



SCALEUP
community-driven
bioeconomy development

**Governance of regional bio-based systems
Empowering Rural Communities: the importance of
developing Governance Models on Circular Bioeconomy**

“Andalusian Strategy for the Circular Bioeconomy”

Dr. Mar Cátedra Cerón

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

Sevilla, 12 September 2024



COP21 · CMP11
PARIS 2015
CONFERENCIA DE NACIONES UNIDAS
SOBRE CAMBIO CLIMÁTICO 2015

Organización de las Naciones
Unidas para la Alimentación
y la Agricultura

INICIATIVA MUNDIAL SOBRE
LA REDUCCIÓN DE LA PÉRDIDA
Y EL DESPERDICIO DE ALIMENTOS



Food loss and waste.



Home > Tracks > Sherpa Track > Bioeconomy Initiative

SHERPA TRACK Initiative on Bioeconomy



The **Initiative on Bioeconomy** is based on three topics: science, technology and innovation; sustainable use of biodiversity; and the role of bio economy in promoting sustainable development.

The **Global Bioeconomy Initiative** is structured around three thematic axes: science, technology and innovation; sustainable use of biodiversity; and the role of the bioeconomy in promoting sustainable development.



The 28th Conference of the Parties to the UN Framework Convention on Climate Change took place in Dubai, United Arab Emirates, from 30 November to 13 December 2023.



COP28 signals beginning of the end of the fossil fuel era

[Special Coverage](#)



EU Bioeconomy



Living well, within the limits of our planet
7th Environment Action Programme



EU Bioeconomy



6 y 7 de octubre, 2022
Bruselas, Bélgica

Promoting a more sustainable, competitive and resilient Europe and boosting rural areas: Council approves conclusions on the opportunities of the bioeconomy (April 2023)

Bioeconomy as an opportunity: reactivating rural areas, employment, sustainable growth, biodiversity, food and energy security, governance, digitalization, new products and markets, etc.



**Communication from the Commission 2024:
Building the future with nature: Boosting, Biotechnology and Biomanufacturing in the EU**

- **REVIEW of the BIOECONOMY STRATEGY by the end of 2025:** social, demographic and environmental challenges and will strengthen the industrial dimension and its links with biotechnology and biomanufacturing.
- Evaluation of the measures taken at EU level.
- Better integrate the bioeconomy into all policies and ensure policy coherence.
- Facilitate the transfer of knowledge to less developed regions and rural areas

Consejo de la Unión Europea

Bruselas, 12 de abril de 2023 (OR, en)

AGRI 186
AGRISTR 22
RECH 131

NOTA

De: Secretaría General del Consejo
A: Comité Especial de Agricultura/Consejo

Asunto: Conclusiones relativas a las oportunidades de la bioeconomía a la luz de los retos actuales, con especial insistencia en las zonas rurales - Aprobación

Tras la confirmación por parte de las delegaciones de la ausencia de objeciones al texto de las Conclusiones del Consejo sobre el asunto de referencia que figura en el anexo, en el marco de un procedimiento tácito informal con fecha límite de 11 de abril de 2023, se niega al Comité Especial de Agricultura que apruebe las presentes Conclusiones sin cambios en su reunión de 17 de abril de 2023 y al Consejo que las adopte sin cambios en su sesión de 25 de abril de 2023.

Con ocasión del debate público que se celebrará para la adopción de las Conclusiones en la sesión del Consejo de 25 de abril de 2023, se invita a los Estados miembros a que pongan aún más de relieve sus prioridades y señalen sus preocupaciones en cuanto al futuro desarrollo de una bioeconomía sostenible y circular.



