

# H.D1562 / S.D1689: An Act Relative to a Future Blue Economy



Protecting the blue planet



## The Future Blue Economy

Massachusetts' blue economy is booming. Between 2009 and 2019, the state's marine economy grew by [38 percent](#) and is valued at \$8.2 billion. Over 6,000 blue economy businesses in Massachusetts employ 100,000 individuals earning \$3.9 billion in annual wages. Massachusetts currently boasts the [second-highest number of seafood industry-supported jobs](#) in the country after California. The state's blue economy is projected to grow even further, with the development of offshore wind, innovations in aquaculture, expanded shipping, and more.

Industry's increased ocean use has brought countless economic benefits to the state and its residents, and will continue to do so. However, the growing industrialization of the ocean, combined with warming waters, is threatening and, in some cases, causing significant changes to coastal ecosystems.

Increasing ocean use must be done responsibly to ensure ecosystems and marine species are not harmed, and all Massachusetts residents can benefit from the growth of the blue economy. Responsible use of the ocean requires a focus on science, conservation, and equity. ***An Act Relative to a Future Blue Economy (H.D1564/S.D1689)***, introduced by Senator Susan Moran, creates three grant programs that guide Massachusetts toward a more responsible and competitive future blue economy.

## Diving Deep into Blue Knowledge

Massachusetts is built on its maritime industry, and is uniquely positioned to contribute to and benefit from a growing blue economy, but requires a better understanding of the impacts of human use. More research and data are needed to understand how stressors like increasing carbon dioxide levels and offshore wind cable routes are impacting our oceans, coastlines, and marine species, as well as the ways emerging technologies and nature-based solutions can be developed responsibly while minimizing socio-ecological harms.

To further understand and reduce human impacts on our ocean and support a more sustainable blue economy, Massachusetts must support research into beneficial ocean-related science and technology. This bill establishes a new grant program for Massachusetts non-profits, academic institutions, and businesses to support scientific research and the development or expansion of new blue technology with the goal of promoting responsible ocean use. Funding within this grant program may be used for the research, development, and expansion of new and existing technology with the goal of increased blue economic activity and the development of the best technological solutions to complicated ocean issues. Eligible projects include

# H.D1562 / S.D1689: An Act Relative to a Future Blue Economy



Protecting the blue planet

both basic and applied research, and can range from the study of marine species migration patterns through offshore wind lease areas to the development of better vessel emission technology and salt marsh restoration technology.

## Building a Blue Workforce

In order for Massachusetts to sustain growth in the maritime industry, prepare coastlines for sea-level rise, and meet our ambitious climate goals, the state needs a trained workforce ready to fill job openings in blue economy sectors. Currently, workforce development programs exist for sectors like manufacturing and clean energy, but not for many ocean sector jobs in science, technology, engineering, art, and mathematics (STEAM).

At the same time, [125,000](#) Massachusetts residents were unemployed in November 2022, with higher unemployment rates [disproportionately centered](#) in cities and towns that have a majority of residents of color. Massachusetts' growing ocean economy can provide new opportunities for residents in these communities to explore career pathways in the blue STEAM sector while helping to close employment equity gaps.

Massachusetts needs to invest in its future blue workforce to remain competitive globally and to create a more equitable economy. This bill establishes a competitive grant program within the Department of Elementary and Secondary Education that funds education, training, and job placement opportunities for students in blue-STEAM industries, with a particular focus on high schools that serve or are located in environmental justice communities. Through this program, Massachusetts can bolster critical and growing industries like commercial fishing, ocean transport, or marine biotechnology, while providing more job opportunities to communities across the state. The grant program is flexible, allowing high schools to leverage career/vocational technical training, internships, apprenticeships, new coursework designs, and more to pave the pathway for the blue workforce of tomorrow.

## Supporting a Circular Economy

Another impact of increased human use of the ocean is an increasing amount of waste, particularly plastics, entering waterways and oceans. There is a growing, global movement to transition to a circular economy system that keeps materials and products in circulation for as long as possible to avoid this unnecessary waste. In Massachusetts, circular economy projects receive little government support and do not qualify for Massachusetts' Recycling Business Development Grant program. This bill supports this transition by creating a circular economy business grant program within the Massachusetts Department of Environment Protection, similar to existing recycling programs, to allow for businesses to become more sustainable. Grants within this program would prioritize minority-owned and women-owned businesses and businesses located in or providing substantial benefits to environmental justice communities to ensure equitable access to funds.