

**idn** E-Briefing Papers

# Shifts in World Geopolitics: Cooperation and Competition in the Atlantic

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International Seminar

Ponta Delgada, Azores



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Conference proceedings of the international seminar organized by the Atlantic Centre, the National Defence Institute and the University of the Azores, on 25 February 2022 in Ponta Delgada, Azores.

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**Abstract:**

This IDN *E-Briefing Paper* intends to disseminate the results of the International Seminar “Shifts in World Geopolitics: Cooperation and Competition in the Atlantic”, organized by the Atlantic Centre, the National Defence Institute, and the University of the Azores, on 25 February 2022 in Ponta Delgada, Azores. This seminar aimed to identify areas of convergence and divergence of interests in the face of a rapidly evolving Atlantic. It also provided important clues on how to enhance the strategic position of Azores in line with the current geopolitical context.

**Resumo:**

Este IDN *E-Briefing Paper* pretende divulgar os resultados do seminário internacional “Shifts in world geopolitics: cooperation and competition in the Atlantic”, organizado pelo Centro do Atlântico, o Instituto da Defesa Nacional e a Universidade dos Açores, a 25 de fevereiro de 2022 em Ponta Delgada, nos Açores. Este seminário visou identificar áreas de convergência e divergência de interesses, face a um Atlântico em rápida evolução. Procurou também fornecer indicações importantes sobre como valorizar a posição estratégica dos Açores, em consonância com o atual contexto geopolítico.

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## Europe and the Blue Economy in the Atlantic

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### Introduction

This brief presentation aims at producing an analysis focused on the Atlantic Blue Economy, with a deepening on the European reality, in the context of the EU. Its main objective is to provide a comprehensive and integrated understanding, considering the main results achieved in recent years, demonstrating the current relevance of blue economy in the North Atlantic economies.

This implies that an enormous proportion of blue economy's potential – and achievements – will not be tackled, due to the options the time available has made necessary: those referring to the South Atlantic Blue Economy. We shall discuss that in new opportunities as they emerge.

### The Ocean in the World Economy

That 'The ocean covers 71% of our planet by surface area and includes 96% of the water on earth by volume' is a commonly used statement on a reality that could not have been ignored in the past, nor can it be minimized in the present because it will not be overlooked in the future.

We now know that the Ocean plays a critical role in cooling the planet, making it habitable; produces over half the oxygen we breathe and absorbs 50 times as much carbon dioxide as the atmosphere, and an enormous attention is devoted to it because of this knowledge we now possess, but throughout history, this knowledge was not available. Nonetheless, the Ocean was also relevant – as a source of natural resources, a way to discover and conquer new lands, and to trade goods.

These activities continue to play a decisive role in our economies, since the Ocean is still a primary source of protein for over a billion people; and serve as a highway that carries more than 90% of the goods and materials that move internationally.

In our current economic system, based in global flows of goods and capitals, shipping routes on the various existing maritime communication lines demonstrates a highest density of flows between the two development hubs in the North Atlantic - USA and Europe, between the Pacific Poles - USA, Japan and China, and in the South Asia region, but we can also see significant South-North maritime traffic, which portrays the density of traffic between Brazil and Europe, but also,

via South Africa, to the Indian Ocean. But blue economy is not only about international maritime trade.

The value of the Ocean economic sectors has been estimated (2015)<sup>1</sup> at about 3 trillion USD annually – 5% of global GDP, equaling the size of the fifth economy in the world.

There is, indeed, a growing relevance of the Ocean in world economy in the past couple of decades, and that is greatly due to three main reasons: (1) the development of technology that allows for the presence and operation on the high seas and the development of new activities and 'new' uses of the ocean; (2) the need to exploit new sources of raw materials in order to maintain or further enhance economic performance globally; (3) and because science has brought to light knowledge on the fundamental role the Ocean has in regulating life on earth, and how exploitation in the past decades has accelerated a change in natural conditions that is enforcing a climate change in the planet.

