple, plug-and-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 decision-making 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

The University plans and implements several campaigns and offline and online events to raise awareness on specific health and mental health issues.

CY FIT

Frederick University implements 'CY FIT', 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 will develop an online platform to collect and evaluate data and develop targeted actions to enhance children's health.

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.

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. Ultimately, the project's focus is on fostering better social and healthcare outcomes for individuals and the community.

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.



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 self-led 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.



"The Sun and Us" educational exhibition



Peer Tutoring Center



UNESCO Chair on Lifelong Learning and Adult Education established by Frederick University

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..

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.

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 the promotion of equality and diversity in 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.

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' TRaining to combat gender-based 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.

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 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 University, while a STEM Camp for girls aged 13-16 takes place once a year at Nicosia campus. Hundreds of young girls 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.

RIGE Research Unit

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 HEIs
- Research on gender-based violence
- Women and girls in STEM
- Implementing projects for making Higher Education and society more inclusive and equal
- Analysing quantitative data and perform 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.

Development of inclusive Gender Equality Plans

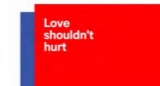
Frederick University participates in NEXUS, a Horizon project which focuses on bridging inclusivity gaps in nine research organisations and their respective R&I ecosystems with the aim to bolster institutional change through the development of inclusive Gender Equality Plans (GEPs) in intersectional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



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



Identify unhealthy behaviours in relationships and prevent dating violence



The Red Card Campaign is an awarded campaign running among the University Students Community to raise awareness on dating violence and gender equality.



iSports Erasmus+ project on combating sexual harassment and gender-based violence in Sports

Center dedicated on Gender Issues, Diversity and Equality

ENAF
EQUALITY 'N' AWARENESS AT FREDERICK



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.

Water management education

Frederick University actively promotes conscious water usage and provide educational opportunities for local communities to learn about good water management. Academic and research staff involved in the 'Waterways' project have developed educational material and activities for preschool and school-age children to raise awareness of environmental and climate change issues related to water and its management. The pilot implementation of these educational outreach activities occurred through workshops in pre-primary and primary schools located in rural areas along the E4 trail in Cyprus. The workshops were designed to help children understand the water cycle and its subsequent path, depending on how we use it.

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 water-conscious 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

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.



Measurements of water samples covering all water drinking resources in Cyprus

Radon measurement equipment

Educating children on the water cycle

Native, drought-resistant plants are planted in the University's outdoor areas



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 (LRAs) in reducing energy consumption and greenhouse gas emissions through the development of customized Clean Energy Transition Plans (CETPs).

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.



The D^2EPC digital platform enables the issuance of next generation Energy Performance Certificates. The project won in the ‘Project’ Category in the Standards+Innovation Awards.



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



Educating pupils on renewable energy

Active Research on Renewable Energy

At least three of the University’s research groups are actively involved 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 hands-on workshop. They also visit Tersefanou Wind Farm and Mech, a state-of-the-art factory, where Hydrogen Technologies are being developed.

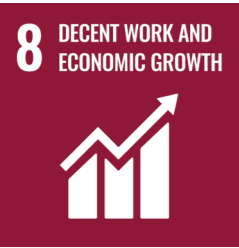
Cyprus Hydrogen Association

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.

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 energy-related policy development. 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. An example is PRO-ENERGY, the objective of which is to improve energy efficiency of public buildings (municipal/provincial/regional buildings, schools, universities, health centres, hospitals, museums, sports facilities etc). The project aims to develop and implement a Joint Strategy and Action Plan, increasing competences of buildings’ owners & operators, developing and applying technologies and tools to reduce energy consumption in public buildings, and promoting generated good practices and results to local/regional/national entities in the Balkan-Med region. The project outcomes will include: increased energy efficiency in the participating territories, improved funding opportunities, and increased local awareness on sustainable energy policies.



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.

Work placements for students

Frederick University participates in the project "Liaison offices with the Labor Market 2018-2023", which is funded by the Structural Funds of the European Union. As part of this initiative, employers can utilize a dedicated platform to post placement opportunities for the university's undergraduate students. These placements encompass all undergraduate programs, enabling students to acquire hands-on experience, enhance their skill sets, and boost their employability, all while being appropriately compensated for their contributions.

Student internships



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



"Yenesis" project aims at creating local green jobs



Entrepreneurial Skills for Social Sciences

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.

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, and the circular economy. YENESIS 2.0 will provide innovative training to 175 young people aged 19-30 from across Europe in these five critical areas.



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 co-curricular 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.
- AlInfinite, 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.



Supporting SMEs in uptaking Additive Manufacturing

Students participating in innovation competitions



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

Start-ups founded by students

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 the 'Next Generation proposals for a better Cyprus' competition, co-organized with Consulco, an investment management company. In this competition, undergraduate and postgraduate students proposed structural changes to enhance the investment sector in Cyprus, through extensive research and innovative ideas presented in comprehensive essays.

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 based 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 group 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.

