

# Excellence in Maritime Technology

---

Eleni Polychronopoulou  
President

22/10/2025

ΕΛΛΗΝΕΣ ΚΑΤΑΣΚΕΥΑΣΤΕΣ ΝΑΥΤΙΛΙΑΚΟΥ ΕΞΟΠΛΙΣΜΟΥ  
**HEMEXPO**  
HELLENIC MARINE EQUIPMENT MANUFACTURERS & EXPORTERS

# HEMEXPO – Who we are

---

HEMEXPO - Hellenic Marine Equipment Manufacturers and Exporters consists of leading Greek companies, specialized in manufacturing marine equipment and products, that invest in innovation and aim at extroversion.



- ✓ HEMEXPO companies operate advanced production plants in Greece, manned by highly competent engineers and scientific experts
- ✓ The companies manufacture innovative, patented and awarded products, certified by International Classes and implementing in-house R&D for marine equipment
- ✓ Established as one of the leading European maritime exporter associations, it offers a unified platform to support the global ambitions of its members and a collaborative link between these specialized companies and owners, class societies and shipyards worldwide.
- ✓ Established in 2014, HEMEXPO today counts 34 member companies.

# HEMEXPO - shaping the industry

Over the past decade, HEMEXPO has shaped the Greek maritime equipment industry, fostering innovation, partnerships, and excellence.



34

Member companies



677 MM

Total annual turnover of  
HEMEXPO member  
companies



39,5%

of HEMEXPO members'  
total sales are exports to  
markets around the globe



67.9%

of HEMEXPO member  
companies' total turnover  
comes from sales in the  
maritime industry



13.400

full-time jobs created or  
supported by HEMEXPO  
members



€2.0 B.

the contribution of  
HEMEXPO members to  
Greek GDP  
(nearly 1% of the country's  
GDP)

# HEMEXPO – Makers' List

HEMEXPO members deliver technologically advanced, high-quality, and globally competitive products. They remain at the forefront of a highly demanding market, exporting innovative marine equipment solutions worldwide. Today, more than 10,000 ships across the globe are equipped with systems manufactured by HEMEXPO members.



# HEMEXPO - Driving Maritime Excellence

HEMEXPO has been evolved into a major force in the Greek and International Shipping Industry and has proved to be a reliable partner for shipyards and shipowners. Main goals of HEMEXPO are :



**Sharing Business Intelligence**



**Promoting Smart Ship Solutions worldwide**



**Facilitate Access to EU R&D Funding**



**Ad hoc Projects**



# HEMEXPO – SEASTARS project



## SEASTARS - Sustainable Emission Abatement Strategies & Technologies for Advanced Revolution Ship

EU Horizon  
Europe  
Innovation Action

€7.2 million  
budget

2025-2027  
36 months  
duration

19 partners from  
8 countries



By 2027, SEASTARS will deliver a modular, replicable design and decision toolset in the format of a Platform-as-a-Service that allows shipowners to design, simulate, and invest in low-risk, future-proof vessels using eight vessel concepts (four retrofits and four newbuilds) covering inland, short-sea, and deep-sea shipping.”



# HEMEXPO - EU Projects Department

A newly established department dedicated to European funding initiatives, **facilitating access to EU programs** for HEMEXPO members and enabling them **to finance R&D**, develop new products and services, and expand their innovation capacity.

## Key Actions

### Identification of Opportunities

Continuous monitoring of EU programs (Horizon Europe, LIFE, Innovation Fund ext) to identify relevant calls.

### Consortium Building

Designing, networking and coordinating strong consortia that include HEMEXPO members and strategic partners.



# HEMEXPO – Building Momentum in EU Research & Innovation



25 proposals submitted in **18 months**, reflecting HEMEXPO's strong commitment to supporting Greek manufacturers in staying at the forefront of technological innovation.

