

# The BiG>East Project



### **Dominik Rutz**

WIP - Renewable Energies, Munich, Germany

**BiG>East Mobilisation Campaign** 

20 October 2009 Athens, Greece

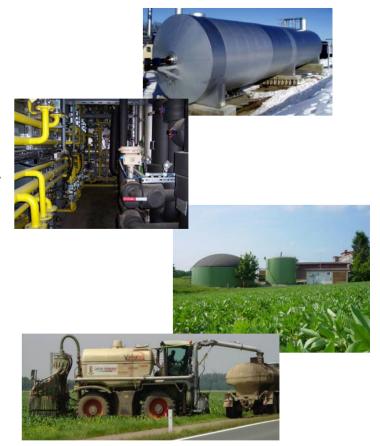




### BiG>East Biogas for Eastern Europe

# **Advantages of the Biogas Technology**

- Renewable energy source
- Waste treatment technology
- Contribution to mitigate global warming
- Reduction of foreign energy dependency
- Creation of new jobs
- Alternative income source
- Production of high quality fertilizer
- **-** ...







# Biogas could be a answer to...

- Global economic crisis
- Global climate change
- Local energy security

→ Actions and investments in biogas technology is needed NOW!







# Biogas Technology is already proved!

- In **Germany, Denmark and Austria** app. 4300 biogas plants are in operation
- Technical solutions are mature and available
- Only few plants exist in Southern & Eastern Europe









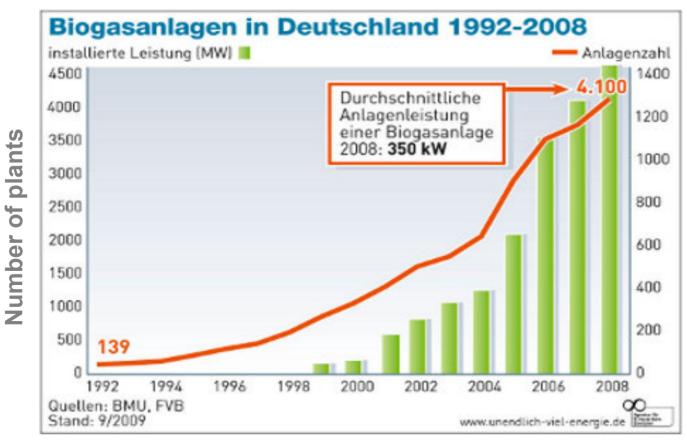








# **Biogas plants in Germany**

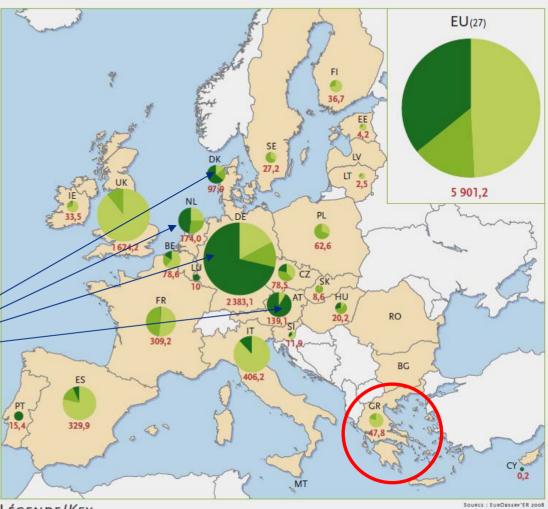


Installed el. capacity [MW]

# **Biogas Market in Europe**

Agricultural biogas plants are mainly in Germany, Austria, The Netherlands, and Denmark

### PRIMARY ENERGY PRODUCTION OF BIOGAS IN EUROPE IN 2007\*



LÉGENDE/KEY

Production d'énergie primaire de biogaz de l'Union européenne en 2007 (en ktep)/ Primary energy production of biogas of the European Union in 2007 (in ktoe)

- Biogaz de décharges/Landfill gas
- Biogaz de stations d'épuration/Sewage sludge gas
- Autres biogaz (unités décentralisées de biogaz agricole, etc.)/ Other biogases (decentralised agricultural plant, etc.)

Les chiffres en rouge indiquent la production totale en ktep/Red figures show total production in ktoe

\* Estimation / Estimate.



www.wip-munich.de









# **Waste produces Biogas!**

- The biogas **potential** in Southern and Eastern Europe is estimated very high especially in the **waste sector**
- Waste is a **serious problem** in many countries









# **BiG>East Objective**

Promote biogas production and utilization in Southern & Eastern Europe by knowledge transfer from...

...Austria Denmark Germany



Latvia, Bulgaria, Croatia, Greece, Romania, Slovenia





Project Duration: Sept. 2007 to Feb. 2010









# **Project Partners**

- WIP Renewable Energies GmbH & Co. KG, Germany
- Ing. Gerhard Agrinz GmbH, Austria
- Finsterwalder Umwelttechnik GmbH &Co. KG, Germany
- German Society for Sustainable Biogas and Bioenergy Utilisation
- University of Southern Denmark
- Ekodoma Ltd., Latvia
- N. Poushkarov Institute of Soil, Bulgaria
- Energoproekt jsc, Bulgaria
- Energy Restructuring Agency, Slovenia
- Center for Renewable Energy Sources, Greece
- Energy Institute Hrvoje Pozar, Croatia
- SC Mangus Sol SRL, Romania



















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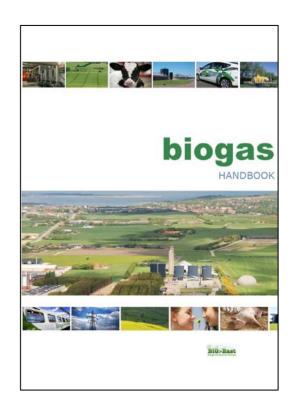


### **BiG>East Activities**

- Studies on biogas potential, barriers and policies
- Biogas handbooks in 7 languages
- 18 biogas training courses for farmers
- Development of biogas show cases
- 12 mobilization campaigns for decision makers
- Study tours to existing biogas plants







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# **BiG>East Experiences**





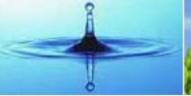
















## How can you benefit from BiG>East?

- Attend the mobilisation campaigns
- Participate in biogas training courses
- Receive the comprehensive Biogas Handbook
- Ask our BiG>East experts about biogas opportunities and technologies, and get assistance in planning your biogas project
- → Please get in contact with our BiG>East Experts











## **Contact**





### **Dominik Rutz**







### www.big-east.eu





















