



BBioNets



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Bio-Based Technologies and regional dynamics

“The future of EIP-AGRI Operational Groups: challenges, opportunities and existing support services”

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BBioNets

Online, 14/05/2025

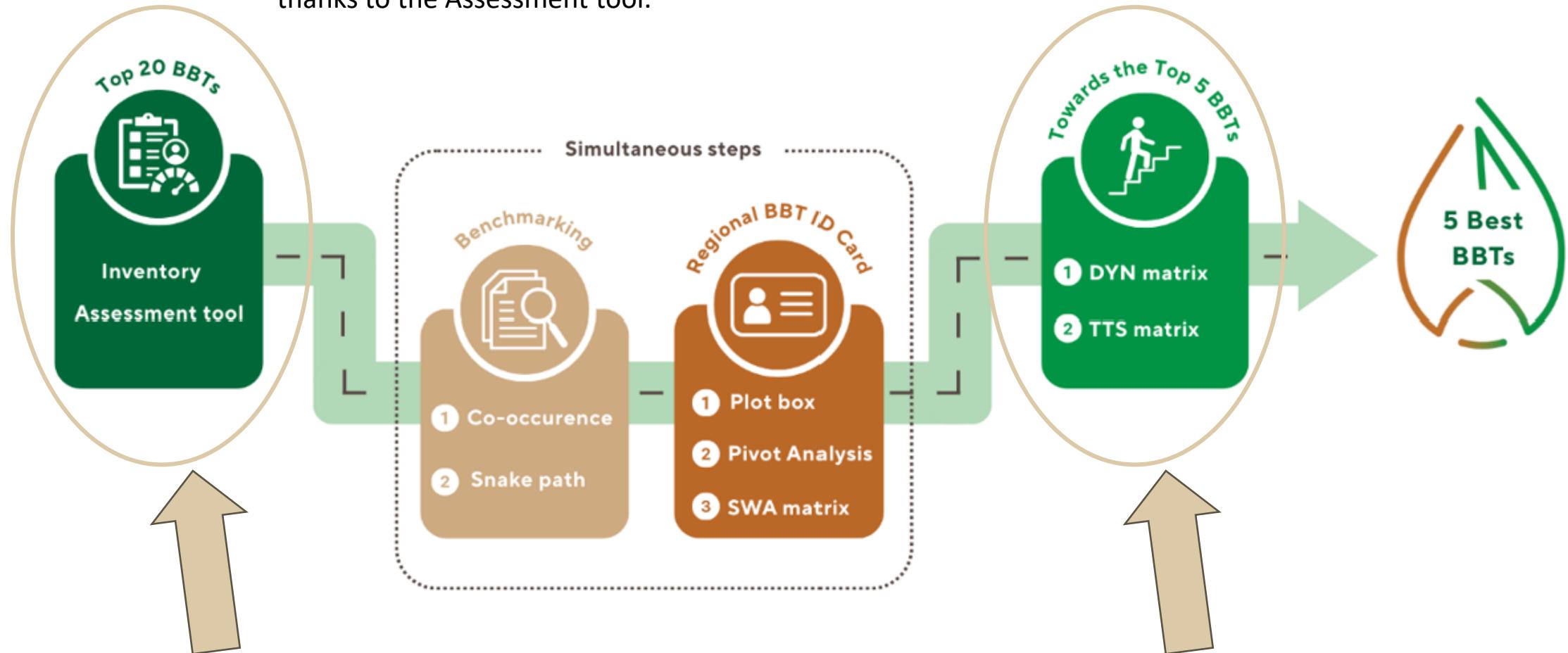


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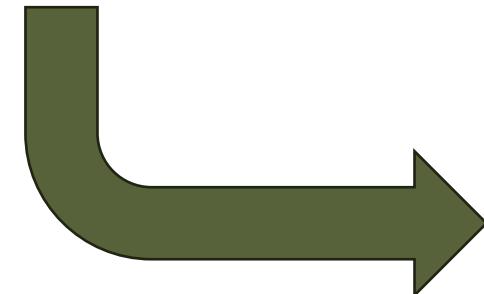
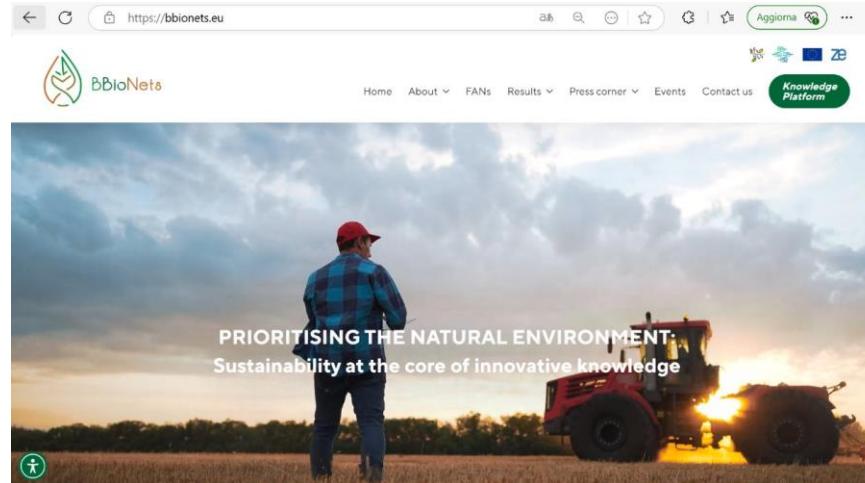
Roadmap for BBTs implementation

Identify and implement the best suitable Bio-Based Technologies (BBTs) stored in the Inventory, in the light of the regional dynamics study and thanks to the Assessment tool.





On-line knowledge platform

