

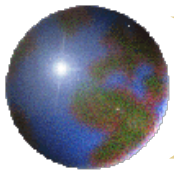
Circular Bioeconomy in EU and in Italy, and the Italian Bioeconomy strategy

Fabio Fava

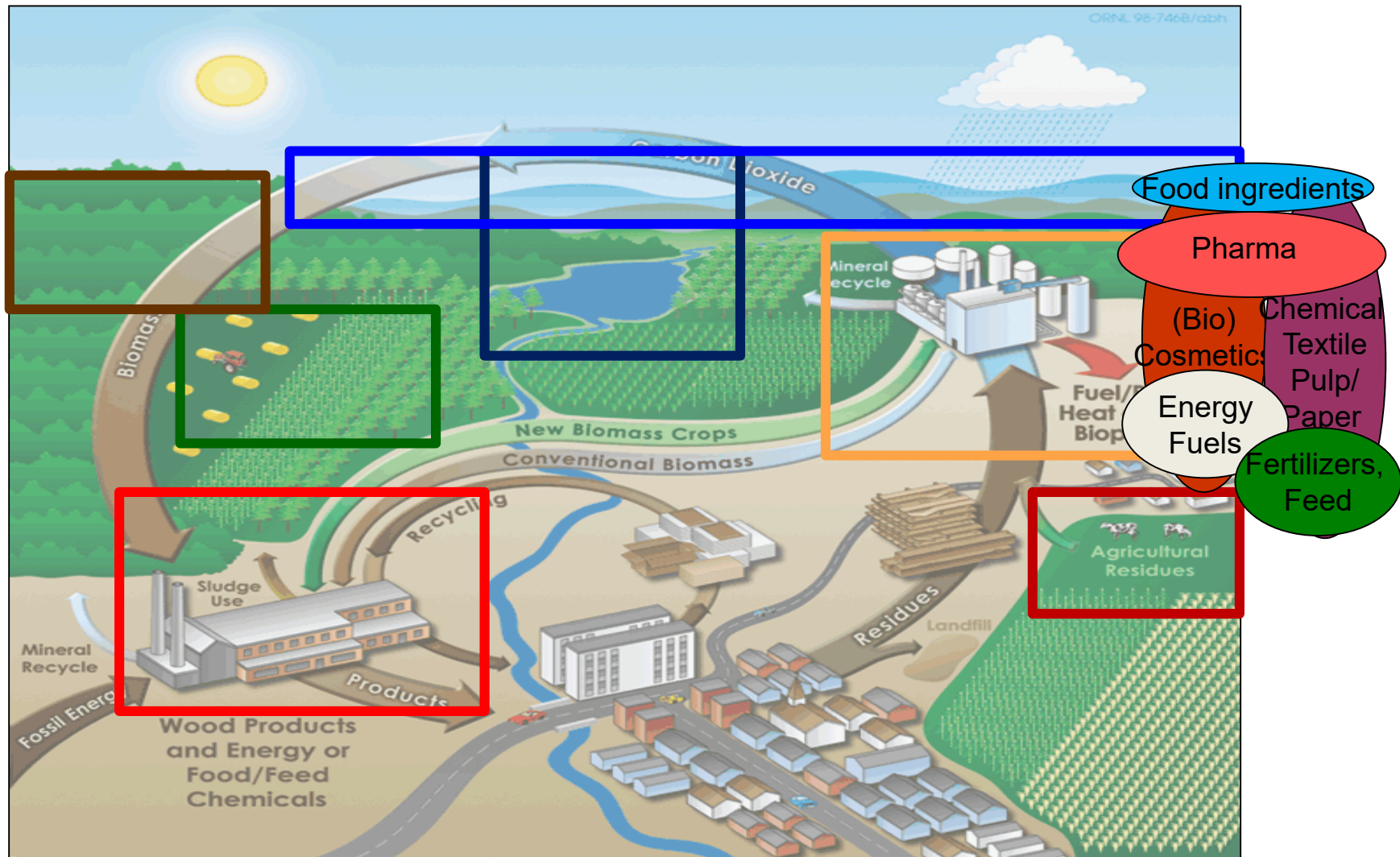
Italian Representative, i) *Horizon2020 SC2* Programming Committee; ii) "States Representatives Group" of *Public Private Partnership Biobased industry (BBI JU)*; iii) *BLUEMED Initiative* WP EuroMed GSOs

