



# Crops2Industry "Non-food Crops-to-Industry schemes in EU27"

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**The overall objective** is to explore the potential of nonfood crops, which can be domestically grown in EU27 context, for selected industrial applications, namely oils, fibers, resins, pharmaceuticals and other specialty products and outline and prioritise crops-to-products schemes, suitable for the different Member States, which will support sustainable, economic viable and competitive European bio-based industry and agriculture.

**The expected output** will be to identify whether and under which terms Europe has the potential and the technical competence to develop a competitive bio-industry fed by a sustainable agriculture.



#### The concept









- Explore the potential of nonfood crops, which can be domestically grown in EU27 countries, for selected industrial applications (WP1)
- Identify current molecular genetics technologies (genomic and biotechnological tools) and suggest their potential applications in a crop-specific manner to address a wide range of breeding constraints regarding yields and tolerance to abiotic and biotic conditions (WP2)
- Explore the potential and feasibility of the European industry to make high-value biobased products namely oils, fibers, resins, pharmaceuticals and other specialty products (WP3)





- Perform supply chain cost analysis, identify best business opportunities and assess the socio-economic impacts of selected crop-to-product schemes at EU-27, regional and country levels (WP4)
- Assess selected production and environmental impacts and identify a 'core' list of standards and criteria for the environmental and socioeconomic sustainability of selected non-food crops-toindustrial-products systems(WP5)
- Perform an overall assessment aiming to select and prioritise crops-to-products schemes in technical, socio-economic and environmental terms (WP6)





- Dissemination activities (WP7) including project website, thematic workshops, links with other activities, such as:
  - Plants for the future platform
  - IENICA project
  - 4F Crops project
- Project management (WP8)

#### Thematic workshops

- Can fibre crops offer a viable alternative land use option? (Poland, m5)
- Niche markets for specialty industrial crops (Greece, m11)
- Can oil crops be considered as the only industrial crops that have a clear niche market in EU 27? (France, m17)
- Carbohydrate crops and the dilemma of using them for non-food purposes (The Netherlands, m23)
- Non-food crops for a bio-based Industry and sustainable agriculture (Italy, m29)



#### The consortium

CPES Contro for Ponowable Energy Sources Grance	
CRES - Centre for Renewable Energy Sources, Greece	
UNIBO - University of Bologna, Italy	Crops
INF - Institute of Natural Fibres, Poland	
BIOS - BIOS AGROSYSTEMS S.A., Greece	
NCPRI-National Institute for Chemical and Pharmaceutical Research and Development, Romania	
ITERG, France	
<b>KEFI</b> - Kenaf Eco Fibers Italia S.p.A, Italy	Industry
Hempflax B.V, The Netherlands	industry
CHIMAR Hellas S.A, Greece	
AUA - Agriculture University of Athens, Greece	Biotechnology
ICCEPT - Imperial College London, UK	Economics
<b>OeKO</b> - Institut of Applied Ecology, Germany	
<b>BOKU</b> - University of Natural Resources and Applied Life Sciences, Austria	Sustainability
FZ-JUELICH Forschngszentrum Julich GmbH, Germany	Crops2Industry schemes

