High level event
on the revised Italian Bioeconomy Strategy

Intervention of

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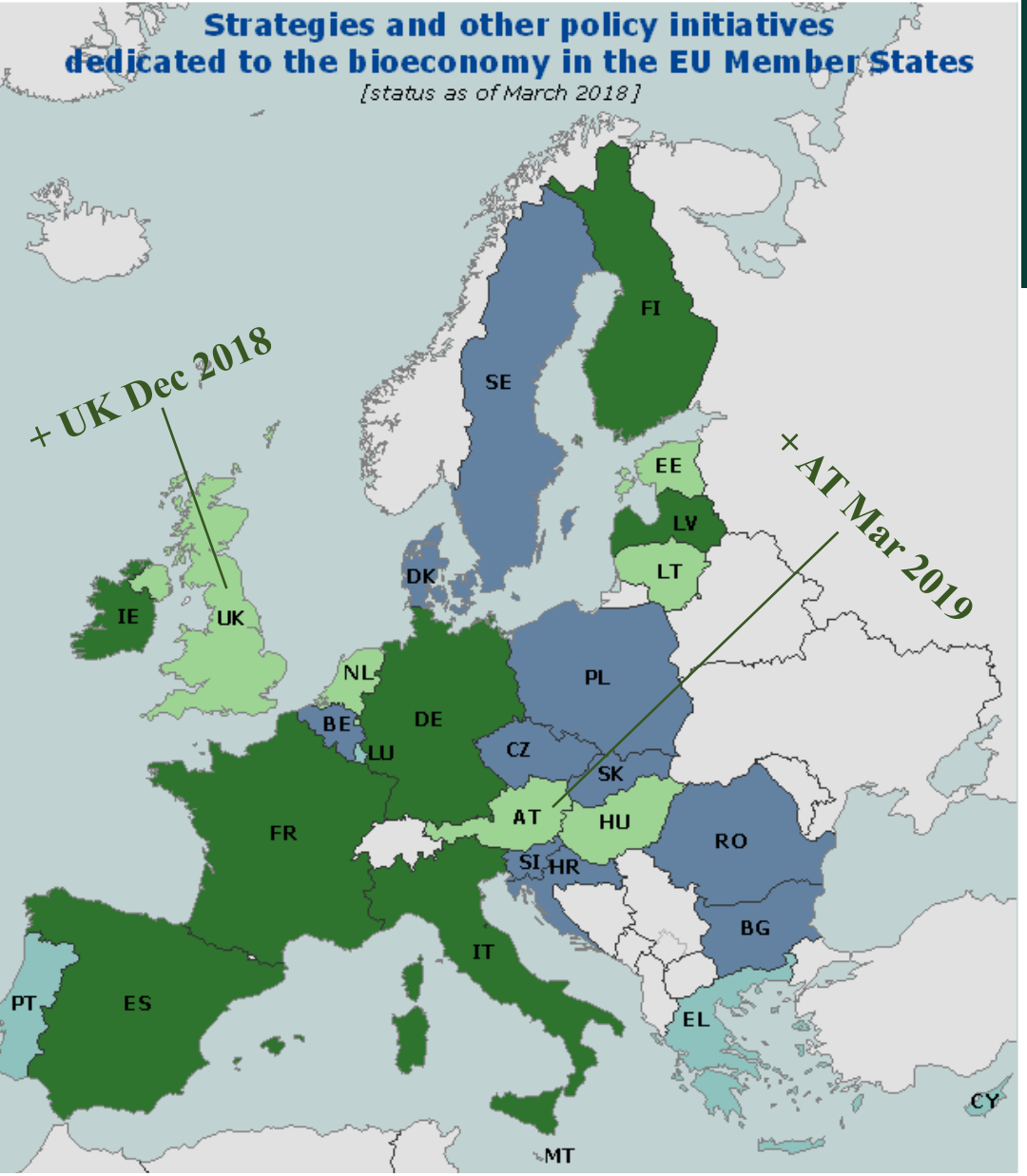
Rome, 14.05.2019

European Commission

Bioeconomy Strategies in EU Member States



Bioeconomy in the EU - *Great diversity… - Wide variety…*

- **9 MS** have a dedicated bioeconomy strategy

  Finland, Latvia, Germany, Italy, France, Spain, Ireland , UK, AT

- **5 MS** in the process of developing a strategy

  Estonia, Hungary, Lithuania, the Netherlands + Sweden (Apr. 2019)

- **11 CEE MS** plan to develop one under the **Bioeast initiative**

  Bulgaria, Croatia, Czechia, Hungary, Poland, Romania, Slovakia, Slovenia, Estonia, Lithuania, Latvia

