

“Energetic products from bio-refineries: new opportunities for the Italian sugar industry”

Verona, 7 febbraio 2008

Centrocongressi Arena – Sala Puccini

« *Bioenergy World* » - 108° Fieragricola

Introduction to the European project RESIPE

Stefano Capaccioli

ETA Renewable Energies



- **ETA Renewable Energies**
 - **The work context**
 - **The organization of the project**
- RESIPE**



ETA Renewable Energies prides itself on its extensive experience in the field of research, development, application, integration of renewable energies systems, offering professional consulting at any level of study, planning and dissemination.

Together with its own institutional customers and partners, firms, trading associations, R&D centres, Universities, **ETA Renewable Energies** is in the lead for completing projects and finding ideal applications for the effective use of Renewable Energy Sources and of Energy Efficiency, both in industrial production and in public contexts.



ETA Renewable Energies enhances the industrial cooperation and joint ventures for integrated bioenergy projects and in the acquirement of public funding and private financing through a network of international expertise.

Some **ETA Renewable Energies** projects in the bioenergy sector:

- **BEST** project (BioEthanol for Sustainable Transport) aims at demonstrating an extensive substitution of petrol and diesel with bioethanol in light and heavy vehicles.

www.etaflorence.it/best-italia

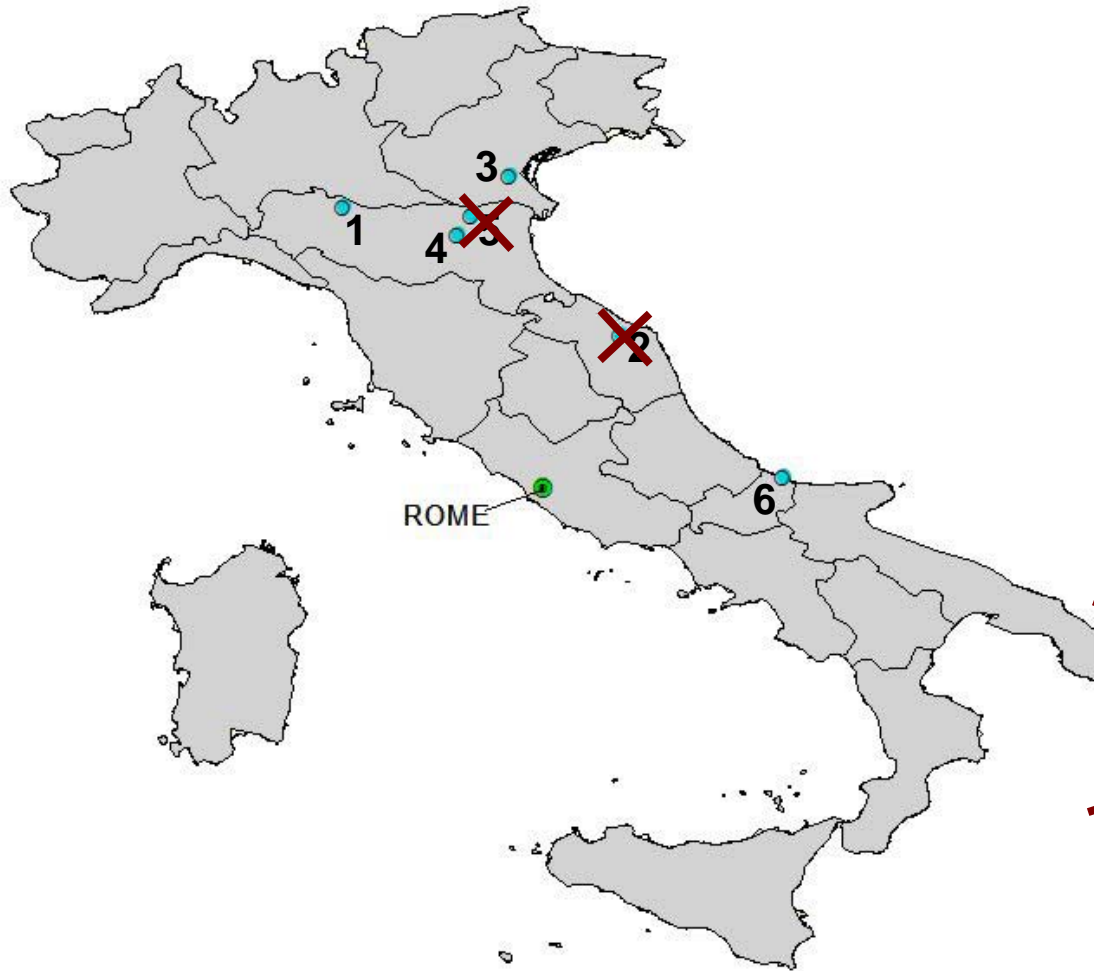
- Evaluation of feasibility to produce modern biofuels (bioethanol and biodiesel) in Bénin, for households and industries, and finding strategies for their promotion.



