Andalusian Regional Ministry of Agriculture, Fisheries, Water and Rural Development (CAPADR)

Mar Cátedra Cerón. Technical Counsellor. General Secretariat of Agriculture, Livestock and Food

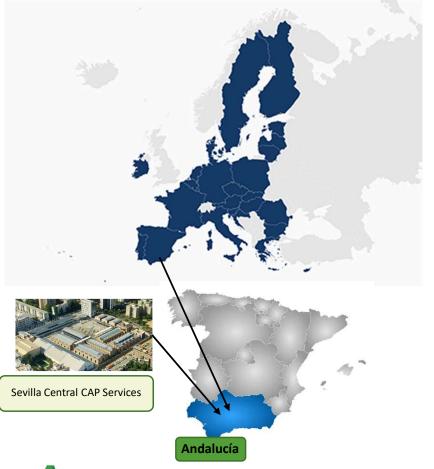
Andalusian Circular Bioeconomy Strategy

Inaugural working group session of BIOTRANSFORM project, focusing on the theme of "Governance and financing challenges for circular bioeconomy"

10 October 2023



Regional Context





1st European region in agricultural production

Total Area: 9 Mha

Agricultural Area: 4,4 Mha. Forestal Area: 4,6 Mha





Population: 49% in rural areas (4 Million people)

> 267.000 Farms





7.000 Agri-food industries > 55.000 employees



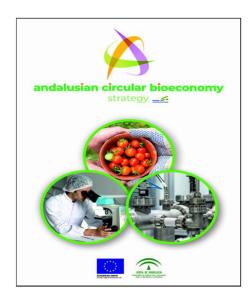
23% of the PAS of Spain and 3% of the EU27

11.355 M€ Exports (2021): olive oil, fruits, vegetables





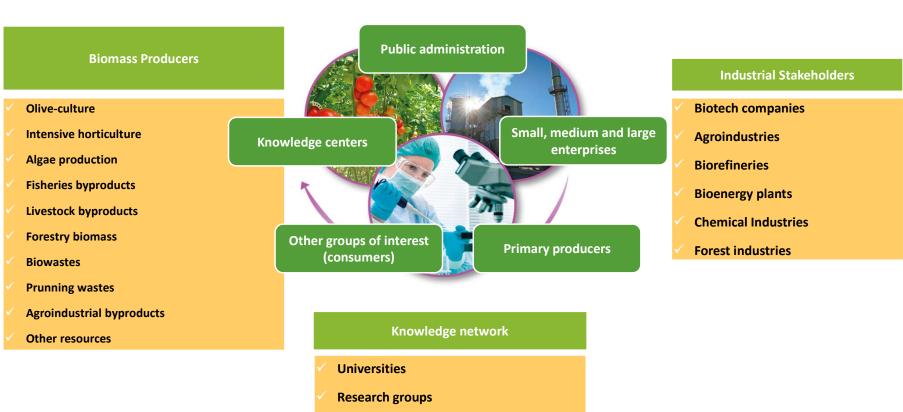
- •Formulation of the Strategy by the Governing Council Agreement July 2016
- Approved 18 September 2018
- Direct contribution of 4 Regional Ministries:
 - Regional Ministry of Agriculture, Fisheries and Rural Development (Coordinator)
 - Regional Ministry of Environment and Land Planning
 - Regional Ministry of Economy and Knowledge
 - Regional Ministry of Employment, Enterprise and Commerce
- •External collaboration on Working Groups, more than experts \rightarrow 50 experts
- •Time Frame: 2030
- Under continuous review to adapt it to regulatory reality
- •Total budget estimation: 1.4 M€







Stakeholders and capacities in the development of Andalusian Circular Bioeconomy Strategy



International Campus of Excellence

RTD centers





BIOECONOMY

Economic model based on use and production of biological resources and its sustainable and efficient transformation into bioproducts, bioenergy and services for the society

SCOPE

Andalusian Circular Bioeconomy Strategy (ACBS) is focused on bioeconomy segments and activities with lower implementation which claim for higher institutional support to facilitate its take-off and long-term consolidation

ACBS does not include directly primary production and agro-industrial transformation of food for human consumption. Specifically, sustainable practices for biomass production promoting a resource efficient use are considered







GENERAL OBJECTIVE

CONTRIBUTING TO THE SUSTAINABLE GROWTH AND DEVELOPMENT OF ANDALUSIA BY BOOSTING ACTIONS AIMED AT THE PROMOTION OF THE PRODUCTION OF BIOLOGICAL RENEWABLE RESOURCES AND PROCESSES

STRATEGIC OBJECTIVES

- 1. Increasing the availability of sustainable biomass for its use in innovative treatments
- 2. Increasing the volume of bioindustries and biorefineries in Andalusia
- 3. Increasing the bioproducts and bioenergy markets and consumption in Andalusia

