



Toward Decarbonization: The Future of Marine Energy & Propulsion *An Inland Waterways Perspective*

2021 Marine Board Virtual Fall Meeting
November 17, 2021



**The American
Waterways Operators**

The Tugboat, Towboat & Barge Industry Association

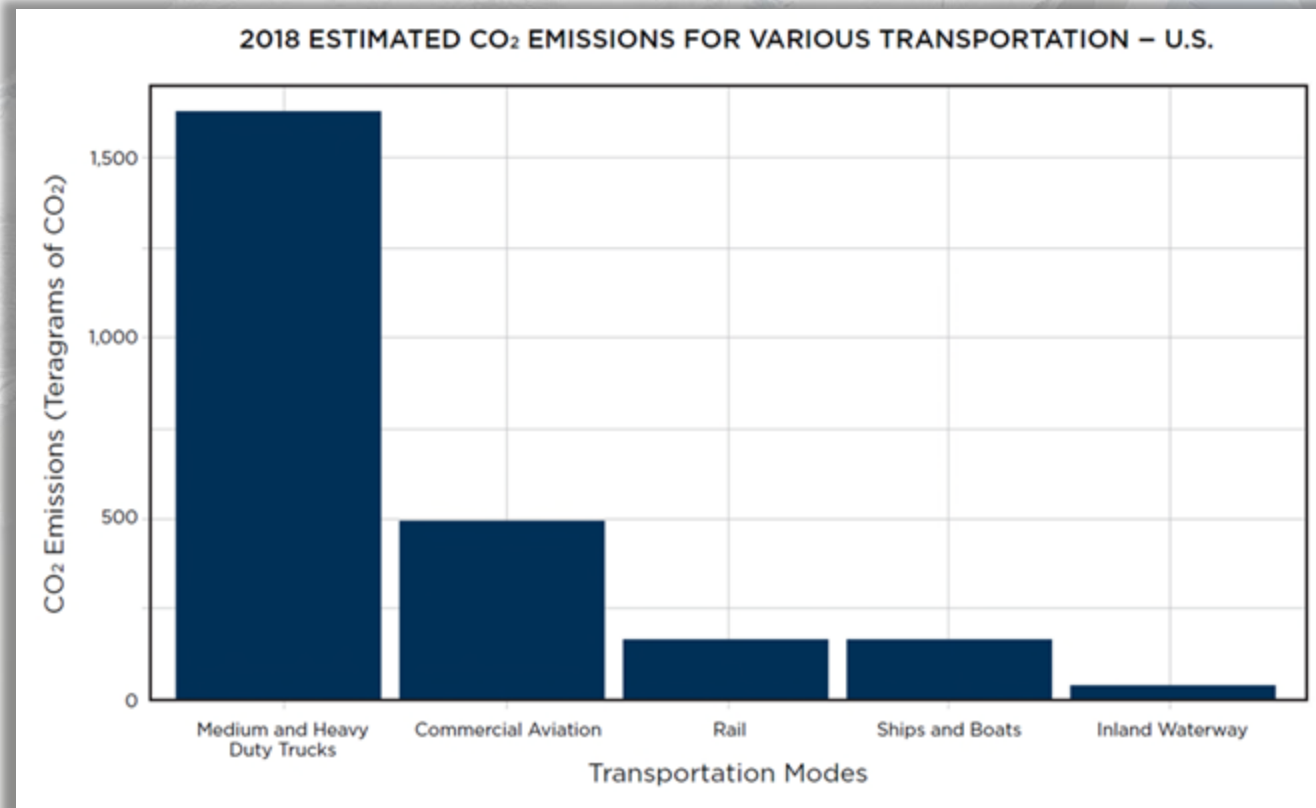
Barge Transportation Is the Sustainable Choice Today

CLEANER FOR THE ENVIRONMENT



¹ All Figures adapted from Texas Transportation Institute, "A Modal Comparison of Domestic Freight Transportation Effects of the General Public: 2001-2014," January 2017, as reflected in the PricewaterhouseCoopers industry study.

