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World Maritime University



People. Development. Impact.

Four Decades of Academic Excellence - The World Maritime University

The Journey Towards (Net) Zero/Low Carbon & Energy Efficient Maritime Future

**On the occasion of the NER Conference
03 May 2023**



ABOUT WMU

Established in 1983 within the framework of the International Maritime Organization (IMO), a Specialized Agency of the United Nations.

MISSION

To be the world centre of excellence in postgraduate maritime and oceans education, professional training and research, while building global capacity and promoting sustainable development.

VISION

To inspire leadership and innovation for a sustainable maritime and oceans future.



IMO SECRETARY-GENERAL

- **Mr. Kitack Lim (Republic of Korea)**
- Elected as IMO Secretary-General by the 114th session of the IMO Council in June 2015 for a four-year period beginning 1 January 2016.
- Mr. Kitack Lim was re-elected in 2019 for a second term running from 1 January 2020 to December 2023.



CENTRE OF EXCELLENCE

Recognized by the UN General Assembly

The United Nations General Assembly (UNGA) on 9 December 2021 adopted [Resolution 76/72](#) on Oceans and the Law of the Sea. **The resolution continues, for the twelfth consecutive year since 2009, to recognize the importance of the World Maritime University (WMU) of the International Maritime Organization, as a centre of excellence for maritime education, research and capacity building:** "[...] confirms its effective capacity-building role in the field of maritime transportation, policy, administration, management, safety, security and environmental protection, as well as its role in the international exchange and transfer of knowledge, notes the role of the World Maritime University-Sasakawa Global Ocean Institute and urges States, intergovernmental organizations and other bodies to make voluntary financial contributions to the University's Endowment Fund."

GOVERNANCE

- IMO Assembly (174 IMO Member States & 3 Associate Members)
- President: H.E. Mr Antonio Manuel R. Lagdameo (Philippines)

- IMO Council (40 IMO Member States)
- Chair: Mr Victor Jiménez (Spain)

- WMU Board of Governors (30 Members appointed by the IMO Secretary-General)
- Chair: Mr Kitack Lim, Chancellor of WMU

- WMU Executive Board (11 Members appointed by the Board of Governors)
- Chair: Mr Gerardo Borromeo (Philippines)

- WMU President
- President: Dr Cleopatra Dumbia-Henry (Dominica)



OUR COMMITMENT TO THE UN SDGs



ensure inclusive & equitable **quality education & promote lifelong learning** opportunities for all



achieve **gender equality and empower all women** and girls



ensure access to affordable, reliable, **sustainable and modern energy** for all



promote inclusive and sustainable **economic growth**, employment and **decent work** for all



build resilient infrastructure, promote inclusive and **sustainable industrialization and foster innovation**



take urgent action to **combat climate change** & its impacts



promote just, **peaceful** and **inclusive societies**



strengthen the means of implementation and revitalize the **global partnership for sustainable development**



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



OUR CONTRIBUTIONS



Masters Programmes



PhD Programme



LLM and Postgraduate Diplomas via distance learning



Capacity Building



English and Study Skills Programme



Customized Professional Education



Solution focused and policy relevant Maritime and Ocean Research



Technical Cooperation Support at request of IMO



MASTERS PROGRAMMES

Malmö Based MSc in Maritime Affairs

Port Management

Maritime Education & Training

Shipping Management & Logistics

Maritime Energy Management

Maritime Law & Policy

Maritime Safety & Environmental Administration

Ocean Sustainability, Governance & Management

China Based MSc in Maritime Affairs

Dalian

Maritime Safety and Environmental Management

Shanghai

International Transport and Logistics

MPhil WMU/IMLI International Maritime Law & Ocean Policy

International Maritime Law (LLM)