## FUNDING PROGRAMMES

 **25** proposals submitted

13 x **HORIZON**

3 x **LIFE**

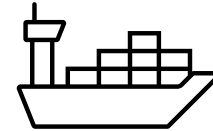
6 x **ERASMUS+**

1 x **Innovation Fund**

1 x **PPPA**

1 x **EIT KIC**

€ **65 m**  
total funding request for HEMEXPO companies



**13** shipping companies included in these consortia

## VESSEL TYPES

- Containership
- Crude oil tanker
- Passenger cruise ship
- Dry bulk carrier
- Electric passenger ferry
- Gas Carrier
- Inland passenger vessel
- Inland waterway cargo vessel
- LCO2 carrier
- Offshore vessels

## Key Technologies under research in these R&D Projects

Alternative fuels  
(LNG, methanol,  
hydrogen, biodiesel)

CO2 storage

Underwater  
Noise

Propulsion  
systems

Digital Twin

e-methanol

Predictive  
maintenance

Cold ironing (OPS)

EMS

Lithium-based swap  
container batteries

CO2 utilization

ESDs

CCUS

Wind  
propulsion

Hydrodynamic  
optimisation

Autonomous  
vessel

VLS-biodiesel with hydrogen  
enrichment/  
injection in 2-stroke engines

# Upcoming Horizon Europe Waterborne Calls

Topic Code	Topic Title	Call	Deadline	Action Type	Demo idea (site & scope)	External must-haves	Max EU grant (€M)	Suitable vessel types / shipowners
<a href="#">HORIZON-CL5-2026-01-D5-17</a>	Real-time monitoring of vessel & port emissions	Call 01-2026	20 Jan 2026	IA (70%)	Port demo: fixed + mobile sensing; stack/in-situ + fence-line + AIS fusion; automatic reporting to authorities.	TEN-T port authority(ies); enforcement authority; Cities Mission city; university/env. lab; classification input.	8.0	All calling vessels; priority: Ro-Pax ferries, cruise, container feeders, tankers & bulkers
<a href="#">HORIZON-CL5-2026-01-D6-10</a>	Integrating inland waterway transport (IWT) in smart shipping & multimodal chains	Call 01-2026	20 Jan 2026	IA (70%)	River–sea corridor pilot; digital twin of corridor; integration with port TOS/rail nodes.	IWT operator(s); logistics integrator; terminal operator(s); rail partner; public authority.	8.0	Inland cargo vessels & barges, river-sea ships, short-sea feeders
<a href="#">HORIZON-CL5-2026-05-D5-12</a>	Shipyards of the future (ZEWT)	Call 05-2026 (single stage)	14 Apr 2026	IA (70%)	Digitalised, flexible production lines; robotic/NDT cells; traceability & QA integrated with MES/PLM.	Shipyard(s) as demo sites; robotics lab; PLM/MES vendor; safety/cert partner.	10.5	Shipyards (industrial users)—not vessel-specific
<a href="#">HORIZON-CL5-2026-05-D5-14</a>	Ports of the future (ZEWT)	Call 05-2026 (single stage)	14 Apr 2026	IA (70%)	Smart/green port ops: OPS + HPCS charging, digital twin, alternative-fuel logistics, safety & cyber readiness.	Port(s); DSO/TSO; terminal operators; cyber partner; municipal/regional authority.	10.5	All port-calling vessels; emphasis on high-throughput segments (container, Ro-Ro/Ro-Pax, ferry, cruise)



# MARTECMA Members' Responses to HEMEXPO's Questionnaire

# MARTECMA Members' Responses to HEMEXPO's Questionnaire

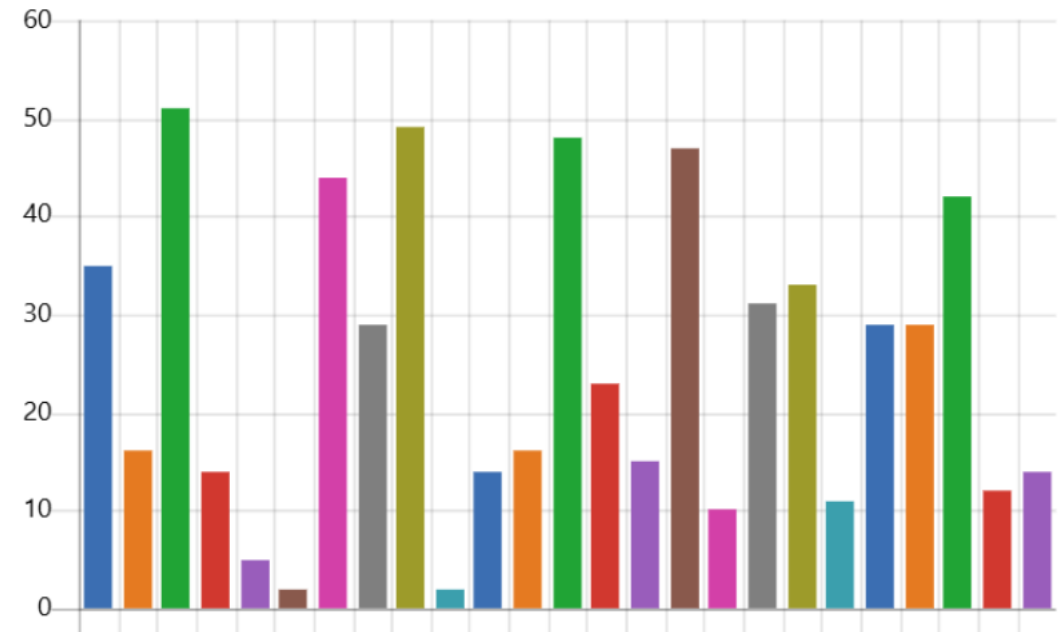
1. Were you aware of HEMEXPO before its presence in MARTECMA?



