

Marginal lands and industrial crops for the European bioeconomy

Combining bio-based products, climate-resilience and biodiversity through innovative agricultural value chains







Supporting the European Bioeconomy

The transition to a biobased economy requires a sustainable supply of biomass, while ensuring food security and respecting our environment.

Climate-resilient industrial crops grown on marginal agricultural land can provide sustainable biomass for the European bioeconomy, without reducing the land available for food, while enhancing soil health and protecting biodiversity.

The approach of MIDAS builds on two pillars:



To optimize selected industrial crops and cropping systems, both through breeding and agronomic practices, to be able to tolerate water scarcity and to mitigate desertification, while improving biodiversity conservation, in Mediterranean and central European marginal.

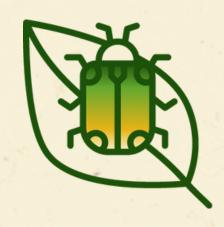


To improve the functional performance and the resource efficiency of specific bio-based value chains, in order to promote the sustainable use of non-edible industrial biomass in a biorefinery concept.

MIDAS is a Horizon Europe project that aims to:



Map and characterize marginal land in Europe for low-ILUC biomass production



Grow industrial crops on marginal land with climate-resilient and biodiversity-compatible systems



Produce
sustainable
biomass
feedstock
additional to food
production



Build value chains and develop business for innovative bio-based products

MIDAS at glance

Sustainable biomass production in marginal land

- Optimize climate resilient crops
- Apply innovative cropping systems



Sustainable biomass value chains

- biomass to product pathways
- environmental assessment
- biodiversity restoration potential
- integrated strategies



Bio-based products at TRL 7

- biochemicals
- biomaterials
- elastomers



Sustainable business plans in European farms with marginal land

- explore revenue models
- design sustainable business plans



Mapping marginal land

- to be certified as low ILUC
- future scenarios and climate change
- cope with biodiversity challenges

MIDAS

Supports EU Green Deal, Circular bioeconomy

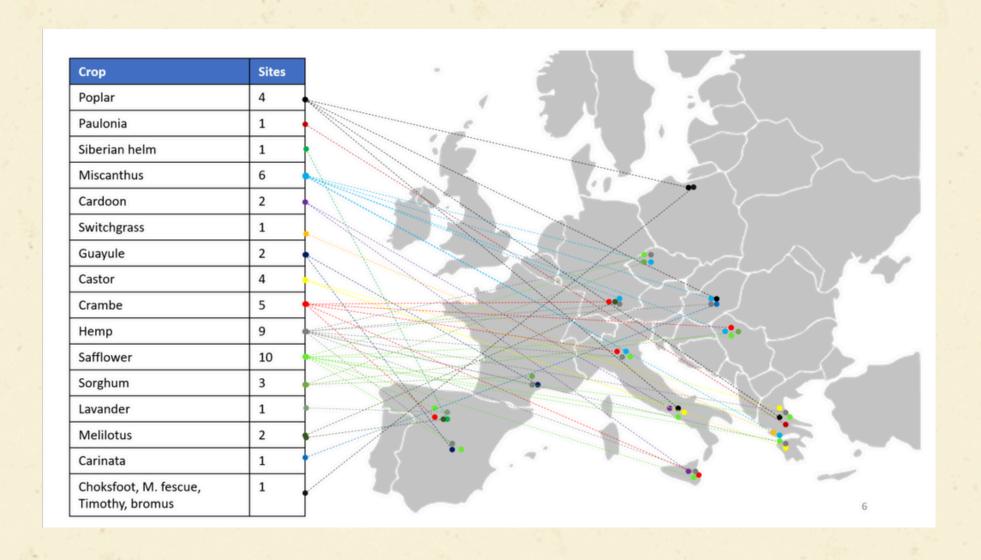
Farm-scale case studies of innovative cropping systems



To optimize selected industrial crops adapted to marginal lands through modern biotechnology tools and tailored agronomic practices towards low ILUC cropping systems



To develop case studies of low ILUC cropping systems
(intercropping & agroforestry) on marginal agricultural land on farm level for present and future farming systems