- **>50 regions** have a bioeconomy-related strategy. Almost all foresee R&I in their RIS3 *(CoR Opinion)*

- **Only a few cities have bioeconomy-related priorities in their policies**

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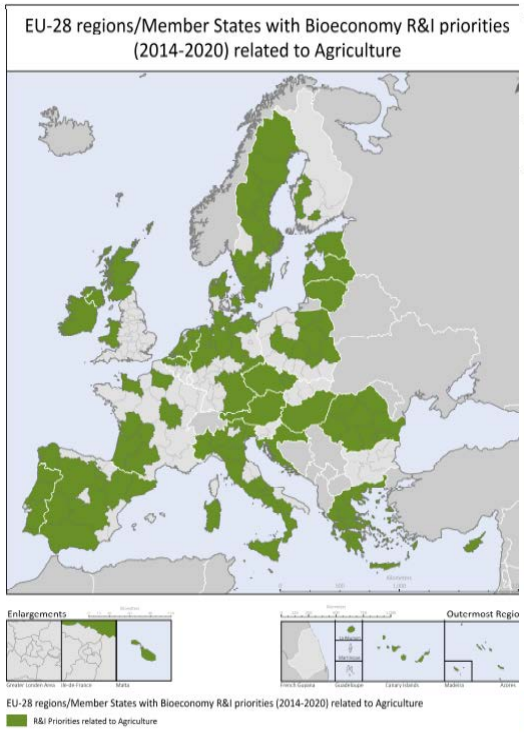
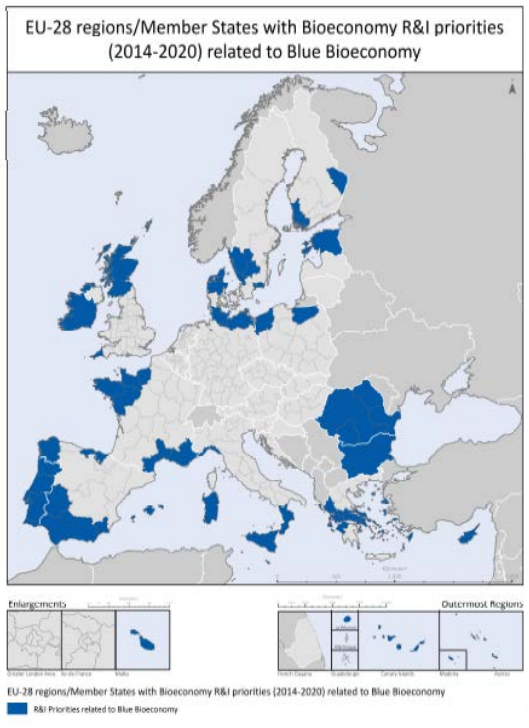
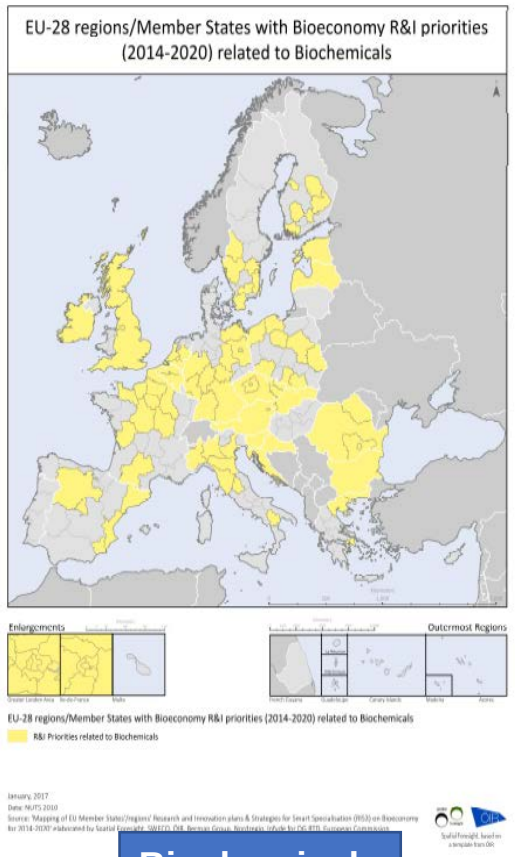
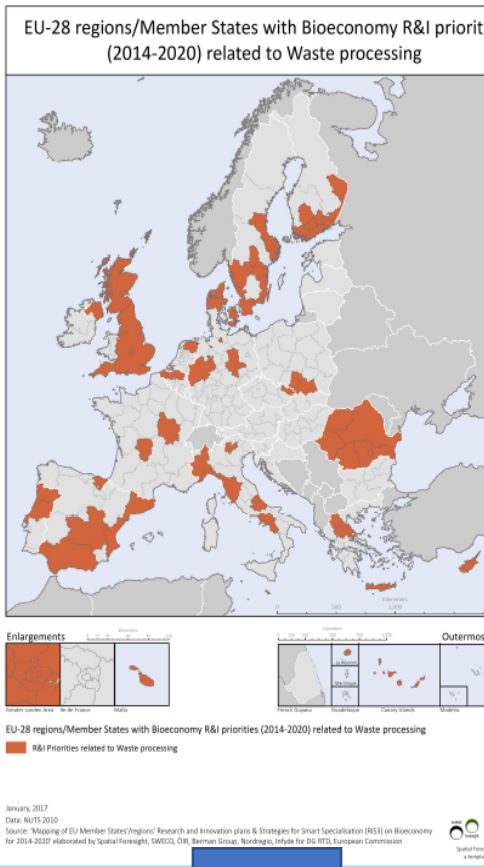
Bioeconomy in the Regions