# MARTECMA Members' Responses to HEMEXPO's Questionnaire

## 2. Which HEMEXPO - marine equipment manufacturers - members are you already familiar with?

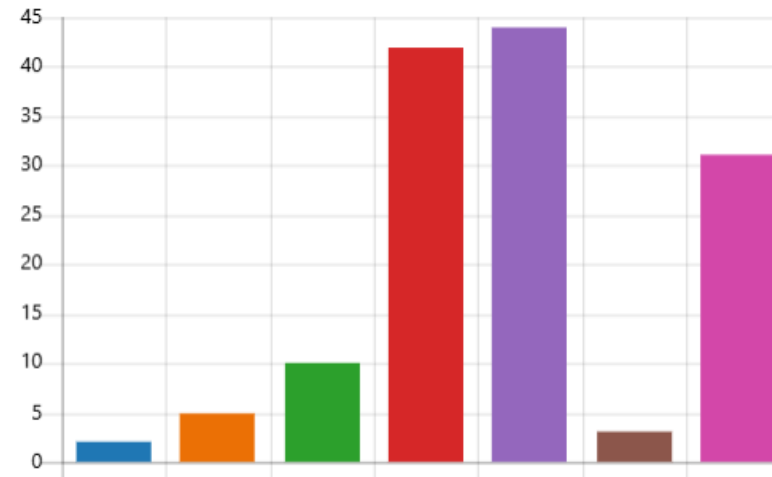
<span style="color: blue;">●</span> BELLOWS HELLAS	35	<span style="color: red;">●</span> GRECO STROM	23
<span style="color: orange;">●</span> CAPTAIN NEMO	16	<span style="color: purple;">●</span> KLEEMANN HELLAS	15
<span style="color: green;">●</span> D. KORONAKIS SA	51	<span style="color: brown;">●</span> LALIZAS	47
<span style="color: red;">●</span> DIVING STATUS	14	<span style="color: magenta;">●</span> MARITA HELLAS	10
<span style="color: purple;">●</span> ELVIK S.A.	5	<span style="color: grey;">●</span> PRISMA Electronics S.A.	31
<span style="color: brown;">●</span> EMMIS ABEE	2	<span style="color: olive;">●</span> PSYCTOTHERM	33
Engineering		<span style="color: cyan;">●</span> RAYCAP	11
Environmental Protection	44	<span style="color: blue;">●</span> SEABRIGHT	29
<span style="color: grey;">●</span> ERGOMATIC	29	<span style="color: orange;">●</span> UTECO	29
<span style="color: olive;">●</span> ERMA FIRST ESK Engineering	49	<span style="color: green;">●</span> VALIADIS S.A.	42
Systems		<span style="color: red;">●</span> VELA ELECTRIC LLC.	12
<span style="color: cyan;">●</span> ESS - European Sensor	2	<span style="color: purple;">●</span> VIOHALCO	14
<span style="color: blue;">●</span> Eurochem S.A.	14		
<span style="color: orange;">●</span> EVAL	16		
<span style="color: green;">●</span> FARAD S.A. Heat Exchangers	48		



