ene.field project

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<Progress Report 1 (M1-M6)>

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(PU – Public, PP – Restricted to other programme participants, RE – Restricted to a group specified by the consortium, CO – Confidential)

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Tables

1. Objectives for the period (M1-M6)

The deliverables due for the period (M1-M6) are the following:

Delivery No	Deliverable name	WP no.	Diss. level	Delivery date
D1.4	Tracking system for trials	1	PP	Month 4
D2.1	Data Handling agreement	2	PP	Month 5
D2.2	Data and Monitoring Equipment Protocol	2	PP	Month 5
D3.1	Field support reports	3	PU	Month 4 and 7 - State of the art, Month 30 Final report
D3.2	Non-economic barrier report	3	PP with PU summary	Month 4 and 7 and Month 42
D4.1	Dissemination Plan	4	PP	Month 6
D4.2.1	Project website and intranet	4	PP and PU	Month 3
D4.2.2	General information pack	4	PU	Month 3
D4.2.3	Information packs for households	4	PU	Month 6
D4.2.4	Newsflashes	4	PU	Months 6,
D6.1	Progress updates	6	PP	Months 7,21,32,45

Table 1- Deliverables M1-M6

2. Progress and Achievements of the period (M1-M6) by work package:

a) WP1 – Field trials (element energy)

This work package has successfully moved through its first stages in terms of co-ordinating and standardising the field trials. It is also clear that due to a range of practical and commercial issues, negotiations with utilities and other potential field partners are taking longer to conclude than originally planned.

The objectives of WP1 are:

- Deploy up to 1,000 fuel cell CHP units across Europe
- Demonstrate the complete route to market
- Establish principles for deployment across Europe
- Run efficient local management for nine trial programs

- Generate baseline energy demand and performance data
- Capture issues from the various trials
- Capture lessons learned for manufacturers
- Establish cooperation between manufacturers

Task 1.0 Trial programme co-ordination

The only deliverable due for this period, the Trial tracker (D.1.4), was delivered on time. The trial tracker will be circulated on a quarterly basis to ensure a good understanding of the local progress and potential difficulties encountered by the trial managers. The information provided will help to manage the trials and ensure that they meet the objectives of the project.

Once the first unit is installed, which is expected shortly, the first operational data will start to be generated (D1.2).

Each of the 9 CHP manufacturers is responsible for managing the trials of their technology, in partnership with their own 'route to market' partners (utilities, municipalities etc.). They are currently focussing their efforts on finalising commercial agreement with utilities and other potential field partners for deployment of units in the field.

Remedial Actions

The field trials are progressing and the practical aspects of engaging field partners in the field trials are taking longer than originally planned. This is the critical path of the project and hence remedial actions have been agreed with the partners.

The remedial tasks underway are:

- A proposal offer based on a greater level of access to the project outputs and the use of the ene.field "branding" has been developed as an incentive for field partners to join the project. The Consortium is currently agreeing the details of the level of benefits field partners will receive.
- To facilitate the manufacturers' commercial negotiations with field partners, a Schedule of Requirements document has been developed that clearly defines the role and responsibilities of the field partners within the ene.field project. This document is intended to form the basis of a common set of schedules in the manufacturers' contracts with field partners.
- Finding further utilities with an interest in participating through existing and new contacts of the partners of the Consortium (see WP4). Discussions have been held between the WP1 leaders and project Co-ordinators with a number of utilities and other organisations that are interested in being involved in the ene.field project, either as a field partner or by facilitating manufacturers' efforts to identify opportunities for deployment. Contacts have been made between these organisations and relevant manufacturers.

- Identifying additional sources of funding to further reduce costs of new utilities wishing to take part in ene.field.

b) WP2 – Data Collection (DBI)

The main objectives of this work package are:

- 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

Task 2.1: Data collection specification (DBI + GWI, DTU) (M1-M5)

WP2 is working to set up a system to receive, host, process and provide data that is collected in the field.

The outcome of this task is the D2.1 – Data handling agreement, whose first draft is available and under discussion. A final version is expected in month 8.

Task 2.2: Data and monitoring equipment protocol for trials (DBI + GWI) (M1-M5)

WP2 is developing protocols for the usage of the equipment concerning, among others, installation of a data collection and logging box, correct setup of sensors and data sampling structure for the host server. This will be the D2.2 – Data and monitoring equipment guidelines for trials, which will be finalize two months after the deliverable 2.1.