Agriculture | **Blue Economy** | **Forestry** | **Biochemicals** | **Waste**

Almost all EU regions (98.6%) foresee R&I in bioeconomy in their RIS3 2014-2020

BUT drivers, capacities and approaches are different

Source: Own Study. EU-28 coverage: Data for 210 regions/countries

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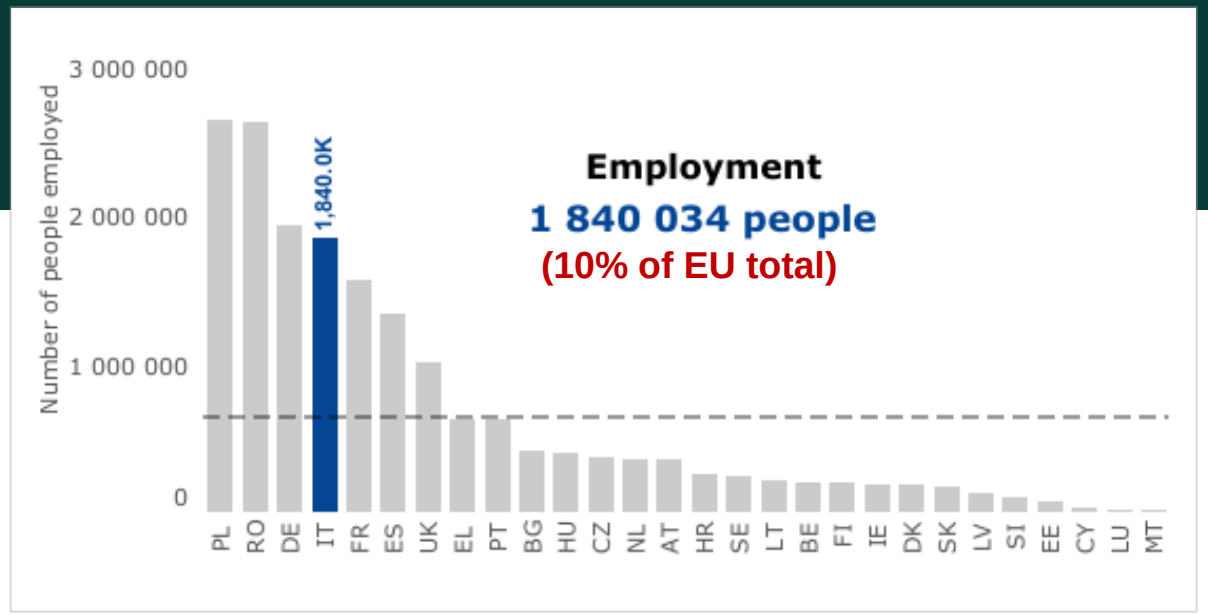
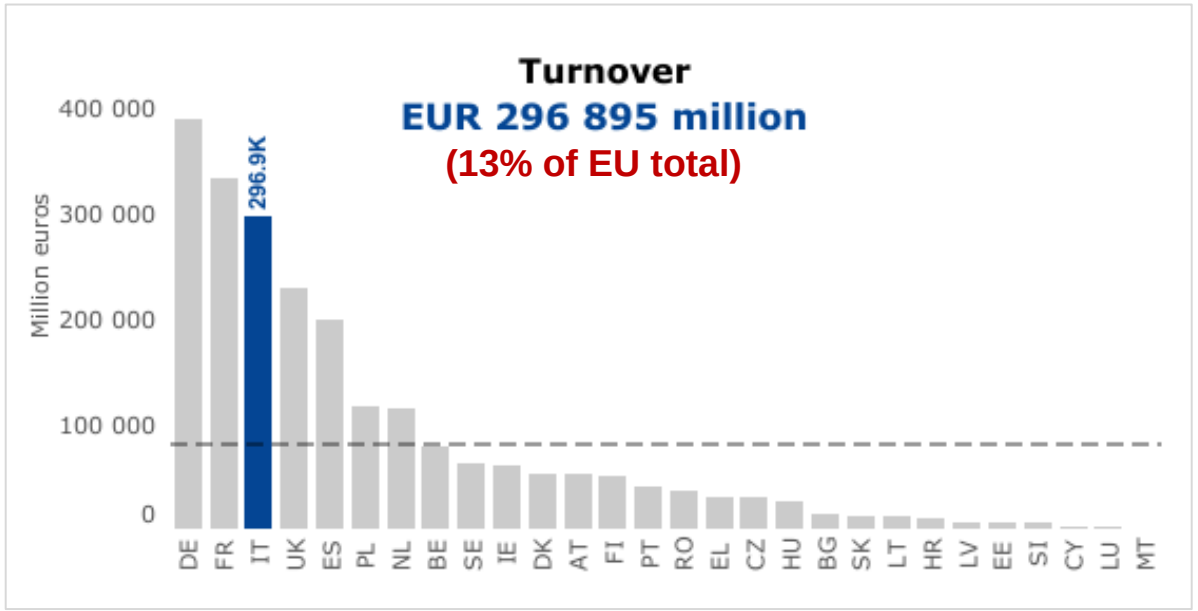
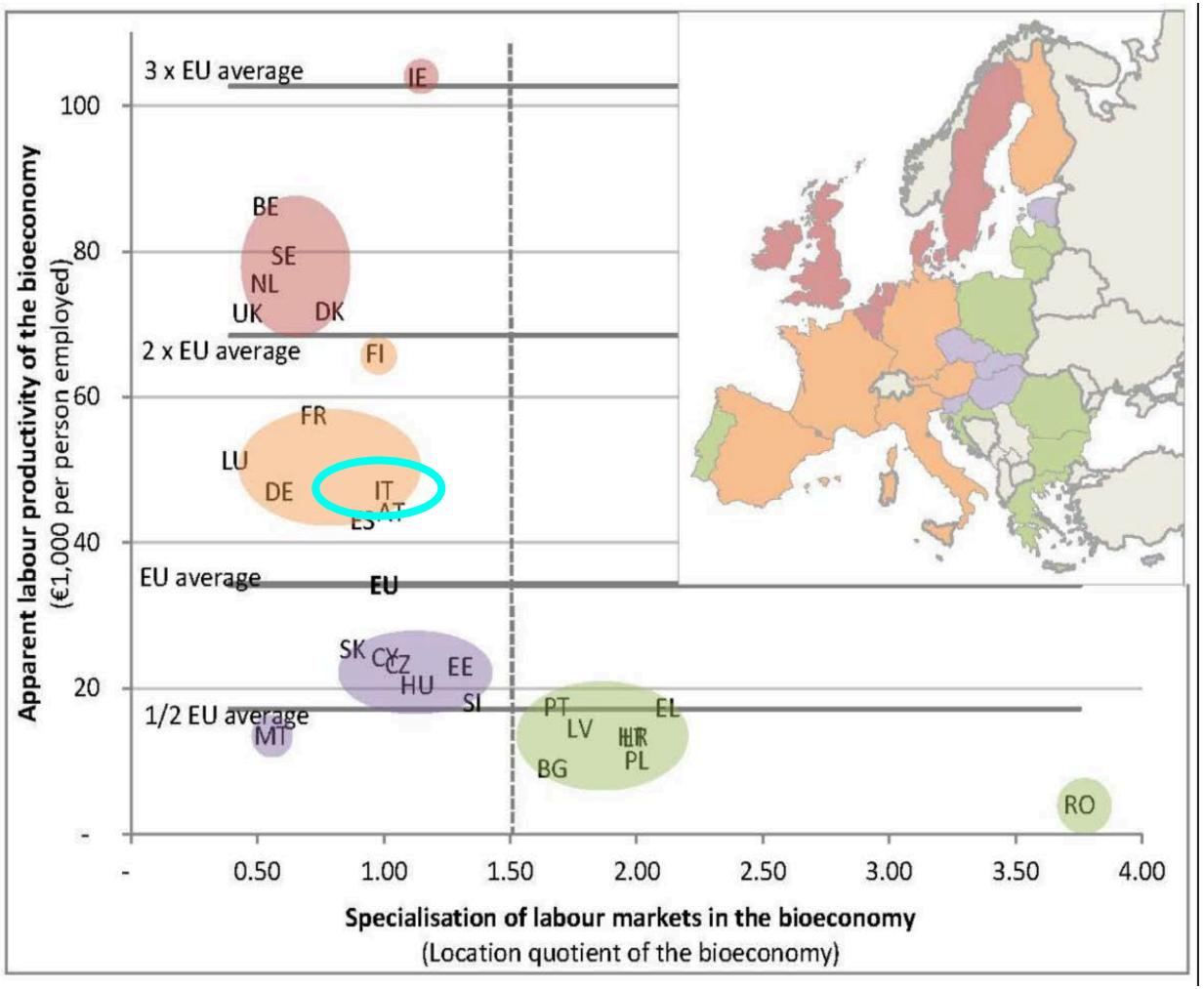
Bioeconomy in Italy vs EU Member States (2015)