School of Engineering, AlmaMater Studiorum-Università di Bologna, Italy

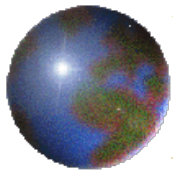
(E-mail: fabio.fava@unibo.it)



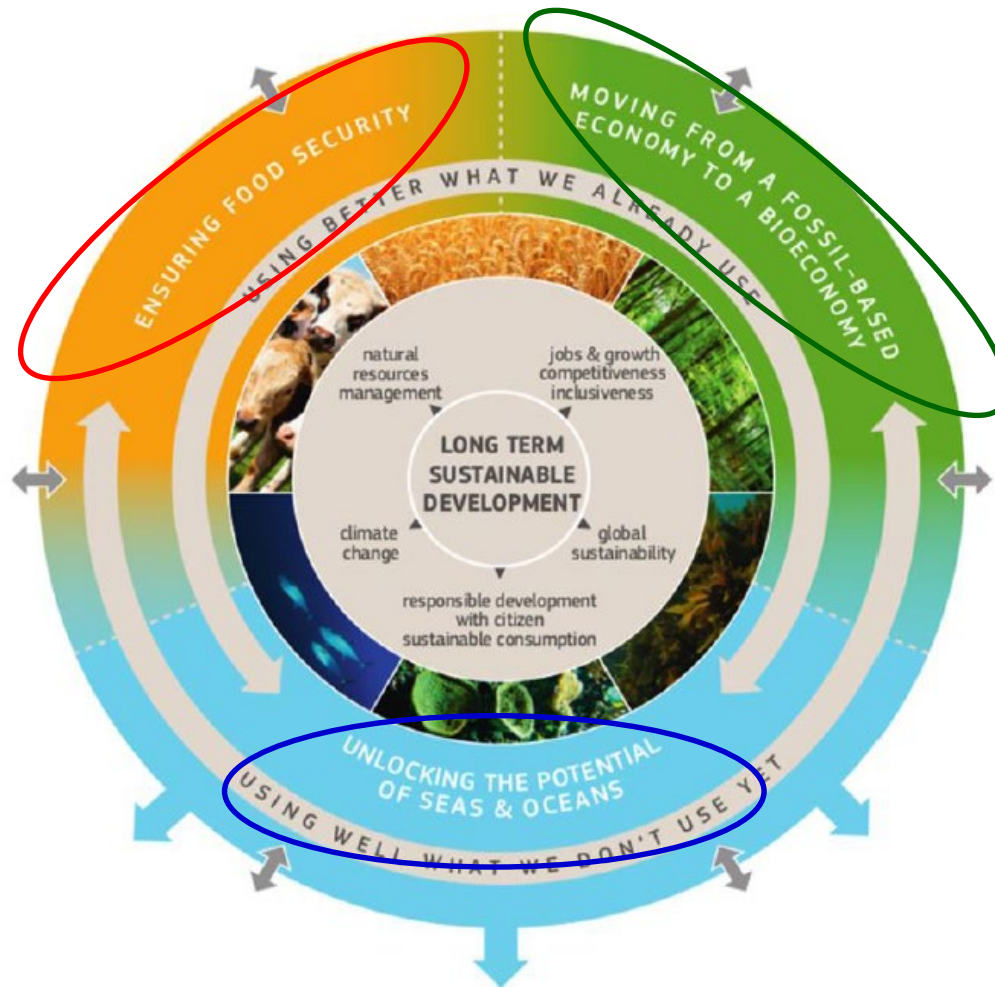
The European Bioeconomy landscape



About 2.300 Bln € / y and 18 Mln of jobs (JRC, 2018)

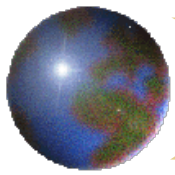


The 2012 European Bioeconomy Strategy



- Productive and resource-efficient primary production systems
- Sufficient supplies of safe and high quality food and bio-based products, including bioenergy
- Competitive and low carbon value chains.

