



**U.S. Center for
Maritime Innovation**

U.S. Center for Maritime Innovation (USCMI)

NSRP Workforce & Compliance Panel
May 2025

Agenda

- Safety Moment
- Antitrust Statement
- Update and Outlook on USCMII Implementation
- Preliminary Strategic Research Priorities
- Engagement on Candidate Projects for the Initial Research Portfolio



Safety Moment



Antitrust Statement

We are meeting today in furtherance of the USCM's goal of promoting innovation across the U.S maritime transportation system.

Although these purposes are procompetitive and recognized to be legitimate and permissible under the antitrust laws, we still need to remember that some organizations may be competitors of one another and that, if the discussion strays from permitted topics, it might later raise suspicions that parties engaged in anticompetitive conduct and subject parties to potential antitrust investigation or an antitrust lawsuit.

Accordingly, participants should avoid any discussions of any participants prices, profits, bids, plans, suppliers, or other matters of competitive sensitivity.





**U.S. Center for
Maritime Innovation**

USCMI Update and Outlook

Mission Scope of the USCM

- National resource for research, development, and demonstration projects supporting maritime innovation in a range of potential subject areas
- Includes interest in all types of vessel, port/port facility, and other marine transportation issues
- Primarily focused on US maritime issues as well as associated international maritime interconnections
- Coverage of the diverse issues of interest in different geographical regions of the country
- Accessible for funding from MARAD, other agencies, and even private funding of projects



**Maritime
Energy**



**Maritime
Operations**



**U.S. Maritime
Competitiveness**



**Maritime
Resilience**



Current & Upcoming Activities

Completed

- Cooperating Agreement and Kickoff
- Initial Research Partner & Stakeholder meetings
- Initial Meetings with Consultative Panels
- Numerous Presentations & Engagement Session on Behalf of the USCM I
- Working Group Definitions and SME Partner Outreach
- Standard Operating Principles (SPS)
- Preliminary Strategic Research Priorities (SRP)
- Administration Alignment Pause & Adjustment
- Public Facing Website
- Launch of Initial Project Funded by ABS for Inland Waterway Maritime Fuels/Power with Vanderbilt University
- Preliminary Research Project Portfolio

Current

- Registering Members for Technical and Regional Working Groups
- Planning for Convening Initial Working Group Meeting (Phased Approach)
- Finalizing Initial Research Project Portfolio & Execution Strategy
- Discussions with Third-parties on Joint Project Opportunities with the USCM I (co-funded work)
- Ongoing Presentation & Engagement Sessions to Grow the USCM I Research Partner and Stakeholder Coalition
- Positioning USCM I for Key Roles Associated with U.S. Maritime Policy

Upcoming

- Convening and Managing Engagement of Working Groups
 - Technical working groups
 - Regional working groups
 - Consultative panels
- Initial Research Project Portfolio Execution
- Ongoing Presentation & Engagement Sessions to Grow the USCM I Research Partner and Stakeholder Coalition
- Securing Additional Funding for USCM I Research Projects



SOP Document

- Roles & Responsibilities of Operating the USCM
- Research Planning and Execution
- Assigning Research Projects
- Overseeing Research Projects
- Supporting Technology Transfer/Sharing
- Hosting Events and Workshops
- Securing Funding for the USCM
- Performing Administrative Functions for Operating the USCM





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Engagement & Outreach

- Key Maritime Conferences, Meetings, and Events
- Agency-specific Engagements (ARPA-E, ONR, DOE EERE, etc.)
- National Security Council Maritime Directorate
- SHIPS for America Act Sponsors
- Various Individual Engagements with Research Partner and Other Stakeholder Organizations