(source: https://ec.europa.eu/knowledge4policy/bioeconomy/country/italy_en)



(Source: Ronzon & M'barek, 2018; https://doi.org/10.3390/su10061745)

Italian and EU bioeconomy strategies

- **Sustainable** Development agenda
- **Integration** across sectors, across stakeholders, across geographical scales, across policies
- **Coordination** between regional, national and EU levels
- **Valorising** biodiversity, ecosystem services, local value chains, marginal lands
- **Investments** in R&I, education and training, market developments

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Knowledge Centre for Bioeconomy

- *Identifying and filtering relevant information from different sources and making it accessible*
- *Bringing together researchers, policymakers and other experts in the fields through a Community of Practice*
- *Analysing, synthesising and communicating available evidence*
- *Enhancing the knowledge base (for policymaking) on the bioeconomy*

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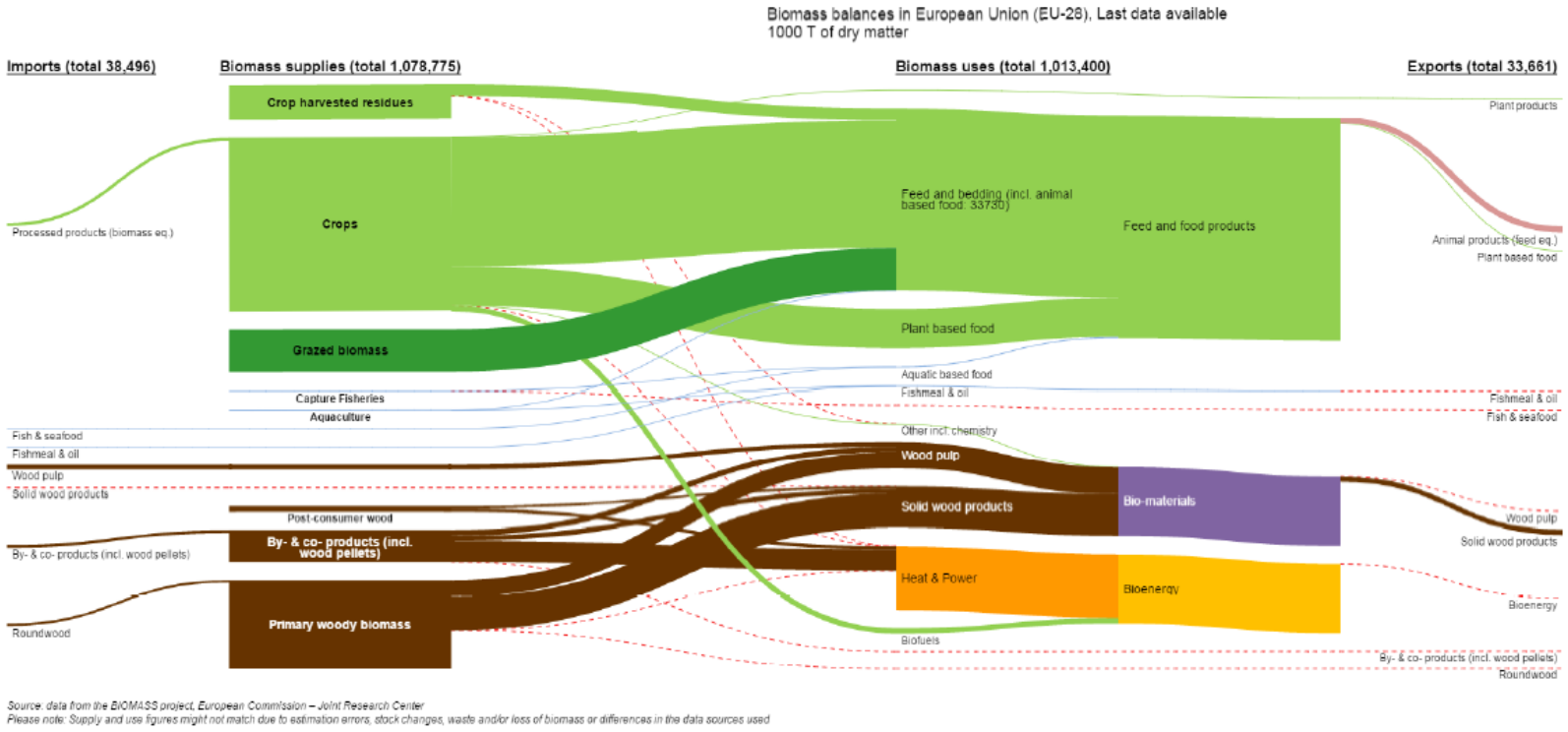
Examples of research activities
Assessments of EU-28 biomass