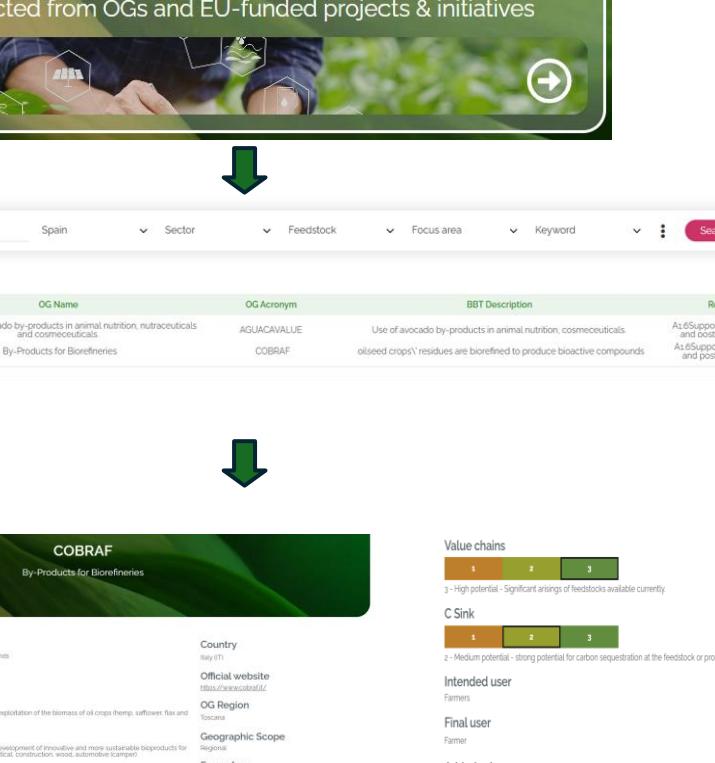




Online knowledge Platform

BioBased Technology Inventory

Inventory providing easy access to information about BBTs collected from OGs and EU-funded projects & initiatives



OG Name: Valorization of avocado by-products in animal nutrition, nutraceuticals and cosmeceuticals

OG Acronym: AQUACAVALEUE

BBT Description: Use of avocado by-products in animal nutrition, cosmeceuticals

Reference sector: As support activities to agriculture and post-harvest crop activities

OG Name: By-Products for Biorefineries

OG Acronym: COBRAF

BBT Description: oilseed crops' residues are biorefined to produce bioactive compounds

Reference sector: As support activities to agriculture and post-harvest crop activities

