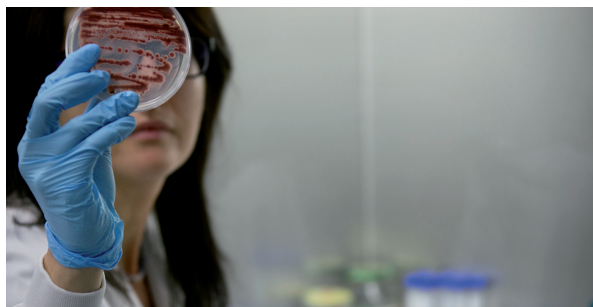




## A PROJECT THAT LOOKS TO THE FUTURE

Another primary purpose of the project is to **train researchers** with the skills and the systemic vision needed to operate within the integrated biorefineries field. The training is addressed to **young and highly qualified researchers** with the aim to offer a complete overview of technical and managerial knowledge in the field of research and development of processes for the production of chemical intermediates from renewable resources.



## CONTACTS

### For further information:

[strategic.projects@novamont.com](mailto:strategic.projects@novamont.com)

[www.novamont.com/rebiochem](http://www.novamont.com/rebiochem)



## SPRING CLUSTER AND BIOECONOMY



Rebiochem project fits within the strategic development plan of **SPRING Cluster**. SPRING was born in 2012 to encourage the **development of biobased industries in Italy** through a holistic approach to innovation, aimed at revitalising Italian chemistry in the name of environmental, social and economic sustainability, in line with the latest EU policies in the field of Research and Bioeconomy.



## SPRING

*Sustainable Processes and Resources  
for Innovation and National Growth*

Italian Cluster of Green Chemistry

### For further information visit:

[www.clusterspring.it](http://www.clusterspring.it)

**BIOCHEMICAL FROM BIOMASS:  
INTEGRATION OF BIOCONVERSIONS  
FOR THE PRODUCTION AND  
APPLICATION OF BIOCHEMICALS  
FROM 2ND GENERATION FEEDSTOCK  
FROM RENEWABLE RESOURCES**



# REBIOCHEM

**Rebiochem** project is funded  
by **Ministry of Education,  
Universities and Research** as  
part of the National Technology  
Cluster of Green Chemistry  
**SPRING** – Sustainable Processes  
and Resources for Innovation and  
National Growth.



**investiamo nel vostro futuro**

## THE PROJECT



Rebiochem primary goal is to develop highly energy-efficient **integrated value chains for the sustainable production of biochemicals from renewable resources, both through biotechnological and chemical processes**. In particular, the project is focused on the technical demonstration, at pilot and industrial scale, of the possibility of producing and using biochemicals and energy from second generation biomass to obtain biodegradable bioplastics. Rebiochem also aims at studying the related biotechnological and chemical processes within a model of integrated biorefinery which starts from the identification and exploitation of biomasses, not in competition with food crops, respecting the local biodiversity and minimising the overall impact.

Officially started on the 1<sup>st</sup> January 2014, the project has a 3-year duration. It is **coordinated by Mater-Biotech** and involves six other partners, representing the industrial and research excellence of the Italian Bioeconomy sector.

## THE WORK PACKAGES

The project is based on 5 Work Packages:

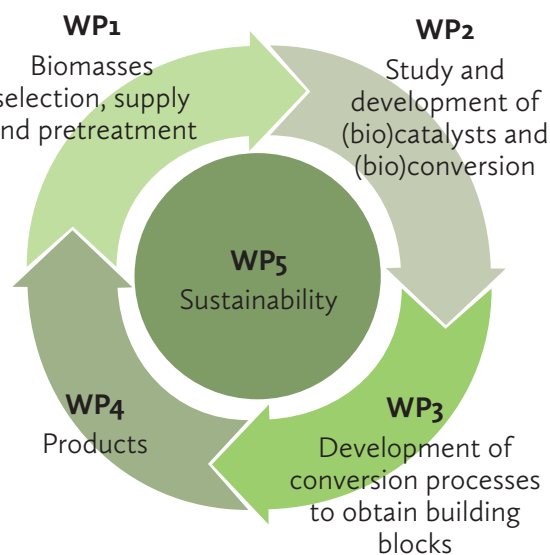
**WP1** - Studies on the selection of biomass and possible pretreatments

**WP2** - Development of (bio)catalysts to be used on pretreated biomass and of conversion processes to obtain energy

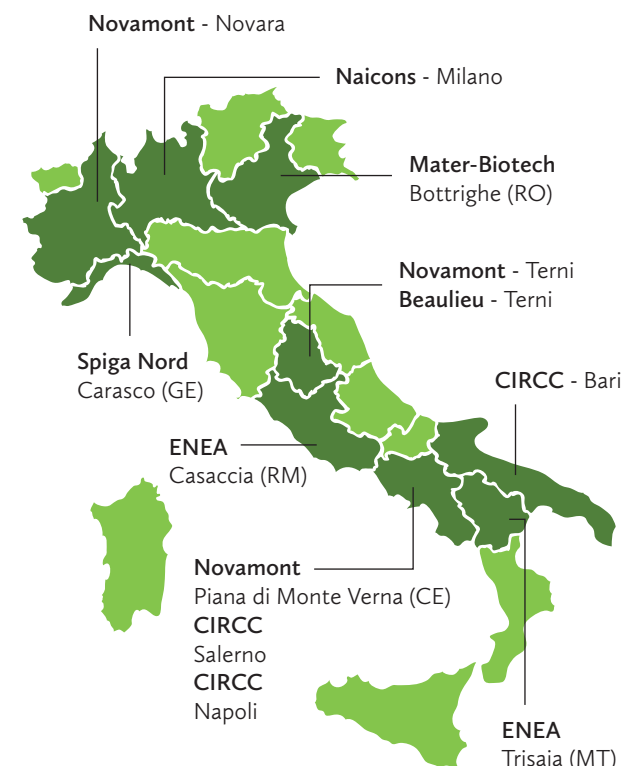
**WP3** - Development of chemical and biotechnological conversion processes for the production of building blocks from renewable resources

**WP4** - Formulation, development and application of the final products (energy and materials)

**WP5** - Optimisation of the energy efficiency of the biorefining processes and sustainability assessment



## PARTNERS



Beaulieu  
International  
Group  
  
Beaulieu Fibres  
International Terni S.r.l.

CIRCC  
Consorzio  
Interuniversitario  
REATTIVITA' CHIMICA e CATALISI  
  
Interuniversity Consortium for  
Chemical Reactivity and Catalysis

ENEA

Agenzia nazionale per le nuove tecnologie,  
l'energia e lo sviluppo economico sostenibile

MATER  
BIOTECH

Mater-Biotech S.p.A.  
(Coordinator)

NAICONS

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NOVAMONT

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SPIGA

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