



RESIPE:

Reform of the European Sugar Industry based on Polygeneration with the use of Energy Crops

TREN/07/FP6/EN/S07.71205/038667

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exergia ENERGY & ENVIRONMENT
CONSULTANTS



The project

- **Title:** Reform of the European Sugar Industry based on Polygeneration with the use of Energy Crops
- **Acronym:** RESIPE
- **Duration:** 18 months
Contract was entered into force on May 29, 2007
Effective starting date July 16, 2007
Duration 18 months from the effective starting date
- **Aim:** to assist the take-off of polygeneration in the sugar industry

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The partners

1. **EXERGIA S.A.**, Energy & Environment Consultants - Greece
2. **KSC**, Krajowa Spółka Cukrowa S.A. - Poland
3. **ETA**, Renewable Energies S.A. - Italy
4. **ECBREC/IPiEO**, EC Baltic Renewable Energy Centre - Poland
5. **BAFF**, The BioAlcohol Fuel Foundation - Sweden

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The objectives

- To appoint the sugar industry as a prime candidate for polygeneration based reform under the concept of bio-refineries;
- To study how the sugar-beet ethanol production can be upgraded to polygeneration applications;
- To increase knowledge of polygeneration with the use sweet sorghum;
- To transfer expertise from the technology developers to the end-users;
- To increase commercial availability of the results of EU research projects;
- To assess the applicability of the technology and to understand its limitations;
- To disseminate information on the feasibility of polygeneration in the sugar industry.

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Work Packages

- WP 1. Project management and coordination**
- WP 2. Sectoral and technology update**
- WP 3. Technology transfer**
- WP 4. Elaboration of pre-feasibility studies**
- WP 5. Consolidation of results and recommendations on sugar industry reform**
- WP 6. Dissemination**



WP1 Project management and coordination

- Networking of the project stakeholders
- Liaison with the Commission
- Coordination of the project activities
- Organisation of project meetings
- Consolidation of the work in the WPs
- Quality control and assurance regarding project outputs (reports and deliverables)
- Organisation of project management meetings
- Preparation of progress, interim and final reports



WP2 Sectoral and Technology update

- Review of the sugar sector in the participating countries (Greece, Italy, Poland, Sweden)
- Establishment of contacts with sugar plant operators
- Expressions of interest from sugar plant operators
- Technology review report



Contents of the Technology Review

Basic energy crops / characteristics

Biorefinery concept – platforms / general description

Biorefinery concept for sweet sorghum / sugar beet / wheat, maize / sugar cane

Applicability of the technology in Greece, Italy, Sweden, Poland – SWOT analysis

Case studies – best practice examples

EU technology providers

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WP3 Technology Transfer

- **Four training workshops in each of the participating countries addressed to the sugar industry**
 - Assessment of the workshops results
- **Organization of a study tour to an existing application of the technology in Europe**
 - In total, a group of around 12 people are expected to participate in the study tour

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WP4 Elaboration of pre-feasibility studies

Objective

- To demonstrate that polygeneration with the use of energy crops is a viable investment in technical and economic terms

The pre-feasibility studies will be carried out by the respective project partners and will address investments in the whole production chain of the sugar plants with real application potential



Contents of pre-feasibility study

- **General data for the project**
- **Existing technology status and description of new technology employed**
- **Potential for polygeneration with the use of energy crops**
- **Key decision factors**
- **Conclusions**

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WP5 Consolidation of results and recommendations on sugar industry reform

- Consolidation and evaluation of project results
- Development of recommendations for the European sugar industry
- Consultation with sugar industry
- Provision of a roadmap for the application of polygeneration
- Release of elaborated recommendations

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WP6 Dissemination

- Development and maintenance of the project website
- Information brochure containing project results and technology related information
- Technology implementation guide
- Networking activities
- Organisation of the final workshop

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RESIPE

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SIXTH FRAMEWORK PROGRAMME

An initiative of 5 EU organisations

RESIPE is a co-financed project by the European Commission through the Sixth Framework Programme (2002-2006) for research, technological development and demonstration (RTD). A consortium of 5 partners from Northern, Central Europe and Mediterranean countries proposed to overhaul the EU sugar sector and contribute to the reform of the European sugar industry assigning them the role of supplier of low-cost heat and electricity via cogeneration and bioethanol for the transport sector as well as other valuable materials, using polygeneration technology.

► [More Information](#)

► **Partners Area**

The RESIPE partners area.

► [Click here to enter](#)

► **Latest News**

7th February, 2008

1st RESIPE workshop in Verona, Italy.

► [More Information](#)

8th October, 2007

RESIPE kick-off meeting in Athens.

► [More Information](#)

► **Sugar Platform Biorefineries**

Fostering the use of agricultural biomass to reduce the dependence from fossil fuels, R&D community made efforts for developing the technological concept of biorefinery. A biorefinery facility integrates biomass conversion processes and equipment to produce biofuels, power, and value-added chemicals from biomass.

Industries converting lignocellulosic

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Thank You

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