



Project CEUBIOM and sustainable biomass use

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CEUBIOM

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Framework programme - FP

FP7 is short for:

- **Seventh Framework Programme for Research and Technological Development**

It is the **European Union's** main instrument for **funding research** in Europe between 2007 and 2013

FP7 supports research in **selected priority areas**

- **Economic benefits**

€1

(research)
at European level



€4-7

(long-run, econometric models)

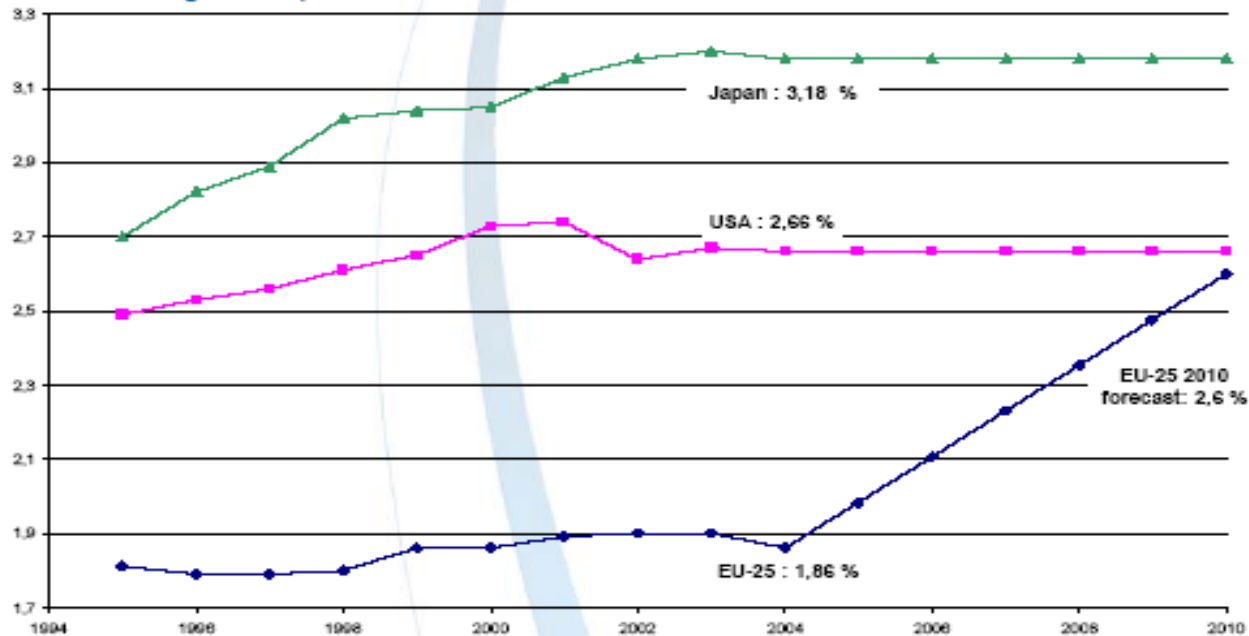


Framework programme - FP

Research: filling the gap (total expenditure on R&D as % of GDP, 2004)



(EU-25 extrapolation based on R&D intensity targets put forward by Member States in their respective National Reform Programmes)