### **Blue Economy in the North Atlantic: Recent Achievements**

Though providing an insight on USA's and Canada's reality, we shall focus on the EU Blue Economy in assessing blue economy in the North Atlantic. We shall also present a synthetic view of Blue Economy relevance to the Portuguese economy in the past decade and its achievements. To understand the relevance of blue economy to the Canadian economy, one could simply recall that its coastal territory touches 3 oceans - the Pacific, the Arctic and the Atlantic – and its coastal community (population living within 10 km of those 3 coasts) totaled 4.8 million people in 2016. In fact, economic activities dependent on the Ocean make a substantial contribution to the Canadian economy<sup>2</sup>. In Canada, as in many other regions of the globe, fisheries and naval installations were the first to develop, followed by fish processing, shipbuilding, and marine transportation, providing a basis for economic development and growth on all three of Canada's coasts. In recent decades, new marine economic activities emerged, including tourism, aquaculture, biotechnologies, specialized manufacturing, and offshore oil and gas exploration and development. A wide range of service industries supports these activities. Together, they create substantial opportunities as well as challenges, emerging from increased and oftentimes competing uses of ocean space, including the need to protect and conserve Canada's ecosystems and biodiversity.

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<sup>1</sup> UNCTAD (2015) and UNITED NATIONS (2015). Sustainable Development Goals fact sheet.

<sup>2</sup> Sylvain Ganter *et al.* (2021). Canada's oceans and the economic contribution of marine sectors, EnviroStats, Catalogue no. 16-002-X. Release date: July 19. Published by authority of the Minister responsible for Statistics Canada, available at <https://www150.statcan.gc.ca/n1/pub/16-002-x/2021001/article/00001-eng.htm>

In 2018<sup>3</sup>, activities linked to blue economy represented 1.6% of both Canada's total employment and gross domestic product (GDP) estimates. The contribution of marine sectors was particularly high in Newfoundland and Labrador (employment: 16.8%, GDP: 30.0%), Nova Scotia (employment: 13.3% and GDP: 13.5%), and Prince Edward Island (employment: 9.3%, GDP: 10.3%).

The main driver of the marine economy was the private sector, namely in fishing and seafood, transportation, and oil and gas, accounting for 79.6% of total employment and 83.1% of total GDP contribution.

Unlike other blue economies – notably the USA and the EU blue economies, where tourism is the sector that offers more employment – transportation was the most relevant sector to employment (23.0% of total employment), followed by fishing and seafood (21.8%), and tourism and recreation (21.3%). In GDP contribution, fishing and seafood (21.1% of total GDP), transportation (20.8%), and oil and gas (20.8%) were the most relevant sectors.

Proving its resilience, measured as a share of total employment and GDP, the contribution of marine sectors to the Canadian economy remained relatively stable from 2014 to 2018, the share of employment having increased slightly (6.5%) from 1.5% in 2014 to 1.6% in 2018, while the share of total GDP, meanwhile, remained stable at 1.6% in both years.

### **Blue Economy in the USA<sup>4</sup>**

The first official USA Marine Economy Satellite Account statistics were released in 2021 by the U.S. Bureau of Economic Analysis.

Though they show a similar pattern of growth as to the Canadian blue economy, USA's blue economy internal structure is very different from its northern neighbour.

In fact, the data released show that the marine economy accounted for 2.4 million jobs and for 1.9% (US\$397 billion) of US GDP in 2019, growing 4.2% in 2019 from 2018 – near doubling the growth for the overall U.S. economy (2.2%). Real gross output, compensation, and employment also all grew faster in the marine economy than in the overall economy in 2019<sup>5</sup>.

In USA's blue economy, a major role is played by Tourism, since this sector (Tourism and recreation, including activities such as coastal trips and travel, offshore boating, and offshore

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<sup>3</sup> Government of Canada (n.d.). Marine Sectors in Canada Summary Tables | Fisheries and Oceans Canada, available at <https://www.dfo-mpo.gc.ca/stats/maritime-eng.htm>

<sup>4</sup> Daria Solovieva (2021). What's holding back America's blue economy? *Fortune*, 3:00 PM GMT+1, September 27, available at <https://fortune.com/2021/09/27/whats-holding-back-americas-blue-economy/>

<sup>5</sup> U. S. Bureau of Economic Analysis (2021). Marine Economy Satellite Account, 2014-2019, News Release, available at <https://www.bea.gov>

recreational fishing) had a major part on that growth, accounting for 35.3% of marine economy gross output. US national defense and public administration was also of relevance (27.1 %), as well as minerals and offshore (including offshore oil and gas), which accounted for 14.0%. Tourism and recreation were the largest marine economy activities in 2019, accounting for US\$234.9 billion of gross output.