These two tasks were the main tasks of the period. Some work on the following tasks has also begun:

- Task 2.3: Energy demand data analysis (GWI + DBI) (M6-M57)
- Task 2.4 Technical performance data analysis (DBI + GWI) (M6-M60)
- Task 2.5 Summary of other issues encountered (GWI + DBI) (M5-M60)

Remedial Actions

The shifts in deliverables have been taken in the knowledge that these are not critical path items and hence the additional time (without additional effort) is bringing a better quality of result to the project. Hence no remedial action is considered necessary.

c) WP 3 – Analysis (DTU)

The main objective is to carry out a collective analysis of the information gathered from the individual trials in WP1. In order to do so, the different tasks are progressing as follows:

Task 3.1– Field support arrangements (Envipark) (M1-M30)

The ene.field project is the first real European wide opportunity to gain knowledge on the needs for technical personnel training. In this first period the evaluation on the current state of the art of field support arrangements, training and certification began.

The first seminar took place on the 20th February, and the first deliverable D3.1 "A document evaluating the state of the art and lessons learnt as from previous project" will be ready by the next month.

Task 3.2 - Non-economic barrier analysis (DTU) (M4-M42)

The objective of this task is to collate and identify the key barriers to the mass uptake of the technology (Technical, political and consumer perception barriers)

The outcomes of the period include the following:

1. Organisation of surveys has been solved with WP2 and will be finalised during March. They will be circulated to relevant WP3 partners to ensure all the surveys will gather the necessary input.
2. Important to include the surveys in the appendix of the contracts between manufacturers and field partners or otherwise they might not at all be fill out (see WP1).
3. DTU is preparing a questionnaire for each manufacturer, possibly combined with a few "RCS" questions.
4. Communication with Vaillant on their experience from the Callux project on this topic.

The Deliverable 3.2: End user survey on perception and expectation will be delayed until month 8.

Task 3.4 - Environmental life cycle assessment (EIFER) (M30-M56)

The start date of this task according to the DOW is month 30, but it has already begun with the specification of data requirements.

Task 3.5 Regulations, Codes and Standards Working Group (POLITO) (M1-M51)

This task is running as planed and it had its first in person meeting of the RCS working group in the project meeting.

The task will be extended until the end of the project by "transferring" two months to M49-51. Like this, a second position paper will be published updated with lessons learnt on RCS throughout the project.

d) WP4 – Dissemination (COGEN Europe)

This WP is intended to develop and implement an effective communications strategy to inform and engage the different target groups who have a role to play in the wider market development and uptake of the product. In order to do so, the work in this first period has followed the tasks:

Task 4.1 – Plan for using and disseminating knowledge (COGEN Europe) (M1-M6)

A dissemination plan to cover the different phases of the project and the different target groups have been developed (D4.1). This dissemination is tailored for the industry stakeholders, residential householders and policy makers. It will be updated annually by the communication plan, which is an appendix of the dissemination one. On year 1 of the project this communication plan is focused on attracting utilities into the project.

Task 4.2 – Development of general communication tools (COGEN Europe) (M1-M60)

In this first period of the project a lively website has been developed together with the project logo, the leaflet of the project and some other tailored communication materials such as the standard project presentation and different templates.

The development of the information pack for householders is ongoing, a first draft is already available and it is expected to be finished in M8.

Task 4.3 – Engagement plan for key industrial stakeholders (COGEN Europe) (M16-M48)

The work in this task has already started. The key industry (utility and ESCO) contacts at EU, national and regional level will be identified and contact will be established and maintained through targeted initiatives and actions.

The buildup of the “Advisory Panel“is beginning, and it should attract international people and interested stakeholders into the project.

Remedial Action on utility

- Launch of project with two utility focused events at Hannover Fair.
- Special mailout to around 500 utilities in advance of Hannover Fair.
- COGEN Europe working with Brussels association network to reach out to utilities for far Eurelectric, Geode, CEDEC, Smart grids task force have been contacted and an extend list is being developed.
- Focus of communication through next 6 months will be utility attraction.

