

The BLUEMED INITIATIVE: objectives, achievements and future actions

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The BLUEMED initiative

The BLUEMED Initiative fosters integration of knowledge and efforts of EU member states of the Mediterranean Basin to jointly create new 'blue' jobs and a sustainable industrial growth in the marine and maritime sectors of the area.

It was a priority of the Programme of the Italian Presidency of the Council of the European Union: “....., the Presidency will organise specific events and work with the Commission and Member States to define a Blue Growth flagship initiative for the Mediterranean”.

Work goes on under the Italian coordination with 9 other EU Member States (except Portugal and Belgium, all bordering the Mediterranean): Cyprus, Croatia, France, Greece, Malta, Slovenia, Spain and - since July 2014 –Portugal and, since May 2015, Belgium. The process is supported and facilitated by the European Commission (DG RTD, DG MARE).

BLUEMED Strategic R&I Agenda: the process

Needs & Gaps

- May 2014 >> Set up of the initiative and roadmap;
- June-August 2014 >> **National mapping of R&I projects** (about 900!) via public/private stakeholders consultations; merging of information and **identification of R&I gaps & needs, opportunities and boundary conditions for their implementation.**

Vision

- September - December 2014 >> Sharing of the findings with relevant scientific communities and industrial associations at national and EU level. Set up of the **Vision Document** which was endorsed by the Italian Presidency of the EU Council and presented at the Competitiveness Council of 04-05 December 2014.

SRIA

- February 2015 >> Identification of the Key challenges and goals & actions according to the drivers *boosting blue jobs & growth, knowledge transfer and SMEs participation*
- April 2015 >> drafting of **BLUEMED Strategic Research and Innovation Agenda (SRIA).**
- May-September 2015: Sharing of SRIA with regional, national , EU and international public/private stakeholders;
- October 2015 : **Publication of SRIA** (updates will be made regularly every 6 months) endorsed by 14 EU Countries; 10 endorsed the **Venice declaration** on October 16, 2015)

BLUEMED Vision & SRIA available at: goo.gl/ZbJTWH



Bluemed

Research and innovation initiative
for blue jobs and growth in the Mediterranean area

Web page: goo.gl/ZbJTWH

Strategic research and innovation agenda

BLUEMED Strategic R&I Agenda: 12 Key Challenges

Key enabling knowledge for the Mediterranean

- Mediterranean Sea ecosystems: services, resources, vulnerability and resilience to natural and anthropogenic pressures
- Mediterranean Sea dynamics: developing services in the field of sustainable adaptation and to climate change; and protection of coastal areas in the Mediterranean

Key sectorial enablers in the Mediterranean

- Innovative business based on marine bio-resources in the Mediterranean
- Ecosystem-based management of Mediterranean agriculture and fisheries
- Sustainable maritime clusters in the Mediterranean
- Maritime Spatial Planning & Integrated Coastal Zone Management in the Mediterranean

Enabling technology and capacity creation for the Mediterranean

- Smart, greener maritime transport and facilities in the Mediterranean
- Observatory and geography capacities in the Mediterranean
- Multi-purpose off-shore platforms in the Mediterranean
- Marine and coastal cultural heritage in the Mediterranean: discovering, protecting and valuing

BLUEMED SRIA available at: goo.gl/ZbJTWH

Achievements: BLUEMED impact on Horizon2020

Some BLUEMED SRIA priorities were adopted by the EU commission, DG MARE and DG RTD, and included in their R&I programmes.

European Commission DG MARE

Call for proposals:

Blue Labs - innovative solutions for maritime challenges (May 31, 2016);

Blue Careers in Europe (May 31, 2016);

Blue Technology - transfer of innovative solutions to sea basin economies (Sept 2016)

<https://ec.europa.eu/easme/en/call-proposals-blue-labs-innovative-solutions-maritime-challenges>;

<https://ec.europa.eu/easme/en/call-proposals-blue-careers-europe>

<https://ec.europa.eu/easme/en/call-proposals-blue-labs-innovative-solutions-maritime-challenges>