PHD PROGRAMME

Principal Areas of Research

Environmental Impacts of Marine Activities

Maritime & Marine Technology & Innovation

Maritime Economics & Business

Maritime Energy Management

Maritime Law, Policy & Governance

Maritime Safety

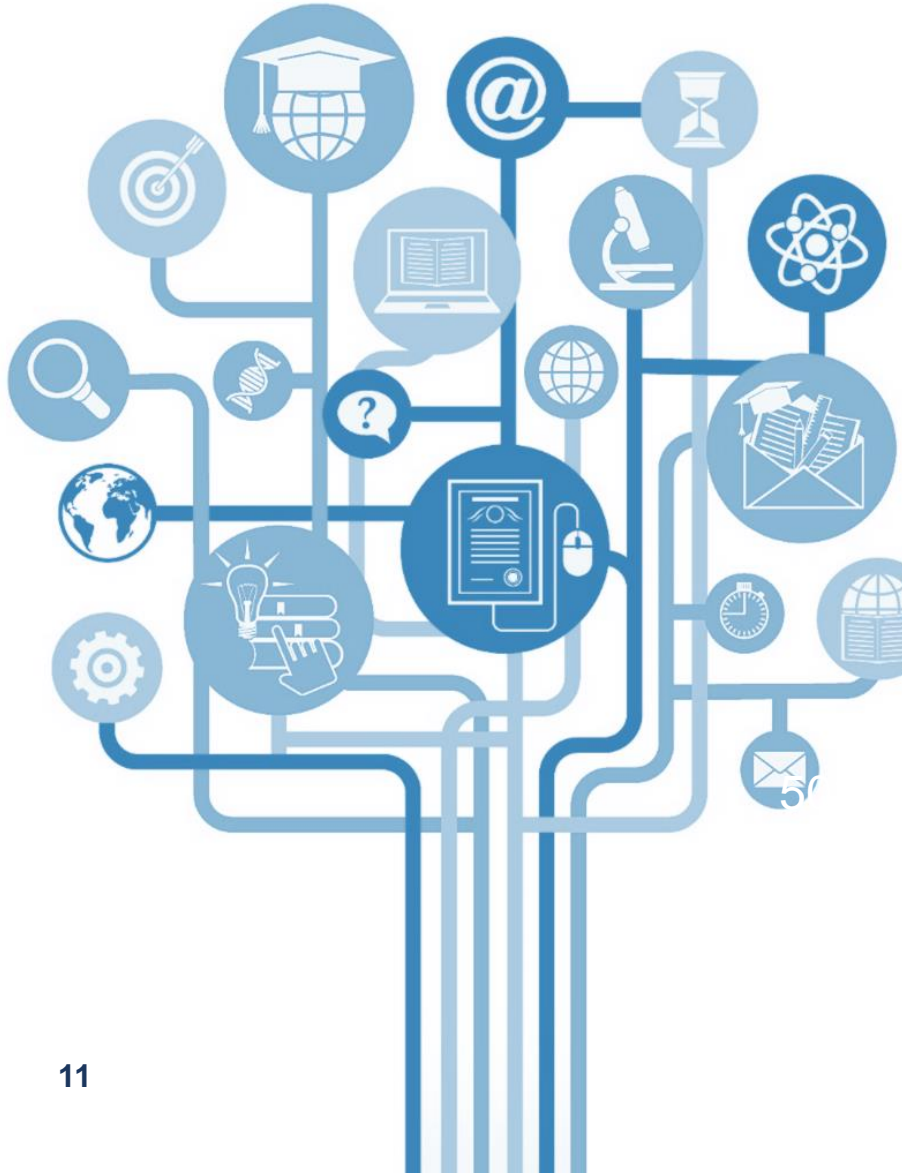
Maritime Social & Labour Governance

48 Enrolled

24 Graduates



DISTANCE LEARNING



International Maritime Law LLM*

Postgraduate Diplomas

- Marine Insurance
- Maritime Energy
- International Maritime Law*
- Executive Maritime Management**

*in partnership with Lloyd's Maritime Academy
**in partnership with DNV

PROFESSIONAL DEVELOPMENT

-  Maritime Casualty Investigation
-  Dangerous Goods
-  International Safety Management Code
-  Economic Modelling of Shipping Markets
-  International Trade & Transport
-  Ship Finance and Investment
-  Contemporary Issues in the Law of the Sea
-  Climate Change Impacts on the Maritime Sector

Customized Professional Development Courses addressing a range of topics

SUMMER ACADEMY

SUMMER ACADEMY 2023

MALMÖ, SWEDEN

The World Maritime University (WMU) is a unique academic institution, founded within the framework of the International Maritime Organization (IMO), a specialized agency of the United Nations. The University has a reputation for bringing together stakeholders such as academics, researchers, professionals, and industry to explore cross-cutting topics facing the maritime industry. The WMU Summer Academy provides a unique opportunity for these stakeholders to gather and share knowledge, as well as collaborate on potential solutions that will directly benefit the maritime industry.