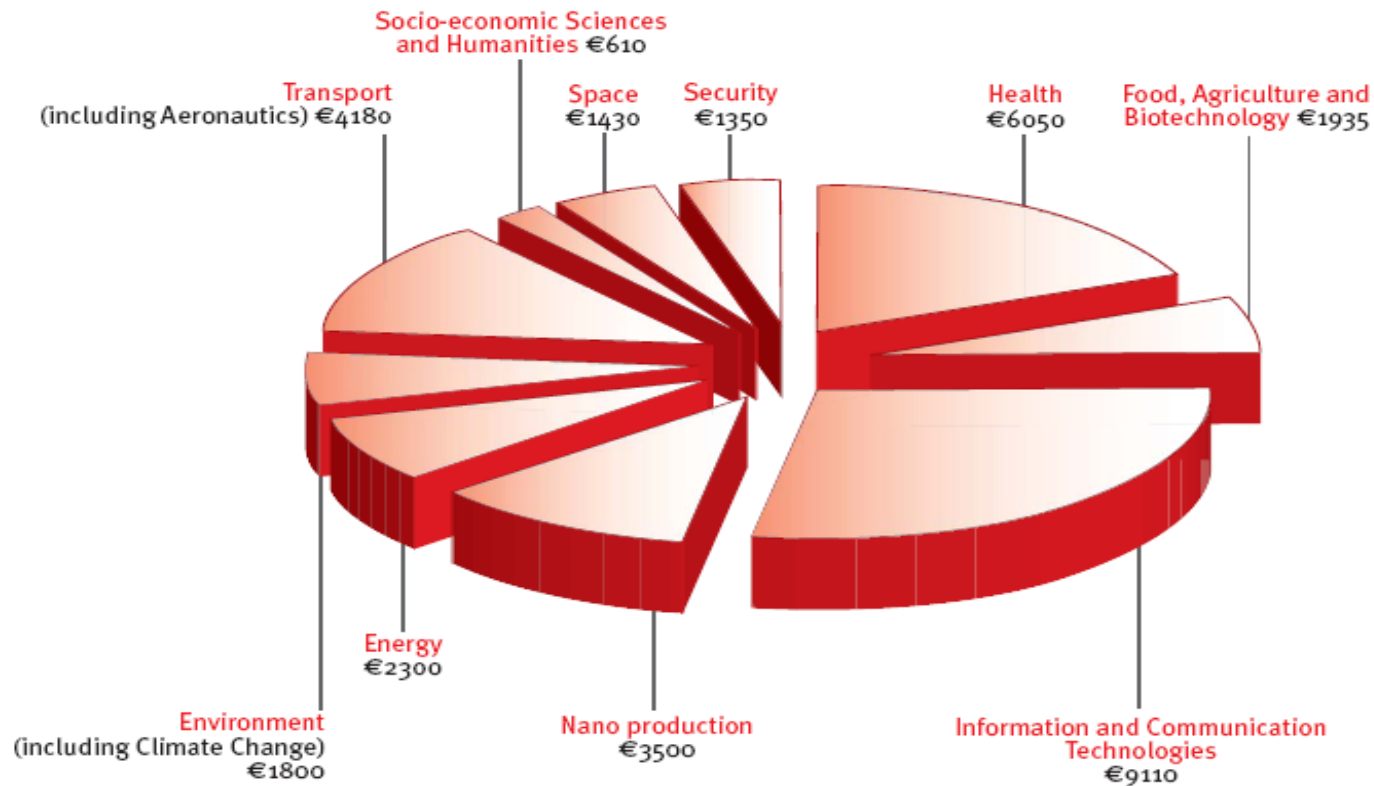
Data: Eurostat, OECD.

Source: DG Research



Framework programme - FP

The Cooperation Programme breakdown (€ million)