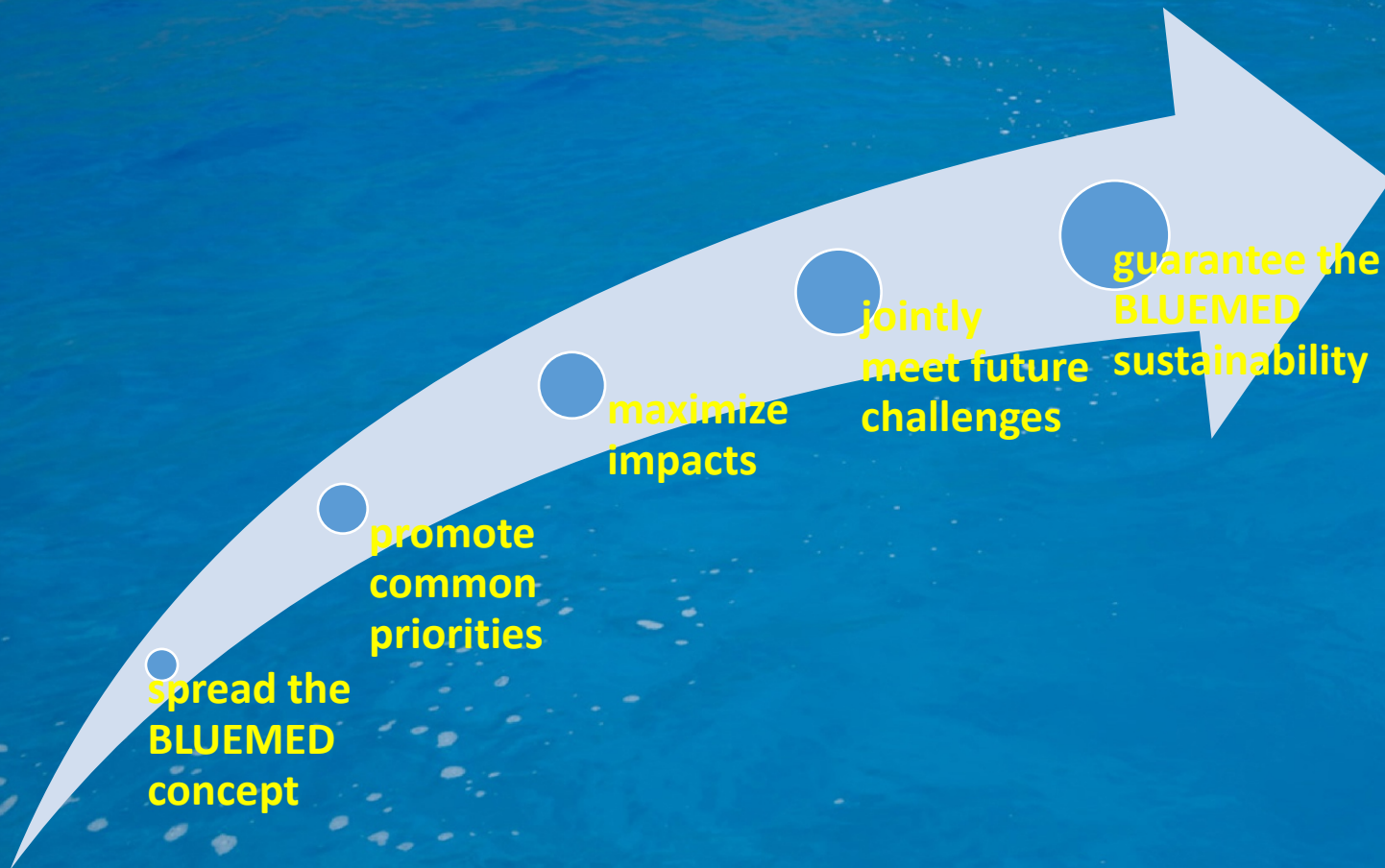
European Commission DG RTD

Six BLUEMED R&I priorities were included in the 2016-2017 WP of Horizon 2020 SC2 with € 43 M.

(http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-food_en.pdf)

Achievements: a BLUEMED CSA promoting implementation of SRIA in the whole MED

The BLUEMED CSA aiming at implementing BLUEMED SRIA in the whole MED is on place since October 1st 2016.



Current and future actions: promotion and sharing SRIA priorities in the whole MED

Some EU MS are adopting BLUEMED SRIA priorities in their national/regional R&I agendas, in line with the Venice Declaration (endorsed by 10 Countries; Venice, Oct 16, 2015). In IT, BLUEMED SRIA is quoted in the “National Plan for Research”, in some regional Smart Specialization Strategies and the IT strategy for Bioeconomy.

Representatives of BLUEMED Strategic Board and of the “EU Strategy for the Adriatic Ionian Region” (EUSAIR) initiative are sharing R&I priorities and actions, in close cooperation with DG REGIO and DG MARE. BLUEMED Strategic Board contributes to the “Initiative for the sustainable development of the blue economy in the western Mediterranean” (WEST MED).

BLUEMED CSA and Strategic Board will promote SRIA in all Countries bordering the MED, in close cooperation with Union for Mediterranean (UfM). BLUEMED initiative is quoted in the UfM declaration and road-map.

Final objective: to contribute to align/integrate funding strategies, R&I funds and infrastructures in the MED at regional, national and EU level, by avoiding duplication, improving the effectiveness in the use of resources and maximizing the leverage effects.