Other relevant sector for USA's blue economy were Marine transportation and warehousing, which accounted for US\$63.8 billion (9.6 %) of gross output in 2019; while non recreational ship and boat building accounted for US\$31.2 billion of gross output in 2019, registering a sturdy increase of 37.2 % from the previous year, making it one of the fastest-growing marine economy activity.

According to the 2021 US maritime satellite account, and in contrast to Canada, the government sector was the largest contributor to the US marine economy in 2019, accounting for 31.3% (US\$124.3 billion) of all marine economy activity. It was also the largest industry sector for compensation (US\$76.0 billion) and for employment (647,000). The second most relevant sector to blue economy was real estate and rental and leasing, accounting for US\$55.5 billion of value added.

Transportation and warehousing was the second-largest industry for compensation (US\$21.3 billion), with 43.3% of this value coming from the category "other transportation and support activities" which includes scenic and sightseeing transportation. Accommodation and food services was the second-largest industry for employment (464,000) in 2019.

Differences on the structure of the blue economy clusters are thus of relevance and may produce different readings on the relevance of the blue economy. In the EU, a common integrated approach, followed by the member states, has limited this effect by providing a common framework to all.

## **Blue Economy in the EU**

The EU and other countries around the world, have thus started to look to the ocean in a different, integrated approach, focused on strengthening established economic activities – marine living resources; marine non-living resources; marine renewable energy (offshore wind); port activities; shipbuilding and repair; maritime transport or coastal tourism – and developing new/emerging economic activities such as ocean energy; bioeconomy & biotechnology; desalination; marine minerals; maritime defence, security and surveillance; research and education and infrastructure on a basis of an environmentally sustainable blue economy.

Though following 2008 crisis the relative size of the EU Blue Economy in terms of GVA and employment, with respect to the EU overall economy, has decreased from 2009 – which may be due to the importance of coastal tourism, (45% of the GVA; 64% of the employment) – in 2018 the EU Blue Economy established sectors main indicators also show encouraging figures.

However, the COVID-19 pandemic represented a major shock for the global and the EU economies and had also impact on blue economy performance.

Indeed, COVID-19 economic crisis' impact assessment on Blue Economy<sup>6</sup> shows that EU Blue Economy will be more affected by the crisis than the overall EU economy, but different sectors will be differently impacted, and in the end, the EU Blue Economy will grow faster when the economy eventually recovers, offering important investment opportunities.

The sectors that suffered most severely in 2020, were all the established sectors, except for marine renewable energy, where the impact was medium. Although the Living resources, Non-living resources, Port activities and Maritime transport sectors suffered strongly (even if some of those activities suffered less than others), they were all foreseen to recover promptly.

In fact, in June 2021, the European Commission expected most sectors to return to pre-COVID levels before 2022; only shipbuilding and repair was expected to recover in 2022, and only coastal tourism should recover to those levels later than that. Most of the emerging sectors suffered small overall impacts in 2020 and were all expected to recover swiftly.

This assessment is of utmost relevance, since EU Blue Economy established sectors are in fact major contributors to the EU Blue Economy. Considering those outlooks, we focus on pre-COVID results to acknowledge the dimension and evolution of those sectors in EU Blue Economy.

EU Blue Economy 2018 data<sup>7</sup> shows an increase in all major indicators from 2009. On these data we should notice that:

- Employment increase was largely driven by Coastal tourism, which saw a 20% rise (in 2018) in jobs compared to 2017.
- Marine renewable energy (production and transmission), which is still in a strong expansion phase given that it is a relatively young sector, saw the number of persons employed increase twenty-two times since 2009, from 383 persons to almost 9 000 persons in 2018.