- Maritime Strategy Workshop Hosted by ABS, the Federal Maritime Commission, and the offices of Rep. Waltz and Sen. Kelly in Washington DC (October 15-17, 2024)
- Smoky Mountain Mobility Conference hosted by ORNL in Chattanooga, TN (October 31, 2024)
- ABS North American Regional Committee Meeting in Houston (November 7, 2024)
- Blue Sky Maritime Coalition Speakers Series (virtual) (December 19, 2024)
- Transportation Research Board in Washington DC (January 6-9, 2025)
- AAPA Power Summit in Tampa, FL (January 22, 2025)
- NYSERDA Maritime Strategy Team for NY State (January 24, 2025)
- NPS Workshop at University of South Carolina (February 12-13, 2025)
- AWO Inland Waterways Working Group (March 11, 2025)
- AASHTO Council on Water Transportation (March 12, 2025)
- USCMJ Research Partner and Stakeholder Update Meeting Hosted by ABS (March 27, 2025)
- Port of the Future in Houston, TX (April 1-3, 2025)
- NPS Consortium Briefing (April 11, 2025)
- Smart Maritime Network (April 15, 2025)
- TRB Conference on Innovation Science and Technologies (June 23-26, 2025)



Preliminary Strategic Research Priorities

[Website: www.uscml.org](http://www.uscml.org)



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🔊 USCMI Technical Working Groups Kicking Off Soon. [Join here](#)

