

UNCLASSIFIED

MEMORANDUM

TO: Secretary Chris Wright
U.S. Department of Energy

CC: Secretary Marco Rubio, Department of State
Secretary Howard Lutnick, Department of Commerce
Secretary Sean Duffy, Department of Transportation

FROM: Zeinah Abdelsalam

SUBJECT: Leveraging U.S. LNG and Blue Ammonia for Strategic Advantage under IMO Net-Zero Framework

I. Recommendation

That you direct interagency coordination to accelerate U.S. production and export of LNG and blue ammonia, promote allied shipbuilding of next-generation vessels compatible with these fuels, and align trade and investment incentives to secure strategic market share. These measures target a rapid scale-up of U.S. low-carbon shipping fuels and vessel production, positioning the United States to outcompete China in the global maritime fuels market while influencing IMO standards to favor American technologies.

Approve _____ Disapprove _____

II. Background

In June 2025, the International Maritime Organization (IMO) agreed to a draft Net-Zero Framework (NZF) intended to achieve net-zero greenhouse gas (GHG) emissions in shipping by 2050.ⁱ The NZF applies to ships over 5,000 gross tonnage, representing roughly 85-90% of maritime CO2 emissions,ⁱⁱ and combines a fuel standard with a global economic measure. Ships exceeding emissions targets may purchase surplus units from others, while those failing to meet them must acquire remedial units from the IMO Net-Zero Fund, initially priced at \$380 per tonne CO2 for missing the base target and \$100 per tonne for the higher target.ⁱⁱⁱ

On August 12, 2025, U.S. Departments of State, Commerce, Energy, and Transportation issued a joint statement rejecting the NZF as a “global carbon tax” that could unduly burden U.S. shipping and energy sectors while benefiting China.^{iv} Under U.S. pressure, on October 17, 2025, IMO members voted to postpone a decision on global carbon pricing by one year.^v

III. Current Situation

The NZF creates both regulatory risk and strategic opportunity for the United States. While critics note penalties may be insufficient to incentivize decarbonization, they highlight U.S.

leverage: domestic production and export of low-carbon fuels can strengthen global competitiveness and influence IMO standards.^{vi}

Two fuels are central: liquefied natural gas (LNG) and blue ammonia. The U.S. possesses abundant feedstock, industrial expertise, and carbon capture and sequestration (CCS) technology to support production at scale. While several blue ammonia projects along the Gulf Coast have faced delays, cancellations, or hold status in 2025 due to rising costs and policy uncertainty,^{vii} ongoing LNG production provides near-term export capacity, and ammonia can leverage shared upstream and midstream infrastructure.

Both fuels require careful management: LNG is flammable, and ammonia is toxic and corrosive. Ship design must include compatible materials, detection systems, and operational safety protocols. Lifecycle and hazard assessments (HAZID, HAZOP, FMEA) should guide integration into newbuild vessels.^{viii}

China has aggressively promoted low-carbon fuel exports to Europe, seeking first-mover advantage. Coordinated U.S. production, allied vessel standards, and strategic exports can counter this influence, reduce dependency on Chinese supply chains, and support gradual decarbonization of maritime transport.

IV. Conclusion

The IMO NZF is not merely a regulatory challenge – it is a strategic opportunity. The United States must aggressively scale up domestic LNG and blue ammonia production, ensure allied shipbuilding programs prioritize vessels compatible with these fuels, and enforce the highest safety and technical standards. Rather than rejecting the IMO framework, the U.S. should actively engage with the organization to shape the rules, incentivize adoption of American technologies, and secure global market leadership. Bold, coordinated action will allow the United States to outcompete China in low-carbon shipping fuels, control the narrative around IMO standards, and convert international regulations into a lever for U.S. economic and strategic dominance.

ⁱ Katie Kouchakji, “International Maritime Organization’s Historic Agreement to Decarbonise Shipping,” *International Bar Association*, February 6, 2025, <https://www.ibanet.org/International-Maritime-Organizations-historic-agreement-to-decarbonise-shipping>

ⁱⁱ Ibid.

ⁱⁱⁱ Enes Tunagur and Jonathan Saul, “UN Shipping Agency Delays Decision on Carbon Price under US Pressure,” *Reuters*, October 17, 2025, <https://www.reuters.com/sustainability/boards-policy-regulation/us-singapore-call-un-delay-carbon-shipping-price-vote-amid-splits-2025-10-17/>

^{iv} Rubio Marco et al., “Joint Statement on Protecting American Consumers and Shipping Industries by Defeating the International Maritime Organization’s ‘Net-Zero Framework’ Aka Global Carbon Tax,” August 12, 2025, <https://www.state.gov/releases/2025/08/joint-statement-on-protecting-american-consumers-and-shipping-industries-by-defeating-the-international-maritime-organizations-net-zero-framework-aka-global-carbon-tax>

^v Tunagur and Saul, “UN Shipping Agency Delays Decision.”

^{vi} Michael Liebreich, “IMO Members Choose between the U.S. and the Deep Blue Sea,” *Thoughts of Chairman Michael*, October 14, 2025, <https://mliebreich.substack.com/p/imo-members-choose-between-the-us>

^{vii} Zane Gustafson, “The Ammonia Industry Expansion Begins To Falter,” *Ohio River Valley Institute*, September 25, 2025, <https://ohiorivervalleyinstitute.org/the-ammonia-industry-begins-to-falter/>

^{viii} “Switching Safely to Low-GHG Fuels and Technologies,” *Det Norske Veritas*, Maritime Impact, September 8, 2025, <https://www.dnv.com/expert-story/maritime-impact/switching-safely-to-low-ghg-fuels-and-technologies/>