Brussels, 20.3.2024
COM(2024) 137 final

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Building the future with nature: Boosting Biotechnology and Biomanufacturing in the EU



Regional Context



Sevilla Central CAP Services



Andalucía



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

25% of the PAS of Spain and 3% of the EU27

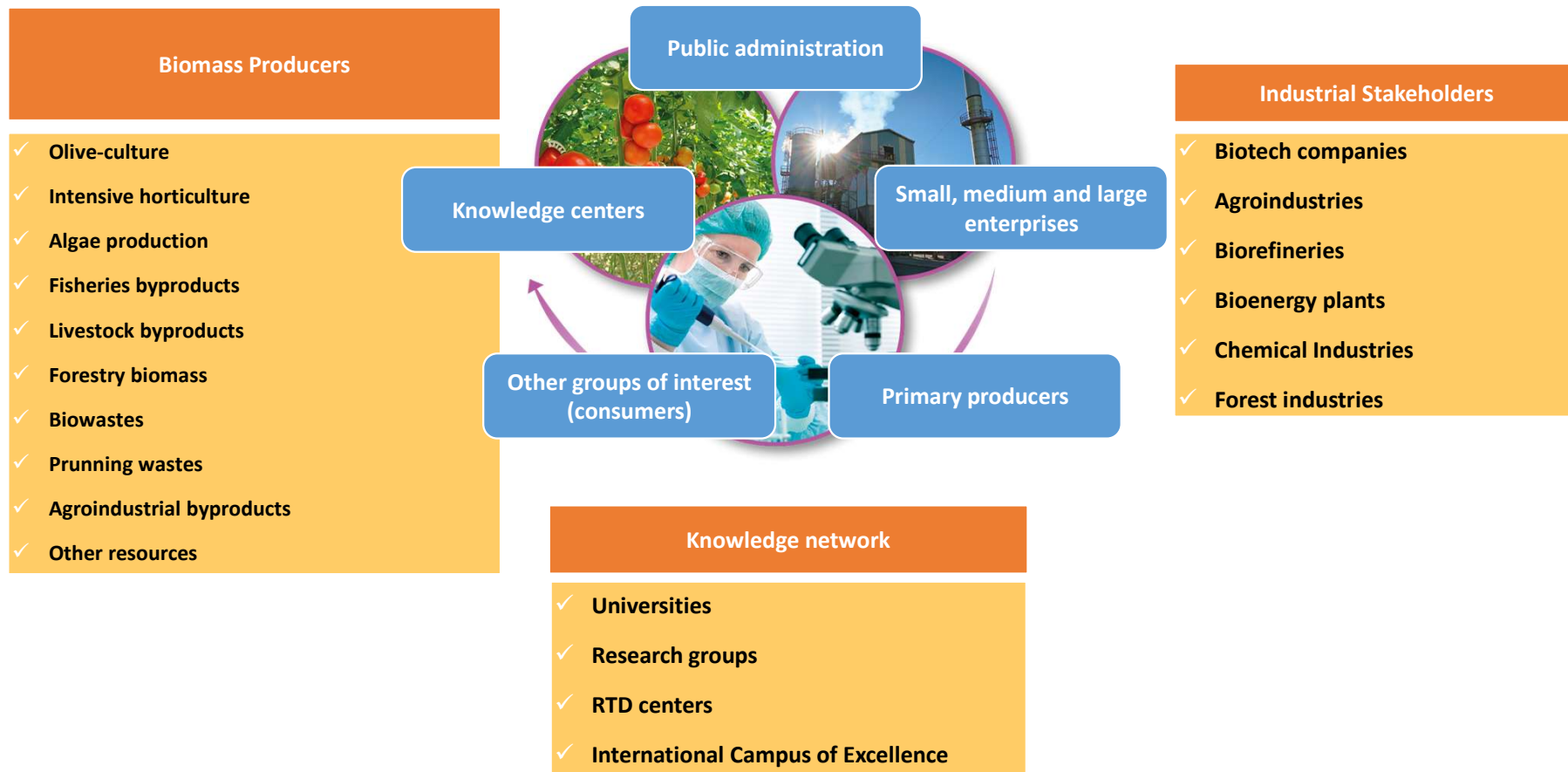


14.000 M€ Exports (2022): olive oil, fruits, vegetables





Stakeholders and capacities in the development of Andalusian Circular Bioeconomy Strategy