BLUEMED Related initiatives



Union for the Mediterranean
Union pour la Méditerranée
الإتحاد من أجل المتوسط

<http://ufmsecretariat.org/water-environment/>

BLUEMED Related initiatives

DG REGIO



WESTMED

DG MARE MARITIME INITIATIVE

5 EU Member States:

Italy, Spain, France, Portugal, Malta

5 IPA countries

Algeria, Libya, Tunisia, Morocco, Mauritania

<https://webgate.ec.europa.eu/maritimeforum/en/frontpage/101>

4 EU Member States:

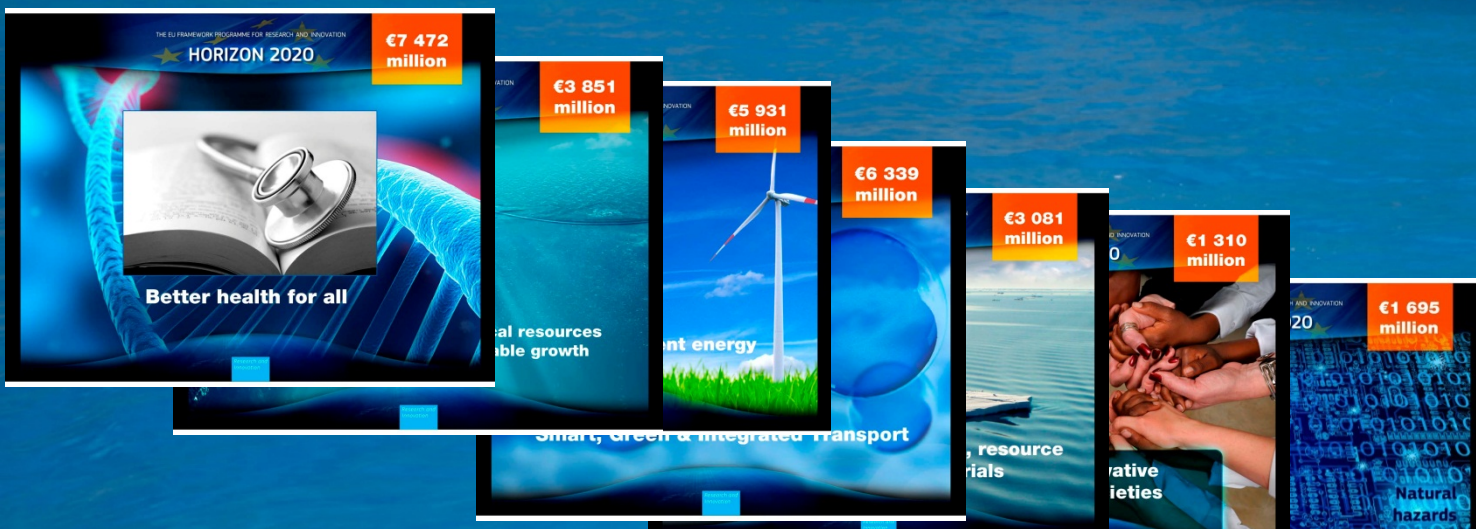
Croatia, Greece, Italy, Slovenia

4 IPA countries

Montenegro, Serbia, Albania, Bosnia & Herzegovina

<http://www.adriatic-ionian.eu/>

DG RTD Horizon 2020, Priority 3: Societal challenges



1. Health, demographic change and wellbeing (7.472 Bln)

2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the bioeconomy (3.851 Bln)


3. Secure, clean and efficient energy (5.931 Bln)

4. Smart, green and integrated transport (6.339 Bln)

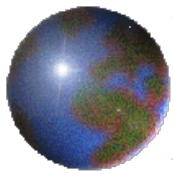
5. Climate action, resource efficiency and raw materials (3.081 Bln)

6. Inclusive, innovative and reflective societies (1.310 Bln)

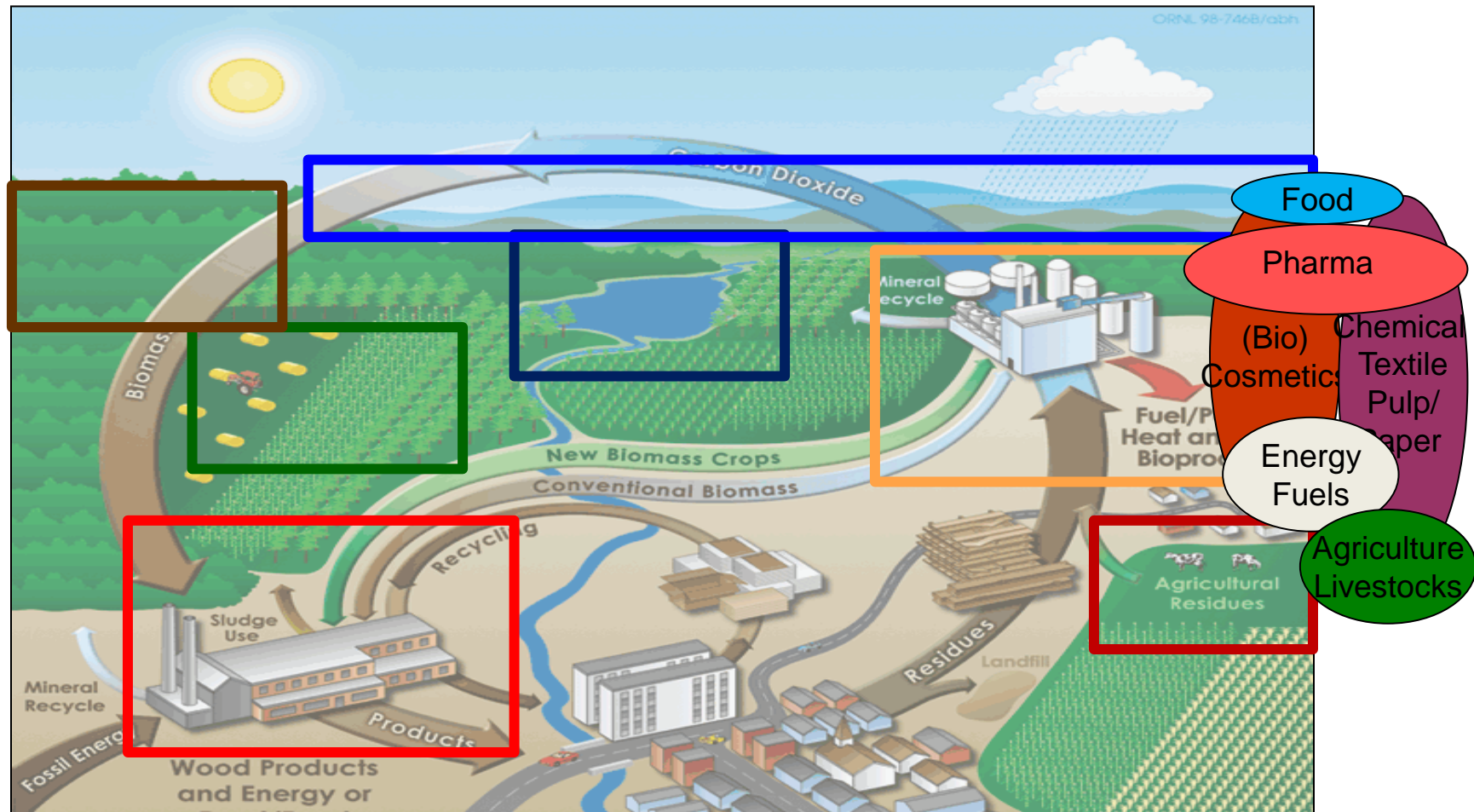
7. Secure societies (1.695 Bln)



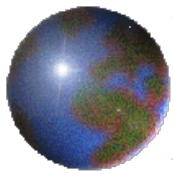
BLUE GROWTH as a key sector of Bioeconomy landscape