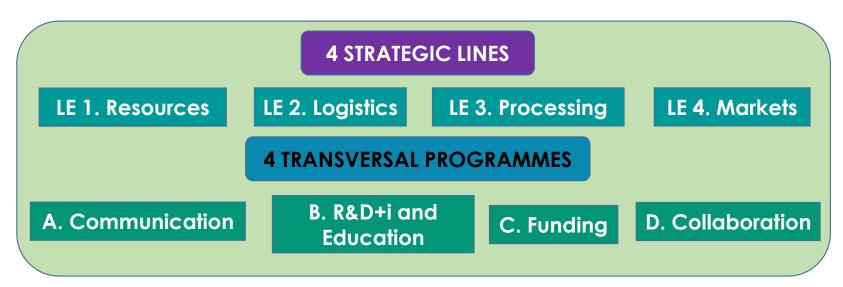
CREATING AND MAINTAINING QUALITY JOBS

ENABLING THE INCORPORATION OF YOUNGSTERS

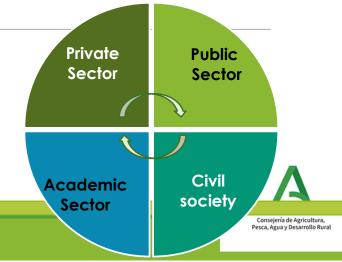
PROMOTING GENDER EQUALITY







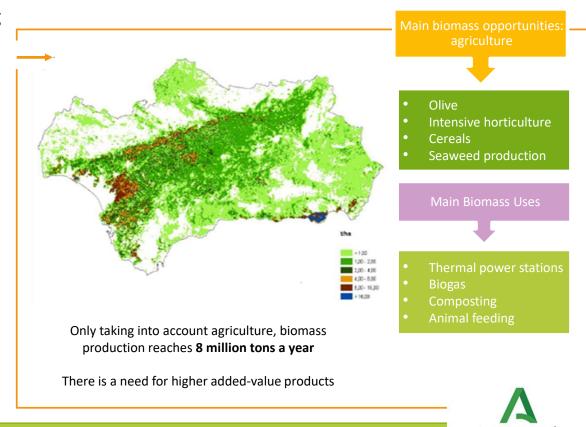






Challenges in Andalusia: biomass production systems and sectors of interest in the bioeconomy

- √ The agricultural sector and agribusiness (farming and livestock)
- ✓ The fishing sector and associated industry
- √ The aquaculture sector
- √ SANDACH
- ✓ The forestry sector and associated industry
- √ The seaweed production sector
- ✓ Municipal competence biowaste





Challenges in Andalusia: Biomass Resource Management, Logistics, and Transformation

Biomass resources must be extracted, treated, and transported to the facilities where they will be

processed and valorized for their bioeconomic utilization

The management and logistics of biomass resources:

- Integrate various operations that ensure resources and products are available on time and in the right form
- Adapt to the type of resource, the transformed material, and the final bioproduct
- A **job** niche and population retention

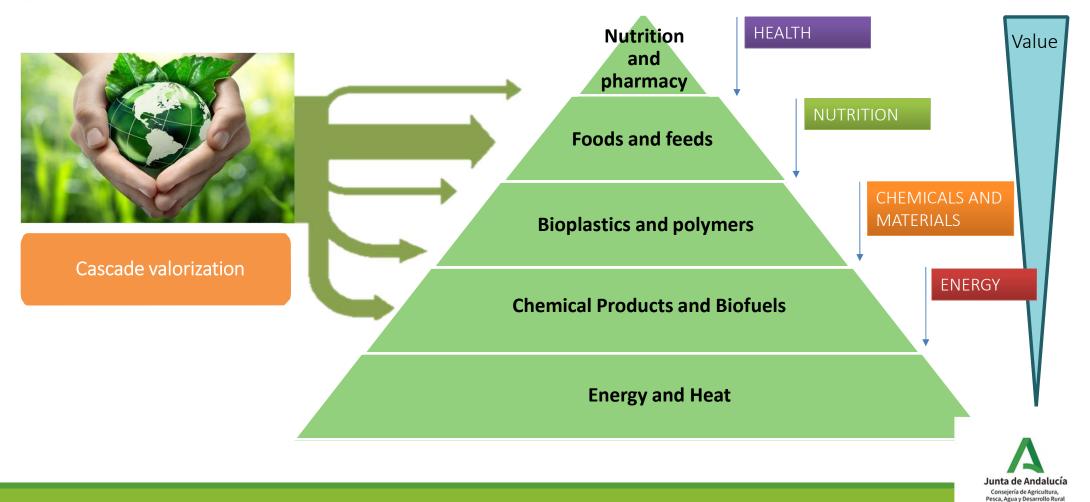








Challenges in Andalusia: To provide new added value to traditional uses





Challenges in Andalusia: Consumer markets for bioproducts



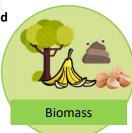


Biorefineries and Bioindustries

Acids and fatty esters, polyols, glycerol, acetic acid, formic acid, fumaric acid, levulinic acid, acetone, furfural, hydroxymethylfurfural, propanediol, acetates, peptides, sugars

Materials and chemicals





Sun, water and nutrients

Markets

Plastics Industry

Construction

Cosmetics

Food and **Beverages**

Agriculture` acuaculture

Chemical industry

Energy and biofuels

Examples

Packaging, bags, medical devices, agriculture, automotive, electronics...

