



European-wide field trials for residential fuel cell micro-CHP

WP2 Data collection

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London, 23-24 September 2013
Annual Project Meeting



- Objectives
- Current Tasks
- Deliverables due June 2014
- Progress February - September 2013
- Timeplan to end June 2014
- Issues and corrective actions
- Upcoming important actions
- Q&A

- Management of collection and aggregation of data from field trials
- Performance of technical analysis of the data both for fuel cells and households
- Forwarding of aggregated data to WP3 and WP5

- Build up system for data collection, anonymisation and processing
- Arrangement of ene.field – specific monitoring system
- Provision of dataset of the technical performance analysis
- Summarization of results of field tests and lessons learnt

- Task 2.1: Data collection specification (DBI + GWI, DTU) (M1-M5)
 - System for receiving, hosting, processing and providing data
 - Package of measuring equipment for in detail monitored systems
 - Approx. 20 % of units monitored with external sensors
 - 80 % data from standard monitoring (mixed methods)
 - 1 unit per supplier in test lab reference measured
- Task 2.2: Data and monitoring equipment protocol for trials (DBI + GWI)(M1-M5)
 - Protocols for equipment usage, set-up of sensors, data box
 - Training courses (webinar) for installation of equipment
- Task 2.3: Energy demand data analysis (GWI + DBI)(M6-M57)
 - “household”-data
 - creation of ready to use database with analysed, compressed data

- Task 2.4 Technical performance data analysis (DBI + GWI)(M6-M60)
 - Database of analysed, compressed performance data
 - Critical issue for suppliers, will need lots of communication before publication
- Task 2.5 Summary of other issues encountered (GWI + DBI)(M5-M60)
 - Issues encountered during installation phase
 - Issues encountered during field trial (different levels of aggregation -> see presentation monitoring workshop 20.02.13)

MILESTONE MS21: data collecting and reporting training

Month 6

- (online) training for manufacturers and installers on how to use monitoring equipment

- on basis of installation manual
- please give notice on demand

MILESTONE MS22: First year dataset

Month 18

- test - dataset for analysis institutes

- on time against incoming data

- data handling agreement – DELIVERABLE D2.1
 - Agreements for utilities and suppliers how data is collected
 - What data is made public, how can data be accessed
 - Data handling agreement → technical procedure!
 - uploaded to EC in week 36
 - missing chapters → see workshop WP2 23/09/2013

 - standard monitoring system
 - high detail monitoring system
 - end-user questionnaire
 - installer questionnaire
 - issues encountered
 - laboratory tests

- installation and set-up manual – DELIVERABLE D2.2
 - Directive to equipment and monitoring process
 - Guidelines for usage and installation of equipment
 - installation manual circulated in English and German
 - uploaded to EC in week 36

- dissemination activities
 - presentation at the VDI (The Association of German Engineers) Technical Committee Fuel Cells in Duesseldorf
 - translation of the ene.field information pack brochure from English into German by DBI
 - translation of questionnaires following shortly

TIMEPLAN TO END JUNE 2014

	Act	2012				2013												2014					
		SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
# WP2 Data Collection		1	2	3	4	5	6	7	8	9	10	11	12										
1 T2.1 Data collection specification																							
2 develop and roundmail questionnaire concerning internal data	GWl	X																					
3 adopt, specify and roundmail questionnaire concerning internal data	GWl			X																			
4 specification of needed / favoured data for analysis	DBl, GWl, WP3, WP5			X																			
5 specification of possible issues encountered	GWl, DBl, WP1			X	X	X	X	X	X														
6 develop questionnaire to be filled out while installing the units	DBl, GWl, ELEMENT				X	X																	
7 specification of measuring equipment	DBl, WP1				X																		
8 set up data collection system	DBl				X																		
9 work out data handling agreement	DBl, GWl, WP1					X																	
10 identify sufficient percentage for high detail monitoring	ELEMENT					X																	
11 develop the "Clean Room process"	WP5					X																	
12 set up of laboratory teststand for reference measurement of sample units	DBl, GWl							X	X														
13 start reference measurement of sample units	DBl, GWl, WP1									X	X	X	X										
14 D2.1 Data handling agreement (M5)						D																	
15 T2.2 Data monitoring equipment guidelines for trial																							
16 instruction manual for measuring equipment, sensor installation	DBl					X																	
17 agree template for data transfer of internal data and issues encountered	GWl, WP1				X	X																	
18 laboratory test of measuring equipment	DBl					X																	
19 supply of installation sites with equipment	WP4								X														
20 D2.2 Data and Monitoring Equipment Protocol(M5)						D																	
21 T2.3 Energy demand analysis																							
22 information on fuel quality and energy prices (via questionnaire #6)	WP1							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23 begin monitoring and collecting energy demand data	WP1, DBl, GWl							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
24 D2.3 Database of energy demand profiles (M25)																							
25 T2.4 Technical performance analysis																							
26 begin monitoring and collecting performance data	WP1, DBl, GWl							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
27 D2.4 Report on technical performance of all mCHP units in the trail (M25)																							
28 T2.5 Summary of other issues encountered																							
29 begin collecting the issues encountered	WP1, DBl, GWl							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
30 D2.5 Summary of other issues encountered (M25)																							

- language and driver update for data gateway ACOS700
 - three partners have not ordered update, yet
 - IDS will not start working without all orders placed
- data handling agreement – clean room process
 - now time to finish up on this subject

- online meeting on clean room process?
 - WP1
 - WP2
 - WP3
- installation of first trial unit with detailed monitoring
- staff changes at DBI
 - Mr. Frank Erler will take over project management (PaCo) from now on
 - Mr. Burkhard Lohöfener introduced as team member enefield



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Questions?

Thank you!

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