



Blue Economy in the Apulian Smart Specialization Strategy and Blue Innovation Drivers

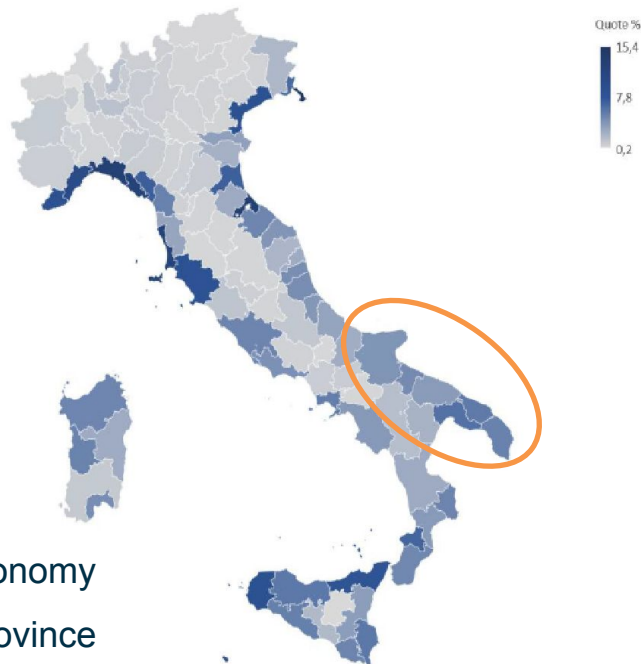
25-01-21 - Carlo Gadaleta Caldarola – ARTI

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Apulia region in the Italian background

- Apulia Region, with about **4% of the companies operating in the blue economy sectors**, exceeds the national average (3.3%).
- The **south of Puglia is** among the areas of greatest blue specialization in the country.



Incidence of the blue economy
by province

The Regional innovative system

- The regional innovative system includes the Polytechnic of Bari and the Apulian universities and numerous public and private research bodies and centers, including several CNR institutes, the CMCC, the CHIEAM, the COISPA and CETMA.
- The regional innovation system includes also associations, private companies and new innovation actors (incubators, fablab..), as well as public agencies and local institutions.



SMART ADRIA

SWOT Analysis

- Areas with great tourist and naturalistic potential.
 - Old tradition in the maritime sector and fisheries and related skills
 - Competitive entrepreneurship (nautical, fishing, tourism).
 - Rich regional innovative system (Universities, Research centers, etc.).
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- Increasing availability of European funding on blue growth.
 - Relevant regional potential of emerging sectors (offshore wind, bioeconomy etc).
 - Impact of new public policies and innovative dynamics related to COVID-19 (digitization, etc.).

STRENGTH

WEAKNESSES

- Reduction of fish stocks and overexploitation of the sea resource.
- Regulatory system and standards not adequate for the development of non-traditional sectors of the blue economy.
- Delays in the adoption of the Municipal Coastal Plans.

- Impact of COVID-19 on the regional economy.
- Further reduction of fish stocks.
- Coastal erosion and effects of climate change.
- International competition (tourism, fishing, aquaculture, nautical, etc.).

OPPORTUNITIES

THREATS

Blue economy in Smart Specialization Strategy

Smart Specialization Strategy - Smart Puglia 2020

Blue economy is considered a **strategic sector** in the innovation area «Health and Environment»



SS 2030

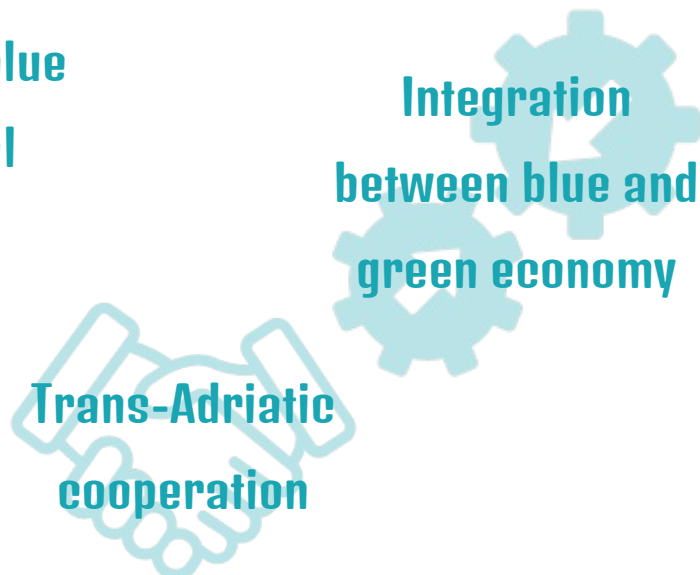
In 2021 Puglia Region, with the support of ARTI, should publish the new Specialization Strategy 2030, with a specific focus on Blue Growth.