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Overview of the Italian sugar industry



ERIDANIA SADAM:

1 - **San Quirico** (Parma, Emilia Romagna)

~~2 - **Jesi** (Ancona, Marche)~~

ITALIA ZUCCHERI:

3 - **Pontelongo** (Padova, Veneto)

4 - **Minerbio** (Bologna, Emilia Romagna)

SFIR:

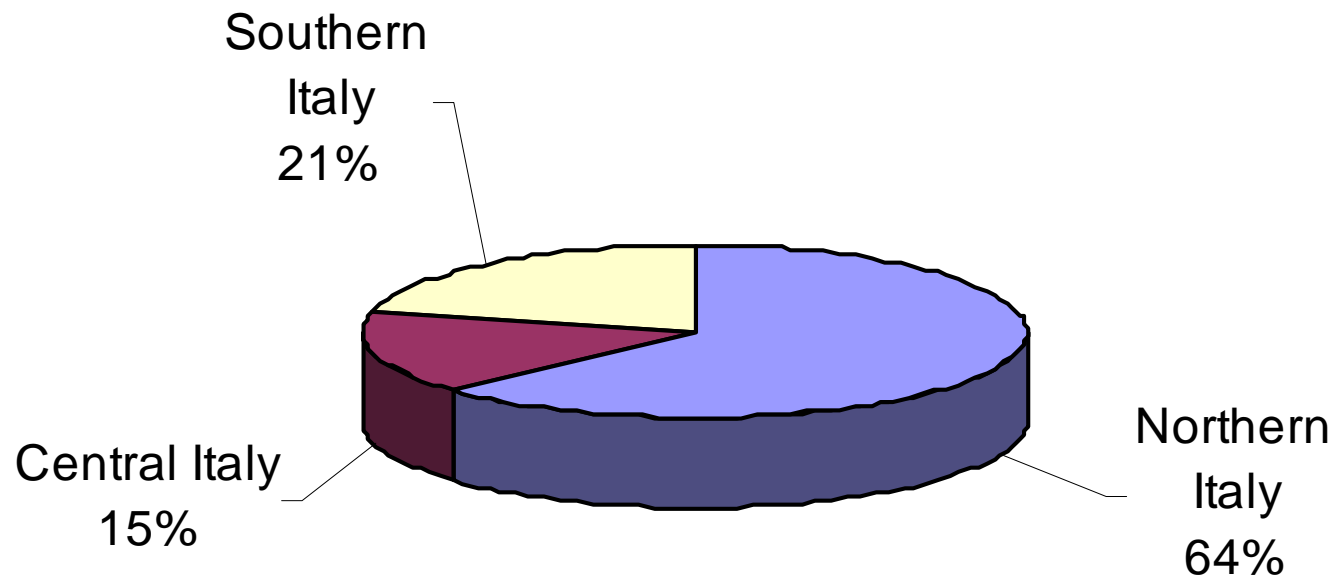
~~5 - **Pontelagoscuro** (Ferrara, Emilia Romagna)~~

