Submission from SYNDARMA and ABEAM

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Prezados,

Seguem abaixo as propostas do Sindicato Nacional das Empresas de Navegação Marítima (SYNDARMA) e da Associação Brasileira das Empresas de Apoio Marítimo (ABEAM) para a construção do Mapa do Caminho para a Transição dos Combustíveis Fósseis.

Atenciosamente

Contributions from the Offshore Support Vessels Sector to the Roadmap for the Energy Transition

1. Main barriers to the transition and to get rid of fossil fuels

The energy transition in the maritime transport sector, particularly in offshore support vessels, faces barriers beyond the availability of alternative fuels — primarily operational reliability (notably for vessels operating in dynamic positioning systems), technological maturity, and regulatory predictability.

In the offshore support vessel context, characterized by dynamic operations, variable load regimes and high safety criticality, the adoption of new fuels requires robust

validation under real-world operating conditions. The lack of consolidated data on performance, transient response and behavior in critical scenarios represents a significant decision-making barrier for operators.

Moreover, regulatory uncertainty regarding acceptance, class rules and safety requirements for alternative fuels in the maritime environment constrains investment and delays scale-up initiatives. This situation is worsened by the absence of specific guidance for segments such as offshore, whose operational demands differ substantially from other sectors.

A further critical issue is the misalignment between decarbonization targets and the operational realities of maritime systems. Mandating solutions that are not yet fully mature may introduce risks to safety and operational continuity, especially in environments where failures are intolerable. Finally, there is a clear need for adequate bunkering and logistics infrastructure for alternative fuels, which remains nascent at many offshore operational hubs.

2. Mechanisms and levers to accelerate implementation

Accelerating the energy transition in maritime support requires a coordinated mix of regulatory, technological and financial instruments tailored to the sector's specificities. Key mechanisms include implementing applied research programs and operational validation of alternative fuels in real maritime environments, with emphasis on dynamic positioning operations and critical conditions. Offshore support vessel pilot projects can play a central role in reducing technical uncertainty and building sector confidence.

Establishing national sustainable maritime corridors, particularly in regions with strong offshore presence, is an important lever, enabling concentration of infrastructure, operational standardization and economies of scale.

Public policies that promote regulatory predictability and long-term stability are essential to enable capital-intensive investments. Risk mitigation instruments — such as energy transition funds and targeted financing mechanisms — can accelerate the adoption of new technologies.

In the Brazilian context, integration with the biofuels value chain, notably ethanol, biodiesel and biomethane, represents a strategic opportunity, leveraging established routes and reducing the need for extensive structural adaptation.

Finally, fostering transitional solutions, such as fuel blends and retrofits, is recommended to achieve progressive emissions reductions without compromising operations.

3. Roadmaps, best practices and lessons learned

Brazil's experience in large-scale deployment of biofuels for export (particularly ethanol and biodiesel) offers relevant lessons for building energy-transition roadmaps, especially regarding regulatory predictability, value-chain integration and the use of carbon-intensity–based instruments.

An effective approach is to define gradual, segmented trajectories by operation type, recognizing that different sub-sectors have varying levels of technological maturity and adaptive capacity. For maritime support, a dedicated roadmap is recommended, with distinct phases for validation, transition and consolidation.

Best practices include regulation of the Fuel Life Cycle Assessment policy currently under consideration at the IMO — to which the Brazilian delegation has contributed substantially — especially on fuel consumption measurement per estimated unit (contribution from SYNDARMA-ABEAM), sustainability criteria, and fuel quality and certification as tools to measure carbon intensity, enabling comparability across technology routes and avoiding distortions in public policy formulation.

Another key lesson is the importance of integrating energy, industrial and logistics policy to ensure the expansion of alternative fuels is accompanied by appropriate infrastructure and technical capacity building.

In the Brazilian offshore context, there is a unique opportunity to position the country as a testing ground for validating alternative fuels in real operational environments, leveraging industrial capacity, biomass availability and operational complexity. While this opportunity has been pursued on an individual basis, clearer governmental incentives and support could accelerate national positioning at an international level.

4. Fair and orderly transition considering different realities

A fair and orderly energy transition must recognize different operational realities, development levels and degrees of fossil-fuel dependence across countries and sectors.

For offshore support vessels, the transition should be progressive and technically grounded, ensuring that the introduction of new fuels does not compromise operational safety or system integrity.

It is crucial to avoid approaches that disregard the specificities of critical segments with unique characteristics — such as offshore, where energy reliability is essential to maintain vessel controllability, particularly when working near platforms at operational distances that may be necessarily, in many cases, less than 25 meters from a platform

or another vessel. Accordingly, the transition should be based on criteria of technological maturity, operational validation and infrastructure availability.

Transition policies must also include workforce training programs, since adopting new fuels entails significant changes in operations, maintenance and risk management.

In Brazil's context, prioritizing biofuel pathways offers not only an environmentally efficient alternative but also a strategy for economic development and social inclusion, aligned with the country's comparative advantages.

Finally, the transition should follow a staged approach with clear, flexible targets to ensure predictability, regulatory certainty and alignment between climate objectives and operational feasibility.