# MARTECMA Members' Responses to HEMEXPO's Questionnaire

3. Which HEMEXPO - maritime services - members are you already familiar with?

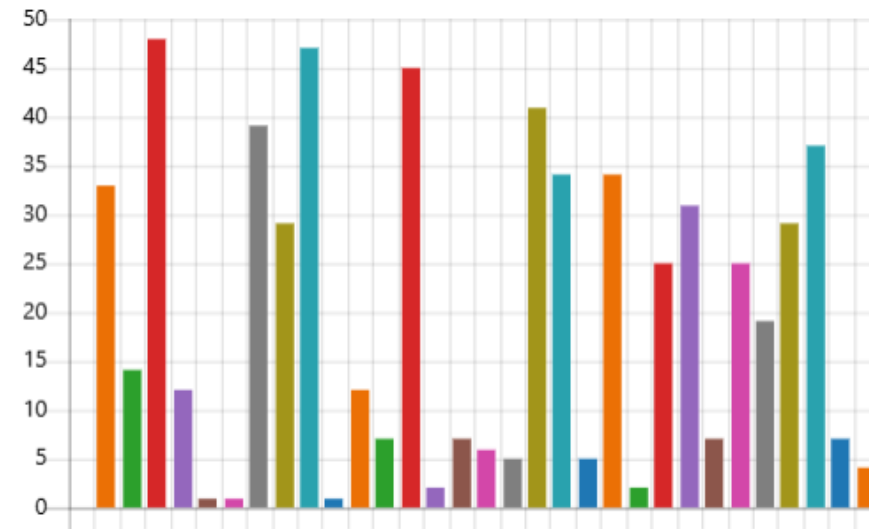
AMK Architecture & Design	2
FEAC Engineering P.C.	5
IQSOLUTIONS	10
MARINE TRAFFIC	42
NAFTIKA CHRONIKA	44
NAP ENGINEERING P.C.	3
SQLLEARN <a href="https://www.sqllearn...">https://www.sqllearn...</a>	31



# MARTECMA Members' Responses to HEMEXPO's Questionnaire

4. Which HEMEXPO members have you commercially interacted with (including cases where an offer was requested but not finalized)?

AMK Architecture & Design	0	GRECO STROM	7
BELLOWS HELLAS	33	IQSOLUTIONS	6
CAPTAIN NEMO	14	KLEEMANN HELLAS	5
D. KORONAKIS SA	48	LALIZAS	41
DIVING STATUS	12	MARINE TRAFFIC	34
ELVIK S.A.	1	MARITA HELLAS	5
EMMIS ABEE	1	NAFTIKA CHRONIKA	34
Environmental Protection Engineering	39	NAP ENGINEERING P.C.	2
ERGOMATIC	29	PRISMA Electronics S.A.	25
ERMA FIRST ESK Engineering	47	PSYCTOTHERM	31
ESS - European Sensor Systems	1	RAYCAP	7
Eurochem S.A.	12	SEABRIGHT	25
EVAL	7	SQLLEARN	19
FARAD S.A. Heat Exchangers	45	UTECO	29
FEAC Engineering P.C.	2	VALIADIS S.A.	37
GRECO STROM	7	VELA ELECTRIC LLC.	7
		VIOHALCO	4



## MARTECMA Members' Responses to HEMEXPO's Questionnaire

5. Would you find value in a centralized HEMEXPO platform listing all Greek marine equipment manufacturers and their solutions, with technical specs and reference projects?