Welcome

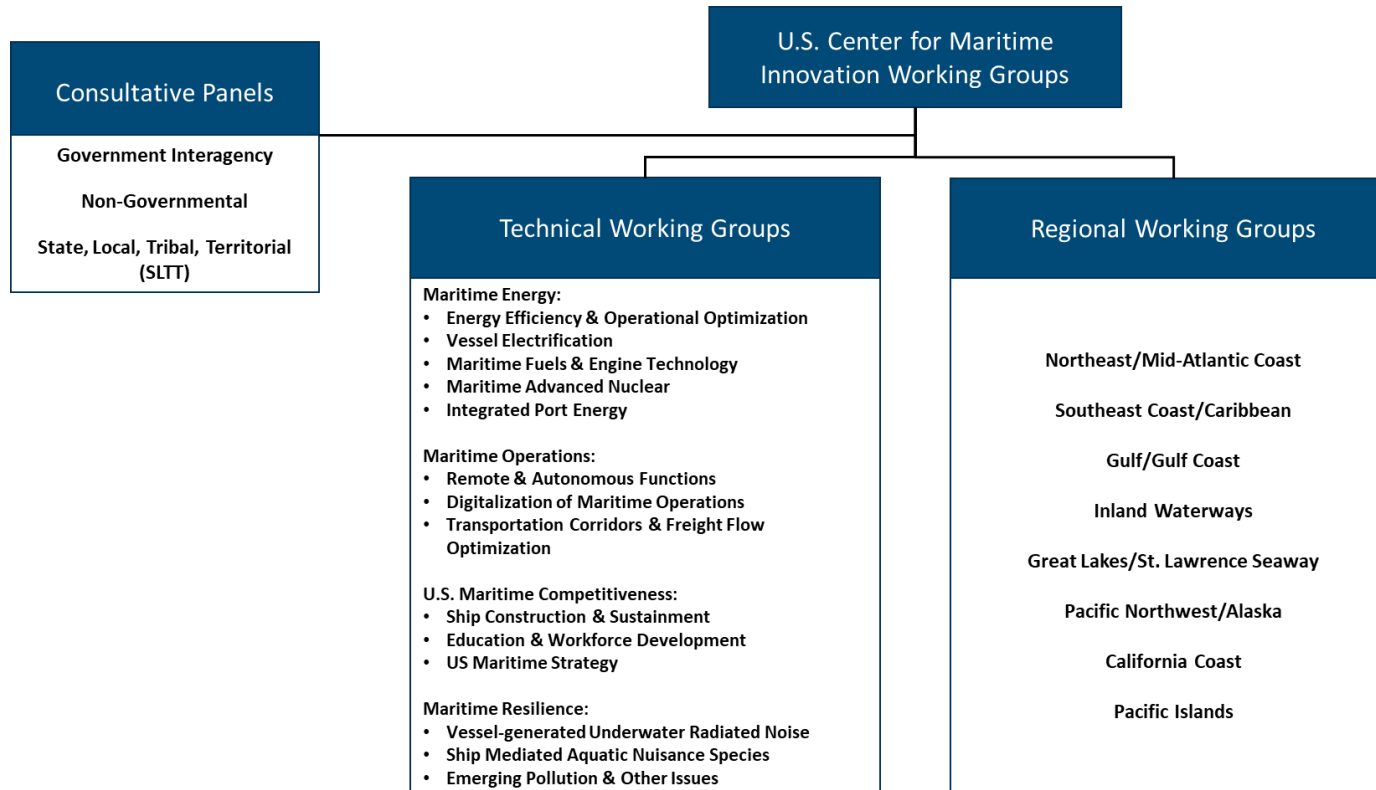
U.S. Center for Maritime Innovation

Authorized by the U.S. Congress, the Center is intended to support the study, research, development, assessment, and deployment of emerging marine technologies and practices related to the U.S. maritime transportation system (MTS)

[Learn more](#)



USCMI Working Groups & Panels



Working Group Name	5/15/25	Change Diff	% Change
Energy Efficiency & Operational Optimization	67	25	37%
Vessel Electrification	60	26	43%
Maritime Advanced Nuclear	56	24	43%
Integrated Port Energy	58	24	41%
Maritime Fuels and Engine Technology	61	26	43%
Vessel-generated Underwater Radiated Noise	50	25	50%
Ship Mediated Aquatic Nuisance Species	44	23	52%
Emerging Pollution Issues	52	23	44%
Marine Transportation System Risks	65	24	37%
Remote & Autonomous Functions	61	24	39%
Digitalization of Maritime Operations	66	24	36%
Transportation Corridors & Freight Flow Optimization	59	24	41%
Ship construction and Sustainment	62	25	40%
Education & Workforce Development	64	23	36%
U.S. Maritime Strategy	75	24	32%
Northeast/Mid-Atlantic Coast	54	25	46%
South Coast/Caribbean	46	24	52%
Gulf/Gulf Coast	55	23	42%
Inland Waterways	46	24	52%
Great Lakes/St. Lawrence Seaway	44	23	52%
Pacific Northwest/Alaska	47	24	51%
California Coast	46	23	50%
Pacific Islands	39	24	62%
General News and Updates	94	27	29%





**U.S. Center for
Maritime Innovation**

Strategic Research Priorities (SRP)

SRP Document

- Authorization Priorities
- Process for Identifying Research Priorities
- Strategic Research Priorities in the Four Major Domains



*Strategic Research Priorities (SRP)
for the U.S. Center for Maritime Innovation (USCMI)*

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Inputs to Strategic Research Priorities

The USCMCI presents a unique opportunity to help build research priority alignment among government agencies and with industry, academia, and other stakeholders to best advance the interests of a safer, more secure, and competitive MTS.

- MARAD META Priorities
- USCMCI Working Groups & Panels
- Broader Stakeholder Engagement
- Secretariat Input
- Priorities Identified or Expressed by Other Organizations

The USCMCI provides the collaborative forum to approach research in a new way – not just issuing competitive grants/contracts for project execution, but rather formulating collaborative teams that bring together many stakeholders in new ways. There are many specific technical challenges to address, but the fundamental challenge is changing the approach to maritime innovation.

The USCMCI also serves as a clearinghouse for maritime innovation research and best practices.