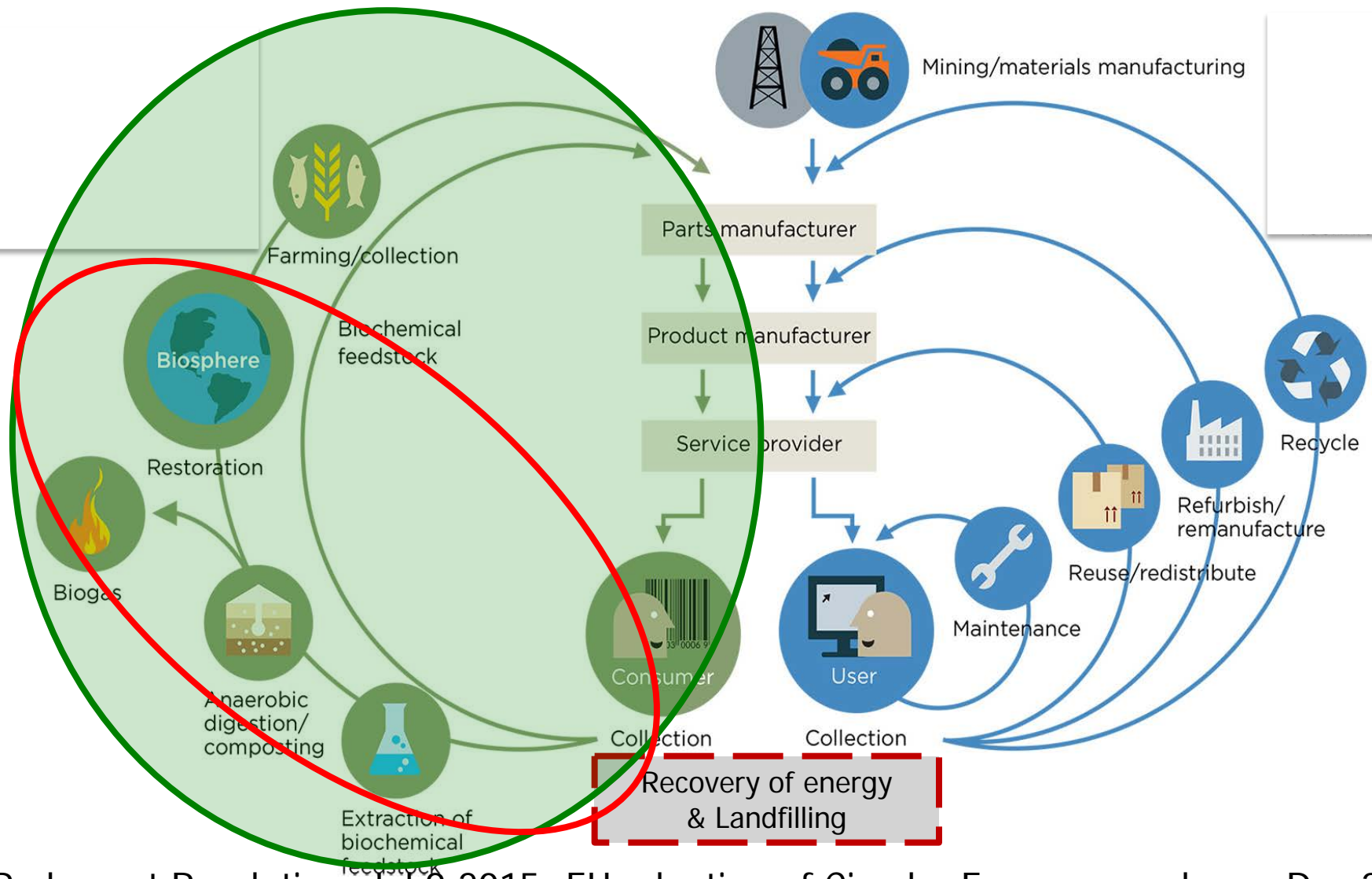
The European and Italian Bioeconomy



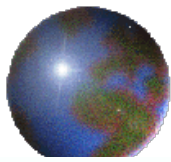
In EU: about 2,100 Billion €/y and 19 Million of jobs
In Italy: about 255 Billion €/y and 1.7 Million of jobs



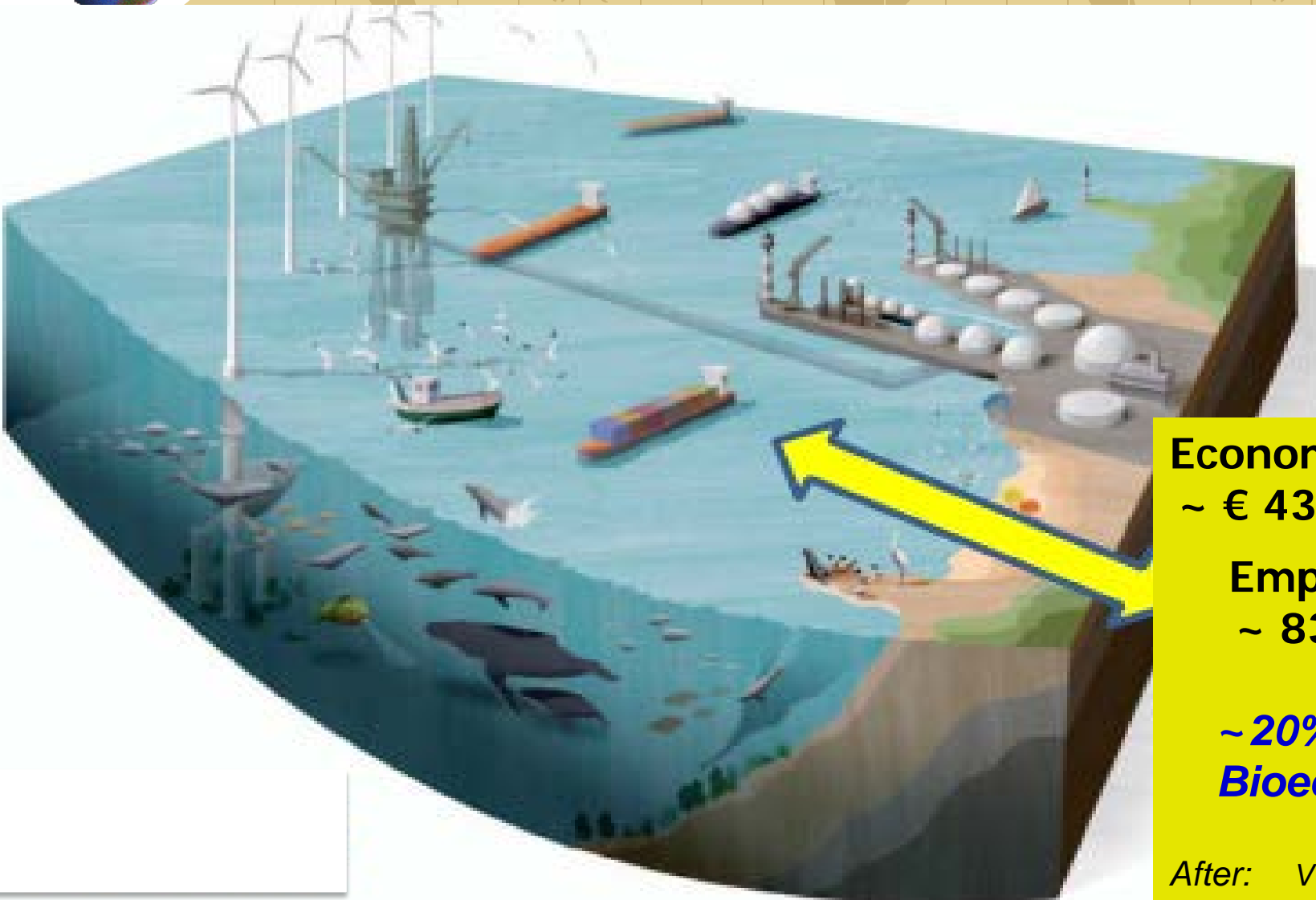
BioBased Industry, Bioeconomy & Circular Economy