MENTAL HEALTH & WELLBEING IN THE MARITIME INDUSTRY

24 – 28 JULY

MARITIME DECARBONIZATION

21 – 25 AUGUST

INTERNATIONAL MARITIME LAW

28 AUGUST – 1 SEPTEMBER

CURRENT ISSUES IN PORTS & TERMINALS POST COVID-19

11 – 15 SEPTEMBER

For more information and to register visit
wmu.se/summeracademy



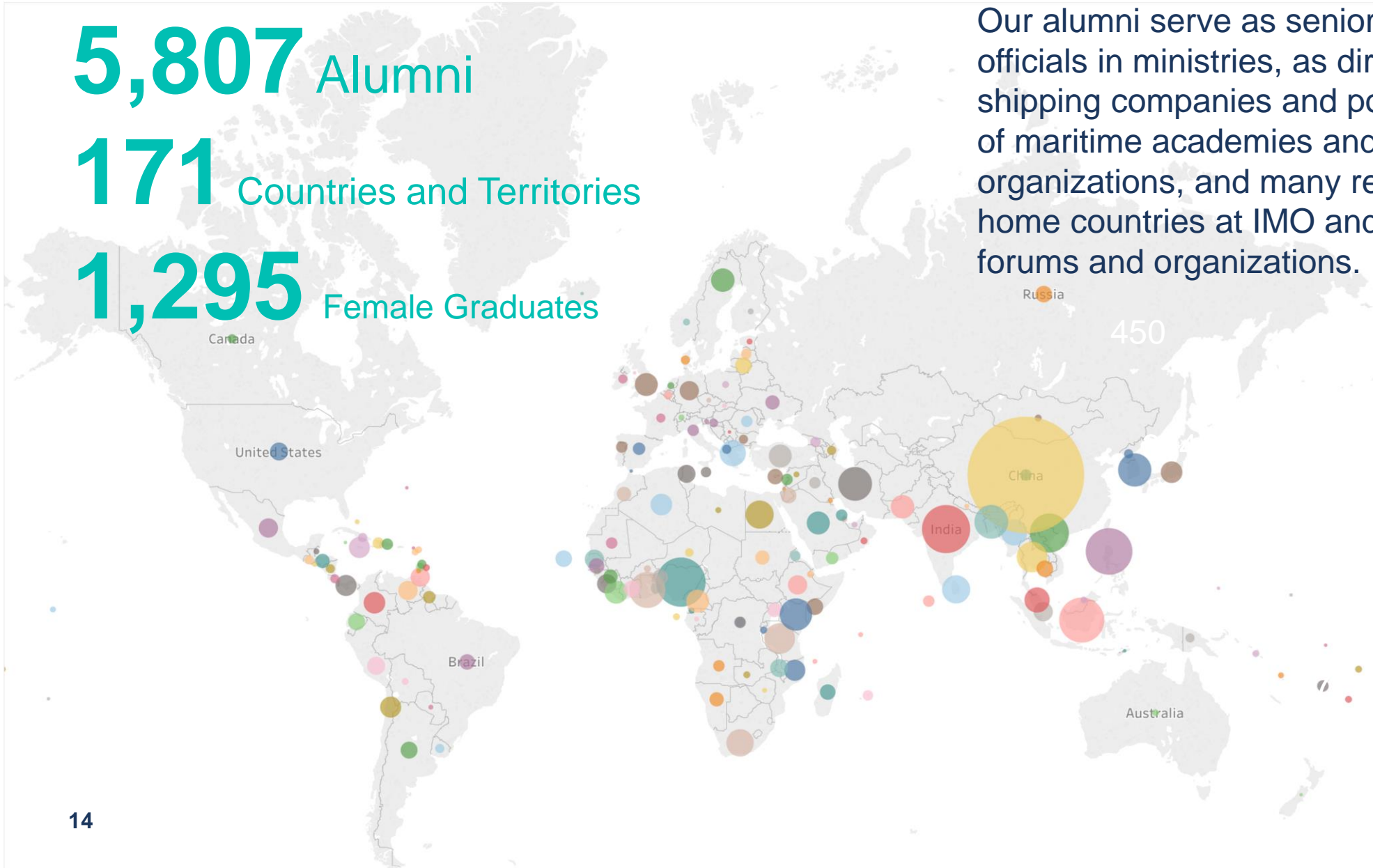
GLOBAL IMPACT – WMU IN NUMBERS

5,807 Alumni

171 Countries and Territories

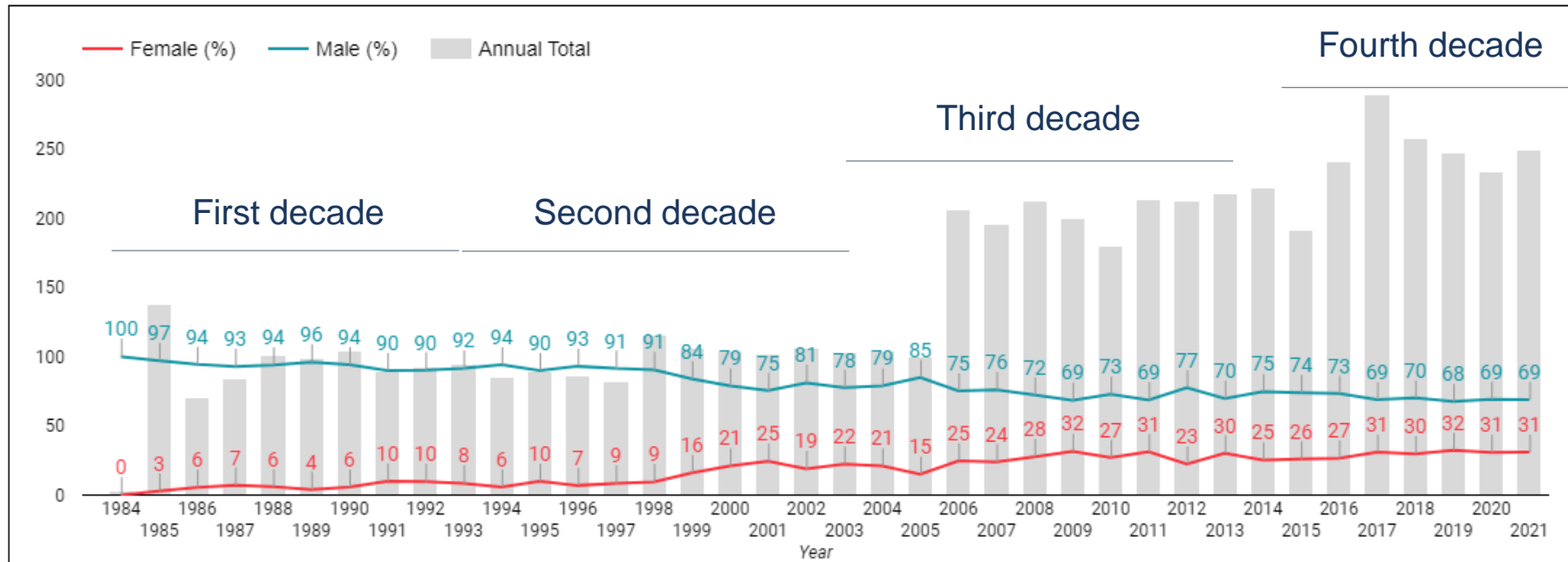
1,295 Female Graduates

