

A close-up photograph of a sunflower with bright yellow petals and a brown, textured center. The background is a soft-focus landscape with greenery and a blue sky.

BioPlat

SPANISH BIOMASS TECHNOLOGY PLATFORM



SPANISH BIOMASS  
TECHNOLOGY  
PLATFORM



## WHAT'S BIOPLAT? ~ WHAT'S BIOPLAT FOR?

“It’s the forum of biomass stakeholders, led by the industry, who have been working in the definition of the “Long Term Vision - 2030” and a “Strategic Research Agenda”. These reports reflect the most relevant and key areas of bioenergy where scientific and technological progress in the short, medium and long term are needed, to ensure competitiveness, sustainability goals and future growth of this sector”

The Spanish Biomass Technology Platform -BIOPLAT- is supervised by a Coordinator Group. The activities are carried out by the members of Eight Working Groups, including a *Biofuel for Transport Working Group*. It’s supported by a Secretariat that receives partial financial support from the MICINN (Spanish Ministry of Science and Technology)

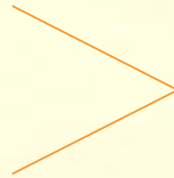
## MEMBERS OF BIOPLAT

- 135 Companies
- 47 Technology Centres + Foundations
- 16 Associations and Cooperatives
- 29 Universities
- 17 Public Entities
- 3 Public Research Centres

**Total: 247 members**

## MAIN OBJECTIVE

- SET THE CONDITIONS
- IDENTIFY and DEVELOP STRATEGIES

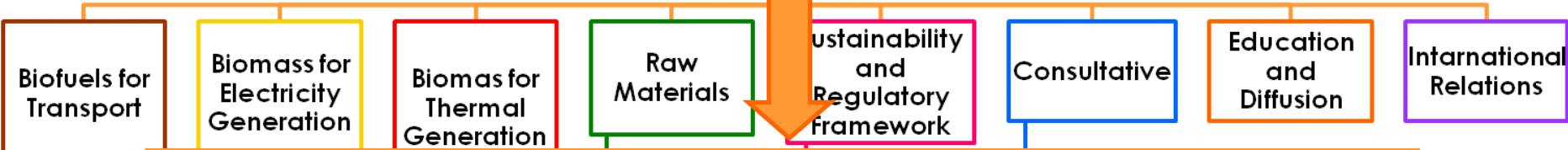


Sustainable commercial promotion and development of biomass in Spain

## SPECIFIC OBJECTIVES

- Provide a **framework** in which all the involved agents in the Spanish Bioenergy sector can work jointly and coordinately.
- Analyze the present situation of the biomass in Spain and detect the primary needs of **R&D**.
- **Recommend** the **financing** of the most outstanding investigation **areas**.
- Propose **strategies** and **sustainable** alternatives to develop the market of the bioenergy in Spain.
- Promote the **coordination** among the different involved sectors and stimulate the **participation of the companies** on the design of the **R&D** and **commercial** programs.
- **Disseminate** the possibilities of the bioenergy and promote the training activities.

# Spanish Biomass Technology Platform



formed by:

- the coordinators of each working group
- the Secretariat
- delegates of the Spanish Ministry of Science and Innovation
- delegates of the Spanish Centre for Industrial Technology Development -CDTI-

It is responsible for coordinating activities of the Platform and ensuring compliance of the objectives of each group, promoting the relationship and communication between them and encourage participation

- └ Biodie
- └ Bioetha
- └ Biogc
- └ Synthe Biofuels Biorefin

## SO FAR HAVE BEEN CREATED WITHIN BIOPLAT

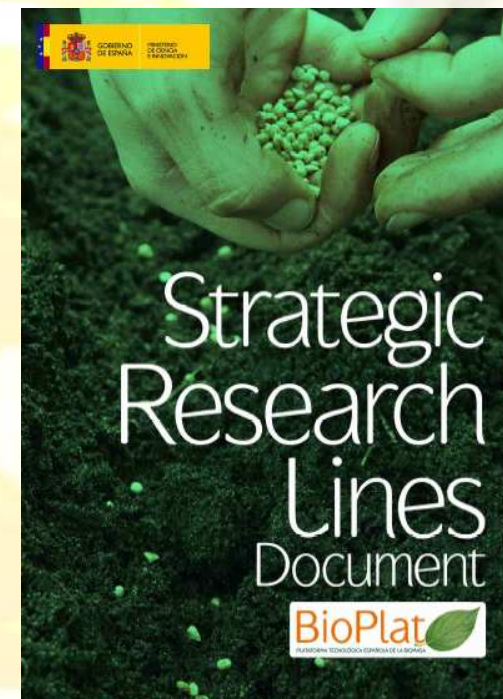
**LONG TERM VISION DOC. - 2030**

### **STRATEGIC RESEARCH LINES**

- Strategic Investigation Lines (14)
- Support to Development Actions (2)



Both documents  
can be  
downloaded from  
our website:  
[www.bioplat.org](http://www.bioplat.org)



## VISION FOR 2030

- Analysis to the current situation.
- Vision scenarios 2020 and 2030: electrical, thermal and transport applications.
- Strategic objectives, technical potential that support them, considerations for its implementation and expected benefits.

