

### **Decarbonization Research Consortium**

**WELCOME** 

16 October 2023

nps.edu/decarb



#### Decarbonization Research Consortium Meeting 16 October 2023 / 2 – 4 pm ET / 11 am – 1 pm PT Agenda

Follow-up from September Meeting

Status of Roadmap

Penn State University

Colorado State University

United States Naval Academy

Conclusion



## Consortium Next Steps

- Develop and implement Collaboration Strategy with core partners
  - Continue potential research opportunity identification process



# **Collaboration Strategy**

- Develop and mature a robust collaboration strategy, with <u>six</u> core communities
  - Current Consortium group foster increased collaboration amongst Consortium members
  - Internal Navy and other DoD operational energy, climate and resilience constituencies
  - Other USG Agencies DOE/ARPA-E, DOT, and others (e.g. NASA, EPA, NOAA, etc.)
  - International partners NATO, TTCP\*, Pacific Islands Partnership, etc.
  - Industry potentially via the DOT/MARAD U.S. Center for Maritime Innovation (in work)
  - Academia identify leading researchers in other technology areas
- Two major goals for collaboration activities are:
  - Better understand ongoing efforts and identify most impactful areas of research to guide and prioritize future years' research agenda
  - Identify appropriate Navy "role" in various thrust areas, considering:
    - Leverage government-wide approach and R&D portfolios of other partner entities
    - Navy unique requirements that may not otherwise be addressed

\* TTCP – The Technical Cooperation Program (US, UK, Canada, Australia, New Zealand)



## **Consortium Next Steps**

- Develop and implement Collaboration Strategy with core partners
  - Continue potential research opportunity identification process
- Execute Year 1 Research Agenda
  - Support required Navy-project team collaboration and data collection
  - Develop project specific S&T evolution pathways with each funded research team
- Assess impact of Year 1 research concepts and technologies to overall Navy decarbonization objectives
  - Further develop Roadmap to include more specific targets, as needed
- Align with other roadmap and data collection efforts
  - Work with other efforts to develop methodology to synthesize R&D and project information across technical areas for efficiency, leverage and gap identification purposes
- Explore applying Consortium model and findings to Aircraft
  - Aligns with other NPS work in OE/IE Nexus



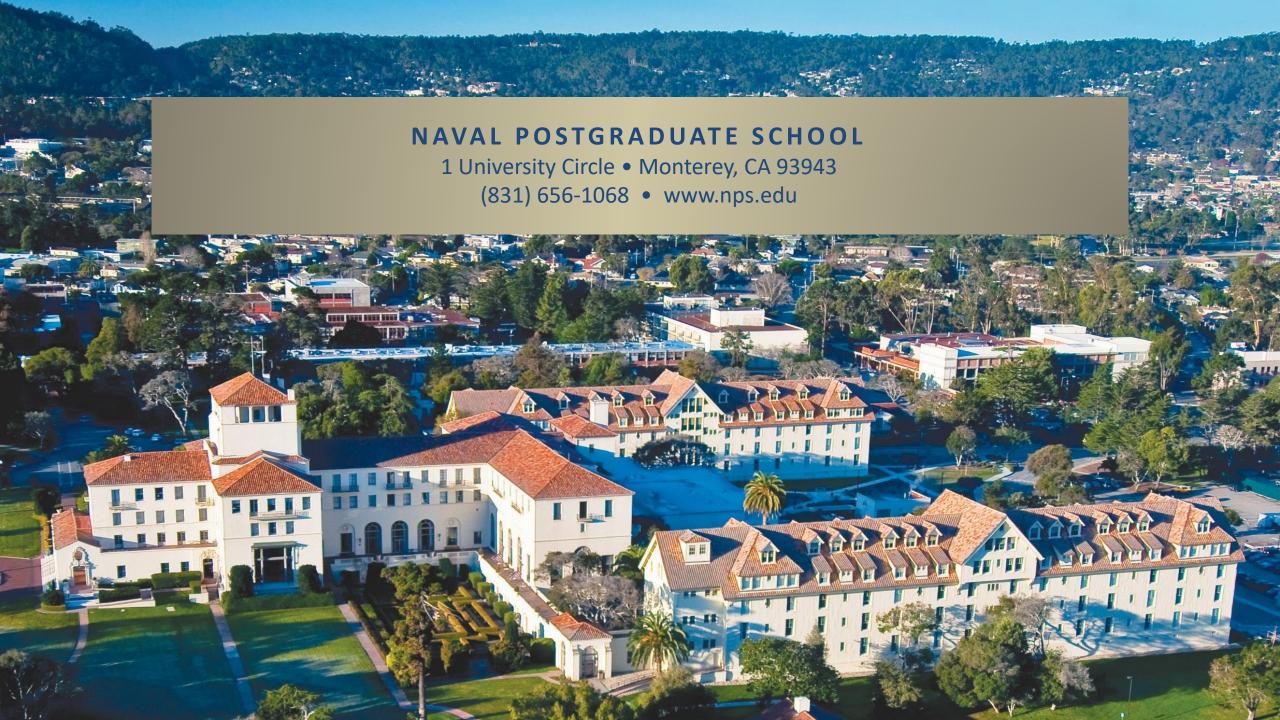
## Progress – Research Area Identification

- 1) Issuance of RFP at NPS for research topics
  - 1) Due 18 October
- 2) Discussions with internal Navy communities dates TBD
  - Aircraft: ONR/NAVAIR/AFRL
  - Deeper dive with Navy TWH community
    - Core question: For maritime platforms, what did we miss in Year 1 that deserves more focus in Year 2?
- 3) Questions/comments/discussion?



# **Progress - Collaboration**

- 1) Internal Consortium support execution of Year 1 research agenda
- DOE/DOT (and other USG)
  - Ongoing discussions with Dan Yuska at MARAD
  - Initiated discussion with DOE fuels/maritime POC (Josh Messner)
  - Working align a KO meeting with Navy leadership, DOE and DOT to set out parameters of this collaboration approach
    - Potential MOU/MOA TBD
- 3) Industry work with Dan Yuska, at MARAD
  - 1) Longer-term likely to be via the US Center of Maritime Innovation
  - 2) Nearer-term need to work with Dan Yuska on a nearer-term path utilizing existing agreements, etc.
- 4) International recent discussion with Singapore Navy, with focus on fuels
- 5) May look to have DOE and/or DOT present to this group at an upcoming meeting TBD
- 6) Questions/comments/discussion?





#### **Decarbonization Research Consortium**

#### **Path Forward**

November 30 November (virtual); 1300 – 1500 ET

December No Meeting

January Virtual Meeting, Date TBD

February Date TBD: In-person Full Day

**Location Colorado State University** 

Agenda will focus on Research Presentations & discussion.

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