Innovating for Sustainable Growth
A Bioeconomy for Europe



Bioeconomy in Horizon2020

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)

A Public-Private Partnership on Bio-Based Industries

Realising the European Bio-economy Potential



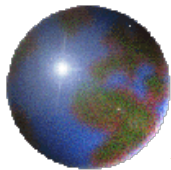
€ 3.2 Billion (2014-2020)

Supported by

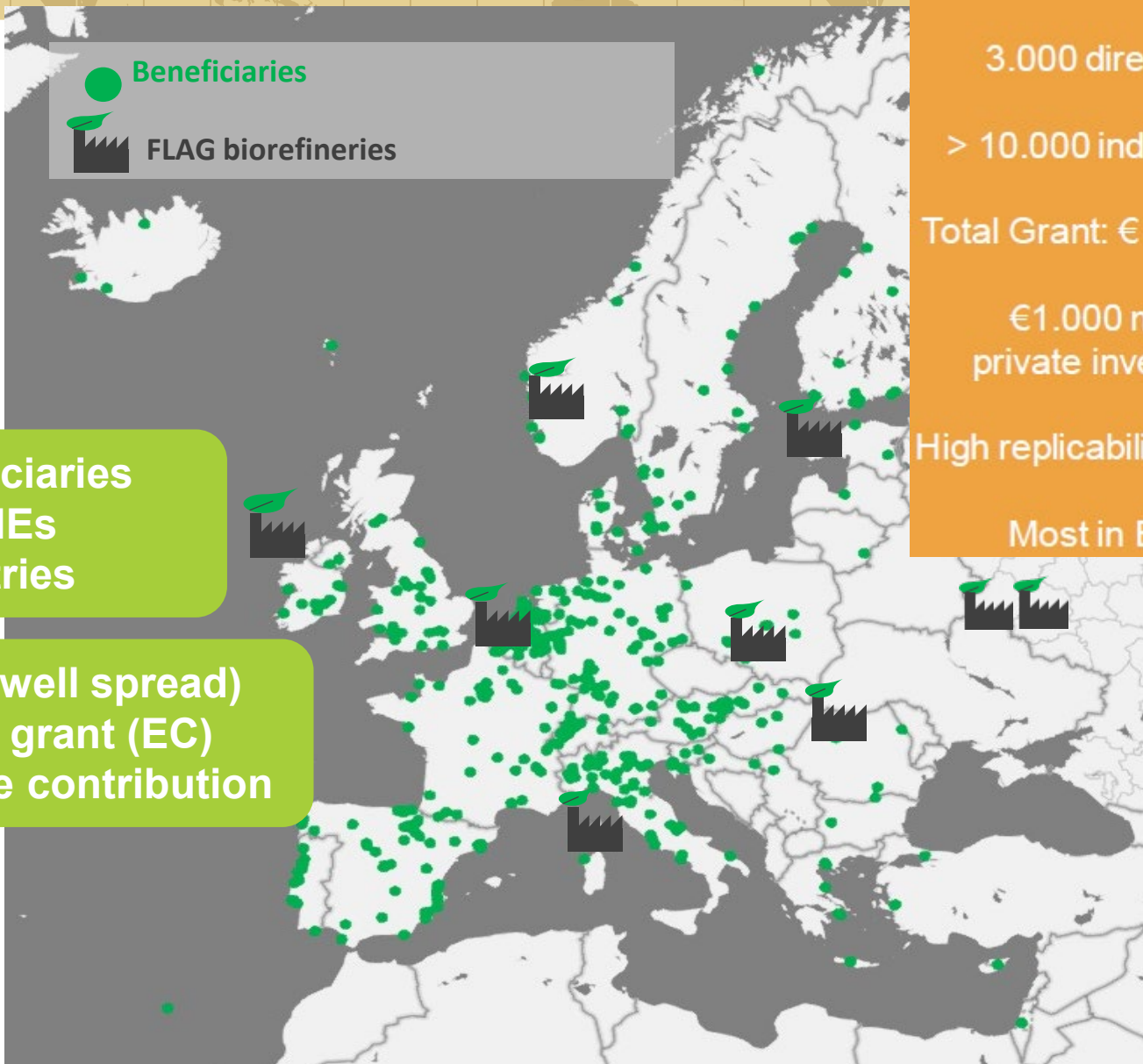




<http://www.bbi-europe.eu/>

 Bio-based Industries
Consortium



PPP BioBased Industry: impacts

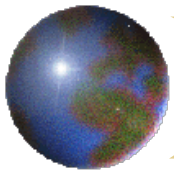


 Beneficiaries
 FLAG biorefineries

