

SUSTAINEXT is the first FLAGSHIP project funded by the Circular Bio-based Europe Joint Undertaking (CBE JU) that aims to transform the traditional botanical extracts industry with a unique model that could be replicated by the European bio-based industry.

- Its main goal is to industrially deploy an intelligent, dynamic and analytical biorefinery that integrates the entire feedstock supply chain and enables cascading valorisation.
- NATAC leads a consortium of 21 European partners who bring diversity, excellence, and strength to ensure the technological, technical, and social progress of the project.



*Putting in place a sustainable and efficient bioeconomy business model based on zero-waste and zero-pollution processes integrated with renewable energy.*

*Revolutionising the botanical extracts industry through a unique model that can be replicated by the European bio-based sector.*

*Empowering regions and sectors to embrace the circular bio-based industries.*

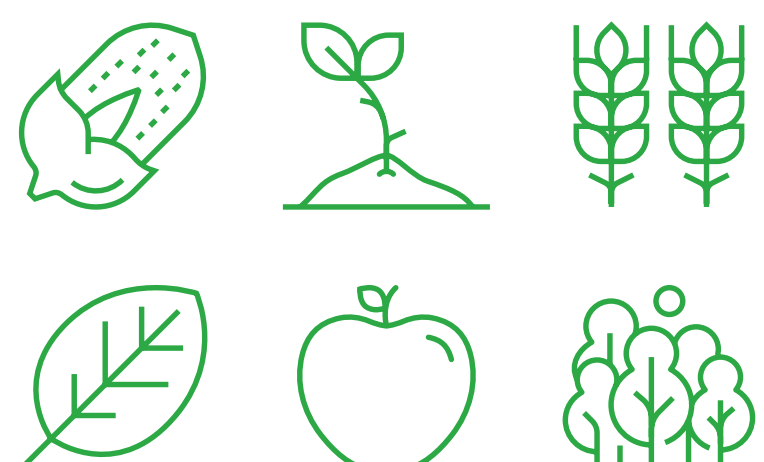
*Showing Europe how the circular bio-based industries can create jobs, attract talent and pur business opportunities in rural regions.*

SUSTAINEXT will scale up and validate a first-of-its-kind industrial facility based on the integration of the whole supply chain – from feedstock providers to products' end-users applying a disruptive circular model integrated in a dynamic biorefinery to achieve the complete valorisation of sustainably sourced feedstocks with a zero-waste and zero-emissions ambition, to deliver plant-based healthy extracts and functional ingredients while transforming a rural region with an outdated cropping system into a cutting edge bio-based circular referent.

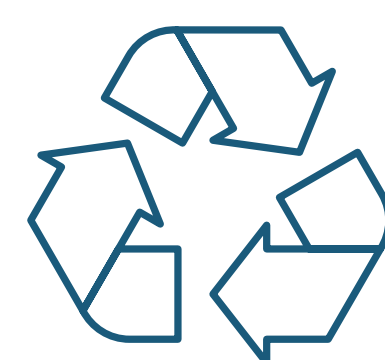


#### FEEDSTOCKS AND PRE-TREATMENTS

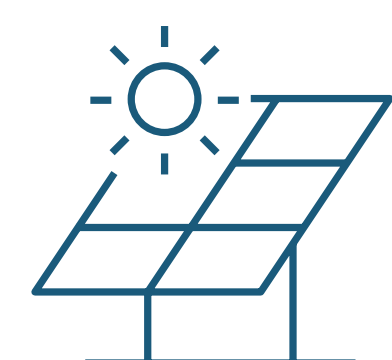
##### 6 FEEDSTOCKS



Modern, sustainable and innovative agricultural **cultivation** practices + **pre-treatments** to optimise the quality of each feedstock.



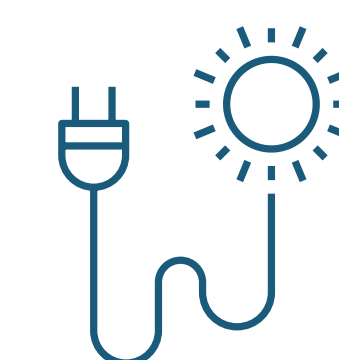
Upcycled food industry wastes



Agrivoltaics



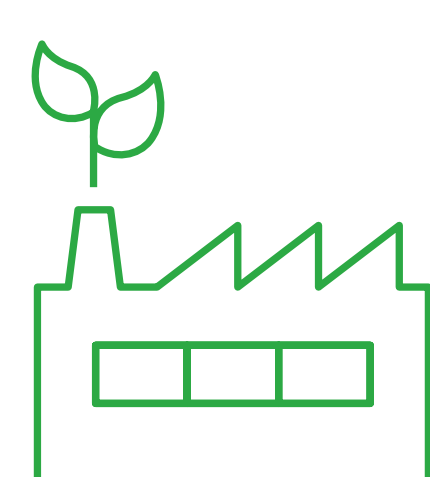
Cultivation in abandoned tobacco fields



Digital technologies

#### INTEGRATING EXTRACTION AND PURIFICATION TECHNOLOGIES TO ESTABLISH A MULTI FLOW: SMART DYNAMIC BIOREFINING

##### BIOREFINERY



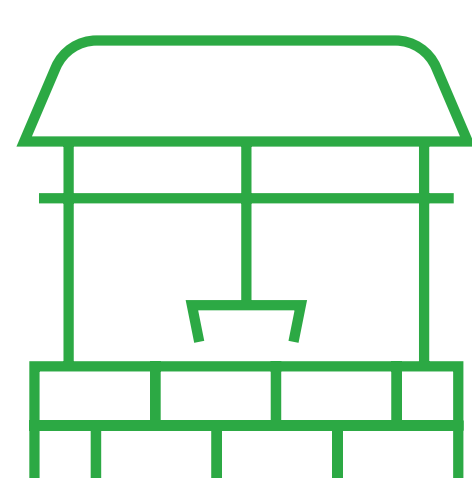
Green chemistry extractions and digital solutions in the **Circular Sustainable and Digital by Desing Biorefinery**.

Dynamic Analysis: novel manufacturing model (most resource efficient manner of processing the biomass).



#### FROM PLANT-BASED HEALTHY EXTRACTS TO END PRODUCTS FOR DIFFERENT MARKETS

##### MARKET UPTAKE OF THE BIOPRODUCTS



Food supplements



Food additives



Food ingredients



PETS



Feed additives



Cosmetics



Performance chemicals

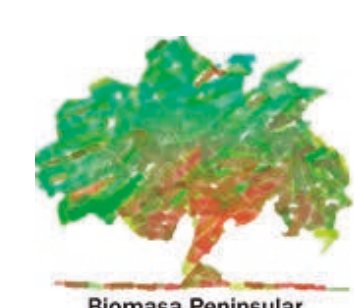


Biostimulants/ Biobased fertilizers

**Bio-based products in various high added value markets -** food, feed, cosmetics, performance chemicals - and recycling of the exhausted biomass.



#### SUSTAINEXT PARTNERS



<https://sustainext-project.com/>