Parlament Resolution: Jul 9 2015; EU adoption of Circular Economy package: Dec 2, 2015
In EU by 2030: +30% resource saving; -50% CO2 emission; +7% PIL; +2 M jobs



The Italian Marine and Maritime sectors

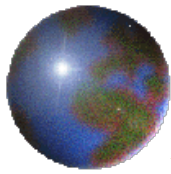


Economic value:
~ € 43 Billion/y

Employees
~ 835,000

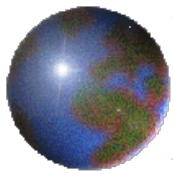
~ 20% due to
Bioeconomy

After: V RAPPORTO
SULL'ECONOMIA DEL
MARE Unioncamere,
2016

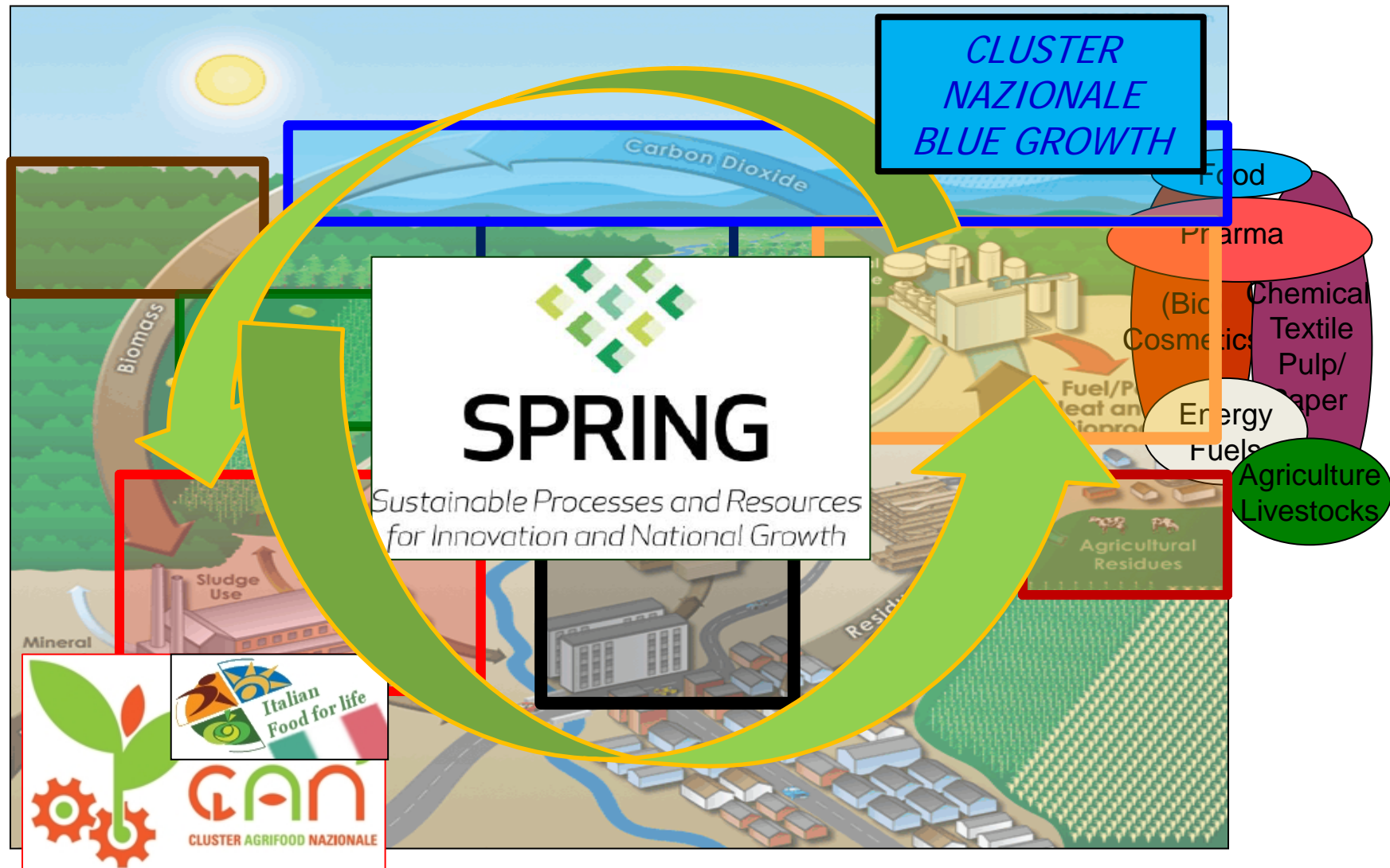


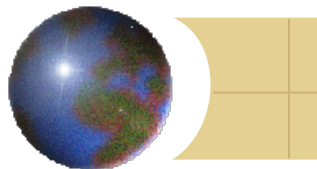
The Italian Marine and Maritime sectors: main R&I needs