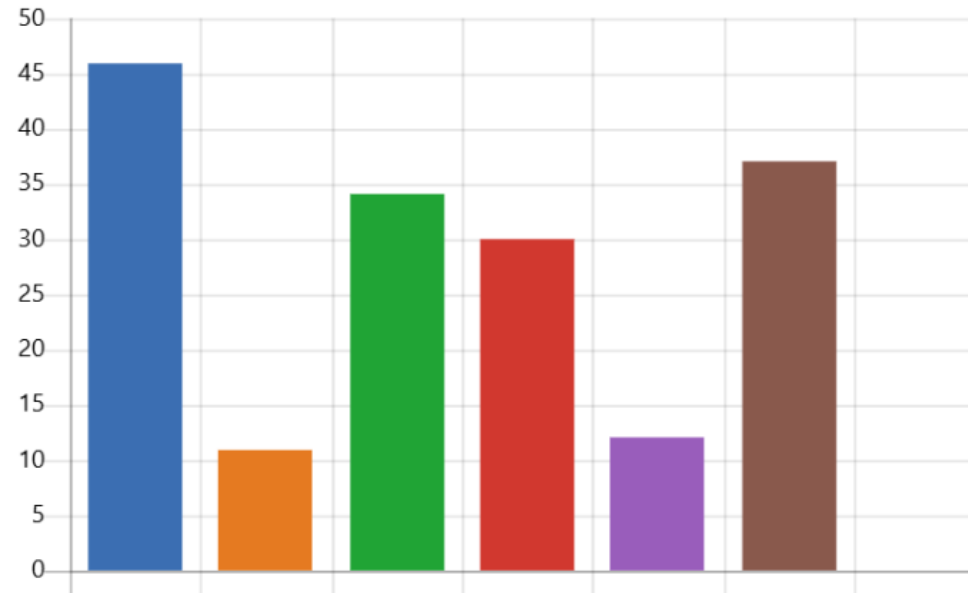
### Proposed Action:

- A new HEMEXPO website is currently under development, featuring all Greek marine equipment manufacturers and their solutions.
- In addition, a comprehensive Makers List has already been prepared and will be further enriched with detailed technical specifications and reference projects.

## MARTECMA Members' Responses to HEMEXPO's Questionnaire

6. What are the main barriers you face when evaluating or adopting new marine technologies or systems?

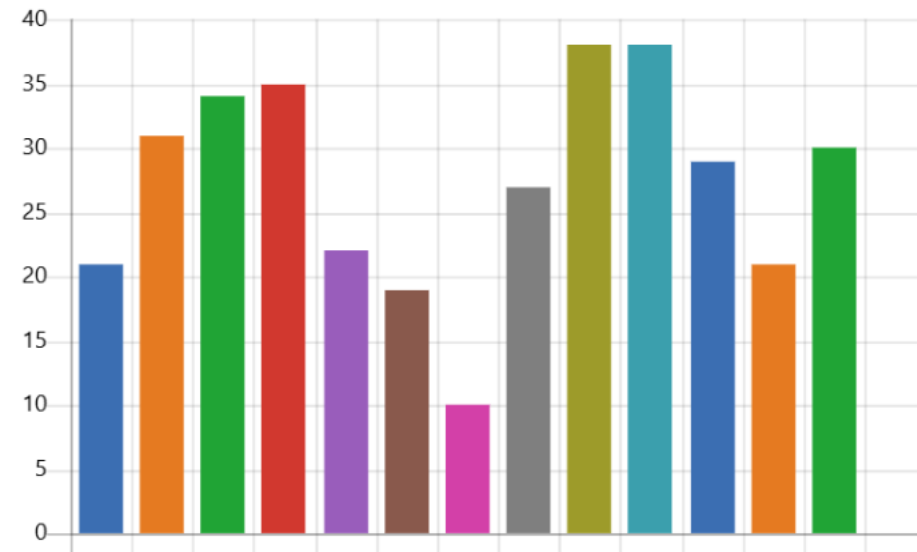
● Cost constraints / ROI concerns	46
● Integration with legacy systems	11
● Crew training requirements	34
● Reliability and after-sales supp...	30
● Lack of trust in new vendors	12
● Regulatory uncertainty	37
● Other	0



# MARTECMA Members' Responses to HEMEXPO's Questionnaire

7. Which of the following technical topics would be of practical value to you if explored through expert-led white papers or short technical presentations by HEMEXPO members?

● Smart HVAC Systems: Efficiency & Compliance in Marine Applications	21
● LED Lighting: Durable, Intelligent Solutions for Harsh Marine Environments	31
● Electric Motors: Optimizing Performance, Maintenance & Power Electrification	34
● Health check for condition-based maintenance of Electric Motors	35
● Waste Heat Recovery: Lessons from Operational Vessels & Pilot Projects	22
● Battery Systems: Use Cases, Barriers & Future Role in Deep-Sea Vessels	19
● Shipborne Networks: pushing towards digitalization, automation, remote operation, and cybersecurity compliance	10
● Measurement and Sensor Calibration Techniques	27
● Energy-Saving Devices in Shipping: 10 Years On – Current Adoption, Technology Readiness, and Future Outlook	38
● Biofuels and Alternative Energy Carriers: Beyond Hydrocarbons in the Maritime Sector	38
● Digitalisation and Energy Efficiency: The Role of AI, Data Analytics, and Smart Routing in Decarbonisation	29
● Hybrid and Full-Electric Propulsion: Lessons Learned and Remaining Barriers	21
● Onboard Carbon Capture: Technical Challenges and Pathways to Integration	30
● Other	0



## Proposed Action:

➤ MARTECMA could allocate 15 minutes during each of its meetings for these presentations. The topics would be scheduled in order of priority, beginning with those that attracted the greatest interest.