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 currently involved in Asm4Deaf, a project which aims at developing 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

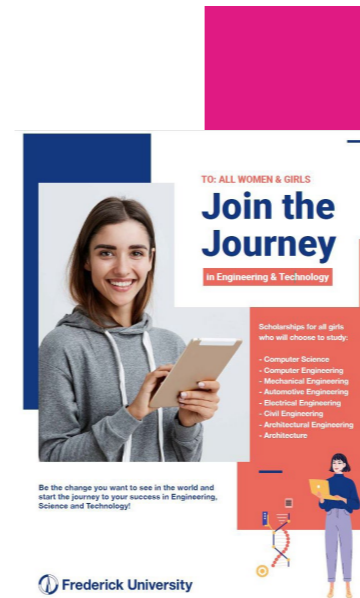
The project DHeLiDA: Digital Health Literacy for Disadvantaged Adults is a European cooperation project aimed at improving the digital health literacy among vulnerable target groups, especially elderly people and people with migrant background, by helping them gain new digital skills and learn how to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

The project intends to fill 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.



Positive discrimination policies in admissions



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

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

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.



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

Managing Natural Disasters and Building Safety in Cyprus

Frederick Research Center coordinates "ISTOS" (Center of Innovative Solutions for Building Safety), a Horizon 2020 project that seeks to strengthen the field of Civil Engineering research in Cyprus, through a high-level collaboration that will work towards understanding natural disasters and assessing the vulnerability of communities, thus leading to achievement of enhanced post-disaster management results.

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 general-purpose PCs, uninterrupted internet access, comfortable and inspiring study spaces, meeting and conference tables and informal seating areas.

Making Limassol climate-neutral

Limassol was recently selected as one of the 100 cities in the European Union to participate in the EU Mission Cities mission, 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 climate-neutral 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.



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.

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.

Contribution 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 38 years of operation, it has produced 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.

Platform for mapping of cultural heritage

Europe's Cultural Heritage is at risk, endangered by environmental processes enhanced by climate changes 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) aims to design and develop 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.

School Contest "Think Smart, Create Green"

Frederick University is one of the co-organisers of the international annual school competition "Think Smart, Create Green". In 2023 Secondary Education students were invited to transform their school into a Sustainable Green Building and/or transform an existing area of their city into a smart and sustainable one. 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 national jury.

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.



Member of EU-CONEXUS



The University's libraries are open to the general public.



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 which is creating a network of touristic areas that will explore ways of collaborating in joint glass waste management actions. The project aims to achieve the transfer of glass up-cycling technology and construct a Pilot Unit for Municipal partners. The Pilot Unit will valorize glass waste to produce building products, through geo-polymerization techniques, thus enhancing recycling of this waste stream. It will be a mobile infrastructure shared by the members of the network, i.e. a small container-size unit that will be easily and economically transferred from one partner to another and treat peak waste in off season periods. A Sustainability Plan will be developed to define the conditions under which the network will operate efficiently and attract more members.

Skateboard decks from recycled material

Frederick Research Centre participates in CapsuleX, a research project that aims 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 involves 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.

On-campus waste reduction

As stated in its Environmental 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

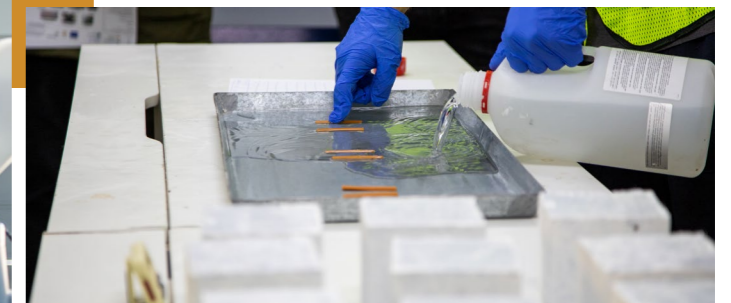
Frederick Research Center is involved in a number of research projects on the conversion of waste material from the construction industry. It coordinates DEFEAT (Development of an innovative insulation fire resistant facade from the Construction and Demolition Waste). The general goal of the project 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, which plans to transform the diabase mud from waste to secondary raw material for the production of innovative binders and, hence, of marketable pre-casted building materials which will be mainly applied as paving blocks. Frederick Research Centre also participates in the RAPCON project, which aims at converting an otherwise waste material, recycled concrete aggregates (RAC), into a high-value material, recycled aggregate concrete (RCA). It is expected that 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 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.



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



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



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 near-real 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 that will 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.

The monitor was successfully developed and is now capable of augmenting the operation of meteorological stations in order to enhance monitoring of local weather conditions and provide real-time 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 new 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

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, in May 2023 it held an open discussion titled "Climate Crisis: Cities and Design", with the participation of academics, urban planners, researchers, and experts in urban design from Cyprus and Greece. The event highlighted the need for sustainable planning and development of cities to make them capable of adapting to the challenges of the climate crisis.



Study comparing climate action and adaptation plans.



Open discussion on "Climate Crisis: Cities and Design".



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 co-create 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.

