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MicroCHeaP

The Integration of Micro-CHP and Renewable Energy Systems

Co-ordination Action

Priority 6; Sustainable Development, Global Change and Ecosystems

## **D6, Report from Expert Groups Deliberations**

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Chalex Research Ltd.

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<b>Dissemination Level</b>		
<b>PU</b>	Public	X
<b>PP</b>	Restricted to other programme participants (including the Commission Services)	
<b>RE</b>	Restricted to a group specified by the consortium (including the Commission Services)	
<b>CO</b>	Confidential, only for members of the consortium (including the Commission Services)	

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## 1: DELIBERATIONS FROM EXPERT GROUP MEETINGS

At the kick-off meeting in Torquay October 11<sup>th</sup>-12<sup>th</sup> 2004 the first co-ordination seminar was held. At this meeting the present WP4-partners proposed the formation of four expert groups: Combustion, Non-combustion technologies, Energy Carriers and Other barriers. The partners also agreed that the actual topic of the groups should be based on written responses from all WP4-partners. FORCE Technology collected and processed the responses during the period up to the next meeting in Potsdam, Germany April 4<sup>th</sup>-5<sup>th</sup>, 2005.

At this meeting FORCE Technology presented the results of the data processing, and the WP4-partners decided to form three expert groups having the topics:

1. Fuels
2. Technology
3. Integration

The partners agreed that these three topics would cover all “hot topics” of the current European R&D projects. Both tasks 4.1 and 4.2 will be solved within the framework of these three fields. Also expert group leaders and members were pointed out (see table below).

<b>Expert group</b>	<b>Fuels</b>	<b>Technology</b>	<b>Integration</b>
Leader	DGS	ISE	IUAV
Member	BTG	ECN	FEE
Member	STSL	ISET	EAT
Member	CRES	GAIA	ARMINES
Member	FORCE	LUND	BEAMA
Member	AUE		

Expert group leaders and members.

Moreover it was decided to collect and register European R&D projects in a database. The subject of this first expert group meetings was to prepare the structure of the part of the database including their topic. Based on these three proposals FORCE Technology in collaboration with ISE has built a common database since a major part of the master data is common.

## MEMO FROM EXPERT GROUP 1: TECHNOLOGIES

Sergio Herman (ECN) proposed that core technologies identified within WP2 shall serve as starting point for investigation

In order to find eligible EU-projects, members will scan proceeding books of previous (last year) and upcoming (this year) conferences. Each member will be assigned a list of conference he has to analyse. Additionally, members will search the EU website via the search engine Cordis to identify more projects.

It has been agreed that the data of the selected projects shall be input using a common entry form. This form is connected to a central database, where the information is stored. The form shall simplify the use of standardised key words and avoid typing errors with regard to future statistical data processing.

The discussion of the three expert meeting results in WP4 shows that the information is used in all expert groups in WP4. Therefore we suggest that the collecting of information and presenting on the webpage should better be organised by WP4-leader to avoid double works, if the expert groups “integration” and “fuel” will agree.

### Form items

Field/Item	Key words	Control element in form
Title of project		Text field
Acronym		Text field
Name and address and e-mail of co-ordinator		3 Text fields
Name of partners		Text field (max. 255 characters)
Short abstract		Text field (max. 255 characters)
Project web page		Text field
Volume of project and if available main sponsors		2 Text fields
Begin and end of project		
State of progress	Proposal submitted, proposal accepted, project launched, project completed	
Core technologies (prime mover)	Fuel cell PEM, Fuel cell SOFC, Fuel cell Other, ICE (otto), ICE (diesel), Stirling, Turbine (Steam), Turbine (ORC), Turbine (Gas), combined cycle	Drop-down list (more than one may be chosen )
Power generator	Any rotating, synchron, asynchron, linear, electrochemical, ...	Drop-down list
Fuels	Solid biomass, Liquid biomass, Gas biomass, Hydrogen, Geothermal, Solar energy, Coal, Petrochemical, Natural Gas, Other	3 Drop-down lists (multiple choice – more than one fuel may be chosen)
Fuel processor	Gasifier, reformer, shifting, pyroliser, other	3 Drop-down lists (multiple choice – more than one processor may be chosen)
Burner	Gaseous, underfeed stoker, stoker-fired, ...	3 Drop-down lists (multiple choice - more than one may be chosen)
Cooler	Water, molten salt, air, other	3 Drop-down lists (multiple choice - more than one may be chosen)
Flue gas cleaning	Cyclone, electric filter, tissue filter, quenching	3 Drop-down lists (multiple choice - more than one may be chosen)

<b>Field/Item</b>	<b>Key words</b>	<b>Control element in form</b>
Kind of know-how developed	Market research, system study, techno-economics, fundamental research, field test, simulation, prototype development, ...	3 Drop-down lists (multiple choice - more than one may be chosen)
Description of technique + link to technical scheme via http		2 text fields
Desire/Outlook for further R&D		text field
Member in charge and date of last modification		Drop-down list and text field

### **MEMO FROM EXPERT GROUP 2: INTEGRATION**

The expert group agreed on the database structure shown below:

Master data:

- Start date
- End date
- Title
- Acronym
- Organization name
- Contact person
- Address
- Tel
- Fax
- E-mail

Descriptors:

- Objectives

Since the definition of “integration” is very broad and difficult to describe by keywords, the partners decided to implement a database with master data and one field describing the objectives of the R&D project.

### **MEMO FROM EXPERT GROUP 3: FUELS**

Generally the entries of the “Fuels”-group are supposed to be looking much the same as the ones proposed by the Expert group 1: Technologies.

The group discussed projects which are supposed to be leading in terms of technology. This was covered for

- Gasification
- Fuel Cell
- Bio diesel
- Ethanol

All the partners will provide project examples. Therefore the database is ideal to feed in this data into the project. The expert group leader has noted, that the participants wanted to do a lot themselves, and the meeting did not go into details of the different projects.

Therefore the group suggested integrating their data into the Excel file made by Expert group 1.