Our alumni serve as senior maritime officials in ministries, as directors of shipping companies and ports, as heads of maritime academies and naval organizations, and many represent their home countries at IMO and international forums and organizations.



GLOBAL IMPACT – WMU IN NUMBERS

WMU Graduates in detail



* In year 1985, two graduations had been processed half-yearly for Malmö MSc programme. As a result, WMU turned out 67 and 71, respectively.

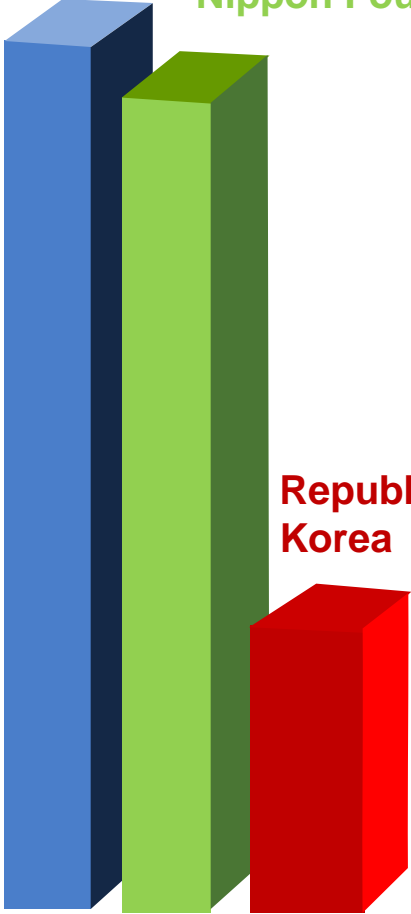
Human resources: **103** Personnel: **47%** women and **60** academic personnel