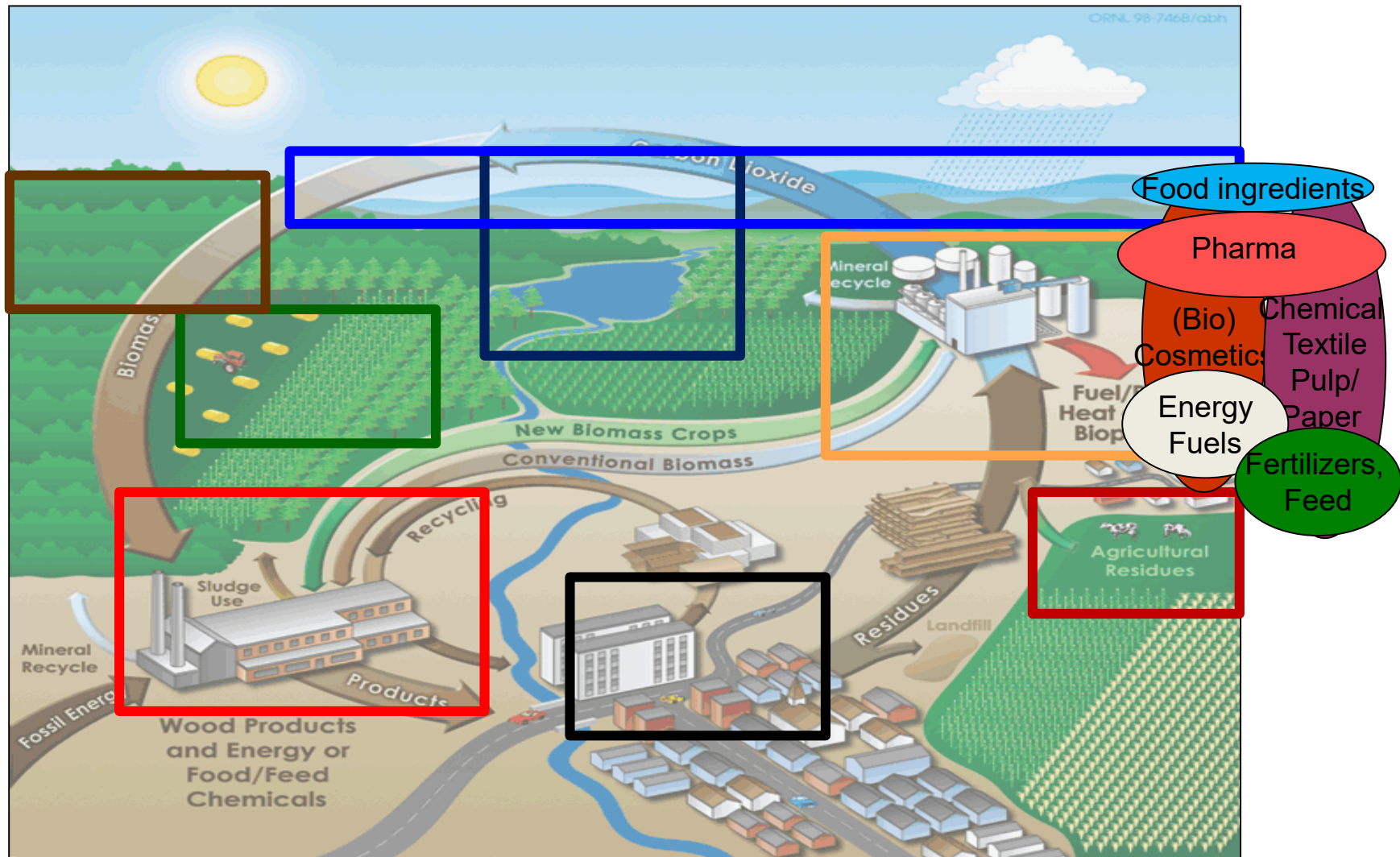
1179 beneficiaries
40% SMEs
35 countries

100 projects (well spread)
€ 602 million grant (EC)
€ 1.65 bn private contribution

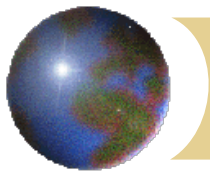
7 FLAGSHIPs
3.000 direct jobs
> 10.000 indirect jobs
Total Grant: € 159 million
€1.000 million private investment
High replicability potential
Most in EU13



The Italian Bioeconomy landscape



About 330 Bln €/y and 2 Mln of jobs (3rd in EU)



Italian performances in Bioeconomy

...but it is often the 2nd EUMS as presence in H2020SC2 & BBIJU funded projects..