Biomass flows in the European Union – Cross sectorial

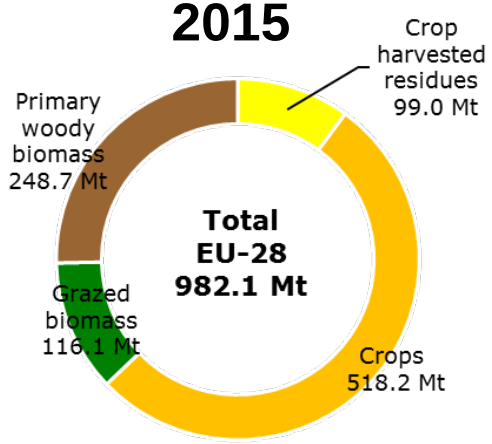
EU-28, Net trade



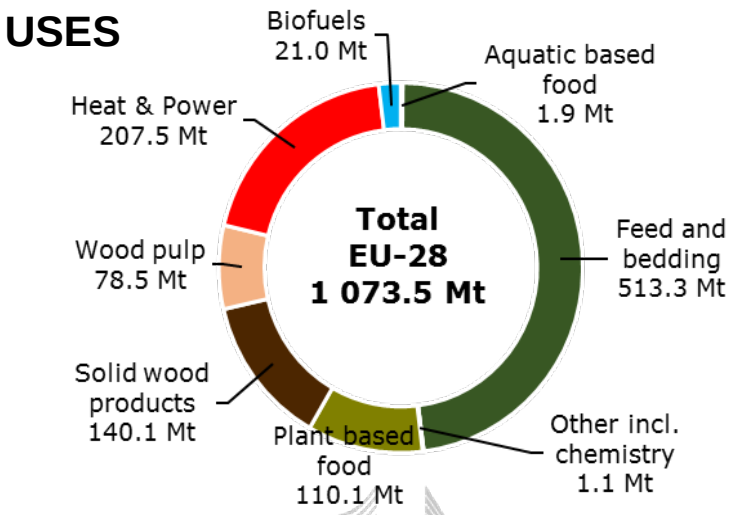
Source: Biomass flows in the European Union, EUR 28565 EN

Please note: Supply and use figures might not match due to estimation errors, stock changes, waste and/or loss of biomass or differences in the data sources used