DGR n.209 of February 2018

With the Regional Deliberation "Blue Growth and the Strategy for Smart Specialization" was commissioned to ARTI to collaborate with the Puglia Region in the recognition of the regional innovative system and the related lines of action to support its Blue Growth potential.



Drivers of Apulian Blue Growth



BLUE Innovation

Objective: focus on innovation and new market niches as a fundamental competitive factor for the Apulian blue economy:

- in traditional sectors such as fishing or aquaculture (in terms of economic and environmental sustainability);
- in emerging sectors such as the blue bioeconomy or marine renewable energies.

Areas: integrated multitrophic aquaculture, underwater and maritime tourism, algae farming, sustainable shipbuilding ...

Tools: European funds on research (such as Horizon), thematic (eg EMFF) and transversal funds (eg ESF) and Recovery Fund.



Inter-sectoral planning and coordination

Objective: Seize intersectoral synergies and manage the marine and coastal areas organically to stimulate long-term investments.

Areas:

Coastal tourism-fishing, coastal protection-fishing; algae farming-aquaculture, management of cruise flows and tourism etc. Example of a holistic vision of the blue economy was carried out by the Torre Guaceto consortium with educational and tourist activities, combined by a protocol with local fishermen for the regeneration of the fish population, food and wine initiatives with the Slow Food presidium.

Tools: Municipal and Regional Coastal Plans, integration of public policies connected to the sea, intersectoral collaborations.



Integration between blue and green economy

Objective: each blue investment must protect and rebuild the diversity, productivity and resilience of marine ecosystems, in order to contrast pollution, overexploitation and mitigate the effects of climate change.

Areas:

- Circular economy - Use of discarded fishery and aquaculture products for the production of bio-products (cosmetics, functional foods, feed, etc.) and materials (natural polymers for packaging).
- Offshore wind power (minimizing its negative impacts).
- Collection of plastics and microplastics.
- Contrasting coastal erosion.

Tools: Funds related to the European Green New Deal.



Trans-Adriatic cooperation

Objective: to strengthen trans-Adriatic cooperation. Puglia is no longer the gateway to the East of Europe in terms of landings of merchant ships, but has a strategic geographical position for maritime connections with Eastern, Mediterranean and Balkan countries (3 main ports - Bari, Brindisi and Taranto - and 6 minors).

Areas:

- relaunching traditional relations with the east and south of the Mediterranean, both at commercial, touristic and cultural level;
- strengthening cooperation on planning, also in security and environmental issues (international networks of protected areas, coordinated emergency response plans, data sharing), and new common investments (new sea routes, pipelines and submarine cables).

Tools: Interreg programs; Eusair strategy.



Strengthening blue human capital

Objectives: catch the opportunities of blue growth as an important driver of employment (linked to value chains such as agri-food, restaurants, transport) especially in some areas, such as Brindisi and Taranto, already specialized in blue economy activities and where industrial reconversion and fight against unemployment are needed.

Areas:

- development of new qualified professionals, with advanced technological and integrated skills (i.e. chef skipper);
- constant updating of knowledge of employed in the blue economy sectors, both in technical (mechanics, electronics), linguistic (foreign languages), relational and IT fields.

Tools: funds dedicated to training, collaboration between quadruple helix actors and new innovation actors.



Conclusions

- Blue economy represent an important **asset** for Puglia region, in terms of companies, research, skills, natural environment.
- Blue growth represents for Puglia Region **a valuable investment** both at short and long term, because it is able to produce solutions that combine development and employment with economic and environmental sustainability.
- It is important to proceed in parallel on the **development of local planning** and **trans-national interconnections**.
- Focus on an **holistic interpretation of the blue economy**, catching its enormous intersectoral synergies.
- The **Covid-19 emergency** is having important negative impacts on blue economy (coastal tourism, maritime transport..) but it can also be a stimulus for innovation.
- Puglia could become **a blue innovation incubator** to get the enormous potential of blue growth, strengthening the relationships between the different stakeholders of its innovative system.

Thanks for your attention

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In collaboration with