



Project Fact Sheet

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Guideline for safe and eco-friendly biomass gasification (Gasification – Guide)

Programme area:	<i>Altener, Electricity from renewable energy sources</i>
Status:	<i>Completed</i>
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Website:	www.gasification-guide.eu
Objective:	<i>Accelerate the market penetration of small-to-medium scale biomass gasifiers for power generation</i>
Benefits:	<i>Production of a Guideline and a software package for easy assessment of Health, Safety and Environment risks</i>
Keywords:	<i>Biomass gasification, HSE Guideline, risk assessment</i>
Duration:	<i>01/2007 – 12/2009</i>
Budget:	<i>€ 1,041,161 (EU contribution: 50%)</i>
Contract number:	<i>EIE-06-078</i>



Short description

Biomass gasification technology for small-to-medium scale power generation is close to commercialisation but various factors hamper large-scale implementation. One obstacle is the poor awareness and lack of understanding of health, safety and environment (HSE) issues. Permitting and regulatory authorities tend to impose unrealistic, unnecessary restrictive and thus costly HSE requirements on gasification plants. This project aimed to develop an accepted guideline and a software tool on potential HSE hazards that will accelerate the process of market introduction and commercialisation of biomass gasifiers. Target groups include technology developers, equipment manufacturers and operators, policy makers, permitting authorities, and others.

Achieved results

The main achieved results are:

- Completion of a full set of deliverables, including the final Guideline and the software tool “Risk Analyser”, that will facilitate the accelerated market introduction of biomass gasification*
- Inventory of HSE hazards at biomass gasification plants including dangerous **events** and **consequences***
- Broad acceptance and use of the Guideline by key market actors and target groups. More than 120 stakeholders requested and used the draft Guideline, prior to its formal release in Dec. 2009*
- Organisation of the five workshops on HSE issues in biomass gasification*

Lessons learnt

The lessons learnt in the project can be summarised as follows:

- A) *To disseminate project results to a large audience in many different EU countries the project results should be made available in the respective languages. The Gasification-Guide project developed German and French versions of the Guideline and the manual of the software tool at its own initiative i.e. they are not included in the Description of Work*
- B) *The existence of harmonised rules for products in the EU suggests that a product can be sold as-is everywhere throughout the EU. However, a process plant cannot be put into service and operated in another EU country without making local modifications, which indicates that there is still a long way to go to realise a common market for process plants.*
- C) *From the beginning of the project, the largest fear for a positive outcome was to collect relevant information from the case studies. During the course of the project, the case studies have been very helpful identifying relevant topics (risks) and solutions. The reason for this success is that from the start “selling arguments” were formulated why companies should participate, i.e. the project explained the benefits for companies to participate. Moreover, the project team promised to keep all information confidential. Only a small portion of the budget that was specially reserved for case study partners was needed for this purpose.*