WMU AND SWEDEN in numbers

Sweden

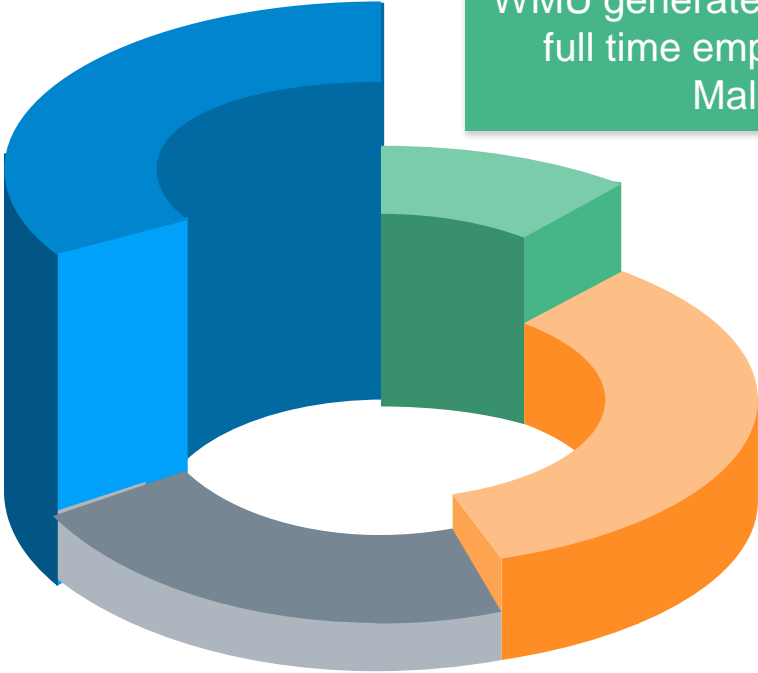
Nippon Foundation



28.2m 20.0m 3.1m

Top Three Donors in 2021 (SEK)

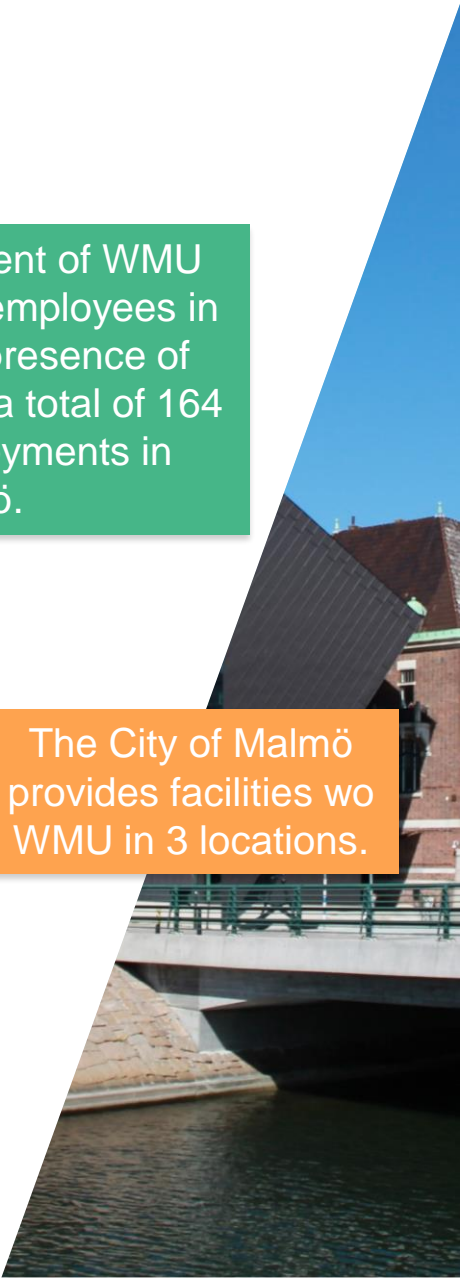
The direct, associated and indirect effects of WMU generated SEK 186 million of Malmö's GRP and 219 million of Sweden's GDP in 2019, compared with SEK 136 million in direct budget expenditures.



Out of the SEK 28 million each year, and WMU contributes approximately 7 million in tax revenue.

Direct employment of WMU was 70 full time employees in 2019, and the presence of WMU generates a total of 164 full time employments in Malmö.

The City of Malmö provides facilities wo WMU in 3 locations.