1. Executive summary

2. Current situation

3. Challenges and opportunities for the future

4. Vision to 2030

- European context
- National context
- Biomass availability
- Conversion technologies
- Biomass development in Spain
- Previous criteria of sustainability
- Strategic objectives
- Technical potential
- Considerations to achieve the objectives
- Expected benefits

## STRATEGIC RESEARCH LINES

- This document contains a number of high priority research lines, whose purpose is to indicate those areas or segments of the biomass sector in which it is considered that R&D investment would be a breakthrough in eliminating the barriers that are impeding the progress of the sector.
- Each line consists of an action, which generally defines the ultimate objective of the research.

14 strategic  
research lines



- Raw materials
- Technologies
- Logistics
- Regulatory Framework
- Sustainability

2 support to  
development lines



- Horizontal actions for all the biomass sector areas



## STRATEGIC RESEARCH LINES

### Strategic Research Lines (I)

1. Studies of **production and market potential** with sustainability criteria:
  - Know the potential, the characteristics and the availability of the different biomass kinds.
  - Encourage the use of deteriorated and abandoned lands.
2. Development the **good agricultural and forest practices** as well as the **characteristics of the biomass from energy crops**.
3. Study / analysis of a **certification system for raw materials**, products and co-products.
4. Production of **biofuels from alternative raw materials** and conventional technologies.
5. Biofuels **production technologies from lignocellulosic biomass**.
6. Development of **biorefinery concepts**.

## STRATEGIC RESEARCH LINES

### Strategic Research Lines (II)

7. Improvement of **logistics** (machinery and pre-treatment in field, collection methods, transport and storage) and their associated processes for the biomass plants supply:
  - Improve the technical and economic viability of the source management in order to ensure the supply.
  - Optimize transportation of biomass.
8. Development of **solid biofuels** production technology for the generation of commercial products from unconventional raw materials .
9. Implement **Life Cycle Analysis** for raw materials and processes:
  - Develop a harmonized method including energy efficiency and reducing of greenhouse gases emission.
10. Development and demonstration of **valorisation and recovery systems** of ashes and slag produced during **combustion**.



## STRATEGIC RESEARCH LINES

### Strategic Research Lines (III)

11. Optimization of **pre-treatment** facilities, **supply** systems and **burners** for biomass firing and co-firing in order to reduce costs.
12. Improvement of **flexible gasification systems** for the use of different types of biomass, independently or through combined gasification.
13. Recycling and using of **digestate**:
  - Common use as a fertilizer in different crops contributing to sustainability.
14. Viability of **biogas use** for vehicles and electric power generation engines, **including gas cleaning**.



## STRATEGIC RESEARCH LINES

### Strategic Research Lines (IV): Support to Development Actions

#### 15. Analysis of the current **legal framework**:

- Include all kinds of biofuels, even the potential ones.
- Include all the valorisation technologies, even all the possible hibridations.
- Simplify all the bureaucratic steps.

#### 16. Perception of the **bioenergy sector in the society**:

- Study the society opinion about bioenergy.
- Improve the society knowledge about the bioenergy benefits and opportunities.



## STRATEGIC RESEARCH LINES

### Implementation of the Strategic Research Lines

- Working Groups → Working on the implementation these **lines**.
- Support to Development Actions:
  - Start work on **Society perception** of the sector.
- Review of the document:
  - Modify the content and adjust it to the needs of the sector.
  - Possible inclusion of activities not currently covered.



## STRATEGIC RESEARCH LINES

### Implementation of the Strategic Research Lines

- Collaboration in the preparation of the draft of the **Saving, Energy Efficiency and Renewable Energy** law of the Spanish Ministry of Industry, Tourism and Trade.
  - Perspective to 2030 → Contribute with the work done by BIOPLAT.
- Provide support to the **public administrations**:
  - Spread all the information about the calls of the different R&D founding programs.
  - Colaboration: → 

|   |   |
|---|---|
| { | - Elaboration of different papers (eg. Renewable Energies Law). |
|   | - Channelling information in the R&D field.                     |

## STRATEGIC RESEARCH LINES

### Implementation of the Strategic Research Lines

- Give support to private companies in the international field.
  - Awareness of the diversity of R&D founding programs.
  - Dissemination of the different calls for projects.
- Organization of technical seminars and briefings.
- Search for synergies and collaborations with other technology platforms.

**THANK YOU FOR YOUR ATTENTION**



**SPANISH BIOMASS TECHNOLOGY PLATFORM**

**SECRETARIAT**

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