SUPPLY **2015**



USES



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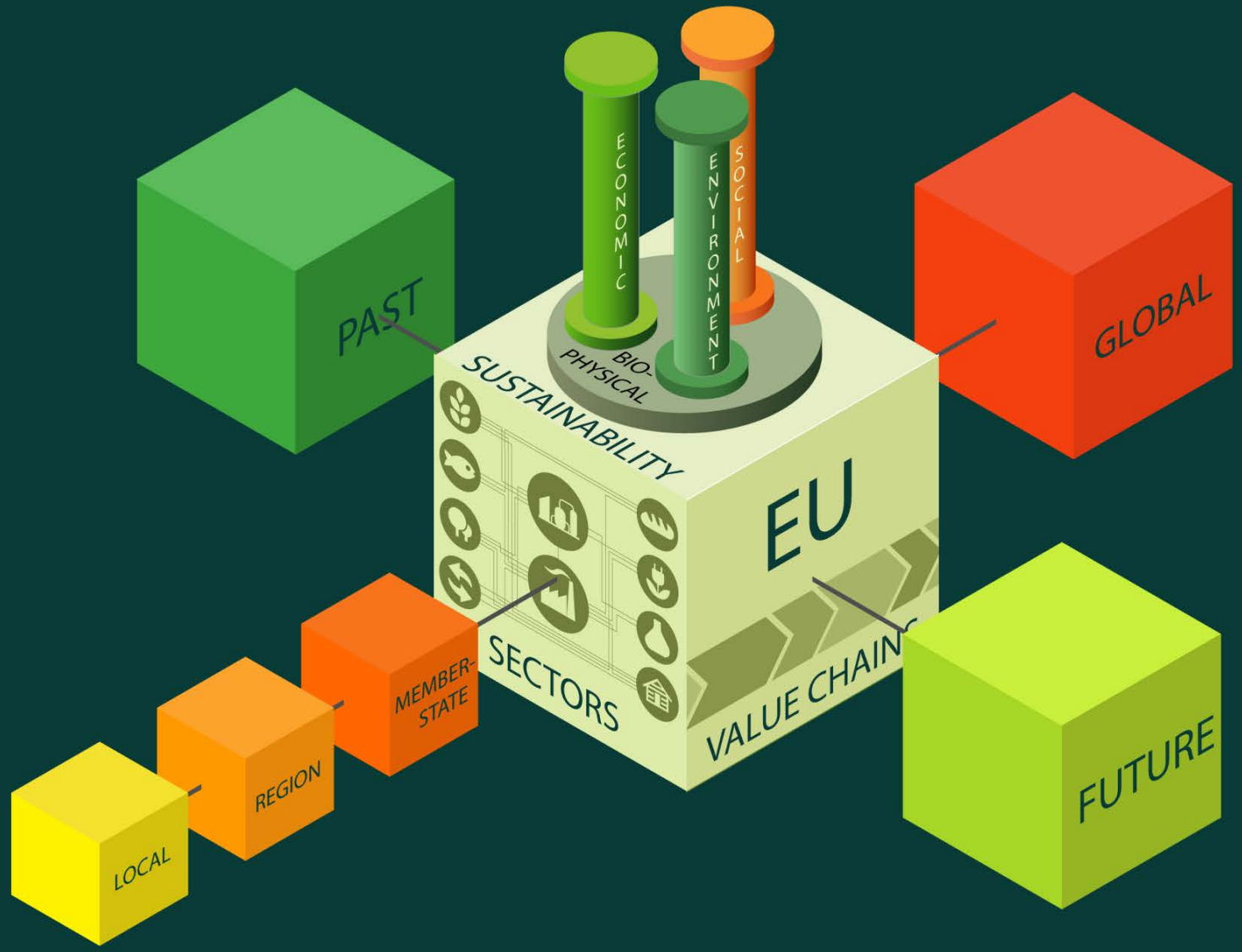
Examples of research activties
Building a bioeconomy monitoring system for the EU



Survey on user stories open until 15 May

https://ec.europa.eu/eusurvey/runner/monitor4be

At system level

For each primary sector

Supply chain STEPS

Recycling

Cascading

STOCK
Natural capital

SUPPLY
Production and Harvesting

USE
Processing and use

END OF LIFE
and disposal

Sustainable Development DIMENSIONS

Physical

Natural capital
- Availability/ stock
- Productivity
- Management intensity
- Land use dynamics

Resource productivity
- Productivity
- Management intensity
- Land use dynamics
- ....

Efficiency of production (output/input)
- ....

Harvested quantities
- ....

Typologies of processing (direct – resource as it is, energy: , material, advanced materials etc)
- ....

Quantities by uses
Material substitution
- ....

Efficiency of transformation
- ....

Quantities which became waste
- ....
- Waste generation

Kind of treatments/ recycling etc
- Recycling rates
- Cascading indices
- ....

Environmental

Ecological carrying capacity / ecosystem services

Pressure and impact on the environment (life cycle based)
- GHG balance, biodiversity, Soil quality
- Environmental footprint, Water footprint, Carbon footprint, LULUCF
- ....

Planetary boundaries

Economic, including trade (resource dependency) and main countries from which is imported

Natural capital
- Economic quantifications

Cost of supply

Value added

Social, including stakeholders involvement

Jobs and growth

Number of key stakeholder

Land ownership/ land grabbing

Corporate sustainability reporting (e.g. registered at GRI)

Spatial and temporal resolution / dimension

Bioeconomy development
- Share of biomass in traditional products and hybrid sectors
- Share of bioenergy in tot energy
- New bio-based products
- Material substitution
- ....

Megatrends relevant for bioeconomy?
- xxxxxx
- ....