Andalusian Circular Bioeconomy Strategy

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

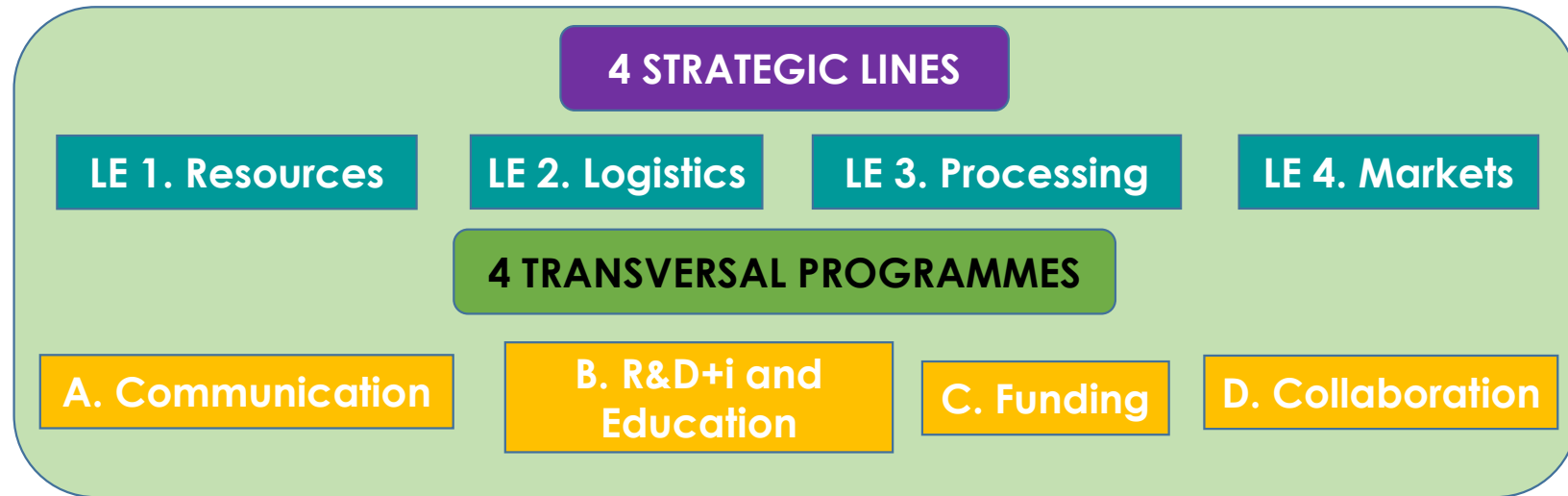
PROMOTING GENDER EQUALITY



- External collaboration on Working Groups, more than experts → 50 experts
- Time Frame: 2030
- Under continuous review to adapt it to regulatory reality



Andalusian Circular Bioeconomy Strategy



<https://www.bioeconomiaandalucia.es/>

<https://www.juntadeandalucia.es/organismos/agriculturapescaaguaydesarrollorural.html>



@Bioeconomia_And



- H2020
- Horizon Europe
- National/ regional projects
- Territorial cooperation
- Training
- Transfer



- Cooperation Funds
- FEADER (GGOO, GDR...)
- FEDER
- Own funds
- ...