Italian presence in the proposals funded by H2020 SC2 + SMEinst

2014 - 4th
2015 - 3rd
2016 - 3nd
2017 - 1st
2018 - 3nd

Budget received: ~ € 145 M

Italian presence in the proposals funded by BBI JU

2014 - 5th
2015 - 3rd
2016 - 2nd
2017 - 1st
2018 - 2nd

Budget received: ~ € 75 M

...and the 1st in biodiversity richness, high quality bioproducts on the market, etc

Thus, Italy can do more but this requires to:

- i) face challenges and exploit opportunities of each the internal Bioeconomy sectors, better interconnect them and their public/private actors;
- ii) increase coordination among Ministries, Ministries and Regions, for policies and regulations, R&I funding programmes, infrastructures, etc.

The updated IT Bioeconomy strategy (BIT II)

BIT II

Bioeconomy in Italy



Roma, May 14, 2019

A new Bioeconomy
strategy for a
sustainable Italy

AVAILABLE AT:

http://cnbbsv.palazzochigi.it/media/1774/bit_en_2019_02.pdf

1 Bioeconomy – Basics

- 1.1 In the global and EU context
- 1.2 At Italian level
- 1.3 Bioeconomy at regional levels

2 Raw materials sources and the opportunities of biowaste

3 Bioeconomy in everyday life

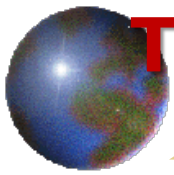
4 The social dimension of the bioeconomy

5 Legislative framework, funding measures and market pull measures

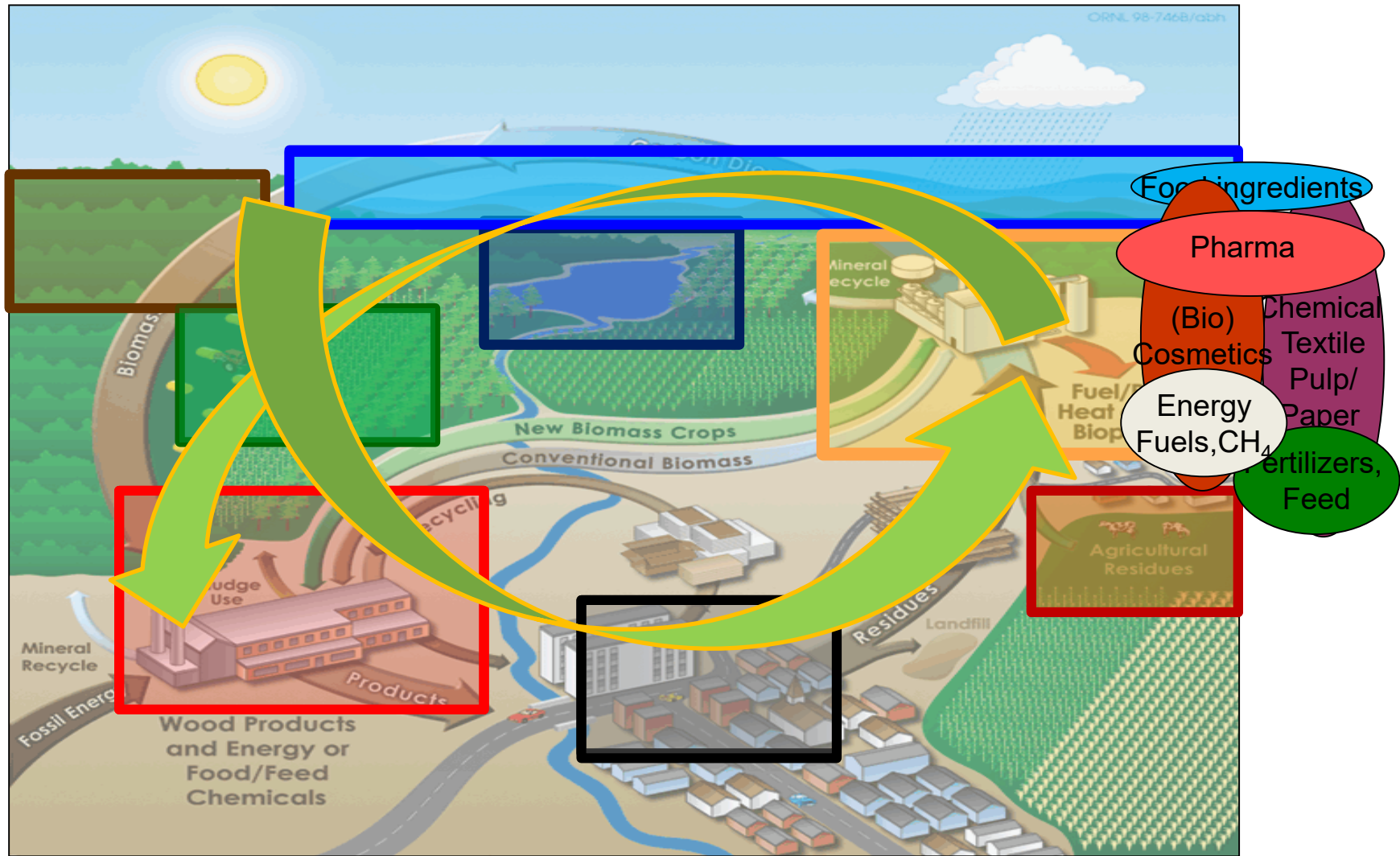
6 Challenges and action plan for the Italian bioeconomy