- ❑ Improve sustainability and productivity of fishery and marine aquaculture;
 - ❑ Exploitation of marine biological resources, ie, biomass, microbes, enzymes, and byproducts and biowaste from of fishery and aquaculture products processing, in biorefinery schemes;
 - ❑ Biomonitoring and Bioremediation of marine habitats water/sediments systems and development of low impact (bio)materials to limit/prevent marine litter and pollution;
 - ❑ Sustainable exploitation of deep sea biosystems and land/sea nexus;
 - ❑ Sustainable tourism and valorization of costal and marine cultural heritage and protected areas.
-
- ❑ Greener and safer ports, vassels and trasportation;
 - ❑ Production of marine renewable energy;
 - ❑ Monitoring and sustainable remediation of spills and contaminated water/sediments systems;
 - ❑ Implementation of Marine Spatial Planning (MSP) and Integrated Costal Zoon Management (ICZM);
 - ❑ Implementation of Operational Oceanography/ Observing Systems.



Integrated Bioeconomy: IT actors of the sectors inter-connection





BIT

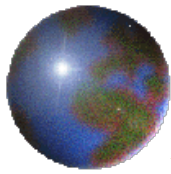


Bioeconomy in Italy



www.agenziacoesione.gov.it/it/Notizie_e_documenti/news/2016/novembre/Documento_0014

**ECONOMY, SOCIETY
and the ENVIRONMENT**



Towards an Italian Bioeconomy strategy: Concept & Objective

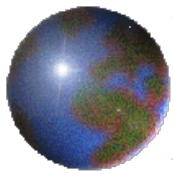
Concept:

The Italian Bioeconomy refers to an economy that relies on renewable natural resources to produce food, bio-based products and energy, and services through integrated chains.

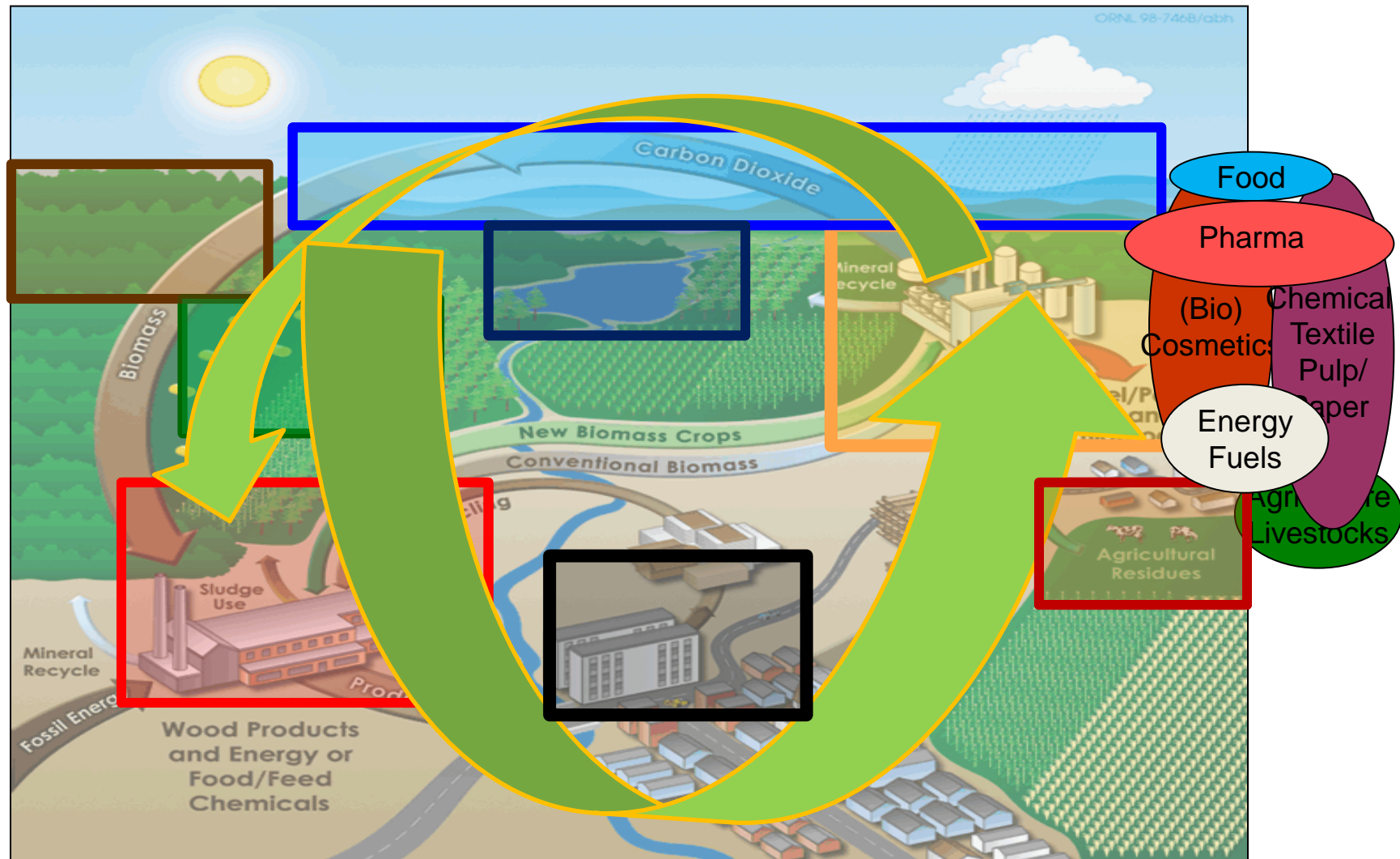
It aims to reduce Italian dependence on petroleum, prevent biodiversity loss, regenerate the environment and create new economic growth and jobs, leveraging on local diversities and traditions, in particular in the rural, coastal and industrial areas (including the abandoned ones), in line with the principles of sustainable development.