-- USCMCI SRP Document



Setting Research Priorities

Research Priority Decision Factors

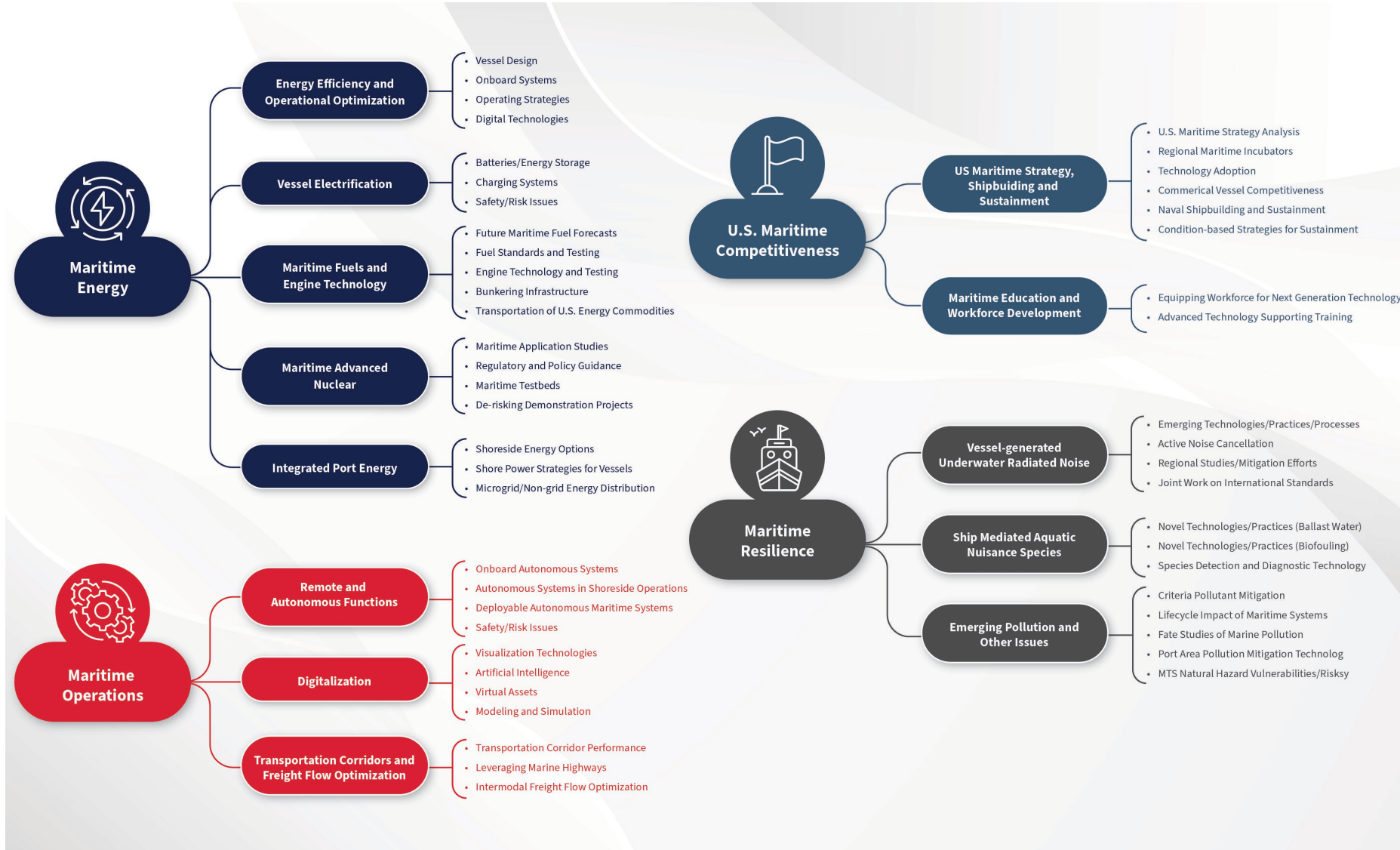
- Alignment with the stated USCMII strategic priorities and research agenda
- Alignment with other national plans/priorities (Administration, Congress, other agencies, etc.)
- Project specific funding availability (such as sponsorship from other agencies or public-private partnership sponsorship)
- Continuation/extension of long-term, high priority initiatives
- Project mix (not just focused on one technical or geographic domain)
- Value proposition of the project for the MTS community
- Compelling public/community impacts
- Ability to fit within available funding constraints

Areas of Emphasis

- Critical evaluation of current state of knowledge, technology, and operating practices in the marine industry to produce best available practice guidance and information clearinghouses/data sets that provide trusted information to decision makers across the industry
- Transition of promising technology solutions at low Technology Readiness Levels (TRLs) to higher TRLs via technology demonstrations and evaluations
- Performance evaluation and/or verification and validation of technology solutions (at various stages of development and testing)
- Early-stage maritime innovation projects
- Innovation in maritime education and workforce development to keep up with changing technologies and the needs of the future workforce
- Specialized technical analysis and evaluation to support major transformational initiatives in the maritime domain



Preliminary Strategic Research Priorities



Key USCM I Points of Contact

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**U.S. Center for
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Thank you