

Newsletter 1

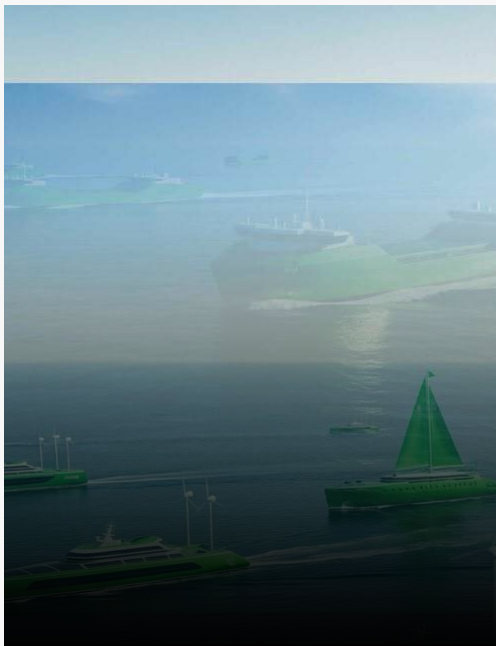
Introducing Gems-Tech



JUN 2025

GEMS-TECH.EU

@GEMS-TECH



Welcome Aboard GEMS-TECH

Shaping the Future of Sustainable Maritime Education

We're excited to introduce GEMS-TECH — Green Maritime Horizons: Collaborative Innovation in Ship Engineering and Sustainable Technologies — an ambitious new initiative reshaping maritime education across Egypt and Kenya.

Feature Spotlight

"Gems-Tech" Project Funded

GEMS-TECH PROJECT is **Co-funded by the European Union under the Erasmus+ Capacity Building for Higher Education-Strand 2**, Project Number 101179386-ERASMUS-EDU-2024-CBHE-STRAND-2.

Funded under Erasmus+ Capacity Building for Higher Education (Strand 2), Project No. 101179386, GEMS-TECH runs for **36 months** with a budget of **€793,055.56**. Our mission: fully integrate sustainable maritime practices and green technologies into the curricula of higher education institutions, equipping the next generation of maritime professionals to lead the industry's transition to a greener future.

Over the life of the project, we'll develop new interdisciplinary modules on sustainable maritime solutions, modernize existing courses to meet global green standards, build hands-on laboratories, train academic staff and students, and share our work openly through online courses (MOOCs) and resources — all aligned with the UN Sustainable Development Goals.



Green Maritime Horizons
Collaborative Innovation in
Ship Engineering
and Sustainable Technologies



Project summary

Transformation

01



GEMS-TECH project is an ambitious initiative aimed at reshaping maritime education in Egypt and Kenya by fully integrating sustainable maritime practices and green technologies into the educational frameworks of higher institutions.

SUSTAINABILITY

This initiative is strategically positioned to address the urgent need for environmental stewardship within the maritime industry, offering a comprehensive approach to education that is aligned with the United Nations Sustainable Development Goals.



By enhancing the competencies of both academic staff and students in sustainable maritime technologies, GEMS-TECH intends to bridge the gap between theoretical knowledge and practical application, fostering a generation of maritime professionals who are well-equipped to contribute to the sustainability of the maritime sector.

04

Empowerment

Modernization



The endeavor will systematically develop and introduce new interdisciplinary modules that focus on sustainable maritime solutions, ensuring a comprehensive modernization of existing courses to align with global green initiatives and the evolving needs of the maritime industry.

02

SUSTAINABILITY



The project will also foster strong partnerships between academic institutions and key stakeholders in the maritime industry, promoting innovation in green shipping and contributing to environmental sustainability and economic resilience in the sector.

03

Collaboration

JUN 2025

GEMS-TECH.EU

@GEMS-TECH



What GEMS-TECH aims to deliver:



Skills enhancement

- Develop modules on sustainable marine practices.
- Training students and faculty on green technologies.



Curriculum modernization

- Updating curricula to include sustainable practices.