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<sup>6</sup> Comissão Europeia, Direção-Geral dos Assuntos Marítimos e das Pescas, Addamo, A., Calvo Santos, A., Carvalho, N., *et al.*, *The EU Blue Economy Report 2021*, Publications Office, 2021, available at <https://data.europa.eu/doi/10.2771/8217>

<sup>7</sup> European Commission, Directorate-General for Maritime Affairs and Fisheries, *The 2018 annual economic report on EU blue economy*, Publications Office, 2018, available at <https://data.europa.eu/doi/10.2771/305342>

- Remuneration per employee for the EU Blue Economy established sectors has increased steadily since 2009, peaking in 2015 (at €24 950 per employee) and falling slightly afterwards. However, average employment remuneration in 2018 was 14.2% higher than in 2009.

Noteworthy sectors to this overall performance were Living resources; Marine renewable energy (offshore wind); Blue bioeconomy and Desalination.

GVA data shows an acceleration in the growth of all sectors from 2013 onwards except for Non-living resources, whose GVA dropped by 62%.

The largest Blue Economy sector in the EU remains Coastal tourism, which reported an increase of 20.6% in GVA in 2018 compared to 2009.

Maritime transport and Port activities, increased by 12% and 14.5%, respectively.

Other sectors that contributed to growth were Living resources (+29%) and Shipbuilding and repair (+30%).

Employment was also recovering after the crisis – with respect to 2009, 2018 figures are very similar. The highest relative expansion was observed, in Maritime transport. In Shipbuilding and repair as well as in Living resources, employment has grown with respect to the minimum observed in 2013-2014, but it has not yet recovered to 2009 levels.

In Non-living resources, a significant declining trend is seen.

The four largest EU Member States (Spain, Germany, Italy and France) are the largest contributors to the EU Blue Economy for both employment (with a combined contribution of 53%) and GVA (a combined contribution of 61%)<sup>8</sup>.

Only Greece manages to come among these four countries by positioning second in the contribution to the EU Blue Economy in employment terms.

Other countries with significant contributions in terms of either employment or GVA include Greece, Portugal, the Netherlands, and Denmark.

Blue Economy exceeds 5% of the national GVA or employment in the insular Member States or those with archipelagos: Greece, Croatia, Malta, Cyprus and Portugal. Estonia is an exception with an employment share of 7%. Other Member States with relatively large Blue Economy sectors include Spain, Latvia, Denmark, Bulgaria, and Ireland.

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<sup>8</sup> Comissão Europeia, Direção-Geral dos Assuntos Marítimos e das Pescas, Addamo, A., Calvo Santos, A., Carvalho, N., *et al.*, *The EU Blue Economy Report 2021: Annexes*, Publications Office, 2021, available at <https://data.europa.eu/doi/10.2771/8217>

## Portuguese Blue Economy

Data related to Portuguese Blue Economy<sup>9</sup> demonstrates this reality:

- Blue Economy GVA has grown nearly twice as much as the national GVA; and more than doubled the employment growth
- It represents 3,9% of the county's GVA and 4% of employment

While society seems not to have this perception – and even most political and social organisations – blue economy GVA is now higher than sectors as agriculture (2,4%), energy (3,6%), and only slightly under construction (4,1%).

The most relevant Blue Economy sector in Portugal is coastal tourism, including nautical sports and culture, followed by the living resources sector (fisheries, aquaculture, and fish transformation and commercialization) – both in GVA and employment.

It is noteworthy to verify that average salaries in blue economy are higher than the national average in almost all groupings of the national blue economy satellite account – only tourism and living resources register average salaries lower than it, derived from the weight that low-skilled jobs have in these sectors.

## Final Remarks

So, briefly, Blue Economy in the North Atlantic has proven resilient to the 2008 economic crisis and, in most sectors, to the 2020 pandemic crisis, and employs skilled workers, especially in emerging areas where the average wage is high, but also in established sectors. It is still, though, at an early phase of development for several sectors, and it is foreseen that it will develop further in the next decades.

It would probably benefit from more synergies between blue ecosystems in both margins of the North Atlantic, namely in emerging technology-driven sectors but it is surely a promising investment area in the coming years.

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<sup>9</sup> See: Instituto Nacional de Estatística (INE), Statistics Portugal and Regional Directorate of Statistics of Madeira (DREM). Ocean Sattelite Account 2016-2018. Destaque Informação Estatística/Press Release. Available at: *Direção-Geral de Política do Mar* [online], Contas Satélite do Mar, <https://www.dgpm.mm.gov.pt/conta-satelite-do-mar>