Composites, fibers, textils...

Antioxidants, thickeners, foaming agents, moisturizers...

Foaming agents, anticaking agents, preservatives, flavors, antibacterials...

> Biofertilizers, animal feeds, biostimulants...

Antibiotics, bioactive compounds, encapsulating agents...

Lubricants, solvents, surfactants...

Electricity, heat, ethanol, biodiesel...

Challenges in Andalusia: Adaptation to regulations



Ley de

ECONOMÍA CIRCULAR DE ANDALUCÍA







Plan Estratégico para mejorar la competitividad del sector agricola, ganadero, pesquero y agroindustrial y

del desarrollo rural de Andalucia



Challenges to the implementation of the bioeconomy

ICT-BI&CHAIN

Information and Communication Technologies to increase the efficiency of biomass supply chains



POWER4BIO

Supporting EU regions in the transition to the bioeconomy through tools, instruments and guidance for the development and implementation of bioeconomy strategies



Bio based Industries Consortium

The <u>Bio-based Industries Consortium (BIC)</u> is a non-profit organisation that represents the private sector in a Public-Private Partnership (PPP) with the European Commission, focused on strengthening the bio-based industries sector in Europe

Mediterranean Innovation Alliance for Sustainable Blue Economy



2022 - 2025



Identifying and expanding innovative and sustainable biobased value chains in 6 European regions. Andalusia will work on the value chain of the olive





Challenges to the implementation of the bioeconomy

Training programme INTERCOONECTA

"Circular BioEconomy as a key element of innovation for the development of the new rurality through Central American rural MySMEs"

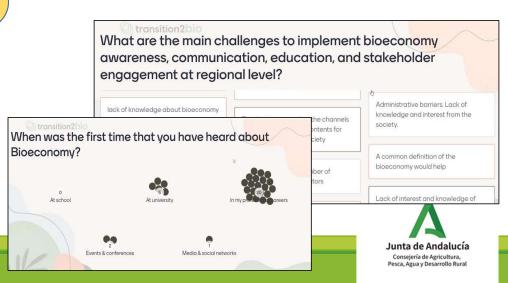


ROBIN aims to empower Europe's regions to adapt their **governance models and structures** in ways that accelerate the achievement of their **circular bioeconomy targets** while promoting social innovation and accounting for different territorial contexts

Communication about the bioeconomy is barely present in the educational stage and in social networks, events, and advertising spaces



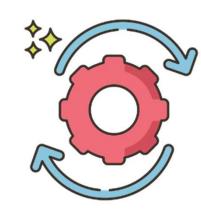






Updating of actions and measures (18 measures and 41 actions)
Preparation of monitoring indicators for the implementation of the ACBS →
Collaboration with JRC (Joint Research Centre of the EC)

Increased focus on awareness and communication about the circular bioecomy Administrative simplification and the use of new technologies



Adapted to new regional and European regulatory and planning developments:

- Andalusian Agri-food Sector Competitiveness Plan
- Andalusian Circular Economy Law
- Planning for the 2021-2027 financial framework funds
- Route established in the European Green Deal







Financial instruments for transition of bioeconomy

H2020 Horizon Europe European Regional Development Fund (ERDF)

European Territorial Cooperation POTENTIAL FUNDING

European
Agricultural
Fund for Rural
Development
(EAFRD)

Bio-based
Industries
Consortium
(BIC)

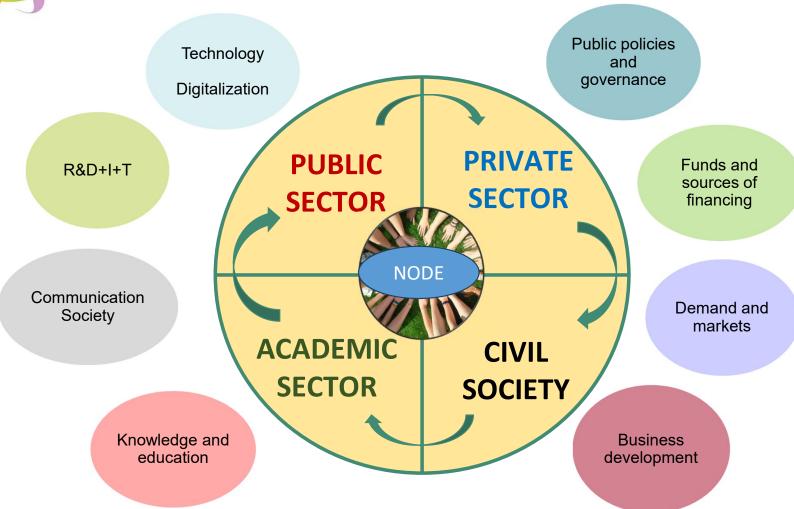
Private funding







Transition to Circular Bioeconomy: Coordinated Action



The implementation of the bioeconomy requires the integration and collaboration of various areas, policies, and stakeholders



Thank you for your attention!





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