Challenges in Andalusia

LE 1. Resources



Agriculture ≈ 8 Mt



Livestock ≈ 5,5 Mt



Agroindustry ≈ 6,8 Mt



Fisheries ≈ 28 kt

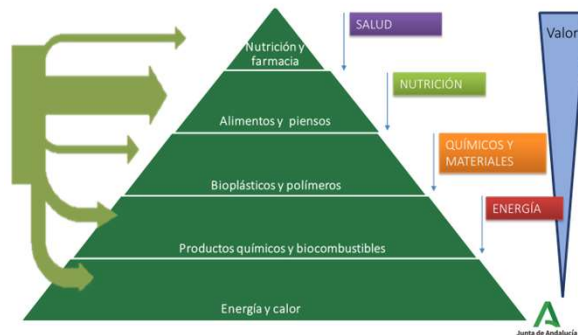


LE 2. Logistics

Biomass Resource Management, Logistics, and Transformation



LE 3. Processing



To provide new added value to traditional uses



LE 4. Markets

**Biorrefineries and Bioindustries
Consumer markets for bioproducts**



Challenges in Andalusia: Adaptation to regulations



Ley de
**ECONOMÍA CIRCULAR
DE ANDALUCÍA**

S4 ANDALUCIA



PRIMER PLAN ESTRATÉGICO PARA LAS
FRUTAS Y HORTALIZAS
DE INVERNADERO
DE **ANDALUCÍA**
HORIZONTE 2030



Primera
Estrategia
Andaluza
para el Sector
del **Olivar**
2024-2027


Research, Innovation, Transfer and Training. International public-private cooperation



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




S3 Partnership on Traceability and Big Data



Working Group in Circular
Bioeconomy and Economy

Interreg Mediterranean




REINWASTE

Sustainable waste management
in protected horticultural crops

Project co-financed by the European
Regional Development Fund

2022 - 2025



Reduce **food loss and waste** at all
stages of the **value chain** and avoid the
use of unsustainable packaging.




SCALE UP
community-driven
bioeconomy development

Identification and development of
**innovative and sustainable bio-based
value chains** in 6 European regions.
Andalusia: **olive** value chain

ICT - BIOMASS CHAIN

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



Mediterranean Innovation
Alliance for **Sustainable
Blue Economy**




HORT OBSERVATIC

Encourage the adoption
and growth of the
circular economy in the
fruit and vegetable
sector




POWER4BIO

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



BBioNets

Andalusian Agriculture and Forestry Network
To promote the use of bio-based technologies
(BBTs) for the processing of agricultural and
forestry biomass