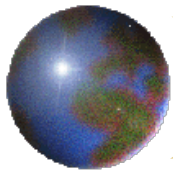
Objective:

To increase our current Italian bioeconomy output (of about EUR 250 billion/y) and jobs (about 1,7 million) by 20% by 2030.



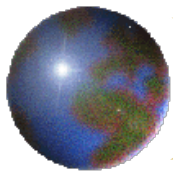
Towards an Italian Bioeconomy strategy: Priorities & Strategies (a)





Towards an Italian Bioeconomy strategy: Priorities & Strategies (b)

- a) To move "*from sectors to systems*", by more efficiently interconnecting the bioeconomy sectors, from the bioresources production (ie, Agriculture, Forestry, Marine, etc), to their processing and final products exploitation (i.e., food, wood, paper, leather, textile, chemical, pharma and energy industries) by creating longer, more sustainable and locally routed value chains, where the actions of public and private stakeholders integrate across all major sectors;
- b) To create "*value from local biodiversity & circularity*" (ie, biowastes valorisation, abandoned lands regeneration, etc);
- c) To move from "economy to sustainable economy" via i) avoiding overexploitation of renewable resources ii) preservation and exploitation of ecosystem services and iii) ensuring lower pollution/waste generation.
- d) To move "*from concept to reality*" via i) a wider and more coherent political commitment, ii) investments in R&I, education, training, communication, iii) better coordination between regional, national and EU stakeholders/policies, iv) better engagement of a public dialogue, and v) tailored market development actions.



Towards an Italian Bioeconomy strategy: Stakeholders involved and Road map

The Strategy was promoted by the Italian Presidency of Council of Ministers. Involved in its development and implementation are: the i) Ministry for the Economical Development (co-coordinator), ii) Ministry of Agriculture, Food and Forestry, iii) Ministry of Education, University and Research, iv) Ministry of the Environment, Land and Sea, v) the Committee of Productive Activities of the Italian Regions Conference, vi) Agency for Territorial Cohesion, and VI) the Italian Technology Clusters for Green Chemistry and AgriFood (*and BlueGrowth*).

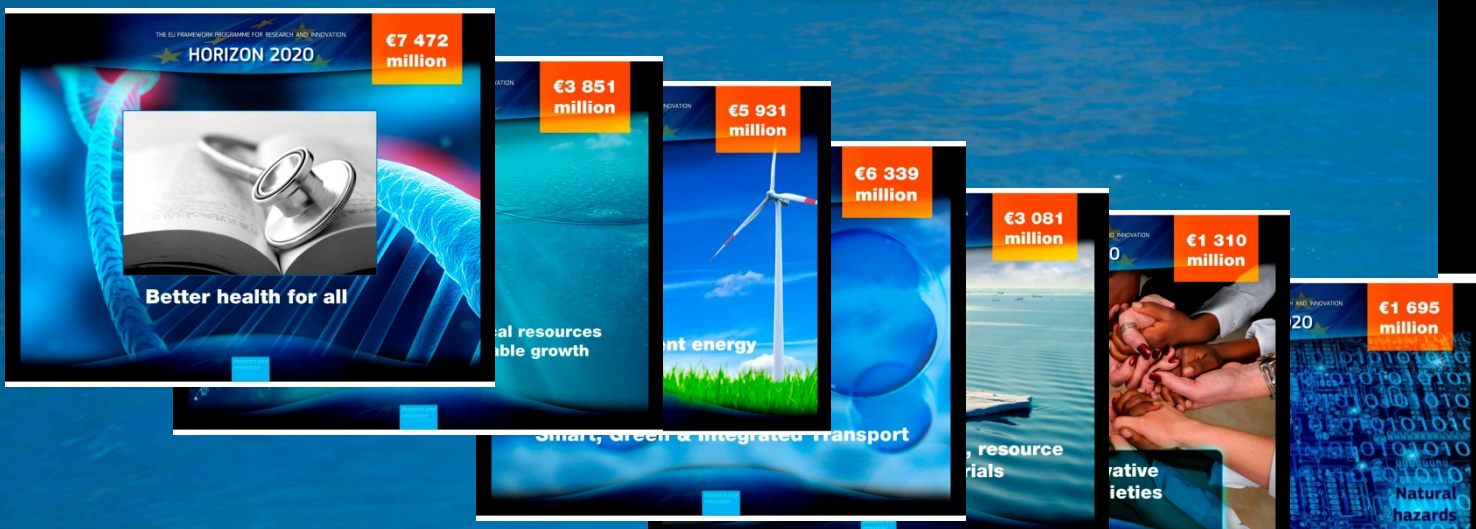
The strategy exploits priorities identified in the frame of the National Smart Specialization (pillars “AgriFood” & “Biobased Economy”), developed with all major Italian Stakeholders, and it will be part of its implementation process in synergy with the Italian National Strategy for the Sustainable Development.