# MARTECMA Members' Responses to HEMEXPO's Questionnaire

8. How open would your technical department be to participating in early-stage pilots or proof-of-concept projects with Greek manufacturers?

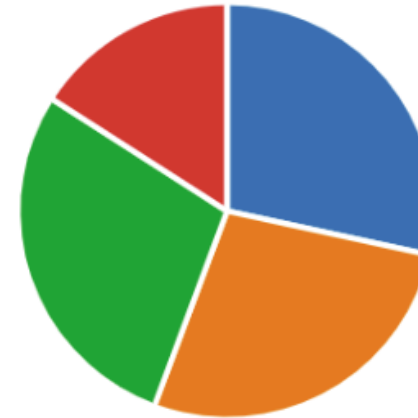
● Very open	8
● Open under the right conditions	34
● Limited interest	8
● Not open at this time	3
● Other	0



## MARTECMA Members' Responses to HEMEXPO's Questionnaire

9. Apart from formal EU-funded collaborations (e.g. Horizon programs), what other types of partnerships or cooperation would you consider valuable between shipping companies and marine equipment manufacturers?

● Joint development projects	25
● Technology pilots	24
● Digitalization initiatives	25
● Lifecycle support programs	14
● Other	0



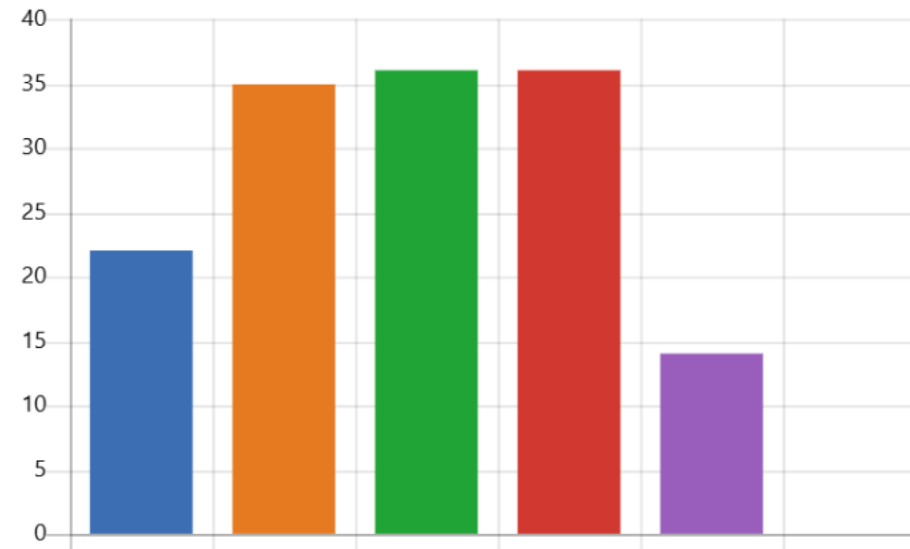
### Proposed Action:

- We would focus on pilot projects proposals solely to MARTECMA members.

## MARTECMA Members' Responses to HEMEXPO's Questionnaire

10. How do you prefer to stay informed about new marine technologies and equipment?

● Direct contact from vendors	22
● Technical articles / white papers	35
● Presentations at conferences or exhibitions	36
● Online webinars or videos	36
● Peer recommendations	14
● Other	0