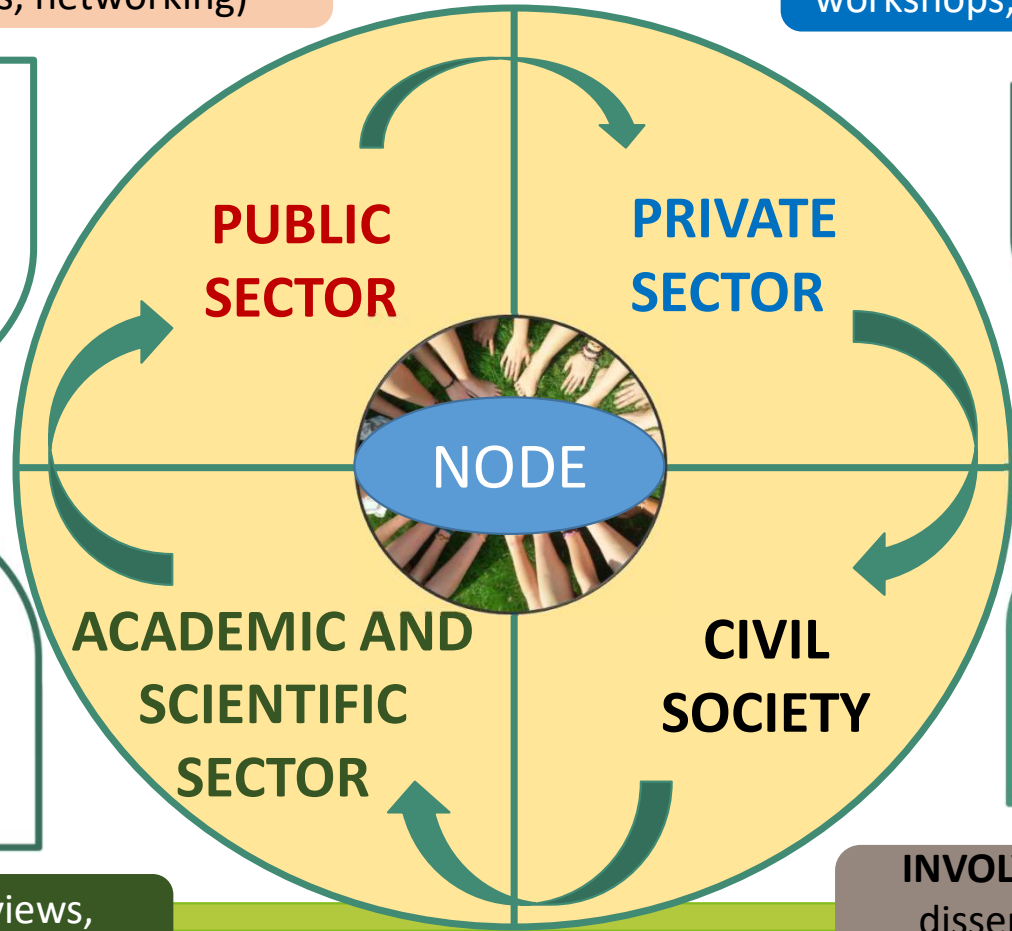
ROBIN Project: engagement strategy

CONSULTATION (interviews, workshops, networking)

COLLABORATION (interviews, workshops, co-creation activities)

Cooperation between different key actors for collaborative governance, understanding **factors, drivers, barriers and motivations**

Developing the **ROBIN toolbox** to support collaborative governance and policy implementation of the bioeconomy



Co-creating **governance models and practices** to overcome barriers and seize **opportunities**

Monitor and evaluate the impact of support measures on society and the economy and ensure their sustainability

INFORMATION (interviews, dissemination of results, events)

INVOLVEMENT (synergies, dissemination of results, exchange of information)



Financial instruments for transition of bioeconomy

European
Territorial
Cooperation

European Regional
Development Fund
(ERDF)

CAP
(Common
Agricultural
Policy)
Strategic Plan

Horizon
Europe

Potential
Funding

European
Agricultural Fund
for Rural
Development
(EAFRD)

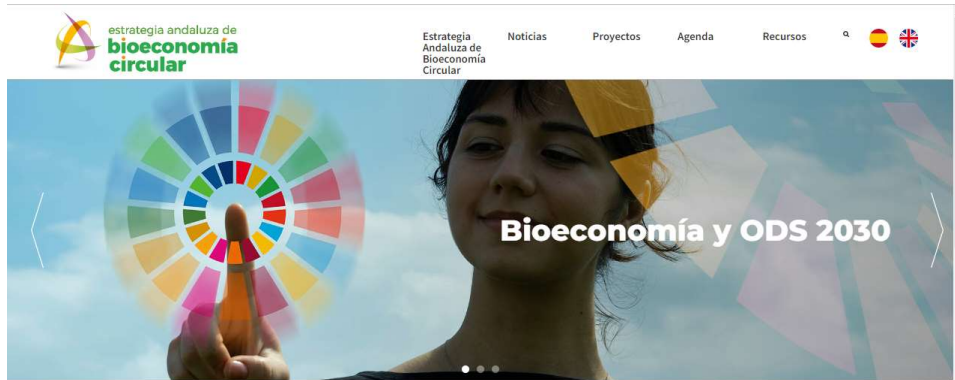
Bio-based
Industries
Consortium
(BIC)

Private
funding





Communication and dissemination



Décimo aniversario de la Estrategia Europea de Bioeconomía

30/5/2022

En febrero de 2012, la UE adoptó su primera Estrategia Europea de Bioeconomía, cumpliendo de esta forma su décimo aniversario.