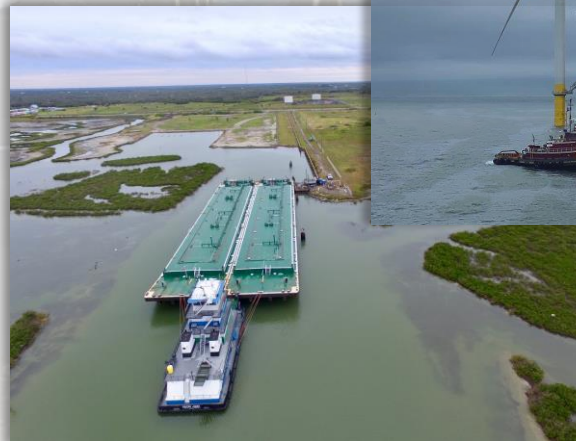
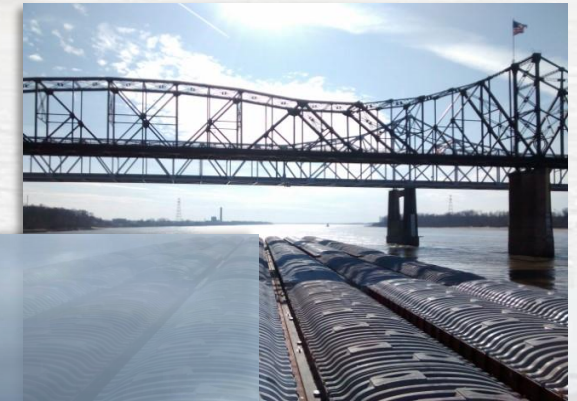
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Source: U.S. Environmental Protection Agency

Industry Characteristics Affecting Decarbonization

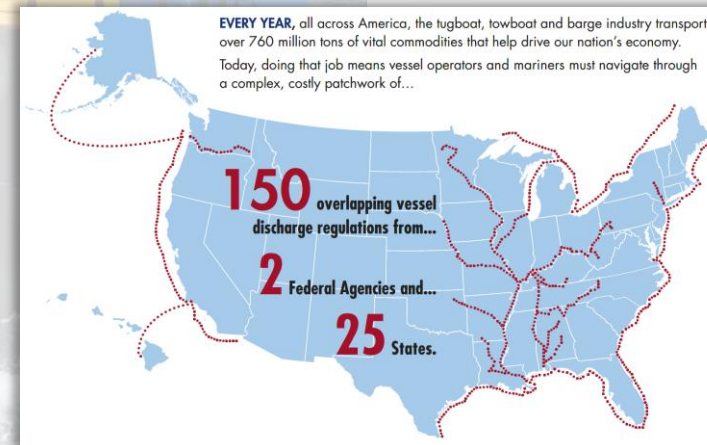
- Operational diversity
- Long-lived vessels
- Varied customer base
- Key part of supply chain infrastructure for low/zero carbon fuels



Decarbonization Policy Goals

Don't:

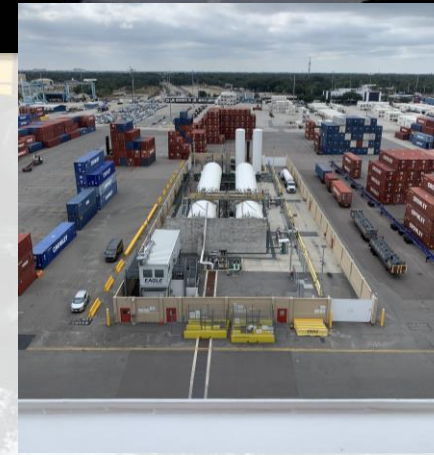
- Advantage other modes or foreign competitors
- Strand economically viable assets
- Dictate specific technology or fuels
- Allow a regulatory patchwork to develop



Decarbonization Policy Goals

Do:

- Take a holistic approach
- Provide reasonable lead time for transition
- Support learning and innovation
- Reduce regulatory uncertainty and delay
- Provide funding opportunities to support needed investment



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