COBRAF

By-Products for Biorefineries

Country: Italy (IT)

Official website: <https://www.cobraf.it/>

OG Region: Toscana

Geographic Scope: Regional

Focus Area: FA-BB: Fostering diversification, creation and development of small enterprises, as well as job creation

Key words: Circular economy, incl. waste by-products and residues

Main source of funding: Biotec development 2014-2020 for Operational Groups in the context of the 3rd call of Reg 2013/2015

Period: 2019-2020

Value chains

1 2 3

3 - High potential - Significant arisings of feedstocks available currently

C Sink

1 2 3

2 - Medium potential - strong potential for carbon sequestration at the feedstock or product level only

Intended user

Farmers

Final user

Farmers

Added value

Very low Low Intermediate High Very high

Bioplastics & Polymers - Intermediate

BBTs assessment tool

BBioNets assessment tool for cost-effectiveness analysis of BioBased Technologies (BBTs)

The diagram illustrates the BBioNets assessment tool for cost-effectiveness analysis of BioBased Technologies (BBTs). It starts with a 2x2 matrix based on Supply Value costs (Y-axis) and Effectiveness (X-axis). The quadrants are:

- Top Left: Increased cost of the supply value and Less effective
- Top Right: Increased cost of the supply value and Higher effective
- Bottom Left: Cost-saving in the supply value and Less effective
- Bottom Right: Cost-saving in the supply value and More Effective

BBTs are then evaluated based on Sustainability (BBT1 < BBT2 < BBT3). The most effective and cost-saving BBT (BBT1) is highlighted in a green box.

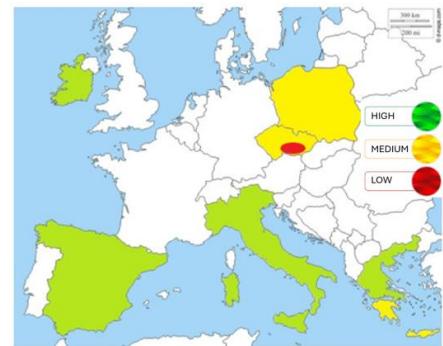
Finally, a bubble chart shows the relationship between cost and effectiveness for various BBTs, with BBT1, BBT2, and BBT3 clustered in the top-right quadrant (High Effectiveness, Low Cost).



Online knowledge Platform



BIOMASS AND TECHNOLOGY		REGIONAL DYNAMICS
Geographical Scope	3 regions; Mainly mountain but also coast and plane	
Primary sector	Agriculture -> arable land (43%), followed by permanent meadows and pastures (25%) and woodlands, permanent crops (woody) (8%). Forestry -> pure broadleaved forests and pure coniferous forests.	
Agro-industrial sector	i) wine processing; ii) olive oil; iii) milk and milk products sector ; iv) cattle beef as well as "Piemontese" breed; v) colonial products processing (coffee and chocolate); vi) local production.	
Biomass availability	Straw, pruning, lawn husks (agro)/hardwoods (forest)/ Arundo (energy crops)	
Management and logistics	biomass sector has significant potential, but logistical challenges such as transportation, storage, and supply chain coordination must be addressed to fully realize its benefits.	
Bio-based industry	the Italian bio-based industrial sector is characterized by a network of large, medium and small size companies which work together, leveraging on the sustainable production and efficient use of biomass.	
Bio-products market	The introduction of sustainability certification for bio-based products lead to an increase in Italian demand for such certified products ProBio project	
REGULATORY FRAMEWORK		
Programmes	National Bioeconomy Strategy; National Energy Strategy, National Plan for Energy and Climate, National Waste Management Programme; National Strategy for the Circular Economy	
SUPPORT AND FINANCIAL POLICIES		
Public support	National Recovery and Resilience Plan; National Research Plan 2021-2027; CAP stragic plan; Regional Smart Specialisation Strategy	
Private support	Bank foundation (Intesa)	
R&D system		
R&D system associated with biomass valorisation	The Italian R&D system has a relavant national institutional structure.	



Collaboration in Action: Unlocking the Potential of OGs

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Thank you!



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