Reunión del Living Lab andaluz del proyecto ZeroW en las instalaciones de La Caña

27/5/2022

Los socios del living lab andaluz del proyecto europeo ZeroW (Systemic Innovations Towards a Zero Food Waste Supply Chain) se han reunido en las instalaciones de Grupo La Caña en...

ATLAZUL

Impulso de la alianza litoral atlántica para el Crecimiento Azul

ZeroW

ZeroW (Systemic Innovations towards a Zero Food Waste Supply Chain) – Soluciones innovadoras sistémicas contra la pérdida y desperdicio de alimentos en la cadena de suministro.

POWER4BIO H2020

El proyecto POWER4BIO H2020, del que la Consejería de Agricultura, Ganadería, Pesca y Desarrollo Sostenible es socio, busca empoderar a las regiones de la UE, con

AgriWasteValue final event

Nantes (France) 4/10/2022

Final event: presentation of complete results. Valorisation of agricultural residues.

EFIB Forum

Vilnius (Lithuania) 26/10/2022 – 27/10/2022

International Forum on Industrial Biotechnology and Bioeconomy 2022

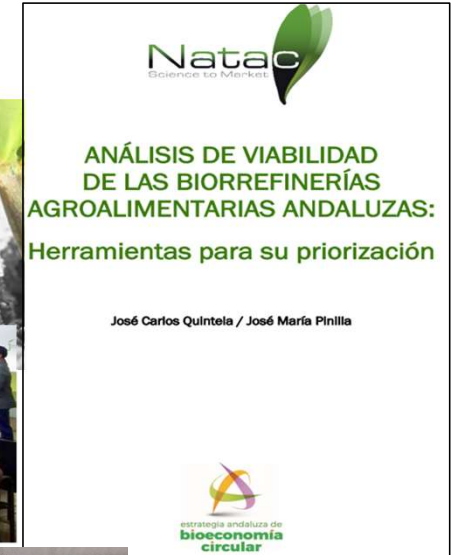
17th European Bioplastics Confer

Berlin (Alemania) 6/12/2022 – 7/12/2022

The European Bioplastics Conference is Europe's leading business and discussion forum within the global bioplastics sector.



Circular Bioeconomy Business Initiatives in Andalusia: Enabling and constraining factors



Study on the state-of-the-art monitoring indicators applicable to the Andalusian Circular Bioeconomy Strategy



Communication and dissemination



A Junta de Andalucía
Consejería de Agricultura,
Pesca, Agua y Desarrollo Rural

foro de

Bioeconomía circular

 November 21, 2023

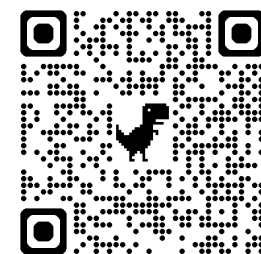
 Seville (Spain)

WELCOME

THE FORUM

PROGRAMME









RESOURCES






ACBS: priority lines of action in the framework 2024-2027

Establishment and consolidation of collaborations:

- Collaboration with the JRC (Joint Research Centre of the EC) 
- Associate member of the BIC 
- S3P Working Group Traceability and Big Data in Bioeconomy and Circular Economy 
- Bioregions Working Group, within ERIAFF 
- Regional Networks    

