

# Economic Issue of the Day



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## Diving into the blue economy

**W**e live on a blue planet, where 70 percent of the Earth's surface is covered with water. Our oceans and seas provide us with our basic needs—food, oxygen, and livelihoods—and serve as habitats for billions of plants and animals. They also absorb carbon dioxide, recycle nutrients, and regulate global climate and temperature.

Our oceans have long been the center of economic activity. In terms of global trade, the shipping industry transports about 80–90 percent of it. Global tourism takes place mostly in coastal areas, with beaches and coral reefs among the most popular destinations. Offshore oil production offers renewable and low-pollution alternatives for our energy needs. Likewise, maritime wind power and tidal energy are promising.

However, human activities have been taking a huge toll on our marine environment. Carbon dioxide emissions, along with chemical pollution and domestic wastes, have been a driver of damage to ocean ecosystems. Meanwhile, climate change has put more lives, wealth, and infrastructure in harm's way due to rising sea levels and increasing frequency and intensity of storms.

The importance of oceans and seas for sustainable development is widely recognized by the international community. Goal 14 of the United Nations (UN) Sustainable Development Goals calls for the conservation and sustainable use of the oceans, seas, and marine resources (UN n.d.). Maintaining healthy oceans, according to the UN report, supports climate change mitigation and adaptation efforts. It also helps promote gender equality, as women do much of the work in small-scale fisheries.

### Origin and concept of the blue economy

Blue economy has become a buzzword over the past few years, emerging as a central talking point in policy discussions, conferences, publications, and international agreements on oceans and seas. It balances economic growth and environmental preservation and offers an approach to sustainable development better suited to the circumstances of the ocean-related sectors.

However, this growing interest in blue economy has also created confusion about what it really means and its applications to sustainable development efforts and businesses. Currently, there is still no widely accepted definition of the term. Thus, to better appreciate this concept, this *Economic Issue of the Day* revisits where blue economy originated and how different groups view and apply this concept.

### A model for innovation

Professor Gunter Pauli first introduced blue economy in 2004, as an offshoot of his Zero Emissions Research and Initiatives project. This project aimed to find 100 of the best nature-inspired technologies that could affect the economies of the world, while sustainably providing basic human needs, such as potable water, food, jobs, and shelter (Pauli 2010).

Based on 21 founding principles, the blue economy insists on solutions being determined by their local environment as well as their physical and ecological characteristics. Similar to the circular economy, it also embraces concepts such as upcycling, recycling, remanufacturing, industrial ecology, renewable energy, and share economy. However, it goes further by advocating the use of locally available resources to lower costs and pursue a more effective economy of scale (Huxley n.d.).

Another central principle of the blue economy is the idea of cascading nutrients and energy the way ecosystems do. According to Pauli (2010), cascading energy and nutrients leads to sustainability by reducing inputs such as energy and by eliminating waste and its cost. An example of this innovation model is the production of mushrooms grown on coffee waste, where by-products of one process are used as inputs to another process.

The focus of blue economy on achieving sustained economic growth using locally available resources and without degrading the environment is likewise shared by the proponents of the other definition of blue economy, which focuses on marine environment.

### In the context of coastal and marine environment

The application of the blue economy concept to coastal and marine environment was conceived at the Rio + 20 UN Conference on Sustainable Development held in Rio de Janeiro in 2012. It emerged in connection with the conference's theme on the green economy as a framework for sustainable development and poverty eradication. Many coastal countries questioned the focus of the green economy and its applicability to them. Thus, strong positions were presented for an ocean-based "blue economy" approach to be more prominently addressed. However, no consensus was reached during the summit on a common definition of the blue economy.

Subsequently, the blue economy concept has been presented in many fora as an alternative economic model for sustainable development of oceans and coastal areas. Among the international organizations that have embraced its concept include the UN, the Asia-Pacific Economic Cooperation (APEC),

and the Food and Agriculture Organization (FAO), which provided different but somehow overlapping definitions of the term.

In a concept paper, UN (2015) describes blue economy as a sustainable development framework for addressing equity in access to, development of, and sharing of benefits from marine resources. The UN views oceans as “development spaces” where spatial planning integrates conservation, sustainable use, oil and mineral wealth extraction, bioprospecting, sustainable energy production, and marine transport.

Meanwhile, APEC, which is composed of 21 Pacific Rim member-economies, views blue economy as an approach to advance sustainable management and conservation of ocean and coastal resources and ecosystems to foster economic growth. In its 2014 Ocean-Related Ministerial Meeting Joint Statement, the organization urged its members to enhance policy and institutional support for ecosystem-based management to create efficiencies and maximize sustainable economic yields from the ocean (APEC 2014).

FAO also embedded the blue economy principles in its Blue Growth Initiative in 2013. The said initiative puts emphasis on efficient resource use in capture fisheries and aquaculture, ecosystem services, trade, livelihoods and food systems (FAO 2015). It aimed to reconcile economic growth with improved livelihoods and social equity and strengthen transparent, reliable, and more secure food systems.

The Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) defines blue economy for business as a set of environmentally and socially sustainable commercial activities, products, services, and investments dependent on and impacting coastal and marine resources. According to PEMSEA (2015), it is not limited to economic activity in coastal and marine areas, but also activity that is sustainable—environmentally, socially, and economically.

### In the Philippine context

Considered one of the most diverse in the world, the Philippine waters host a wide array of coastal and marine resources including coral reefs, seagrass beds, mangrove forests, and various fish and marine species (ADB 2014). The country has certainly a lot to benefit from adopting the principles of the blue economy given its archipelagic nature and long coastlines.

In a paper published by the Philippine Institute for Development Studies, Briones et al. (2015) noted that the country can aggressively champion the blue economy approach as an innovative way of managing the country’s fisheries resources

and coastal and oceanic waters as well as comanaging those in the Asia-Pacific region.

The oceans and seas have been a major source of food and livelihood to more than 100 million Filipinos. In fact, the Philippines ranked 7th among the top fish-producing countries in the world in 2012. According to the Philippine Statistics Authority (2015), the fisheries sector alone contributes 19.6 percent of the total gross value added in agriculture and 1.8 percent of the total gross domestic product in 2014. However, the agency also noted the sector’s economic contribution has been declining since 2010.

### What’s next for the blue economy?

The transition from conventional growth-focused ocean economy into a blue economy will take decades to complete. Experts are in agreement this will require huge investments of capital and political will. As an initial step to this transition, the international community, together with governments around the world, must work together in developing a common understanding of the blue economy and in laying down a set of clear policies and framework for creating a sustainable blue economy. ✨

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