

Oil crops

Definition

Oil crops are plants cultivated for their seeds, which are rich in vegetable oils.

Technical relevance

RUNFASTER4EU uses crops such as safflower, cardoon, and HEAR as biorefinery feedstocks for producing bio-based intermediates and products.



Low-ILUC-risk crops

Definition

Crops grown in a way that avoids causing Indirect Land Use Change, meaning they don't displace food or feed crops, or trigger deforestation.



Technical relevance

They are grown on marginal or underutilised land, ensuring no competition with food/feed systems and compliance with EU sustainability criteria.

Marginal lands

Definition

Agricultural land with limitations like poor soil, drought and erosion risk that reduce its productivity under conventional farming.

Technical relevance

RUNFASTER4EU activates marginal lands for the cultivation of oil crops, enabling scalable feedstock production without affecting agricultural land use.





Soil health

Definition

The capacity of soil to function as a living ecosystem that sustains plant productivity and environmental quality.

Technical relevance

RUNFASTER4EU promotes practices that enhance soil carbon content, structure, and biodiversity through sustainable crop cultivation.



Bio-stimulants

i Definition

Bio-based substances that enhance plant growth and resilience without acting as fertilizers.

⚙️ Technical relevance

Derived from biomass (e.g. protein hydrolysates), they are developed as value-added products within the biorefinery value chain.





Bioherbicides

Definition

Bio-based products used for weed control.

Technical relevance

RUNFASTER4EU develops herbicides based on pelargonic acid derived from vegetable oils, offering alternatives to synthetic chemicals.



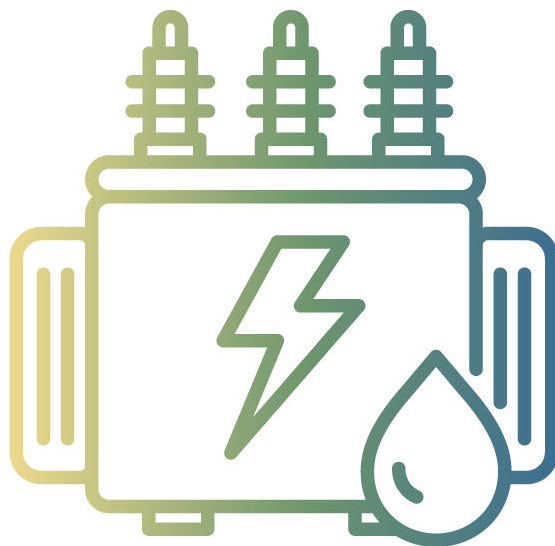
Dielectric fluids

Definition

Insulating liquids used in electrical equipment such as transformers.

Technical relevance

The project develops biodegradable dielectric fluids from vegetable oils and bio-based esters for energy applications.





Bioplastics

Definition

Plastics produced – wholly or in part – from renewable biomass instead of fossil-based resources.

Technical relevance

They are generated from bio-based intermediates produced in RUNFASTER4EU biorefineries, enabling sustainable material applications.





Biorefineries for bioproducts

Definition

Industrial facilities that convert biomass into multiple bio-based products, such as fuels, chemicals, and materials.



Technical relevance

RUNFASTER4EU upgrades existing biorefineries to operate at TRL8 scale, enabling full biomass valorisation into multiple product streams.

Lignocellulosic biomass

Definition

Plant biomass composed of cellulose, hemicellulose, and lignin.

Technical relevance

Represents the non-oil fraction of crops, used for producing bio-based materials, chemicals, and energy through further processing.





Biopolyesters

Definition

Polymers produced from bio-based acids and alcohols.

Technical relevance

Used in applications such as fertiliser coatings and advanced materials, contributing to biodegradable and circular product systems.