WMU AND SWEDEN

Project funded by the Ministry: Evaluate the effects of the COVID-19 pandemic on seafarers and develop recommendations to increase the profession's resilience in the face of future disruptions

Projects in collaboration with the Swedish Agency for Marine and Water Management (SwAM) and Trafikverket

Collaboration with the Swedish Maritime Administration, City of Malmö, Swedish Rescue Society, Copenhagen Malmö Port and many other Swedish institutions

**Milestone:
Accreditation of WMU
degrees by Sweden**

The strategic partnership between Sweden and WMU has resulted in:

- An impactful example of Sweden's contribution to the United Nations 2030 Sustainable Development Agenda and to the IMO, particularly investing in young talents and future leaders of maritime and ocean
- Internationalization culture and branding of Malmö and Sweden
- Long-lasting friendships and professional relationships benefitting tourism, trade and investment



WMU RESEARCH PRIORITY AREAS



Maritime

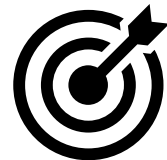
- ❑ RPA1: Maritime Energy Management
- ❑ RPA2: Maritime and Marine Technology and Innovation
- ❑ RPA3: Maritime Economics and Business
- ❑ RPA4: Maritime Social and Labour Governance
- ❑ RPA5: Maritime Law, Policy and Governance
- ❑ RPA6: Maritime Safety
- ❑ RPA7: Environmental Impact of Maritime Activities



Ocean

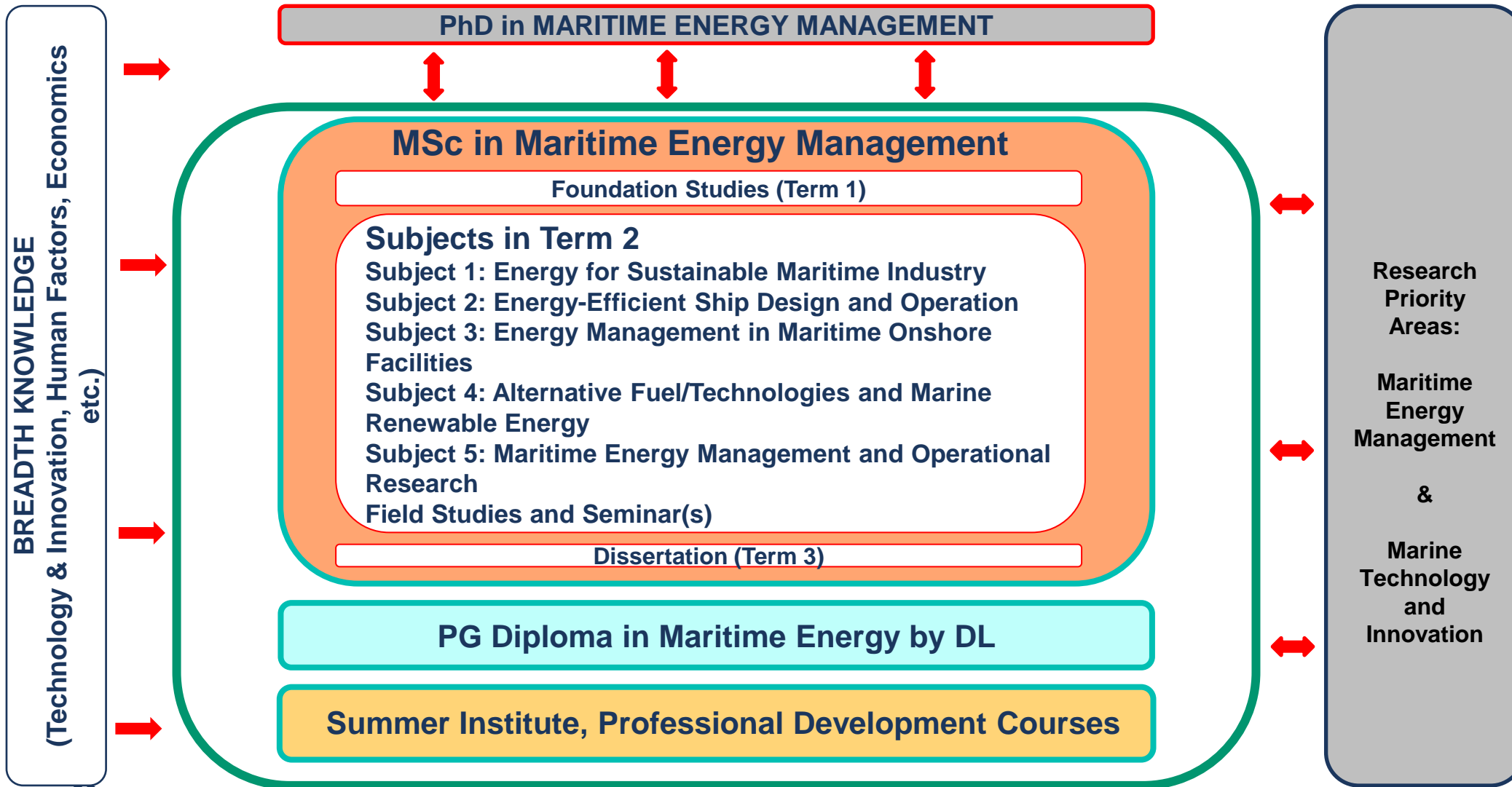
- ❑ RPA8: Navigational Right & Freedoms
- ❑ RPA9: Deep Blue: Capacity Building & Areas Beyond National Jurisdiction
- ❑ RPA10: Oceans, Climate Action & the UN 2030 Agenda
- ❑ RPA11: Blue Limits: Spatial Governance of Ocean Space & the Ocean/Coastal/Terrestrial Interface
- ❑ RPA12: Challenges in Ocean Governance

