



SPRING

*Sustainable Processes and Resources
for Innovation and National Growth*

Italian Cluster of Green Chemistry

The role of the Cluster Spring

The Bio-economy in Transition
An International Workshop on the future of Biorefineries in Europe
25-27 May, 2017 – Gela, Italy
Vittorio Maglia
Member of Board SPRING



Biobased chemicals in Italy: an Italian excellence

- **Large industrial groups**
and a network of medium and small companies
- Research on the **technological frontier**
- Existing or under construction
relevant production facilities
- **Strong collaboration**
between public and private research institutions



SPRING: origins and history

- **SPRING**
Sustainable Processes and Resources for Innovation and National Growth
is a **non-profit Association**
- Born in **2012** in response to the **Call of MIUR** for the **Development and Strengthening of National Technological Clusters**
- **Represents and promotes Biobased chemicals**

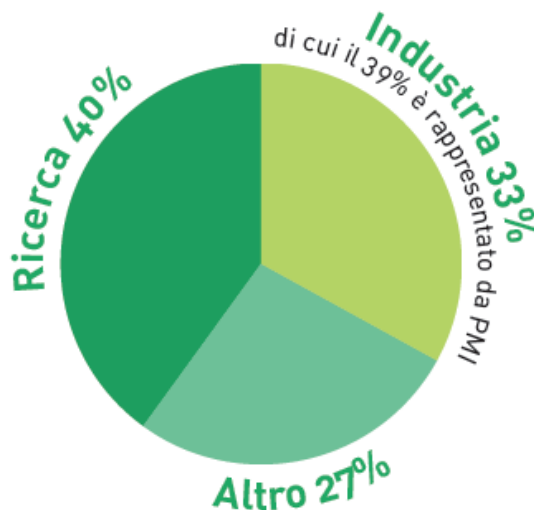
The Cluster SPRING: structure



FOUNDING FATHERS

105 MEMBERS

SUPPORTING REGIONS



Regions

- Basilicata
- Campania
- Emilia Romagna
- Lombardia
- Piemonte
- Puglia
- Sardegna
- Umbria
- Toscana
- Veneto

Interested Regions

- Sicilia
- Liguria
- Calabria
- Abruzzo
- Venezia
- Giulia



Permanent Working Group



The cluster concept: Diverse subjects working together

- **Public research and industrial research**
- **Large industrial groups and SMEs**
- **Regional and central authorities**
- **R&D level with flagship with industrial projects**
- **All the stakeholders along the chain from biomasses to bioproducts on the market**



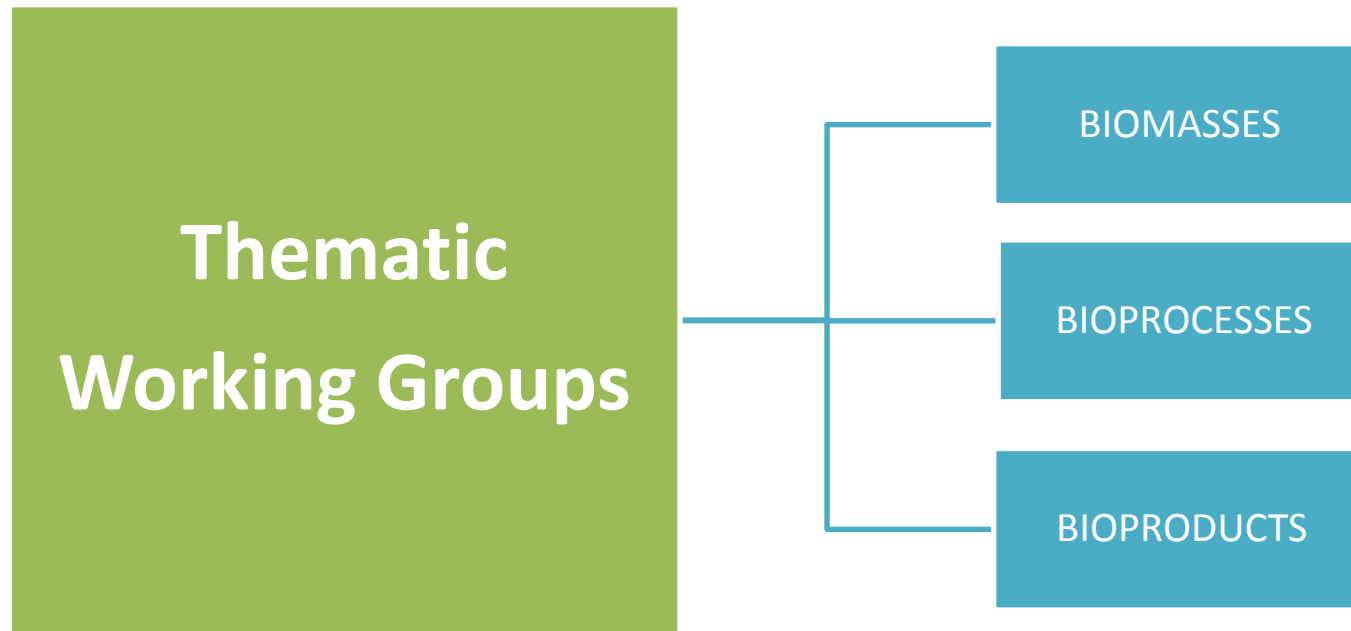
Role of the Cluster: suggest policies to support research

- Interacting with the **central institutions** in order to identify the projects to be addressed by the support instruments
- Promoting cooperation at **regional level**, including initiatives involving multiple regions



SPRING operative results

- Roadmap setting priorities for biobased chemistry in Italy
- Active participation
 1. to **National Smart Specialization Strategy for Biobased Industry**
 2. and to **National Strategy for Bioeconomy**
- Operative Working table with **Regions**
- Operative working groups to define R&D projects
- Supporting Italian priorities in Horizon 2020



Scientific Committee and coordination of D'Appolonia
"Priority technological trajectories 2016–2022"

- **Technological trajectories 1:**
Biorefineries Integrated in the territories
- **Technological trajectories 2:**
Biorefineries multi-input and multi-product
- **Transversal trajectory of support:**
Creation of integrated national infrastructure: Research, innovation and education for the sustainable development

BIT- Bioeconomy in Italy

- SPRING has given its important contribution to the drafting of **“National Strategy for Bioeconomy”**
- It was officially presented April 20th
- Available on **Agency for Territorial Cohesion** web site -
http://www.agenziacoesione.gov.it/it/S3/Consultazioni_publiche/Bioeconomy.html



- ❖ From January 2016 SPRING is **Associate Members** of **BIC Biobased Industries Consortium**
- ❖ **Partnership in GRACE**
GRowing Advanced industrial Crops on marginal lands for biorEfineries"
(call BBI.2016.D2) start on 1st june 2017
- ❖ From January 2016 it has taken part as an observer in the **Expert Group on Biobased Products of the EC**