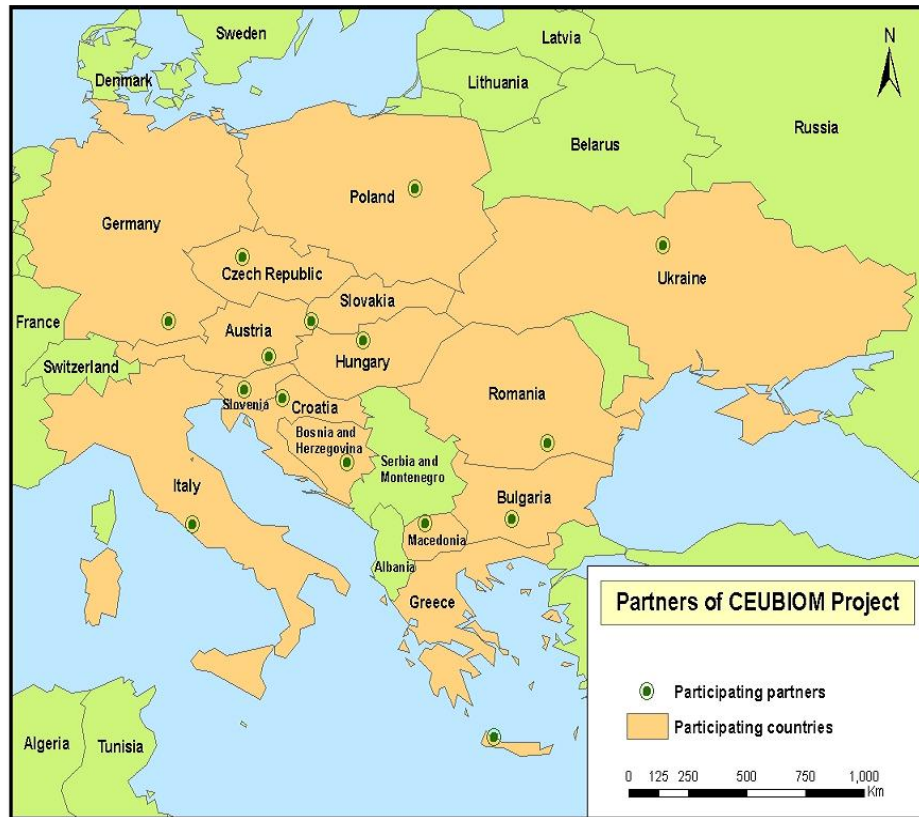
CEUBIOM Project

- How to achieve standardized way in accessing biomass potential (to make sure everybody is talking about the same thing)?
- **CEUBIOM** project is funded within the "Energy Thematic Area" and contributes to "Harmonisation of biomass resource assessment activities"

CEUBIOM - Strategic objectives

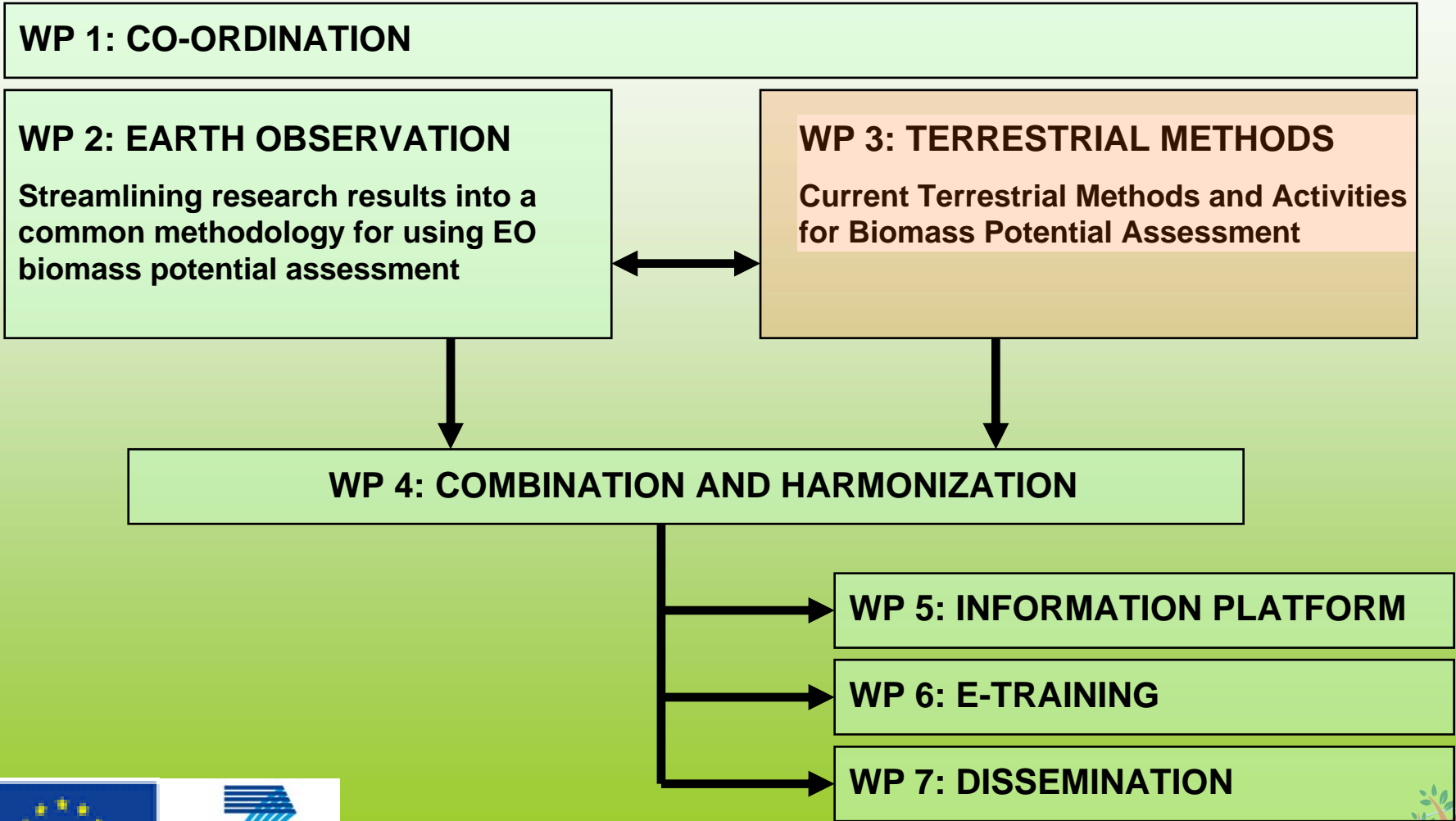
- Develop a common methodology for gathering information on biomass potential using terrestrial and earth observations.
- Disseminating information, best practices and methodology on using earth observations in the assessment of biomass potential.
- Raise awareness of the scientific community and the public for the use of EO on estimating biomass potential.
- **Duration:** March 2008 – November 2010
- **Total Budget:** 1,340,834€