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

Study on city climate plans

Members of the Frederick University academic community contributed to a study focusing on city climate plans, encompassing over 300 European cities. The study resulted in the development of a free, online Climate Change Adaptation Scoring tool, which computes 'ADaptation plan Quality Assessment' (ADAQA) indices for individual cities. This tool empowers local climate practitioners to assess the coverage of their plans and benchmark against others. Moreover, the indices' components facilitate benchmarking and expedite enhancements in the next generation of plans. This work is pivotal as it scrutinizes numerous climate action and adaptation plans, aiming to mitigate the impact of climate change on urban environments. The comparative analysis creates improvement opportunities by facilitating the exchange of knowledge from city to city, ultimately bringing the European community closer to addressing the repercussions of climate change in urban settings.



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

Blue Limassol Forum

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 included presentations and panel discussions where speakers and participants from Cyprus and abroad shared and discussed the implementation of best practices and technologies related to carbon neutrality in coastal cities in harmony with Citizen Wellbeing. 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.

Environaut

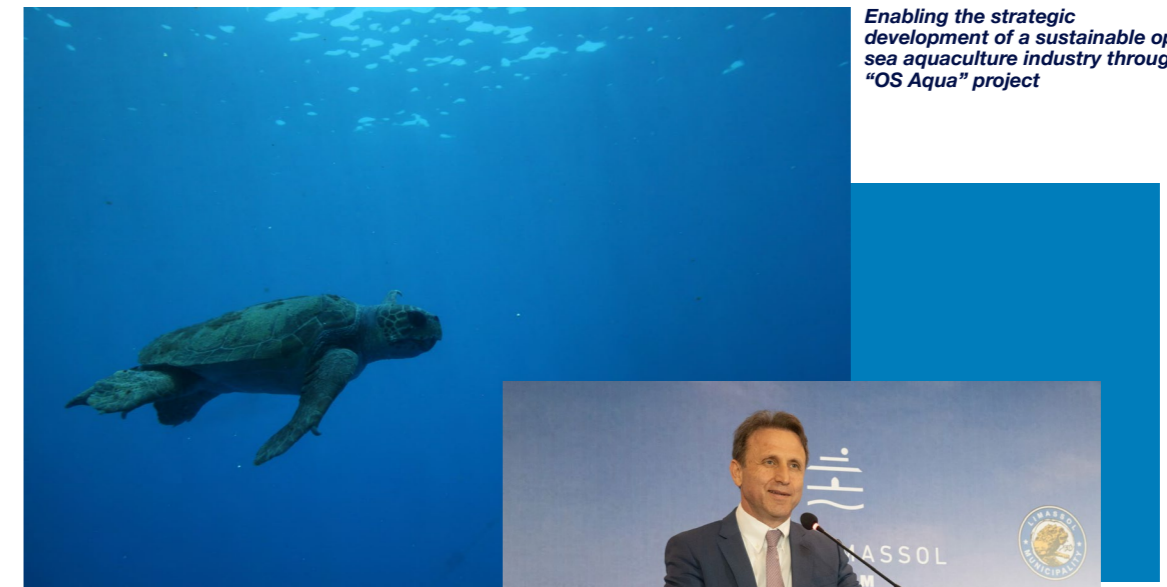
Frederick University is one of six partners in the "ENVironmental Officer in the NAUTical Tourism Industry" (EnviroNaut) project, during which the first ever environmental qualification for nautical tourism companies will be developed. The project aims to bridge the gap between the training and skills 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).

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 climate-neutral 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.



Enabling the strategic development of a sustainable open sea aquaculture industry through "OS Aqua" project



"EnviroNaut" project is developing the first ever environmental qualification for nautical tourism companies



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

Monitoring maritime activities

The city of 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 and to help tackle the growing problem of pollution spillages across Limassol Bay.

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:

- Develop an integrated model for use 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

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 in 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.



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



LIFE CALLIOPE is a project aiming to protect coastal dunes, sublittoral sandbanks and marine reefs along the coastline of Italy and Cyprus.

“Pandoteira” project aims at protecting species and habitat types in the Natura 2000 network.

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 remote 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.

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 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 those areas remains a key research priority. The methods and monitoring protocol developed in BIOMON 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.



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.

Law and Ethics in the Digital Era

In May 2023 Frederick University hosted an Erasmus+ Blended Intensive Program (BIP) under the theme 'Law and Ethics in the Digital Era.' This program brought together participants from various European universities for workshops, presentations, and roundtable discussions focusing on pressing EU topics, including democracy and corruption. The seminar delved deep into critical issues such as the legal aspects and role of artificial intelligence in contemporary society, the transformative impact of digitalization on our daily lives, the emerging facets of the digital economy, and the imperative concerns regarding privacy and security in social media. These subjects were at the forefront of the seminar, fostering in-depth discussions and comprehensive analysis.

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.



The GDHRNet COST Action explores the challenges posed by the online context to the protection of human rights.



Frederick University Council includes elected representatives from students, academics and administrative personnel.

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 qualitative and quantitative 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.



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

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



The University implements on and off campus outreach activities related to the Goals.



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 SDGs and includes workshops aiming at empowering academics to be able to incorporate SDGs in their courses content, teaching practices, research, and community actions, but also enabling administrative staff to embed SDGs in daily operations, policy making and university reporting.

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

Frederik 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

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