

#### HIGH LEVEL EVENT

THE ITALIAN BIOECONOMY: A REVISED STRATEGY AND NEW ROAD MAP FOR INTENSIFYING ITS CONTRIBUTION TO THE SUSTAINABLE GROWTH OF THE COUNTRY

Presidency of Council of Ministers, "Sala Polifunzionale", Via Santa Maria in Via, 37. Rome.

May 14th, 10.00-13.00

Comments and suggestions from CL.uster A.grifood N.azionale «CL.A.N.»

Paolo Bonaretti Vice-President Agrifood National Cluster CL.A.N.



### THE ITALIAN FOOD & BEVERAGE INDUSTRY



Olt is the 3rd food and beverage Industry in Europe, behind France and Germany

Olt is the 2nd manufacturing sector in Italy, after the engineering industry

**®**Turnover: 140 Bln €

• Businesses: 58.000 (6.850 with more than 9 employees)

©Employees: 385.000

**@**Export: 33,2 Bln €

• Investments in R&D: 10 Bln € per year (8% of turnover):

more than 2% of turnover in analysis and quality and safety control;

**1,8%** in formal and informal R&D of innovative products and processes;

more than 4% in new equipment, automation, ICT and logistics



### CLUSTER CL.A.N.

- ☐ It is an **industry led and multi-stakeholder Association** established in 2013 and based in Federalimentare premises (Rome);
- ☐ It groups **key national players of the agrifood chain:** companies, associations, research centers, universities, local administrations (Regions) representatives;
- Stakeholders are grouped into 3 categories: industry; research; territory;
- ☐ Since 5 February 2018 Cl.uster A.grifood CL.A.N. is a legal recognized entity.

Source: Cluster CL.A.N.



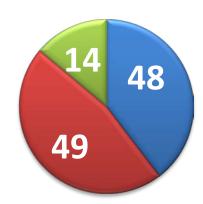
### **OUR MISSION**



aggregation & coordination of food stakeholders;
 integration between regional, national and EU policies on R&I;
 advisory to policy makers to identify priority investment lines for industrial food research;
 establishment of ad hoc partnerships for the development of industrial research projects;
 internationalization of food research and innovation;
 dissemination and communication.



### **MEMBERSHIP**



- **■** COMPANIES **■** RESEARCH
- **■** REGIONS





#### **REGIONS**:

- 1. ABRUZZO
- 2. EMILIA ROMAGNA
- 3. FRIULI VENEZIA GIULIA
- 4. LIGURIA
- 5. LOMBARDIA
- 6. MARCHE
- 7. MOLISE
- 8. PIEMONTE
- 9. PUGLIA
- 10. SARDEGNA
- 11. SICILIA
- 12. TOSCANA
- 13. P. A. TRENTO
- 14. UMBRIA
- 15. VENETO



# A SHARED STRATEGY: PRIORITIES RELATED TO AGRIFOOD AND BIO-BASED INDUSTRY

Food Industry sees open up huge opportunities for innovation and growth in the sector of the BIOECONOMY

Adoption of eco-innovation and sustainable business models, may represent the chance for SMEs to increase their competitiveness and give their contribution to the struggle of sustainability issues.

CLUSTER CL.A.N. contributed to the elaboration of the National Strategy on Bioeconomy and shared the priorities related to food and bio-based industry

- 1. Improving and promoting **HEALTHY DIETS & PEOPLE'S HEALTH** through actions and R&I
- 2. Improving FOOD SAFETY through actions and R&I
- 3. BOOSTING SUSTAINABLE, COMPETITIVE, AND INNOVATIVE FOOD MANUFACTURE through actions and R&I





## CLUSTER CL.A.N. ACTION PLAN 2018 -2020

PRIORITIES

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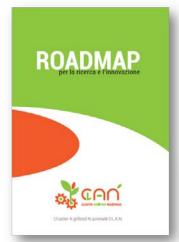
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• AGRIFOOD SUSTAINABLE

• AGRIFOOD MADE IN

AGRIFOOD HEALTHY



Core-themes are characterised by a cross cutting approach and encompass various objectives & activities related to BIOECONOMY





# CLUSTER CL.A.N. ACTIVITIES to foster BIOECONOMY (Examples)

- Production of additives and/or compounds with high added value (polyphenols, molecules with biological activity, natural pigments, antioxidants, to be used in the food, nutraceutical, pharmaceutical, cosmetic, agronomic and zootechnical fields).
- Recovery and reuse of nutrients for new food products (functional and healthy foods, including antioxidant phytochemicals, bioactive peptides, prebiotics, dietary fibers, minerals, polyunsaturated fatty acids, caroteinoids ...), from cultivated, spontaneous plant species, from marine biomass, by-products and waste agro-industrial, or from plant cell cultures.



# CLUSTER CL.A.N. ACTIVITIES to foster BIOECONOMY (Examples)

- □ Production of composted soil improvers deriving from the processing waste residues and by-products of the energy supply chain.
- □ Valorization of agro-food biomasses from agro-industrial waste for the production of biochemicals of industrial interest, bioplastics and high added value molecules.
- Study of mechanisms that correlate diet with metabolic alterations, including the role of the intestinal microbiome.



# PROBLEMS & BARRIERS AFFECTING THE ADOPTION OF A BIOECONOMY STRATEGY IN FOOD & BIO-BASED INDUSTRY

- Rapidly growing global food demand
- Fragmented sector
- Weak connections with the primary sector
- Innovation is too low
- **Low efficiency of food making chains** with high consumption of resources and excessive byproducts/waste production
- Lack of coordination of stakeholders
- Slow growth of start up companies due to lack of facilities and pre-industrial scaling up
- Inability to exploit by-products and production residues due to unsuitable terms and conditions set by national legislation
- High level of product counterfeiting and imitations
- Social reluctance to change dietary behavior and reduce food-waste generation





## ACTIONS TO TACKLE AND OVERCOME BARRIERS AND NEEDS ON BIOECONOMY

- ☐ To strenghten intercluster activities and collaboration
- To strenghten open innovation activities between start ups and corporates
- ☐ To **promote and foster industrial research** as a key value to spread innovation along the value chain and to create an industrial research community
- To valorize preserve and protect wide availability of "typical/quality" food products
- To valorize the large availability of food byproducts with the production of food ingredients and feed and of waste to be converted into biobased chemicals, materials, energy, fertilizers and compost.





## THANKS FOR YOUR ATTENTION

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