Consortium of project CEUBIOM



- GEONARDO Environmental Technologies Ltd
- Remote Sensing Solutions GmbH
- Center for Promotion of Clean and Efficient Energy in Romania
- University of Ljubljana
- University of Zagreb Faculty of Electrical Engineering
- Ciheam-Mediterranean Agronomic Institute of Chania
- Joanneum Research Forschungsges m.b.H
- Institute of Geodesy and Cartography
- Balkan Foundation for Sustainable Development
- Cross Czech a.s.
- Faculty for Agriculture and Food Science
- Advanced Computer Systems A.C.S. S.p.A.
- Slovak Innovation and Energy Agency
- National Biomass Association
- Ukrainian Land and Resource Management Center

Structure of working packages



Structure of working packages

WP2: Assessment with Remote Sensing

- Review the different satellites and sensors used for assessing land cover
- Review knowledge on vegetation indices derived from optical data
- Currently available methodologies for land cover assessment using different satellite data types
- Propose a methodology assessing the land use/land cover and forest types, above ground biomass (AGB), carbon content and respective changes based on EO

Structure of working packages

WP3: Terrestrial Assessment

- To survey the current terrestrial

- methods
- activities

for biomass potential assessment and to evaluate them

Also, to make an overview of all past activities on collecting biomass potential in SEE

To suggest methodology for biomass potential assessment using terrestrial assessment

EO vs. Terrestrial Assessment

Terrestrial Assessment

- + very detailed
- + information on age structure, layers
- + accepted and applied
- time consuming and costly
- no area-wide information (forest)

Assessment with Remote Sensing

- + area-wide information
- + lower costs, less time
- + objectivity
- + higher temporal resolution feasible
- + direct use in GIS systems
- less details
- typically less accurate



Structure of working packages

WP4 Combination and Harmonization of EO and Terrestrial Methods

- harmonized biomass assessment approach of EO and terrestrial methods
- WP4 = WP2 + WP3

WP5 Platform development for Stake-holder Interaction, Common Datasets and Results

- A Platform will be developed in order to bring up new ideas, help European researchers staying at the forefront of European EO/biomass research and interact with stakeholders
- Consisted of results from WP2, WP3, WP4


Structure of working packages

WP6 CEUBIOM e-Training Programme Development and Deployment

- A simple but robust and highly cost efficient e-training program. Activities include:
 - Setting up e-Learning software environment,
 - Developing the e-learning Curriculum,
 - Pilot Course implementation,
 - Maintaining and updating the e-training services



WP7 Dissemination Activities



CEUBIOM - Home - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Refresh Print Mail Word Excel PowerPoint Internet Options

Address <http://www.ceubiom.org/> Go Links

Web Search

 **CLASSIFICATION OF EUROPEAN BIOMASS POTENTIAL FOR BIOENERGY USING TERRESTRIAL AND EARTH OBSERVATIONS**

THE PROJECT EVENTS PARTNERS AREA CONTACT

Classification of European Biomass Potential for Bioenergy Using Terrestrial and Earth Observations

CEUBIOM project is funded by the European Commission under the Framework Programme 7 within the "Energy Thematic Area" and contributes to "Harmonisation of biomass resource assessment" activities which focus on assessing and optimising the availability of biomass resources.

