



estrategia andaluza de
bioeconomía
circular

Andalusian Circular Bioeconomy Strategy

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Color Circle

Who we are?

**Total Area:
9 Mha**

**Agricultural
Area:
4,4 Mha**

**Forestal
Area:
4,6Mha**

Population: : 8,4 Million people 37% in rural areas

2nd European Region in Agricultural Production

4th Payment Agency in Europe

300.000 Farms

5.400 Agroindustries

23% of Agrifood Employment in Spain

20% of the Spanish Exports

**Irrigation: 25% Useful Agriculture Area,
70 % Agricultural Income**

13% of the Spanish Chemical Industry



Capacities in Andalusia for Bioeconomy development

Production and availability of biomass resources

- Olive-culture
- Intensive horticulture
- Algae production
- Fisheries byproducts
- Livestock byproducts
- Forestry biomass
- Biowastes
- Pruning wastes
- Agroindustrial byproducts
- Other resources

Political Support

- Andalusian Circular Bioeconomy Strategy
- Rural Development Groups
- Technological Centers
- Programmes and Structural Funds

Industrial Capacities

- Biotech companies
- Agroindustries
- Biorefineries
- Bioenergy plants
- Chemical Industries
- Forest industries



Knowledge network

- Universities
- Research groups
- RTD centers
- International Campus of Excellence

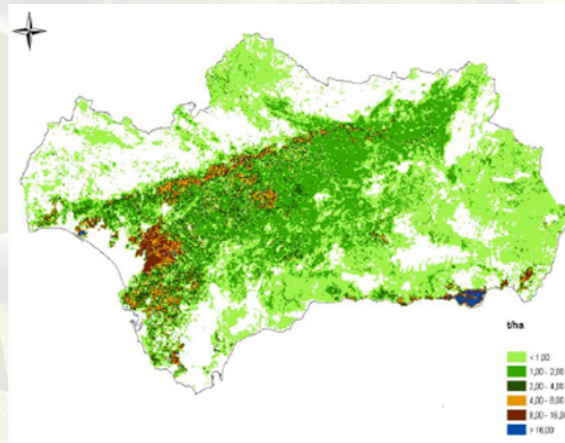
Which is our bioeconomy positioning?

Main biomass opportunities

- Olive biomass
- Intensive horticulture
- Seaweed production

Main Biomass Uses

- Thermal power stations
- Biogas
- Composting
- Animal feeding



Only taking into account agriculture, biomass production reaches 8 million tons a year

There is a need for higher added-value products

Source	Tonnes
Cotton	226,014
Rice	526,183
Strawberry	214,744
Fruit trees	457,791
Sunflower	604,150
Greenhouses	1,217,461
Maize	680,419
Olive groves	1,859,840
Other cereals	523,754
Beetroot	200,522
Outdoor tomatoes	45,927
Wheat	1,322,777
Vines	116,898

BIOMASS PRODUCTION



8 M Tons/Year

ANDALUSIAN BIOECONOMY SECTOR



Market Volume: 30.068 M€ (2015)

Employment: 290.968 persons (2015)

Previous Background

Model Demonstrator Region in Sustainable Chemical Production 2016-2017

BIC Associated Member (Bio-Based Industries Consortium) since 2017

Participation in European initiatives:

- ICT-Biochain
- Reinwaste
- Power4Bio
- Symbi



Andalusian Circular Bioeconomy Strategy coordinated with:



European and National Framework:

1. European Circular Bioeconomy Strategy (2012 revised in 2018)
2. United Nations Sustainable Development Goals
3. Circular Economy Action Plan (2015)
4. Spanish Bioeconomy Strategy Horizon 2030 (2016)
5. Spanish Circular Economy Strategy (under elaboration)

Regional Framework:

- Employment Agenda
- Andalusian Innovation Strategy: RIS3 Andalusia
- Andalusian Plan for Research, Development and Innovation- PAIDI 2020
- Energy Strategy Andalusia 2014-2020
- Andalusian Strategy for Sustainable Development 2020
- Strategic Plan for Agro-Industry 2020
- Other cross-nature plans and programmes



Bioeconomy definition according to Andalusian Circular Bioeconomy Strategy:

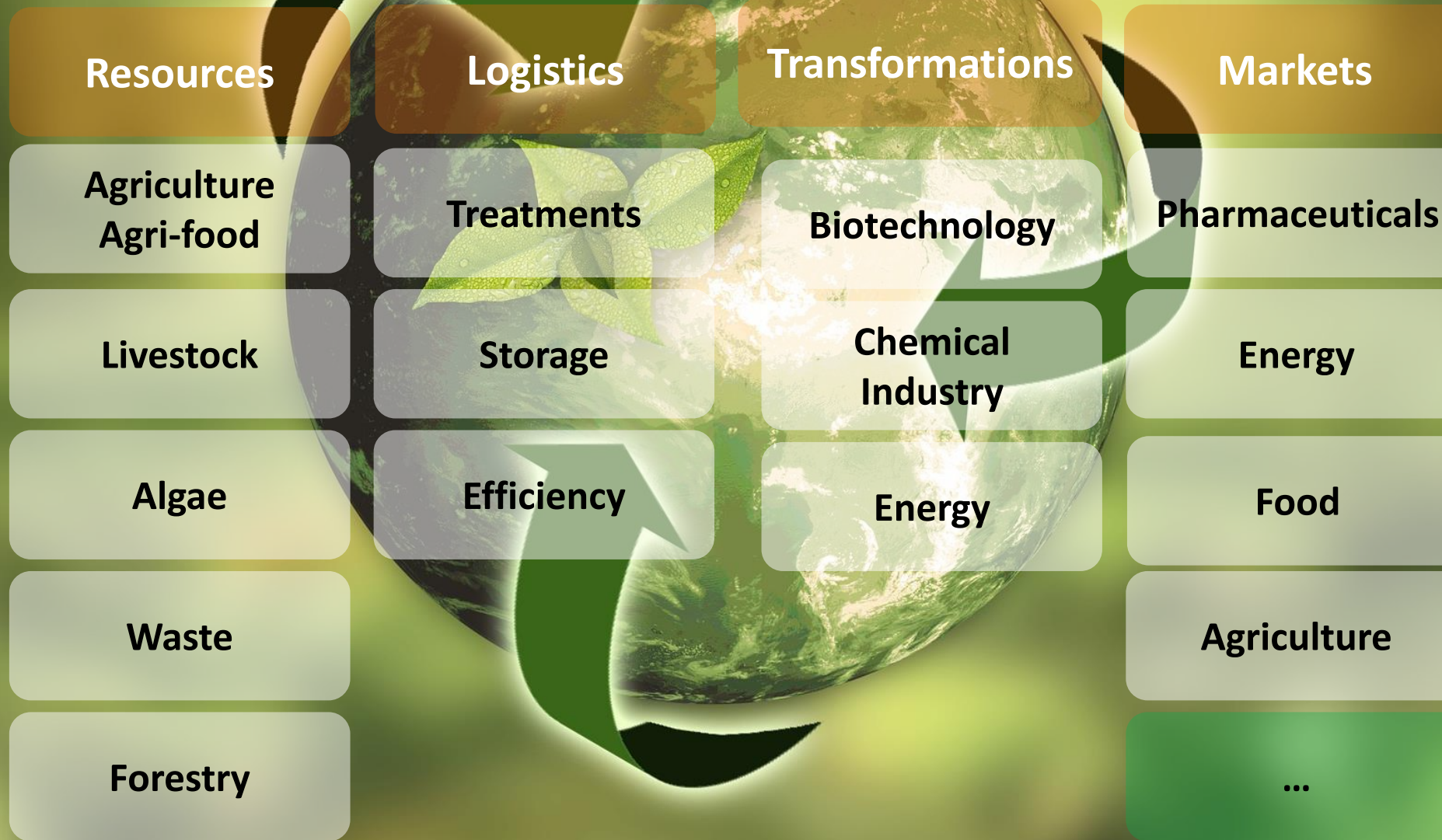
Economic model based on use and production of biological resources and its sustainable and efficient **transformation into bioproducts, bioenergy and services for the society**

Scope

ACBE is focused on bioeconomy segments and activities with lower implementation which claim for a higher institutional support to facilitate its take off and long-term consolidation

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

Which sectors are included?



Andalusian Circular Bioeconomy Strategy

Objectives

General objective

Contribute to sustainable growth and development in Andalusia by fostering target actions to promote the production of resources and renewable biological processes.



Strategic objectives

- 1 Increase the availability of sustainable biomass for resource utilization through innovative treatments
- 2 Rise the number of bioindustries and biorefineries in Andalusia.
- 3 Boost the markets and consumption of bioproducts and bioenergy in Andalusia.

Andalusian Circular Bioeconomy Strategy



Milestones

Participation:

- Direct contribution of 4 Regional Ministries
- External collaboration on Working Groups, more than 50 experts

Structure:

- 4 Strategic Lines divided in: Resources, Logistics, Processing and Markets.
- 4 Transversal Programmes: Communication, R+D+i and Education, Funding and Collaboration
- 17 measures and 39 actions

Time Frame: 2030

Total budget estimation: 1.427.572.722 M€

Financial instruments



H2020

European
Territorial
Cooperation

ERDF

Own
resources

EAFRD



How are we moving forward?

