



Expertise offer

Date (11.12.2009)

- (*) Description of the expertise offered (up to 1000 characters)**

After great success in the development of FLOX-lean-gas burners, low-NOx and complete combustion of low caloric values down to 1.5 MJ/m3 with high CO2 content (up to 95%), the development of a micro-turbine was started in 2007, to directly produce power from such or other waste heat. A consortium of two German and four Swiss industrial company was founded and lab scale testing has been performed with very good correspondence to the calculated data. However the mentioned turbine can be used not only for weak land-fill gas but also for all other high temperature heat sources, where it is an economical and or technical advantage when being able to directly use atmospheric gases – for instance concentrated solar radiation in solar combined cycles. Besides, our institute offers all necessary knowledge and infrastructure for lab or field testing, measurement and data acquisition. SMPS shall be applied for the tracing of Siloxane-particles in the burned land fill gas.

- Keywords describing the expertise offered (up to 10 words)**

Atmospheric hot air turbine, clean lean fuel combustion, micro turbine, GHG-emissions other than CO2, landfill gas, Low-caloric fuel, CSP

- (*) Relevant topic/s in work programme (up to 3 topics)**

ENERGY.2010.5&6.2.1: Extending the value chain for GHG emissions other than CO2
ENERGY.2010.2.5-2: Main CSP components for high-temperature operation

- Former participation in FP or other international cooperation projects**

- FP6 “Bio-Pro”. Active in several work packages and leader of two workpackages
- EUREKA “Biopoly Heat”. Coordinator and main research partner.
- Others

Organisation information

Organisation and country:

Center of Appropriate Technology and Social Ecology CATSE

Type of organisation:

Enterprise SME Academic Research institute Public Body Other:

Former participation in FP European projects?

Yes No

Web address:

www.oekozentrum.ch

Description of the organisation:

Private NPO, foundation based, acting in the public interest (rec.), applied R&D and dissemination for decentralized energy systems based on renewable energy or energy efficiency principles.

(*) Contact details

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(*) -Mandatory