Establishment of laboratories

- Establishing laboratories for practical training in the field of green shipping.



Enhanced Cooperation

- Strengthen links between academia and industry.



Knowledge Sharing

- Provide online training and resources on green marine practices.



Promoting Sustainability

- Supporting environmental conservation and enhancing employment opportunities in the maritime sector.

JUN 2025

GEMS-TECH.EU

@GEMS-TECH



A truly international consortium



Bulgaria

- Bulgaria: University of Telecommunications and Posts (**UTP**)
- Institute for Technological Transfer and Innovation (**ITTI**)



Egypt

- Ain Shams University (**ASU**)
- Arab Academy for Science, Technology and Maritime Transport (**AASTMT**)
- Arab Navigation Institute (**AIN**)



Kenya

- Jomo Kenyatta University of Agriculture and Technology (**JKUAT**)
- Technical University of Mombasa (**TUM**)
- Lake Victoria Basin Commission (**LVBC**)



Greece

- University of the Aegean, Creative Thinking Development (**CRETHIDEV**)



Croatia

- University of the Aegean, Creative Thinking Development (**CRETHIDEV**)



Estonia

- Tallinn University of Technology (**TalTech**)

Partners Working together professionally

VISHE UCHILISHTE PO TELEKOMUNIKATSII I POSHTI (UNIVERSITY OF TELECOMMUNICATIONS AND POSTS)	UTP	BULGARIA
PANEPISTIMIO AIGAIU (UNIVERSITY OF THE AEGEAN)	UAEGEAN	GREECE
SVEUCILISTE U ZAGREBU (UNIVERSITY OF ZAGREB)	UNIZG	KROATIA
TALLINNA TEHNIKALIKOOL (TALLINN UNIVERSITY OF TECHNOLOGY)	TalTech	ESTONIA
ARAB ACADEMY FOR SCIENCE, TECHNOLOGY AND MARITIME TRANSPORT	AASTMT	EGYPT
AIN SHAMS UNIVERSITY	ASU	EGYPT
JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY	JKUAT	KENYA
TECHNICAL UNIVERSITY OF MOMBASA	TUM	KENYA
DIMIOURGIKI SKEPSI ANAPTYXIS (CREATIVE THINKING DEVELOPMENT)	CRETHIDEV	GREECE
INSTITUTE FOR TECHNOLOGICAL TRANSFER AND INNOVATION	ITTI	BULGARIA
LAKE VICTORIA BASIN COMMISSION	LVBC	KENYA
ARAB INSTITUTE OF NAVIGATION	AIN	EGYPT



WORK PACKAGES

WP1

Management



WP2

**Modernization
of Existing
Curricula**



WP3

**Advanced
Maritime
MOOCs**



WP4

**Dissemination &
Sustainability**



PROJECT OUTPUTS



Qualified Professionals

Graduates with advanced skills
in sustainable charging
techniques.



Modern Education

Updated curricula that integrate
sustainable practices and green
technologies.



Training facilities

Functional laboratories that
provide practical training in
green charging.



Collaboration between industry and academia

strong partnerships that foster
innovation and sustainability



Knowledge Dissemination

Develop and share open online
courses (MOOCs) and
electronic resources on
sustainable practices.



Contributing to sustainability

contributions to global
sustainability goals and
increasing employability



Economic and environmental impact

Enhance economic resilience
and reduce the carbon footprint
of the shipping industry.



KICK OFF MEETING



Kick off Meeting



Date: 23-24& 25.04.2025



Location : University of Telecommunications and Post (UTP) in Sofia, Bulgaria.



Welcome by the project coordinator



Presentation of the partners



General overview of the project and its working packages(WPs)



Presentation of the Gantt Chart



Discussion on the Gantt Chart



Planning of the next steps



Summary and closing of the meeting

Participants

The Kick-off Meeting was attended by representatives from 12 institutions across Europe, Egypt, and Kenya, united by a shared commitment to advancing sustainability and digital transformation in the maritime sector.

NEXT STEPS NEWSLETTER 2