Some highlighted actions

- Bioeconomy Website, Social Media, Communication Plan
- Creation of the Andalusian Bioeconomy Cluster
- Creation of an inter-departmental Commission for boosting and monitoring of actions and measures.
- Bioeconomy Regional Observatory establishment
- Methodology development to quantify and qualify biomass resources (Indicators)
- Creation of a hallmark to identify bioproducts and processes for bioeconomy
- Encourage participation in European initiatives
- Promote a Catalog of Good Practices and a portfolio of successful projects
- Draft of Law of Circular Economy of Andalusia

Web, Social Media and Communication Plan



- In development the communication plan
- News bulletin
- Twitter
- Web page (AVAILABLE)

 @bioeconomia_and

<http://www.bioeconomiaandalucia.es/home>

A Cluster to meet the following needs

01

Improve the cooperation and coordination of bioeconomy stakeholders

02

Bioeconomy-oriented research and innovation

03

Strengthen of bioeconomy sector

04

Increase the awareness of bioeconomy

05

Attract investment on Andalusian Circular Bioeconomy initiatives

Roadmap of the BioeconomyCluster

01

Expression of Interest
-Type of entity
-Type of partner
-Range of contributions

02

Cluster Concept
Strategic planning and viability model
(Preliminary Technical Office)

03

Preliminary Statutes
(Preliminary Technical Office)

04

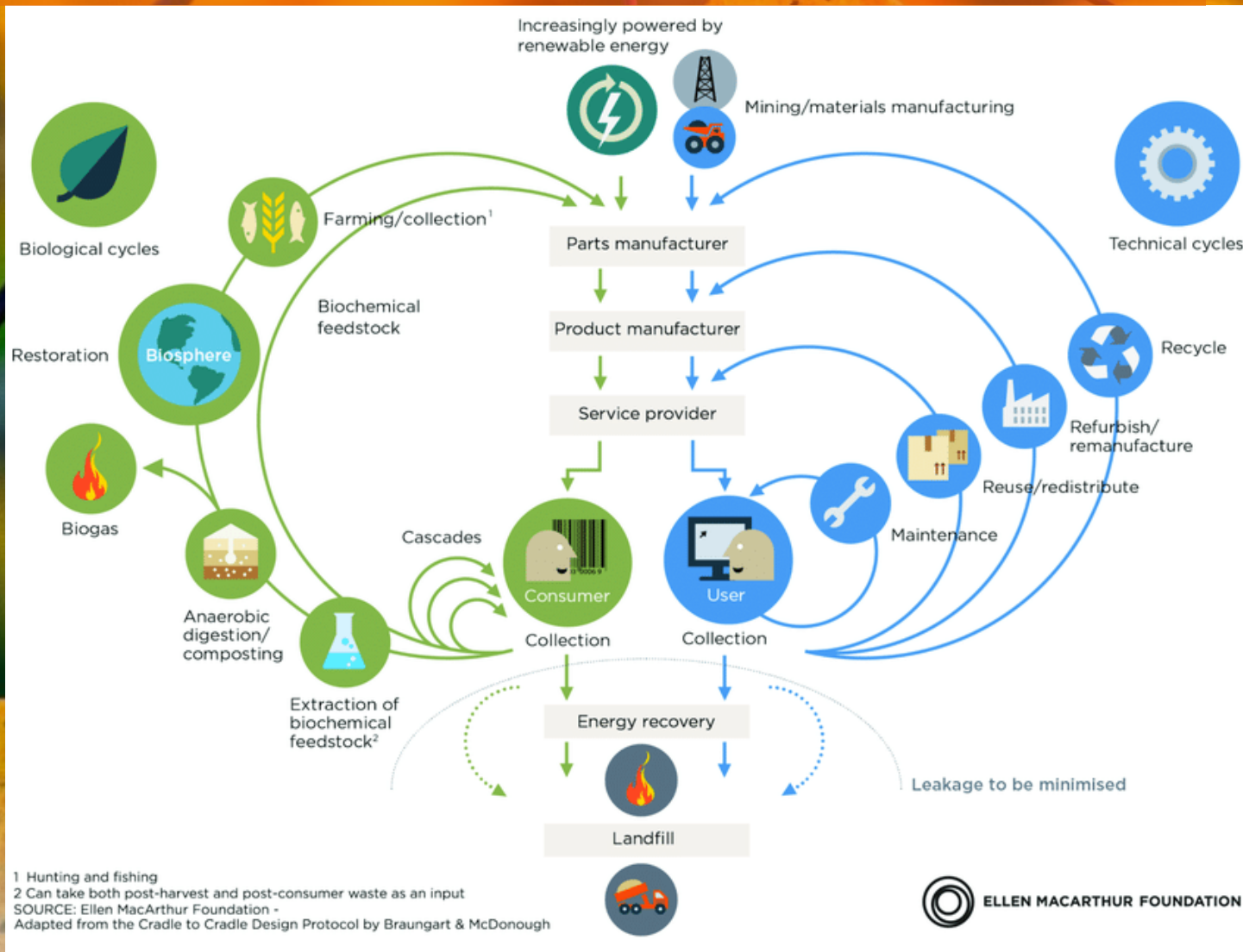
Association in Agreement with public regional government

05

Consolidation
Cost Structure
Incomes Structure
Catalogue of Services

YOU ARE
HERE

Why a Regional Circular Economy Law?



Lesson learned



Innovation



Collaboration



Sustainability



Competitiveness



Communication activities



People factor



Public synergies



Multiactor Approach

Thank you very much for your attention



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



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