REGIONE MOLISE:

6 - **Termoli** (Campobasso, Molise)



Regional distribution of harvested areas 2007



Source: Italian sugar beet growers association (ABI CISAC)



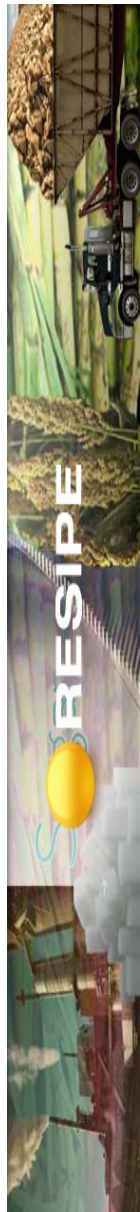
Overview of reconversion projects

All **decommissioned plants** must be reconverted to different uses.

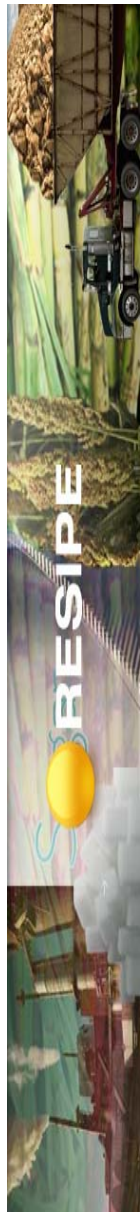
Reconversion projects will be partly funded with European funds.

Most reconversion projects of decommissioned plants involve the development of bioenergy:

- 4 out of 13 projects have been approved by local authorities and stakeholders
- 9 projects are still waiting for approval by local authorities



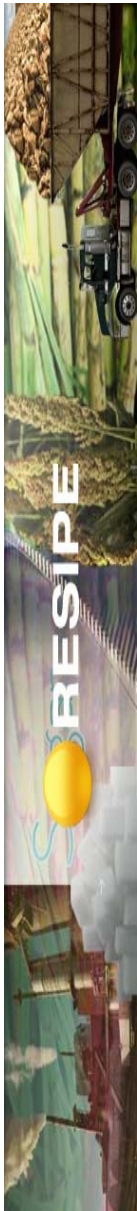
Sugar plant	project approval	Reconversion project
Castiglion Fiorentino (AR)	No	Solid biomass and vegetable oil CHP power plant (25 MW) + greenhouse horticulture
Fermo (FE)	No	Vegetable oil and biogas CHP power plant, sunflower seed oil extraction plant.
Russi (FE)	No	Biomass CHP power plant (30 MW)
Celano (AQ)	Yes	Biomass CHP power plant (30 MW) fuelled with forest residues (50%) and short rotation coppice (50%).
Villasor (CA)	No	Solid biomass and vegetable oil CHP power plant (47 MW)
Finale Emilia (MO)	No	Still waiting for proposal from plant owner



Sugar plant	project approval	Reconversion project
Casei Gerola (PV)	Yes	Bioethanol production (200 kL) and sugar packing
Bondeno (RA)	Yes	Vegetable oil CHP plant
Contarina (RO)	No	Bioethanol production (200 kL) and sugar packing
Forlimpopoli (FC)	No	Biomass CHP power plant (22 MW) and sugar packing
San Pietro in Casale (BO)	Yes	Biodegradable food package production, sugar storage and packing plant.
Foggia	No	Sugar cane refinery and biomass CHP power plant
Ostellato (FE)	No	Still waiting for proposal from plant owner