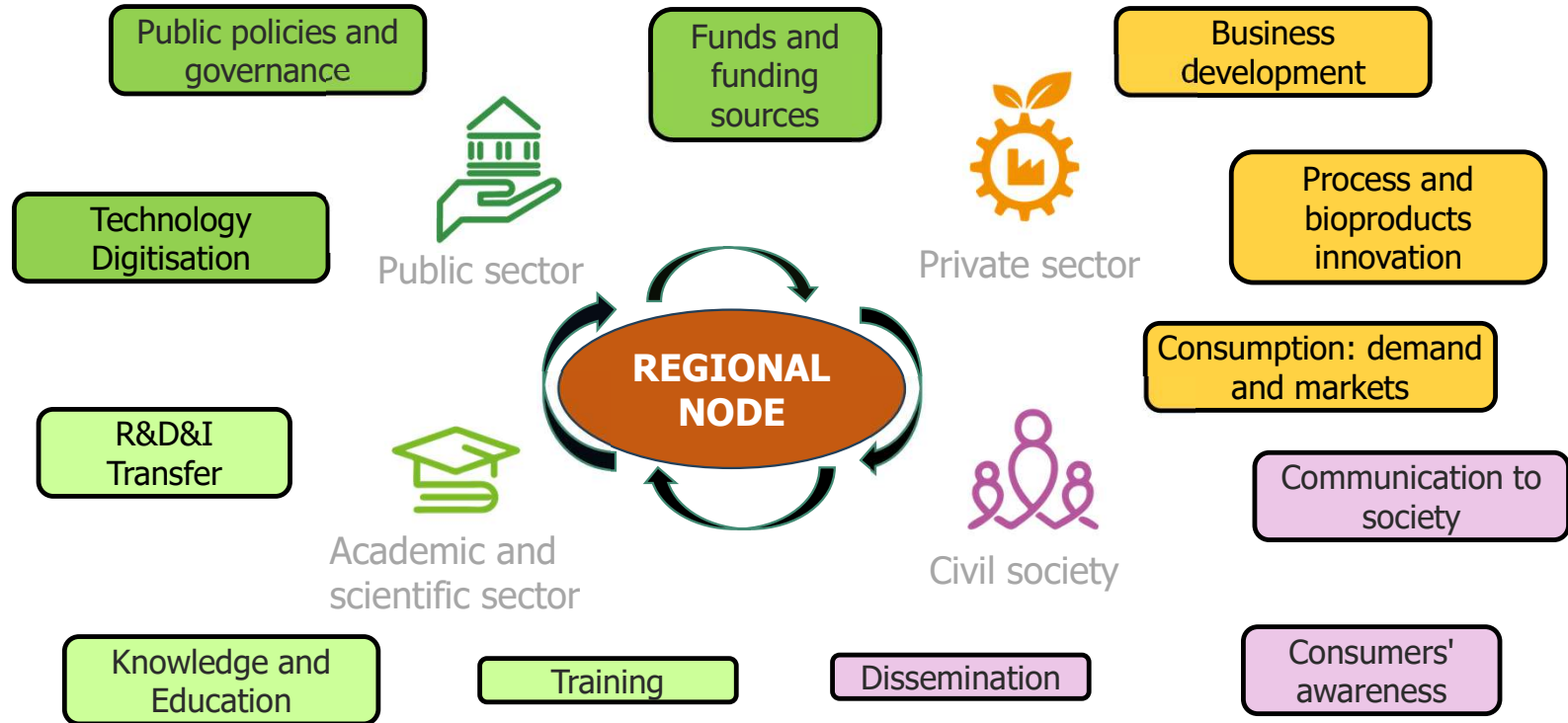
- Priority **collaboration of public-private partnerships**
- Increased focus on **awareness-raising and communication on the BEC**
- **Cooperation between sectors and new markets**
- **Administrative simplification** and use of new technologies 

Adapted to new regional and European regulatory and planning developments:

- **CAP Strategic Plan 2023-2027** Andalusia
- **Circular Economy Law**
- **Regional sectoral strategies:** greenhouse fruit and vegetable, olive sector,...
- Route established in the **European Green Deal**
- Planning of funds for the **financial framework 2021-2027** 



Circular bioeconomy: coordinated action



mariam.catedra@juntadeandalucia.es
comision.bioeconomia.capadr@juntadeandalucia.es



@Bioeconomia_And
 @AgriculturAnd



<https://www.bioeconomiaandalucia.es/>
<https://www.juntadeandalucia.es/organismos/agriculturapescaaguaydesarrollorural.html>