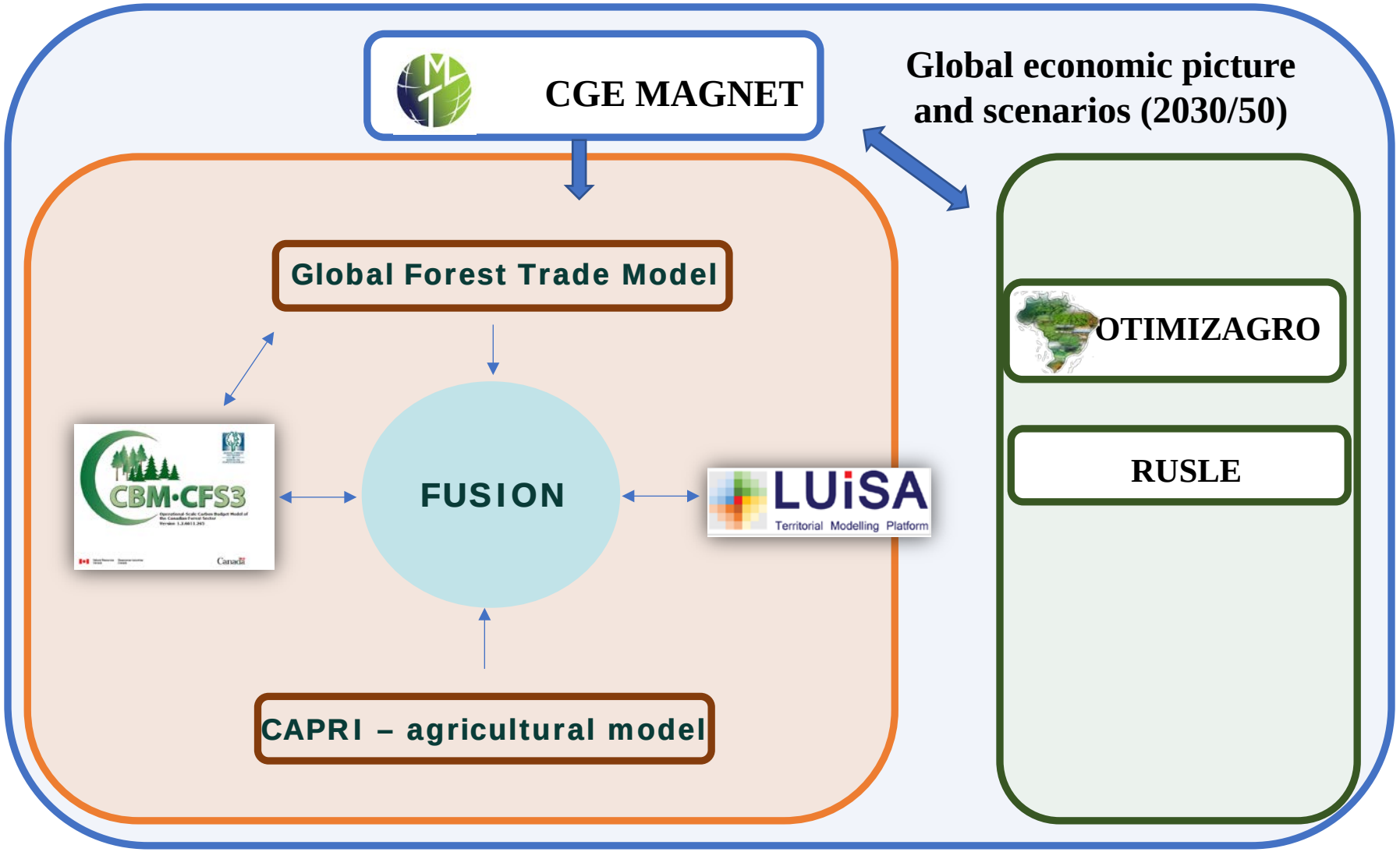
SDG's
- xxxxxx
- ....

Ecoinnovation/ technological dimension?

FOOD SECURITY | CLIMATE CHANGE | SUSTAINABLE MANAGEMENT | RENEWABILITY / CIRCULARITY /RES. EFFICIENCY | JOBS & GROWTH

5 SOCIETAL CHALLENGES

Bioeconomy modelling framework



Conclusions

- The Italian revised Bioeconomy Strategy with its ambitious targets is key to drive progress towards a circular, sustainable bioeconomy in the EU and is an example to follow especially in Mediterranean areas.
- To be successful we need to act altogether: EU institutions with national and regional authorities, with the science and technology clusters and industrial partners.
- The JRC can and will contribute with scientific evidence, figures and forward-looking analysis. But real progress requires a concerted effort of all stakeholders, at EU, MS, regional and local levels.