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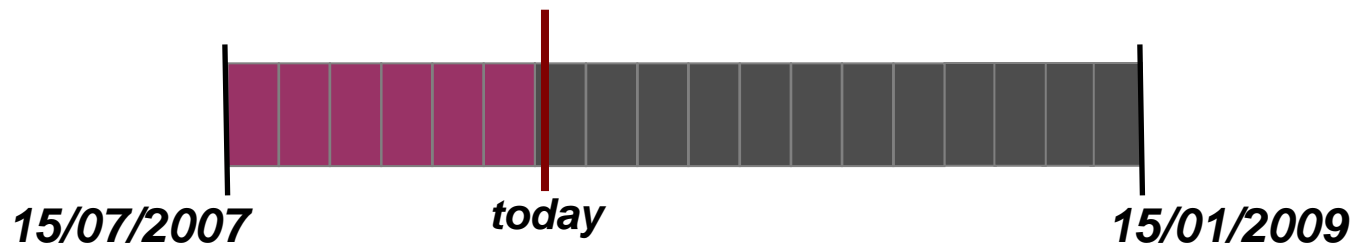


Reform of the **E**uropean **S**ugar **I**ndustry based on **P**olygeneration with the use of **E**nergy crops

Six Framework Programme of European Commission

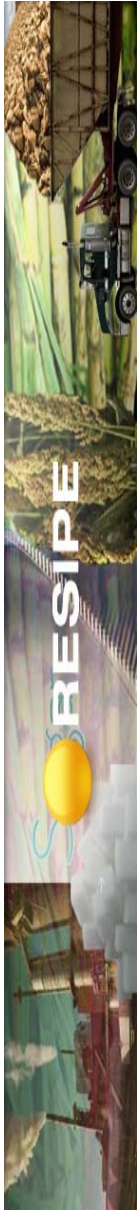


Contract number: **038667**



Website: **www.re-si-pe.com**

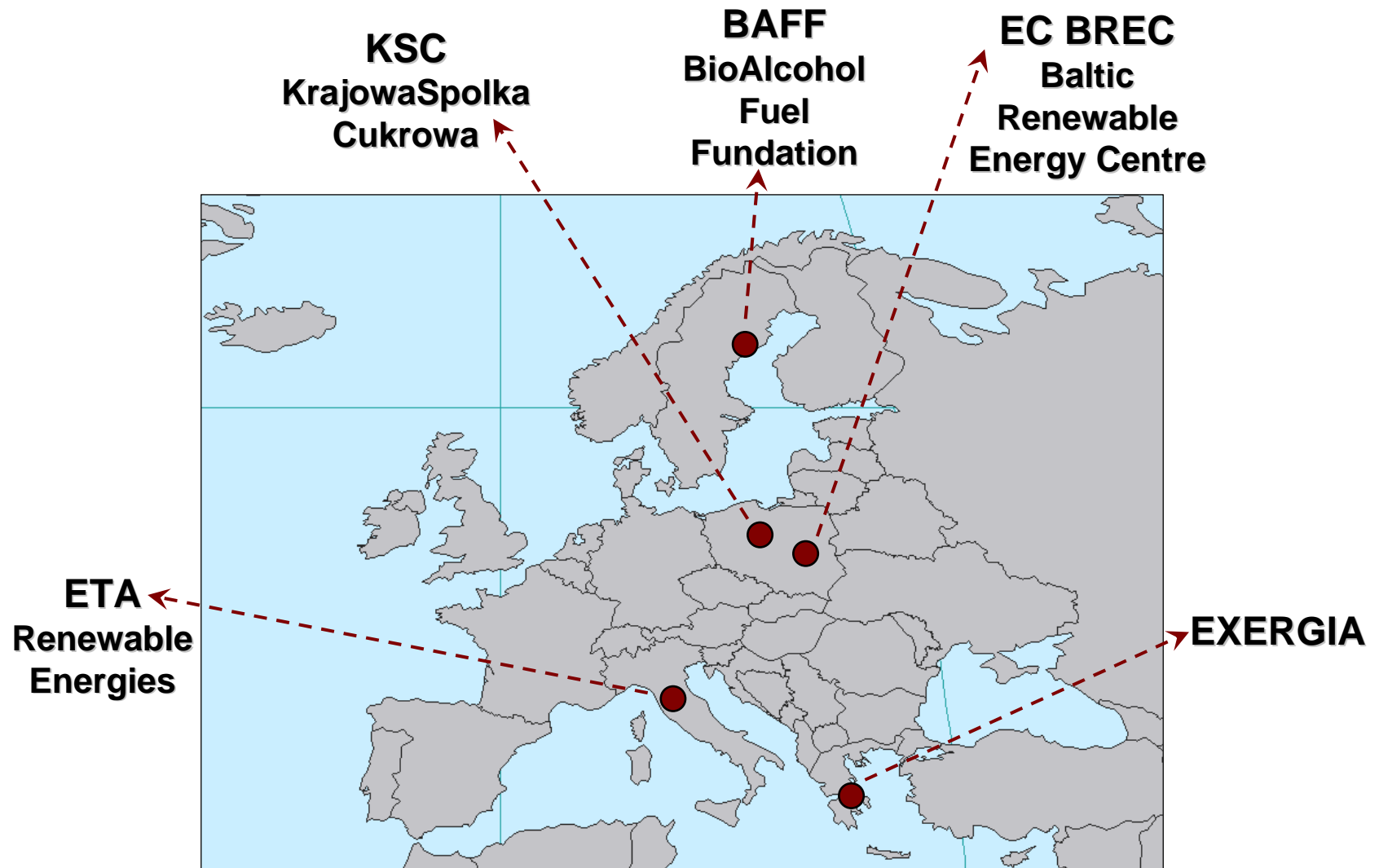
RESIPE Project

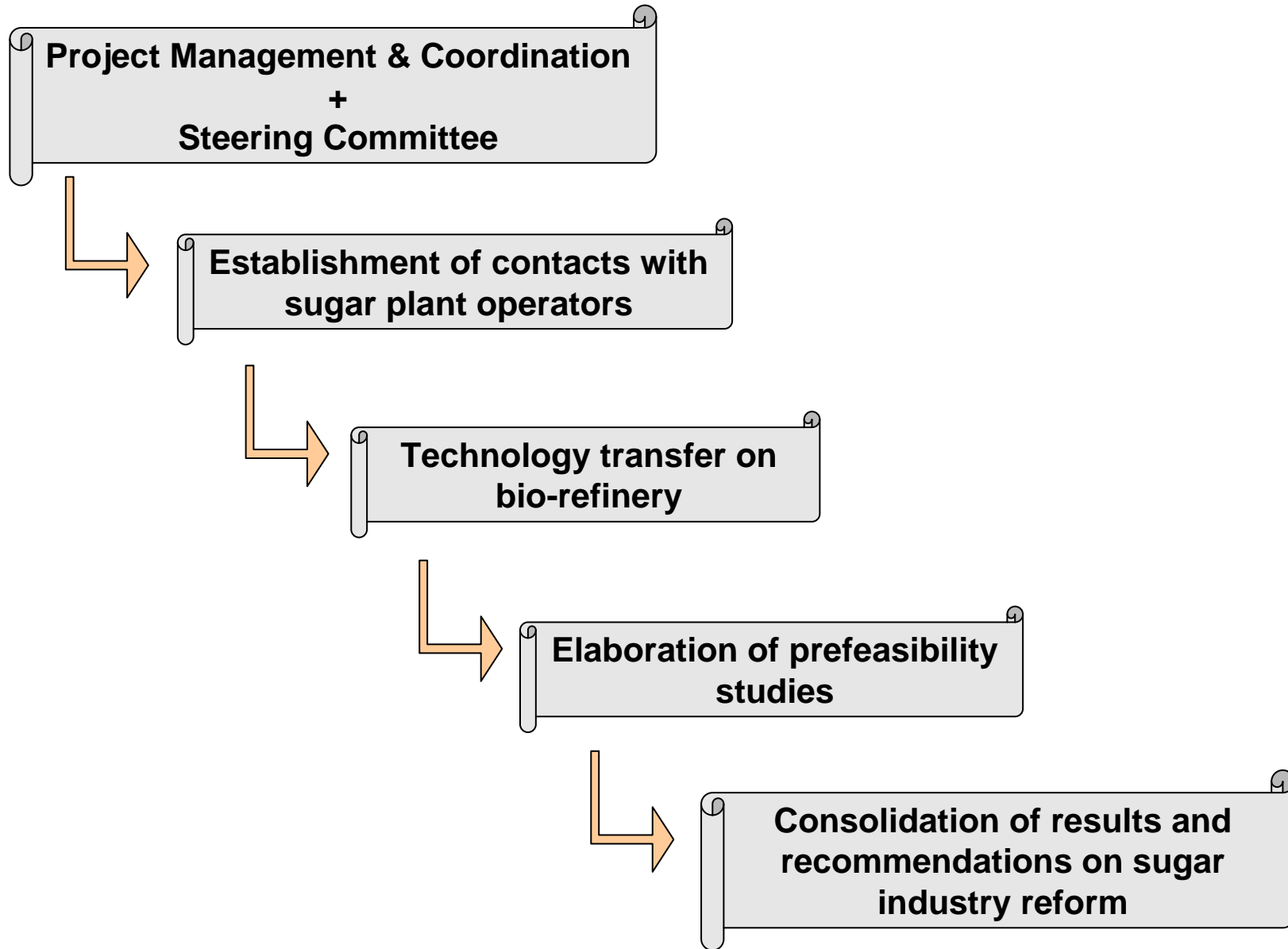


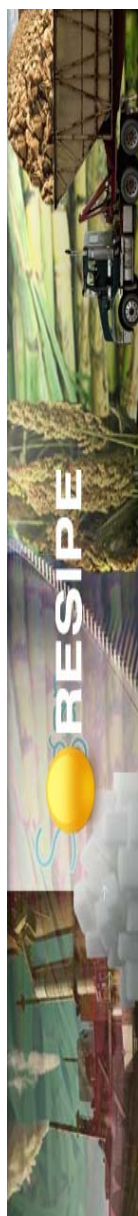
The project aim is to contribute to the **reform of the European sugar industry** by assigning industry participants the role of supplier of low-cost **heat and electricity** via cogeneration and **bioethanol** for the transport sector as well as for other valuable materials, utilising energy crops as **sweet sorghum**.