WMU RESPONSE: MAINSTREAMING MARITIME DECARBONISATION IN HIGHER EDUCATION



(Net) Zero/Low Carbon and Energy Efficient Maritime Industry

THE PG PATHWAY IN MEM STREAM



FUTURE MARITIME LEADERS



- ❑ The WMU is at the forefront of MEM education and research. Since 2016, WMU has offered a MEM specialization within the Master of Science in Maritime Affairs programme, and in 2018 launched a new postgraduate diploma programme in MEM by distance learning. MEM has been disseminating expertise to the graduates' home countries to maximize the global efforts towards decarbonization of international shipping.

- ❑ 77 Graduates from MSc in MEM (as of Nov'22)
 - ❑ 43 out of 77 are from Africa

- ❑ More than 50 Graduates in PG Dip in ME (former and current)

- ❑ Maritime administrations, ports, classification societies, shipping companies, shipyards, academic institutions and so on.

- ❑ Colleagues at IMO & Country delegation in plenary session of MEPC

- ❑

Including Maritime Professionals from LDCs and SIDS

RESEARCH IN MARITIME ENERGY MANAGEMENT (MEM)



- ❑ EU Funding from FP6, FP7, H2020 to Horizon Europe and Academic Partnership
 - ❑ CHEK (deCarbonizing sHipping by Enabling Key technology symbiosis on real vessel concept designs)
 - ❑ SEANERGY (Sustainability EducationAI programme for greeNER fuels and enerGY on ports”–SEANERGY Project)

- ❑ Regional Funding and Academic Partnership
 - ❑ Nordic Energy Research – CAHEMA (Concepts of ammonia/hydrogen engines for marine application)
 - ❑ Trafikverket – ETS Impact on International Shipping

- ❑ MSc dissertations (https://commons.wmu.se/mem_dissertations/)
 - ❑ WMU alumnus receives RINA Ian Telfer prize (<https://www.wmu.se/news/wmu-alumnus-receives-rina-ian-telfer-prize>)

- ❑ PhD Research
 - ❑ Wide Spectrum of Topics (energy modelling, ports/shipyards & MEM, economic measures, alternative fuels etc.)

