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Partner search

Date (18-07-20)

- **(*) Indicate numbers of relevant topics for Green Deal call:**

LC-GD-3-2-2020 : Demonstration of systemic solutions for the territorial deployment of the circular economy

- **Quick description of the project**

- **(*) Do you intend to apply as ? :**

Coordinator: ~~No~~
Participant: Yes

(*) Either Description of the expertise requested (up to 1000 characters) - *specify which points of the "expected impact" of the call you are targeting*

Or Description of the expertise proposed (up to 1000 characters) - *specify which points of the "expected impact" of the call you are targeting*

Expertises that could provide systemic solutions for sustainable growth and economy recovery :

Plant biology and biochemistry
- plant biotechnologies (bioproduction, …)
- phytochemistry, photosynthesis
- biocontrol, elicitation, plant defense mechanisms, epidemiology, plant stress ecophysiology
- functional genomics

Microbiology
- fermentation, white biotechnologies
- fractionation and purification of plant derived material
- physical processes of agro-resources transformation
- plant protein production

Environmental sciences
- ecotoxicology, biomarkers
- metal and organic pollutants
- environmental technologies
- insect-plant interactions
- systems ecology, ecology of communities

Soil Sciences
- bio-mineralisation
- geomorphology and geochemistry

Agro-biochemistry
- organic chemistry (synthesis, catalysis, biocatalysis …)
- chemical synthesis
- environmental and chemistry
- sugar chemistry
- extraction and transfer
- enzymology and ionic liquids

Agromaterials
- agromaterials, biopolymers, thermics, composites

- physical properties
- new material development (building, car and plane industries, textiles, …)

Electrochemistry

- organic electronics, photovoltaics
- nano semiconductives
- organic batteries, hybrid materials
- analytical electrochemistry
- electrolytes and polymers

Process development

- process optimization
- process modelisation and simulation
- ecoprocesses
- scale up

Societal aspects of bioeconomy

- market studies
- business models
- politics and institutions
- ecosystems of innovation

Contribution to the implementation of the CCRI :
The north of France is known for its agriculture and its industrial activities of biomass processing in food and non-food activities. This development is due to : (1) a strong political support since the 90s to implement bioeconomy in French regions ; (2) actors of the territory : Bazancourt-Pomacle biorefinery and the IAR Industry Cluster ; (3) a rich offer of bioeconomy curricula (from graduate to post-graduate studies), (4) scientific and innovator communities as universities (URCA, UPJV, ULCO, Univ Lille, UTC), engineering schools (AgroparisTech, CentraleSupélec, UniLaSalle) and different innovation platforms. This network of bioeconomy actors in the north region of France can establish a relevant “circular territorial cluster”.

+key words : plant biology, microbiology, environmental sciences, soil sciences, agro-biochemistry, agromaterials, electrochemisty, societal aspects of bioeconomy, biomass, biorefineries, transformation, fractionation, valorisation, white biotechnologies, green chemistry, biofuels, agro-sourced materials, plant protection, lignocellulose, lignin, biogaz.

Organisation information

Organisation and country:
RF CNRS Condorcet France

Type of organisation:

☐ Enterprise ☐ SME ☐ Academic ☒ **Research institute** ☐ Public Body ☐ Other: Association

Former participation in FP European projects?

☒ **Yes** ☐ **No**

Web address:
https://www.sfr-condorcet.fr

Description of the organisation:
Condorcet is a CNRS French cluster of research labs and platforms dedicated to the Bioeconomy. It brings together more than 680 scientists from Hauts-de-France and Grand Est in France and Wallonia in Belgium. Their expertise concerns the whole value chain of plant valorization including social aspects. The plan of actions turns around (i) sustainable plant production and environment, (ii) plant biomass transformation and processes, (iii) innovative agro-sourced products and materials and (iv) conditions for the emergence of a sustainable bioeconomy. Research projects are supported by 14 technical and technological platforms open to the members of the federation.

Condorcet is leaded by 3 Universities including Reims and Amiens (France) and Liege (Belgium) and

labelled by the French CNRS.

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(*) –Mandatory