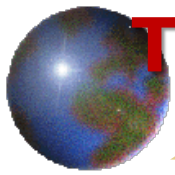
7 Implementation and monitoring

8 Actors involved and road map



The updated IT Bioeconomy strategy (BIT II): the vision





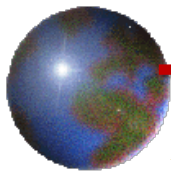
The updated IT Bioeconomy strategy (BIT II): main objectives and priorities

Main priorities:

- a) Improve sustainably the productivity and quality of products of each of the sectors and more efficiently interconnect them, by creating longer and more locally routed value chains, where the actions of public and private stakeholders integrate across all major sectors;
- b) Exploit national terrestrial/marine biodiversity, ecosystem services and circularity, and regenerate abandoned/marginal lands and former industrial sites;
- c) Contribute to the growth of Bioeconomy in the Mediterranean area via PRIMA and BLUEMED initiatives, for a greener and more productive region, a wider social cohesion and political stability in the area;
- d) Create: i) more coherent political commitment and coordination among regional and national institutions/stakeholders, ii) more investments in R&I, start ups, infrastructures and consistency with policies/regulations, iii) increased demand for bio-products via tailored standards, labels, and incentives, and tailored communication; iv) education and training.

Objective:

Increase Italian Bioeconomy turnover and jobs by 15% by 2030.



The updated European Bioeconomy strategy

Brussels, October 2018



<https://ec.europa.eu/research/bioeconomy/in dex.cfm?pg=policy&lib=strategy>

A sustainable bioeconomy for Europe: strengthening the connection between economy, society and the environment

Updated Bioeconomy Strategy



Research and Innovation

Rapidly deploying bioeconomies across Europe

- set up an EU Bioeconomy Policy Support Facility for EU countries to develop national/regional agendas;
- launch pilot actions for the development of bioeconomies in rural, coastal and urban areas, interconnecting the sectors.

Scaling up and strengthening the bio-based sectors via a €100 million Circular Bioeconomy Thematic Investment Platform.

Protecting the ecosystem and understanding the ecological limitations of the bioeconomy

Horizon Europe

Open Science

ERC

MSCA

Research
Infrastructure

Ind.Tot: €25 Bln

Global Challenges Industrial Competitiveness

Health

Inclusive and Secure Society

Digital and Industry and Space

Climate, Energy and Mobility

Food, Bioeconomy, Natural Resources,
Agriculture and Environment

Incl. non nuclear activities JRC

Ind. Tot: € 53 Bln

Open Innovation

EIC
(Ecosystems)

EIT

Ind.Tot: €13,5 Bln

Strengthening ERA

Sharing Excellence

Reforming/Enhancing R&I systems

MISSIONS: Healthy Oceans Seas, Coastal and inland waters; Soil Health and Food