



Accelerating Growth In An Information-Based Blue Economy

A sustainable and equitable ocean and coastal economy that optimizes advances in science and technology to create value-added, data-driven economic opportunities and solutions to pressing societal needs



NOAA expands and strengthens the New Blue Economy by leading agency-wide initiatives in the following areas:

- Data and Information Services
- Marine Transportation
- Ocean Exploration
- Seafood Competitiveness
- Tourism & Recreation
- Coastal Resilience

NOAA's enhanced collection, analysis, and dissemination of ocean- and coastal-derived data will advance the New Blue Economy by helping economies thrive and marine ecosystems flourish.

WHAT'S AT STAKE

The global ocean is the lifeblood of our planet's most vital functions and the power source of global commerce and trade. For millennia, people have recognized the value of ocean resources for food, transportation, energy, minerals, trade, and more. The traditional blue economy developed around these tangible resources and services, with data serving a supporting role. In 2020 alone, the American blue economy supported 2.2 million jobs and contributed \$361 billion to the nation's gross domestic product. If American coastal counties were an individual country, they would rank third in the world in GDP, surpassed only by the United States and China.

Yet, our oceans and coastal communities are rapidly changing and are at threat from climate change. More extreme storms and changing water levels are heightening risks to lives and property and are challenging marine navigation in dynamic coastal environments. Warming, acidification, deoxygenation, and shifting biological productivity are challenging and reshaping ocean and Great Lakes ecosystems, fisheries management, protected resources conservation, habitat protection and coastal community resilience. The rapid and accelerating pace of climate change is driving increased demand for information about the ocean and along our coasts.

A new age in ocean technology, sustainability, and logistics calls for a **New Blue Economy** founded on the improved collection, analysis, and dissemination of ocean and coastal-derived

data and information to support economic growth, protect the ocean's health, and address societal challenges and inspire their solutions.

NOAA's ROLE

This 21st century New Blue Economy is driven by the need for improved ocean and coastal data that characterize the status and trends of the ocean environment in order to address societal challenges and drive the acceleration of ocean and coastal products and services. NOAA is one of the world's largest providers of ocean, coastal, and Great Lakes data, including forecasts, predictions, and outlooks for sea surface temperature, precipitation, water level, pH, salinity, surface currents, and harmful algal blooms. To meet the demands of the growing new blue economy, NOAA provides these free and open source data and information to other federal agencies, state and local governments, tribes, academia, non-governmental organizations, businesses, and the public.

These data are used every day to: make informed decisions that impact the manufacturing and transportation of technologies and goods; site offshore wind farms; ensure sustainable fishing practices; maximize the efficiency of our Nation's ports; and ensure our Nation's coastal, ocean, and Great Lakes waters and resources are restored and protected. NOAA's data also provides crucial information for decision managers, emergency responders, and local leaders to better understand and respond to natural hazards that pose a risk to coastal communities, infrastructure, and environments. NOAA is investing in innovative ocean and coastal observing technology to maximize the economic potential of the world's oceans while ensuring the sustainable use of ocean and coastal resources and protecting ocean health, natural capital, and ecosystem services now and in the future.

NOAA is working to advance and grow the new blue economy by: (1) increasing the volume and diversity of ocean and coastal observations; (2) enhancing the dissemination and accessibility of these data and information; (3) improving the accuracy of models that predict ocean and coastal conditions.

NOAA is also working to advance the new blue economy by strengthening partnerships and enhancing service delivery, which lies at the heart of NOAA's mission and is critical in all that NOAA does. In addition to the data, and services NOAA provides, users and partners look to NOAA for support in applying NOAA's this information to their situation or issue. Effective implementation of service delivery requires relationships built on mutual trust and respect with sustained engagement and collaboration that facilitates the integration of services into actionable information. NOAA is continuously building its network of trusted experts who engage with partners to ensure NOAA's product and services are useful, usable, and used.

The changing climate system necessitates new observations and tools to help answer the ever-evolving questions posed by decision makers. The New Blue Economy takes these observations and tools and creates economic and societal value by harnessing the untapped potential of America's ocean and coastal environments, contributing to equitable climate change adaptation strategies, and unleashing American innovation. An information-based blue economy that leverages NOAA's ocean and coastally- derived data and information services will enhance the understanding and predictive capabilities of the impacts from climate change on the oceans and coasts, and serve to catalyze American competitiveness, accelerate growth of sustainable ocean industries, and facilitate the technology advancements for coastal and marine solutions to climate challenges.



National Ocean Service Objectives for the New Blue Economy

- Build coalitions and partnerships to drive sustainable, data-driven economic growth;
- Stimulate innovation and sustainable economic growth by removing barriers and providing consistent and reliable access to authoritative data consistent with the NOAA Data Strategy;
- Accelerate research, development and adoption of new technologies and data-driven services; and
- Build an expert and diverse workforce needed to advance the New Blue Economy in a competitive and changing labor market.