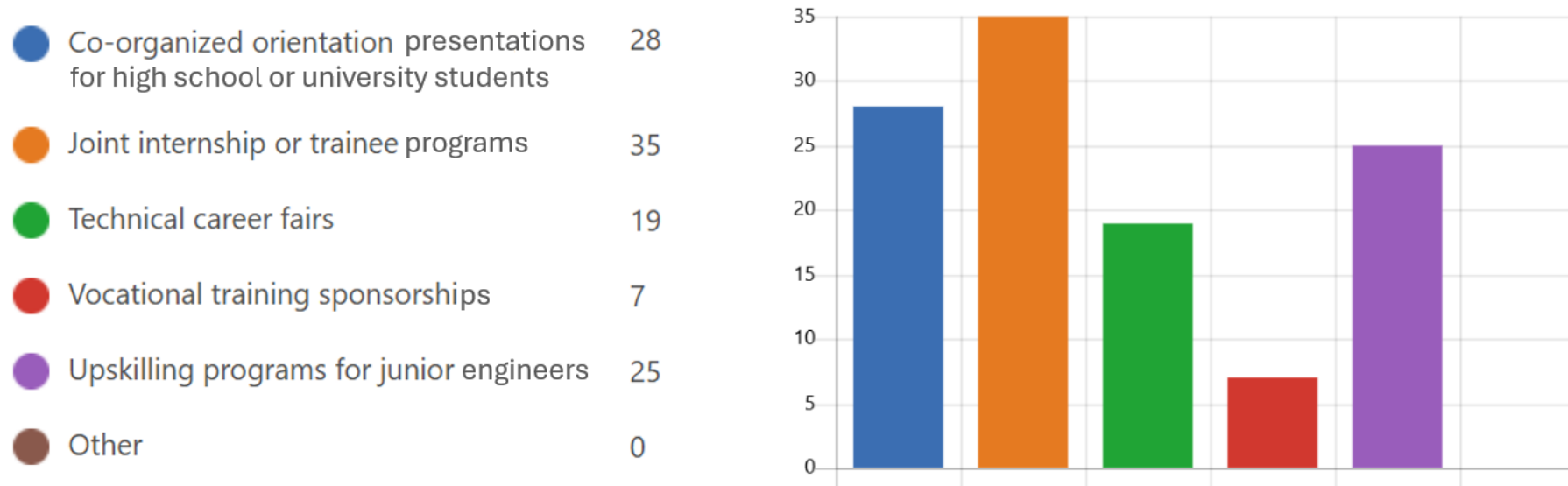


### Proposed Action:

➤ We would focus on providing white papers, webinars and videos solely to MARTECMA members

## MARTECMA Members’ Responses to HEMEXPO’s Questionnaire

11. There is increasing competition for specialized technical personnel, as both Greek shipping companies and equipment manufacturers often rely on the same limited talent pool. What joint initiatives between our associations (HEMEXPO & MARTECMA) would you consider useful to address this challenge?



### Proposed Action:

- A joint working group will be established to prepare proposals in the field of undergraduate and graduate student orientation programs, as well as personnel training for shipping companies.

## MARTECMA Members' Responses to HEMEXPO's Questionnaire

12. Finally, beyond the topics mentioned above, do you have any recommendations for activities or initiatives that HEMEXPO or its members could develop to better support MARTECMA or the technical departments of shipping companies?

1. *Martecma following up all on excellent status and informing his members*
2. *JV projects on existing vessels of MARTECMA members. The results of such projects will be shared within the MARTECMA group and, subject to the Owners' approval, may also be published online.*
3. *HEMEXPO FORUMS*
4. *Special Rates for Members*
5. *HEMEXPO MEMBERS TO volunteer in offering solutions for retrofits of their nature when such needs arise from the technical departments. Technical Directors/Managers should address upfront relevant enquiries to them.*
6. *R&D and feedback via MARTECMA*
7. *It will be very prudent to initialize a task force for addressing specific technical challenges. In detail, we would like to see ways to enhance ship maintenance, maybe ways to reduce emissions.*
8. *Their activities and equipment selling/supplying to ship-builders. In short reference of activities on the newbuilding sector.*
9. *To provide measurable results, basis on actual cases, honest and trustworthy replies, analyses when it comes for demonstration to shipping companies.*

## Proposed Actions

- 15 minutes presentations. The topics would be scheduled in order of priority, beginning with those that attracted the greatest interest.
- Proposals for Joint Development programs
- Webinars, white papers and videos for MARTECMA.
- A comprehensive Makers List with detailed technical specifications and reference projects available to MARTECMA
- A joint working group to prepare proposals in the field of undergraduate and graduate student orientation programs, as well as personnel training for shipping companies.



Thank you!



Stay tuned!