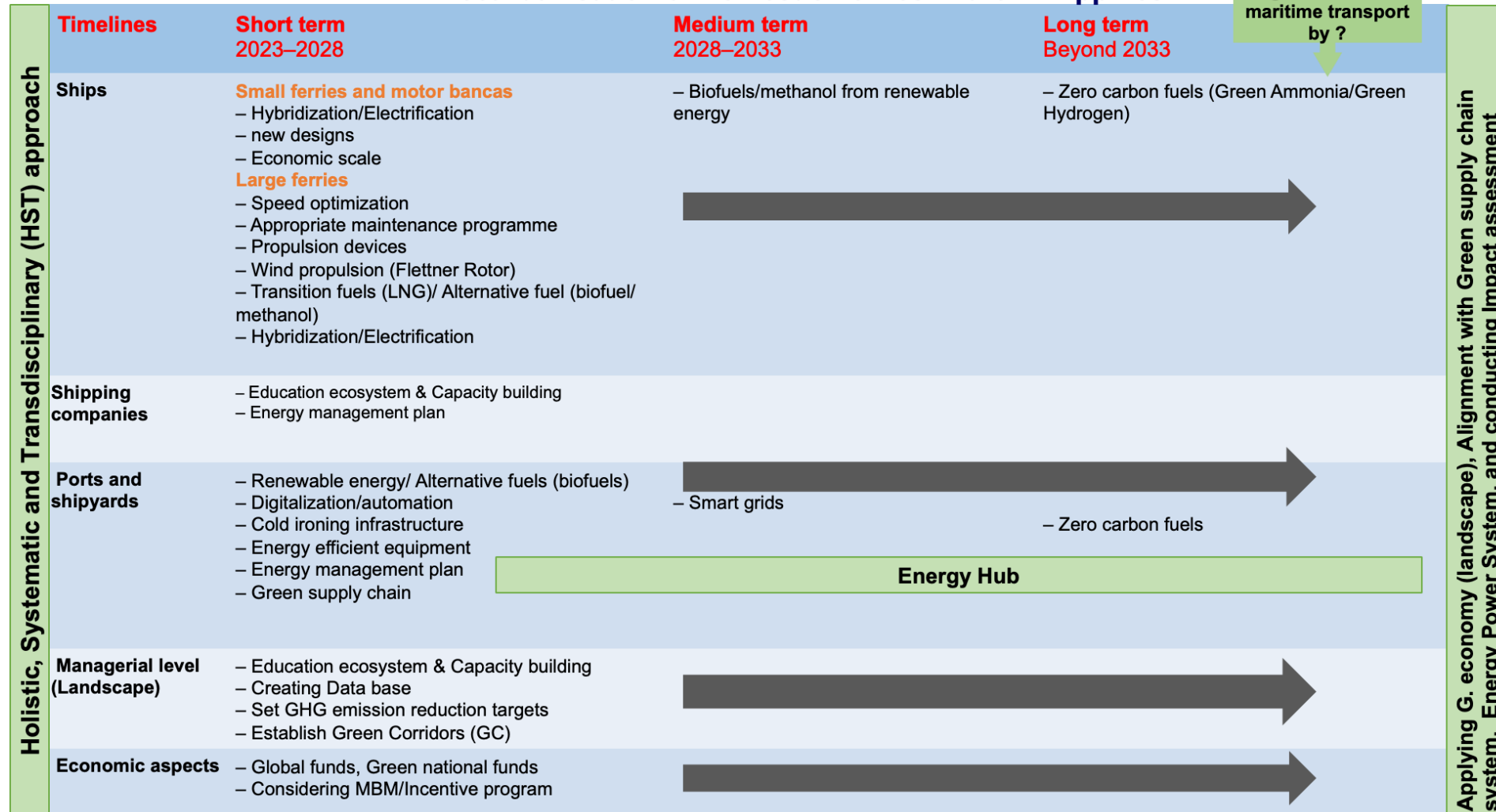
- ❑ Research Seminars/Webinars/Workshops

- ❑ Link curriculum content and delivery to research

WMU'S RECENT STUDY: IMO, WB AND IFC FUNDED PROJECT

Decarbonisation of Domestic Ferries in the Philippines

Target: Carbon free maritime transport by ?



COLLABORATION WITH IMO



- ❑ GMN Project (<https://www.wmu.se/news/maritime-energy-management-executive-development-course-delivered-in-london>)

- ❑ IMO-GHG Smart Project

- ❑ Potential scholarships for MEM MSc/PGDip

- ❑ IMO CARES Project



- ❑ Literature review on comprehensive impact assessment of the short-term measure as part of IMO's mepc76 (<https://www.wmu.se/news/wmu-literature-review-on-comprehensive-impact-assessment-of-the-short-term-measure-as-part-of-imos-mepc76>)

- ❑ Enhancing safety and energy efficiency of domestic passenger ships in the Philippines (<https://www.wmu.se/news/enhancing-safety-and-energy-efficiency-of-domestic-passenger-ships-in-the-philippines>)

THE WAY FORWARD

- ❑ Holistic and transdisciplinary view
- ❑ Right combination of thematic pillars and measures
 - ❑ With a Special Focus On **Innovation and Capacity Building**
- ❑ Mindset change and paradigm shift
- ❑ Global collaboration amongst all stakeholders
- ❑ Life-cycle perspective within energy and maritime supply chain
- ❑ Last but not least **INVEST ON FUTURE MARITIME LEADERS**
 - ❑ **(WMU as a Role Model)**

While keeping the following in mind:

- ❑ *Empowering women in the maritime industry and*
- ❑ *Building resilience for disruptions such as COVID-19*





THANK YOU!