13 case studies - 9 countries - 19 crops

Webinar 1 - Marginal land case studies and biodiversity assessment



www.midas-bioeconomy.eu/news/webinar-highlights-farming-for-bio-based-materials-and-biodiversity/

Setup of Regional Advisory Groups

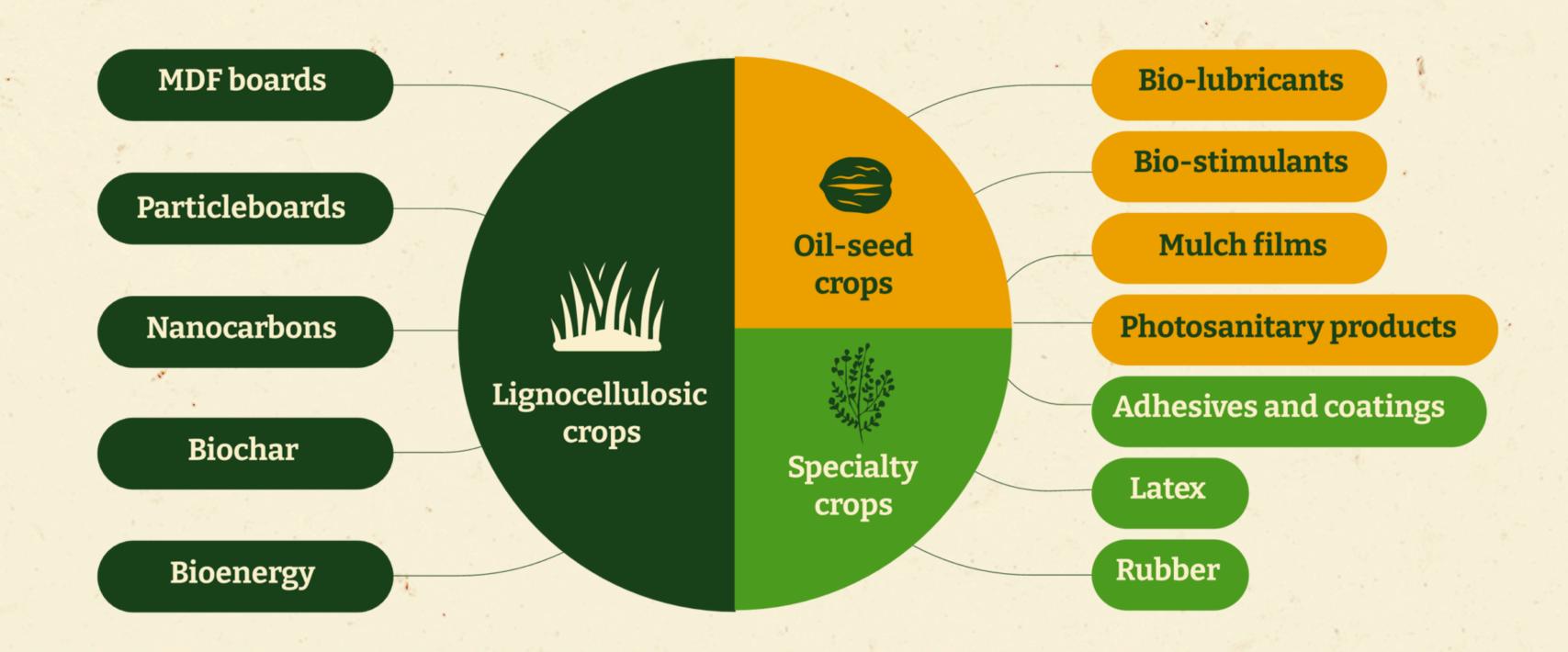
Regional Advisory Groups organized in all the 9 countries where the case studies are located for co-creation and planning with relevant agricultural stakeholders.





Products

MIDAS adopts a resource-efficient biorefinery concept to develop a wide range of bio-based products, obtained from innovative value chains and from diverse biomass feedstock produced on marginal land.



Partners

MIDAS is coordinated by Centre for Renewable Energy Sources (CRES) Greece and brings together 24 partners from 13 countries including research organizations, industries and SMEs.































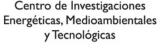
































Thank you

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Contacts



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