



OPTIPOLYGEN

Intelligent Energy  **Europe**

OPTimum Integration of POLYGENeration in the Food Industry



The goal of the project

- To develop a suitable database of successful existing polygeneration applications in the food industry
- To prepare a European food industry survey regarding the potential of polygeneration applications together with RES uses
- To prepare a coherent set of information for polygeneration implementation in the food industry including technical, financial and investment guidelines
- To prepare a dedicated interactive web site giving full information and initial calculation procedures useful for feasibility studies of polygeneration in the food industry
- To prepare training material suitable for consultants and engineers active in the food industry
- To disseminate the results and the data of the project towards interested stakeholders



OPTIPOLYGEN results

- 40 detailed cases of operating polygeneration plants in the food industry searchable in the database of the project. The first time that classified quantitative data are available for users.
- The technical potential of polygeneration applications in the EUR-15 food industry has been quantified for the first time. 63 TWhel /year and 18 million tonnes of CO₂ /year can be saved if the proper policies are followed
- Extremely important parameters if boosting of polygeneration applications is needed: keep the Electricity over Fuel price ratio above 3 and provide a price to tri-generated electricity at least 50% higher than the typical selling to the grid price.
- There are minor technical gaps in terms of efficient polygeneration applications in the food industry.
- Full training material for consultants and engineers has been developed and is available in the project web-site www.optipolygen.org
- A web-site where data-base searches can be performed and where non experienced users from the food industry can perform initial feasibility calculations. All project reports and material ready for downloading



Partners

- ESTIA consulting S.A. Planning and Management of Energy investments - Greece-coordinator,
- FORCE Technology –Denmark-
- Österreichischer Energiekonsumenten Verband ÖEKV - Austria-
- The Serres Institute of Education & Technology –Greece-
- Chalex research Ltd –UK-
- Gaia Group Oy –Finland-
- The European Association for the Promotion of Cogeneration COGEN Europe – Belgium-
- Energy for Sustainable Development Ltd–UK-
- Instituto Superior Técnico –Portugal-

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