The production of bioethanol, heat and electricity is now grouped into the concept of the **bio-refinery**.

The targeted sector will be the sugar industries of Greece, Italy, Sweden and Poland. However, the project results will be disseminated widely to the EU sugar industry.







SCHEDULE	SPEAKER	ORGANIZATION	PRESENTATION TITLE
9.00	Stefano Capaccioli	ETA Renewable Energies	Opening and Introduction to the EU project RESIPE
9.20	Niki Komioti	EXERGIA	Reform of the European Sugar Industry based on Polygeneration with the use of Energy Crops
9.50	Argyro Monokroussou	CEFS (European Committee of Sugar Producers)	Experiences and Perspectives in the Greek Sugar Industry
10.20	Marta Serafin	Krajowa Spółka Cukrowa (Polski-Cukier - Poland)	Reform of the Sugar Industry and Implementation of the Production of Biofuels – Perspectives and Experiences in Poland
10.45	Oscar Ruiz	CEFS (European Committee of Sugar Producers)	Restructuring Process of the European Sugar Industry
11.05	Giuliano Grassi	EUBIA (European Biomass Industry Association)	Perspectives of Sweet Sorghum Refineries for Viable Coproduction of Biofuels and Green Power
11.35	Maurizio Cocchi	ETA Renewable Energies	The Cultivation of Sweet Sorghum for the Production of Biofuels
11.55	Luigi Pari	Council for Agricultural Research and Experimentation	Sweet Sorghum Mechanization
12.20	Gianpietro Venturi	University of Bologna	Introduction to the Italian Biofuels Platform
12.45			Debate and Closing Remarks

Thank you for your attention!



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