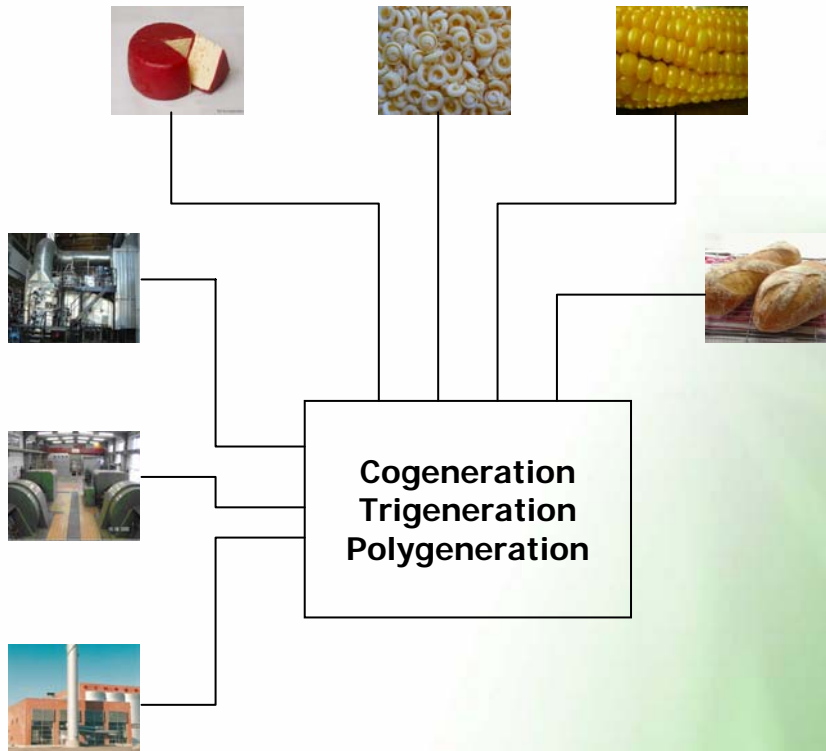


# Technical and financial aspects of energy efficiency and CO<sub>2</sub> reductions through Cogeneration, Trigeneration and Polygeneration in the European Food and Drink Industry



**Workshop**  
organised within the OPTIPOLYGEN project  
co-funded by the Intelligent Energy Executive Agency

**Tuesday 12 December 2006**  
**Brussels, Belgium**

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Visit  
[www.optipolygen.org](http://www.optipolygen.org)

Intelligent Energy  Europe

"Intelligent Energy –  
Europe" Programme

## Save costs and emissions by applying Polygeneration

Industries in Europe have to use considerable resources to satisfy their energy needs, including fuels and electricity. Polygeneration can help these industries to meet their energy needs with reduced costs and reduced environmental impact. The **Optipolygen project** focuses on promoting the application of polygeneration in the European food and drink industry.

**Polygeneration** is the use of multiple energy sources to cover multiple energy needs. Applications of polygeneration can provide significant energy cost savings, security of supply and environmental benefits. Cogeneration and Trigeneration are more specific cases of Polygeneration.

### Are your energy costs significant?

Have you calculated your Polygeneration potential?

Do you apply Cogeneration or Trigeneration?

Are you interested in reducing your CO<sub>2</sub> emissions?

Are you aware of Cogeneration and Trigeneration techniques?

How many Polygeneration ways do you know to benefit from your organic by-products?

Do you apply the Best Available Techniques?

### What are your benefits?

Improve the overall energy efficiency of your plant

Deliver direct cash benefits to your company

Use the experience of specialised engineers and existing polygeneration users

Understand the links between energy use and carbon emissions

Benchmark your energy use

Set realistic and achievable targets

Identify the opportunities in energy production and CO<sub>2</sub> emission savings

Develop a culture of sustainable and continuous improvement

### The Optipolygen project

The Optipolygen Project consortium has worked on several aspects of polygeneration in the European food industry sector. Results are however important for other industry sectors as well. The outcomes are the following:

- Determination of the **potential of polygeneration** based on fossil fuels and renewable energy sources in various food sectors.
- The development of a **database** of existing polygeneration applications in the food industry.
- The creation of a European food industry **survey** regarding the potential for polygeneration applications in Europe.
- The creation of a set of coherent information for **polygeneration implementation** in the food industry including technical, financial and investment guidelines.
- The creation of a **website** giving information and initial calculation tools for polygeneration feasibility assessments in the food industry.
- The preparation of **training material** suitable for consultants and engineers in the Polygeneration, Trigeneration and Cogeneration sector.



## Workshop Programme

**12 December 2006**  
**at the International Press Centre's Conference room**  
**(Mezzanine floor) of EurActiv**  
**Bld. Charlemagne 1, B-1041 Brussels**

09:00 Welcome by IEEA and COGEN Europe

Session 1 **EU POLICIES ON ENERGY EFFICIENCY**

09:15 Energy efficiency in the European Union  
*Guido de Wilt, European Commission*

Session 2 **RESEARCH INTO ENERGY EFFICIENCY AND  
POLYGENERATION**

10:00 Optipolygen - Optimum Integration of Polygeneration in the Food Industry  
*Dr. Ing. Athanasios Katsanevakis, Estia Consulting SA*

11:00 BESS - Benchmarking and Energy management Schemes in SMEs  
*Boudewijn Huenges Wajer, SenterNovem*

Session 3 **EXPERIENCES FROM PRACTICE**

11:30 Experience in cogeneration applications in the food sector  
*Géraldine Roy, Siemens*

12:00 Experiences from the food sector  
*Christoph Tamandl, Confederation of the Food and Drinks Industries of the EU*

12:30 **PLENARY DISCUSSION**

13:00 Closure