A draft of the Italian Bioeconomy strategy is available at the web site: www.agenziacoessione.gov.it/it/Notizie_e_documenti/news/2016/novembre/Documento_0014 since Nov 22, 2016. **All Stakeholders of the Italian Bioeconomy, Citizens and any other interested in it are invited to express their views on the document by December 23, 2016.**

Horizon2020 opportunities

Horizon 2020, Priority 3: Societal challenges

**Tackling
societal
challenges
for a better
society**



1. Health, demographic change and wellbeing (7.472 Bln)
2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the bioeconomy (3.851 Bln)
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7. Secure societies (1.695 Bln)

H2020 SC2, WP2016-2017

SC2**WP 2016-2017****2016: ~352.5 M€****2017: ~390.0 M€**

SFS – Sustainable Food Security – Resilient and Resource Efficient value chains

2016: 180.5 M€**2017: 251.0 M€**

BG - Blue Growth – Demonstrating an Ocean of opportunities

2016: 82.0M€**2017: 47.0M€****New**

RUR – Rural Renaissance – Fostering innovation and business opportunities

2016: 66M€**2017: 62M€**

BE – Bio-based innovation for sustainable goods and services – Supporting the development of a European Bioeconomy

2016: 24M€**2017: 30M€**

BG - Blue Growth topics, SC2 WP2016/17

Boosting Innovation for emerging Blue Growth activities

BG-01-2016: Large-scale algae biomass integrated biorefineries

BG-02-2016/2017: High value-added specialised vessel concepts enabling more efficient servicing of emerging coastal and offshore activities (IA, 8M, Feb 14, 2017)

BG-03-2016: Multi-use of the oceans' marine space, offshore and near-shore: compatibility, regulations, environmental and legal issues

BG-04-2017: Multi-use of the oceans marine space, offshore and near-shore: Enabling technologies (IA, 8M, Feb 14, 2017)

BG-05-2016: ERA-NET Cofund on marine technologies

Linking healthy oceans and seas with healthy people

BG-06-2017: Interaction between people, oceans and seas: a strategic approach towards healthcare and well-being (CSA, 2M, Feb 14, 2017)

BG-07-2017: Blue green innovation for clean coasts and seas (IA, 12M, Feb 14, 2017)

BG-08-2017: Innovative sustainable solutions for improving the safety and dietary properties of seafood (IA, 7M, Feb 14, 2017)

The Arctic Dimension

BG-09-2016: An integrated Arctic observation system

BG-10-2016: Impact of Arctic changes on the weather/climate of Northern Hemisphere

BG-11-2017: The effect of climate change on Arctic permafrost and its socio-economic impact, with a focus on coastal areas (RIA, 10M, Feb 14, 2017)

Valorising the Mediterranean Sea Basin

BG-12-2016: Towards an integrated Mediterranean Sea Observing System

BG-13-2016: Support to the BLUEMED Initiative: Coordination of marine and maritime research and innovation activities in the Mediterranean

Other Blue Growth relevant topics, WP2016/17

RUR-02-2017: Coastal-rural interactions: Enhancing synergies between land and sea-based activities (RIA,5M, I stage Feb 14, 2017, II stage 13 Sept 2017)

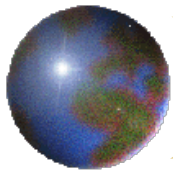
SFS-20-2017: Towards a science-based regionalisation of the Common Fisheries Policy (RIA,6M, I stage Feb 14, 2017, II stage 13 Sept 2017)

SFS-21-2016/2017: Advancing basic biological knowledge and improving management tools for commercially important fish and other seafood species (RIA,5M, I stage Feb 14, 2017, II stage 13 Sept 2017)

SFS-22-2017: Smart fisheries technologies for an efficient, compliant and environmentally friendly fishing sector (IA,6M, I stage Feb 14, 2017, II stage 13 Sept 2017)

SFS-23-2016: Improving the technical performance of the Mediterranean aquaculture

SFS-24-2016: Reinforcing international cooperation on sustainable aquaculture production with countries from South-East Asia

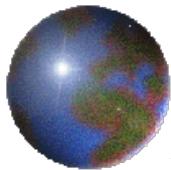


Other programmes sustaining R&I in the sector (a)

II Programma di Cooperazione Transfrontaliera ADRION 2014-2020



<http://www.adrioninterreg.eu/>



ADRION Eligible geographical area

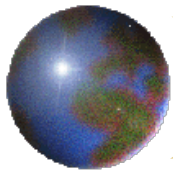
Transnational Cooperation areas 2014 - 2020

ADRIATIC-IONIAN



European
Commission





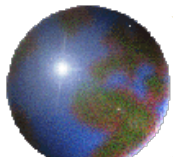
Other programmes sustaining R&I in the sector (b)

II Programma di Cooperazione Transfrontaliera Italia-Croazia 2014-2020

Interreg
Italy - Croatia



<http://www.italy-croatia.eu/>



ADRIION Eligible geographical area

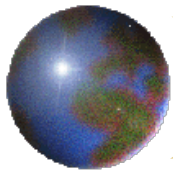
Cross-border cooperation programmes 2014-2020

IT-HR - Italy-Croatia



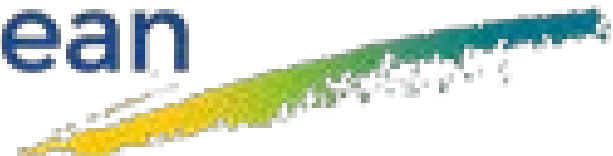
European
Commission



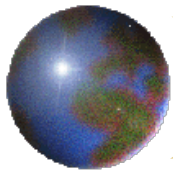


Other programmes sustaining R&I in the sector (c)

Interreg
Mediterranean



<http://interreg-med.eu/en/home/>



Other programmes sustaining R&I in the sector (d)

Thank You!



Priority Area: Environment and Resource Efficiency
Priority Area: Environment and Resource Efficiency
Topic: Water including the marine environment:

- Better integrated coastal management and maritime spatial planning
- flood and drought risk management
- preventing and reducing marine litter
- promoting synergies between integrated coastal management and maritime spatial planning, demonstrating the added value of coordinating integrated coastal management and maritime spatial planning in new marine contexts etc,

<http://ec.europa.eu/environment/life/>