[more ...](#)

<http://www.ceubiom.org/>

CEUBIOM coordinator
Mr Balázs Bodó (Geonardo Ltd, Hungary)

EU Scientific officer
Mr Philippe Schild (DG RTD-ENERGY)

Contact

"Twin Project" **BEE** which focuses on the harmonisation of biomass resource assessment for bioenergy purposes in Europe.

Done Internet

start An o... Ulaz... moje... Micr... Ado... CEU... 11:36

WP7 Dissemination Activities




NEWSLETTER

Issue 1 June 2008

CEUBIOM project is funded by the European Commission under the Framework Programme 7 within the "Energy Thematic Area" and contributes to "Harmonisation of biomass resource assessment activities"

COOPERATION ENERGY.3.7: CROSS-CUTTING ISSUES



Project partners

- GEONARDO Environmental Technologies Ltd
www.geonardo.com
- Remote Sensing Solutions GmbH
www.rsgmbh.de
- Center for Promotion of Clean and Efficient Energy in Romania www.enero.ro
- University of Ljubljana
lest.fe.uni-lj.si
- University of Zagreb Faculty of Electrical Engineering
www.fer.hr
- Ciheam-Mediterranean Agronomic Institute of Chania
www.maich.gr
- Joanneum Research Forschungsges m.b.H
www.joanneum.at
- Institute of Geodesy and Cartography
www.igik.edu.pl
- Balkan Foundation for Sustainable Development
www.balkanfoundation.org
- Cross Czech a.s.
<http://crossczech.cz>
- Faculty for Agriculture and Food Science
<http://www.unsa.ba>
- Advanced Computer Systems A.C.S. S.p.A.
www.acsys.it
- Slovak Innovation and Energy Agency
www.siea.gov.sk
- National Biomass Association
www.ukbiomass.co.uk
- UK Energy Research Centre
www.ulrnc.org.uk

Network of partners



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Classification of European Biomass Potential for Bioenergy Using Terrestrial and Earth Observations



CEUBIOM project is funded by the European Commission under the Framework Programme 7

www.ceubiom.org



Common Dissemination Brochures

- Newsletters
- Presentations to meetings,
- Publications
- Stakeholder Network

Parallel project

Biomass Energy Europe (BEE)

BEE project activities will include a proposal for a harmonised biomass potential assessment methodology. The project activities will include:

- (i) the analysis of recently conducted biomass resource assessments,
 - (ii) the analysis of policy backgrounds, sustainability criteria and user requirements,
 - (iii) the analysis of currently applied methodologies,
 - (iv) an inventory of data sources and ongoing activities aimed at improved data quality and accessibility,
 - (v) a proposal for a harmonised biomass potential assessment methodology.
- (<http://www.eu-bee.net>).



Sustainable biomass use

Sustainability takes in account many different aspects (environmental, economical, sociological, ecologic, social...)

Biomass availability suggests several qualities:

- economic: at reasonable cost
- socio-economic: without producing negative impacts on the economy (labour, GDP)
- ecologic: without (unacceptable) harm to environment
- social: hierarchy of uses unchanged (food, production, energy)

Sustainable biomass use

- Second-generation fuels - fuels made from lignocelluloses biomass feedstock using advanced technical processes
 - Lingo-cellulose biomass sources include woody, carbonize materials. These materials do not compete with food production.
 - Algal materials which would grow in water and which don't dependent on arable land
 - Second-generation biofuels would completely remove fear of competition between energy fuel and food.

A photograph of a dense forest with tall, thin trees and a thick canopy of green leaves. The lighting is soft and dappled, creating a serene atmosphere. The text "Thank you for your attention!" is overlaid at the bottom in a bright green, bold font.

Thank you for your attention!