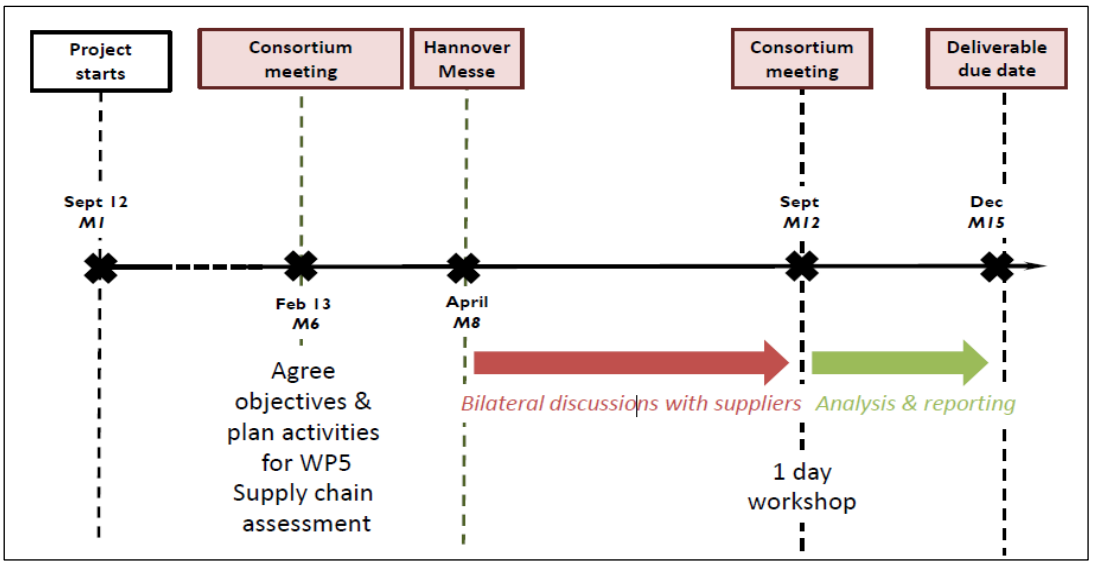
e) WP5 – Commercialization framework (Imperial College)

Most of the work of this work package begins in a later stage.

The task 5.2 – EU supply chain, started in Month 6 with a deliverable due in Month 15.

An initial presentation on the intended scope for Task 5.2 was made to the Consortium at the 6-month meeting. A more detailed document detailing the supply chain information that is required to inform this task will be developed during April and discussed with task participants. A period of data-gathering, primarily through bilateral interviews with the manufacturers will then commence. Work carried out under Task 5.2 will be developed in collaboration with DTU as it will be of relevance for the Task 3.2 non-economic barriers.

The suggested timescale of the work package will be as follows:



f) WP6 – Coordination (COGEN Europe)

The work in this WP is running as planned. The ene.field project is following its schedule and is working in a coordinated way with all the work packages and partners in the project, with a regular exchange of information.

There are monthly Steering Committee conference calls, whose minutes are distributed to the consortium.

The second project meeting was held in Berlin the 20 and 21 of February with the attendance of the whole consortium. It was a two days meeting where the different work packages had the chance to communicate with the other members of the project and share and discuss the different documents and concerns.

Apart from the consortium meeting there were two bilateral meetings with the FCH JU during the first period of the project. The goal of these meetings was to inform the FCH JU about the evolution of the project and exchange opinions and remarks.

Regarding the administrative part of the project we can highlight:

- The Consortium Agreement has been signed by all the partners and is effective since the 6 March 2013.
- Amendment N 1:
  - The subcontracting budget of the different manufacturers was updated including, whenever was necessary, the subcontracting costs of the units.
  - The status of the partner Hexis was updated
  - Other changes in the DoW per work package:
    - ✓ WP1 - Trial deployment (Element Energy)
      - Baxi Innotech:
        - New version of the field trial unit named GAMMA PREMIO with better performance data. Update table 4 / products to be deployed under ene.field, see Dow page 33 and the confidential product performa.
    - ✓ WP 2 - Data collection (DBI)
      - Delay in 2 deliverables:
        - D2.1 – Data Handling agreement –until M8
        - D2.2 – Data and Monitoring Equipment Protocol- until 2 months after D2.1
      - Other Minor changes
    - ✓ WP3 - Analysis (DTU)
      - Delay in 2 deliverables:
        - D3.1 Field support reports - until M8
        - D3.2 Non-economic barrier report - until M8
      - Task 3.5 – RCS Working Group - extended
        - Month 15(position paper) and Month 51 (lessons learnt appendix)
        - 2 hours moved from year 2 to year 4 (no budgetary changes)
    - ✓ WP4 – Dissemination (COGEN)
      - Delay in one deliverable:
        - D4.2.3 Information packs for households – until M8
      - Change of name:
        - Farmers Panel to Advisory Panel

- Updated table of deliverables:

According to the status of the different work packages the final and updated table of deliverables will be as follows:

Delivery No	Deliverable name	WP no.	Diss. level	Delivery date	Update
D1.4	Tracking system for trials	1	PP	Month 4	
D2.1	Data Handling agreement	2	PP	Month 5	8
D2.2	Data and Monitoring Equipment Protocol	2	PP	Month 5	10
D3.1	Field support reports	3	PU	Month 4 and 7 - State of the art, Month 30 Final report	8
D3.2	Non-economic barrier report	3	PP with PU summary	Month 4 and 7 and Month 42	8
D3.5	Position paper on RCS	3	PU	Month 15	Month 15(position paper) and Month 51 (lessons learnt appendix)
D4.1	Dissemination Plan	4	PP	Month 6	
D4.2.1	Project website and intranet	4	PP and PU	Month 3	
D4.2.2	General information pack	4	PU	Month 3	
D4.2.3	Information packs for households	4	PU	Month 6	8
D4.2.4	Newsflashes	4	PU	Months 6,12,18,24,30,36,42,48,54,60	
D4.3	Engagement plan for industrial stakeholders	4	RE	Month 15	
D6.1	Progress updates	6	PP	Months 7,21,32,45	

Table 2- Updated table of deliverables

Remedial Actions

The shifts in deliverables have been taken in the knowledge that these are not critical path items and hence the additional time (without additional effort) is bringing a better quality of result to the project. Hence no remedial action is considered necessary.

- **Changes in personnel**

There have been no major changes in personnel. Only some organizations added staff to the mailing list.

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Table 3- Contact list

3. Main activities in the next period (M7-M12)

According to the project plan, the upcoming deliverables are:

Delivery No	Deliverable name	WP no.	Diss. level	Delivery date
D1.1	Summary of Installations from trials	1	PP	1 month after installations complete (supplier dependent)
D1.2	Operational data from trials	1	RE	monthly, ongoing
D1.4	Tracking system for trials	1	PP	Month 4
D1.5	Annual report on trial progress	1	PP with PU summary	Month 12, 24, 36
D2.1	Data Handling agreement	2	PP	Month 8
D2.2	Data and Monitoring Equipment Protocol	2	PP	2 months after D2.1
D3.1	Field support reports	3	PU	Month 8, Month 30 Final report
D3.2	Non-economic barrier report	3	PP with PU summary	Month 8 and Month 42
D3.5	Position paper on RCS	3	PU	Month 15(position paper) and Month 51 (lessons learnt appendix)
D4.1	Dissemination Plan	4	PP	Month 6
D4.2.1	Project website and intranet	4	PP and PU	Month 3
D4.2.2	General information pack	4	PU	Month 3
D4.2.3	Information packs for households	4	PU	Month 8
D4.2.4	Newsflashes	4	PU	Months 6,12,18,24,30,36,42,48,54,60
D4.3	Engagement plan for industrial stakeholders	4	RE	Month 15
D5.2	Report on the EU FC micro-CHP supply chain	5	PP with PU summary	Month 15
D6.1	Progress updates	6	PP	Months 7,21,32,45
D6.2	Annual Reports	6	PP with PU summary	Months 14,26,38,51

Table 4- Upcoming deliverables (M7-M12)

4. Conclusion

The first 6 month period allowed the project to kick-off by:

- Finalising effective and efficient project coordination procedures, both at the consortium and the trial level (i.e Consortium Agreement, Trial trackers).
- Determining the data collection protocol and data handling agreement to serve effectively the needs of the analysis WPs as well as the deployment of units in the field.
- Defining and agreeing on a dissemination strategy.

Key lesson learnt during the first 6 months are:

- Engaging field partners in the trials is taking longer than originally planned, due to commercial and practical considerations.
- The value of shifting due date of not critical path deliverables to use additional time (without additional effort) to bring a better quality of result to the project.
- The importance of coordinated activities between WPs. Steering Committee and Consortium meetings have allowed the Coordination team and the WPs leaders to identify potential risks to the project at early stage and put together remedial action strategies (i.e. coordination between field trials, monitoring and analysis activities).
- The need to identify, at an early stage, the specific requirements of the project and translate this into commercial agreements that will be put into place with field partners.
- The importance to develop and implement an effective communications strategy to inform and engage the different target groups who have a role to play in the wider market development and uptake of the product.

Remedial actions on potential risks have been taken as required and the project is progressing forward. Key remedial actions are:

- Adoption of additional actions in WP4 in order to assist manufacturers “marketing “the field trials to potential utility partners. (E.g. Hannover fair, communication and out-reach activities to relevant stakeholders, development of special mailing list for utilities, dedicated press and events targeting utilities).
- The development of incentives to engage field partners more effectively through a proposed dissemination offer to future field partners.
- The development of an appendix listing schedule of requirements to be added to commercial agreements between manufacturers and field partners.
- In general, additional efforts from the Consortium members and more especially from the Manufacturers and WP4 members.

The next 6 months period will see the deployment of the first units in the field and consequently the beginning of the data collection and monitoring of the performances of the systems.

A six-monthly core partner meeting is due in September and will be a good opportunities for the partners to exchange lessons learnt during this period.