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On the Way to safe and ecofriendly Biomass Gasification

Introduction and history of the way so far

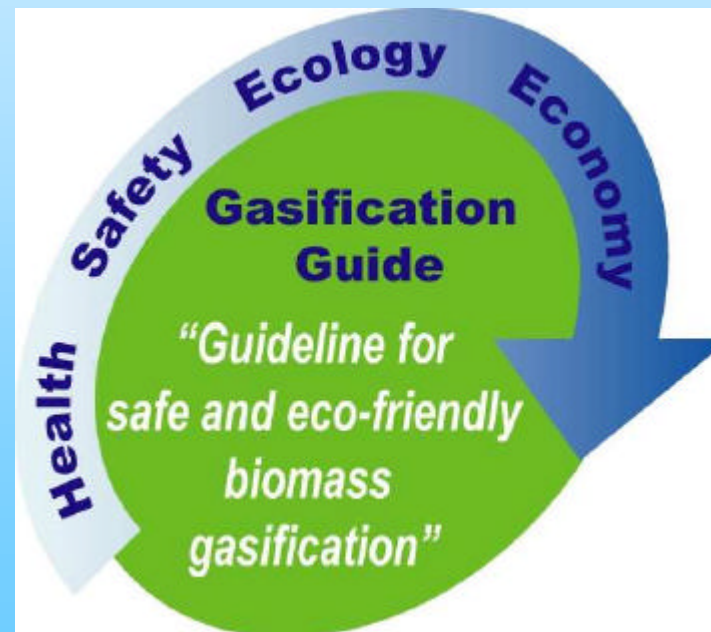
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On the Way to safe and ecofriendly Biomass Gasification

The Subject of today

Draft Guideline



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Preliminary Remark

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Gasification

**Today's workshop and Guideline refers to
gasification plants up to 5 MW_{th}**

HSE is an important topic

- **HSE Barriers in implementation of biomass gasification:**
 - Manufacturers do not know the risks
 - Manufacturers do not know how to assess HSE risks and how to minimise them
 - Manufacturers do not know the standards which have to be fulfilled
 - HSE permitting authorities are not familiar with biomass gasification
 - Different regulations in European countries
 - Different interpretations by different authorities.

Problems

- Installed plants with insufficient (no) H+S protection measures
- Installed plant with expensive H+S protection measure, which might not be necessary or without or with negative H+S effect
- Inappropriate requirements
- Without detailed knowledge, which HSE requirements have to be fulfilled, a reliable offer to a client is not possible

Joint effort to solve these problems since 2002.

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Objectives of the Joint Task

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- Improve / Create Awareness: HSE is important
- Establish a «state of the art procedure» to assess and avoid risks
- Harmonise and accelerate the permitting procedure
- Reduce objections against the use of biomass
- Initiate a Guideline for safe and eco-friendly Biomass Gasification Plants.

Activities in 2002

- HSE expert presentation at Strasbourg
 - Guideline is important
- Questionnaire 1: What manufacturers know about Health and Safety
 - Result: Manufacturers have little knowledge as regards Health and Safety.

Activities in 2003

- Questionnaire 2: Ask Manufacturers what they need as regards HSE
- Results of the questionnaire:
 - Most of them ask for support in HSE
 - Support the intention to develop a guideline.

Activities in 2004

- Handbook of Gasification (H. Knoef, Editor), Sept. 2005
 - «*Health, Safety and Environmental Aspects of Biomass Gasification*»
- Austrian HSE Project started
- EC project proposal: «*Guideline for safe and ecofriendly Biomass Gasification and Pyrolysis*»
 - Project proposal rejected.

Activities in 2005

- Austrian HSE project finished → important input on European level
- Joint HSE workshop of GasNet and IEA: Innsbruck, 28th September 2005
 - gaseous emissions
 - waste water
 - risk assessment and risk management
 - permissi



Proceedings available:
download from websites.

Activities in 2006

- New EC project proposal: «*Guideline for safe and ecofriendly Biomass Gasification*», «*Gasification Guide*»
- Project accepted.

Activities in 2007

- Project “Guideline for safe and ecofriendly biomass gasification” started
- Information exchange
Gasification Guide - ThermalNet - IEA Biomass Gasification

Objective: Further close cooperation in HSE of ThermalNet, «Gasification Guide» and IEA Biomass Gasification.

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Activities in 2008

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Step to meet this objective: Workshop of today.

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I hope you enjoy our workshop!