

MARINE ENERGY COMMERCIALIZATION RECOMMENDATIONS

FEDERAL ACTIONS FOR GLOBAL LEADERSHIP

MARINE ENERGY WILL HELP ACHIEVE CLEAN POWER GOALS

Marine Energy Benefits: Marine energy is a significant and valuable untapped renewable resource that can help decarbonize the U.S. energy portfolio. Deployment opportunities include offshore power and “Blue Economy“ markets, rural, remote, and underserved communities, and ultimately, utility-scale grid applications.

Marine Energy Potential: The National Renewable Energy Laboratory estimates total marine energy resources in the fifty states to be 2,300 terawatt hours per year, **56% of all U.S. electricity generated in 2021**. Utilizing just one-tenth of these resources equals 5.6% of total electricity generation and **could power over 22 million homes**. For comparison, all domestic installed hydropower and solar power capacity each generated 5.6% of total U.S. electricity in 2023. In addition, the DOE Water Power Technologies Office (WPTO) has noted that “**up to 50 GW of marine energy capacity** could be added in the United States by 2050.”

International Competition: U.S. support lags behind the leading global competitors which are making large public investments in the sector paying off with several marine energy systems at the point of market entry and commercial scaling in grid-connected farms. Without increasing near-term financial support for private sector-led technology innovation and early commercial deployments, the U.S. will become an importer, not exporter, of these renewable energy systems.

KEY RECOMMENDATIONS FOR FEDERAL COMMERCIALIZATION SUPPORT

- Secure growing federal investments for marine energy technology RDD&D activities funded by the DOE WPTO and the U.S. Navy Energy Program.
- Establish a continuum of DOE funding among the WPTO, Office of Clean Energy Demonstrations, and the Loan Programs Office for private sector-led marine energy technology and project development companies, creating a robust roadmap for commercialization.
- Better align federal investments with the near-term needs of **private sector-led** technology advancement and testing activities.
- Eliminate cost share requirements for RDD&D funding awards utilizing existing DOE authorities.
- Set national marine energy deployment targets of 50 MW by 2025, 500 MW by 2030, and 1 GW by 2035 as recommended in NHA’s 2021 Marine Energy Commercialization Strategy.
- Establish a Task Force with public input to explore any regulatory barriers and needed improvements to license and deploy marine energy projects.