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WP1 Workshop no. 6

Meeting in Paris
4-5 May 2017

"Final design, monitoring and mobility"

COWI

Welcome address

- CamilleLGI
- Reto

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Agenda: 4th May morning, General and Aarhus

09:00	Information from Project Coordinator Amendment status, M30 reporting, updated time schedule, Kaunas
09:30	Aarhus: Single-family house, Aarhus Ø and District Heating Technical solutions and specifications.
09:55	Final design on Ringgaarden Dept. 20, Aarhus Basic building design and news on Dept. 21.
10:15	Discussions and questions
10:30	Break
10:45	Ringgaarden Dept. 20 - Heating installations Details on planned heating installations in Trigeparken, Ringgaarden Dept. 20
11:05	Ringgaarden Dept. 20 - Electrical installations Planned electrical installations in dept. 20
11:25	Discussions on installations Common discussion and questions on final design and installations in Ringgaarden.
11:45	Models for mobility management in Aarhus (30 min.) Status and results from deliverable D.4.6.1
12:15	Lunch

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Agenda: 4th May afternoon, Växjö and monitoring

13:15	Strategic plan on EV charging in Växjö (30 min.) Status and results from deliverable D.4.6.2
13:45	Final design on demonstration buildings in Växjö (15 min.) Basic/general building design from demonstrations
14:00	Heating and electrical installations Waste water heat recovery
14:10	"One-stop-shop" Presentation of concept
14:25	"Interface of Life"
14:40	Discussions and questions Common discussion on final design installations in Växjö
15:00	Break
15:15	Monitoring workshop
16:45	Open discussions
17:00	End of day

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Amendment status

- On going process since November 2016
- Annex 1 DOW is updated
- New BEST sheet from Växjö received 2 May but U values not ok
- LiBa economy to be checked finally
- Justification note ready
- Budget adjustments almost ready
- Update of validation of organisational status, indirect cost, RaCell – ongoing
- Possible further change VEAB (alternative to ORC)
- Ready to submit officially now (when a few obstacles have been solved)

- Technical Officer probably 2-3 weeks
- Economic Officer 6 weeks
- Legal plus signature 6 weeks
- i.e. maybe 14 weeks processing time i.e. medio August (maybe before)

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Main points in the amendment

1. All changes retrospective from start of project
2. Use of in-house consultants, MUN-DK / AVA, WXB-SE, WEAB, Wexnet (Kirsten, Johan Lindahl, Johan Saltin, Per Bengtson)
3. Replacement of building demonstrator in Växjö (townhall to CA office)
4. Other RES demo than ORC in Växjö
5. IKEA excluded, work transfer to UNI-SE et all- Increaased behaviourial campaign
6. Extra emphasis on Interface of Life platform (Wexnet Sweden)
7. Lithium Balance to take over from DONG (Powerhub => Smart Building Energy Hub)
8. 10 MM Budget from MUN-DK to UNI-DK
9. Many Swedish budget transfers
10. Renovation of computer centre
11. Addition of BEST sheets

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M15-30 Periodic Report

- M30 report incl. cost statement has to be delivered officially 15th July
- Remember emphasis on encountered barriers and ways to overcome incl. plans for next period
- Update list of dissemination activities / events
- Please be aware that reporting collides with holiday periods

- Technical report must be ready 21 June
- All deliverables for M15-M30 must sent to COWI for uploaded at 19 June
  - D.3.1.2 Report on feasibility of utilising surplus heat from industry – UNI-DK, VEAB, LEI, M30
  - D.3.1.3 Design note for implementing ORC – VEAB, M28
  - D.3.5.2 Report describing concept of integrated energy systems… - UNI-DK, M29
  - D.4.6.2 Strategic plan on EV charging in Växjö – MUN-SE, M28
  - D.4.7.1 Report on 3 mature concepts for innovative technologies – UNI-DK, M28

- Ongoing amendment may delay time window where costs can be reported
- Please prepare the cost statement with comments in your excel sheets

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Upcoming deliverables in M31-M45 period

Deliverables		3rd 15M-period															
		2017							2018								
		J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	
		31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	
D.3.4.2	Report describing the innovative solutions for DC developed and proposed for the district in Aarhus	X															
D.4.2.3	Result note on pilot test of battery pack solution		X														
D.4.2.4	Final design note of battery pack solution for demonstration and the integration with an energy system with a high amount of renewables		X														
D.1.2.7	Decision note regarding use of sustainable community development certification schemes		X														
D.3.5.3	Report describing the replication pilot for holistic design of integrated energy systems in Kaunas						X										
D.3.4.3	Report describing the dissemination case study featuring the city of Kaunas							X									
D.3.5.1	Report describing the outcome of task 3.4.1-3.4.3 in relation to analysis of innovation level and suggestions for improvements in demonstration projects									X							
D.3.5.4	Ph.D. thesis on pricing										X						
D.3.5.5	Ph.D. thesis on consumer incitements to be flexible in consumption patterns and the consequence of this on future renewable energy-based supply systems										X						
D.3.5.6	Ph.D. thesis on optimization of building retrofit in an integrated energy system based on renewable energy										X						
D.5.2.2	Documentation of demonstration of PVT systems										X						
D.5.1.1	Documentation of performed refurbishment - hand-out certificate												X				
D.5.2.1	Documentation of demonstration of waste water heat recovery by heat pump, installation manholes												X				
D.5.3.2	Documentation of smart DH metering: DH distribution optimisation and consumer engagement												X				
D.5.5.3	Documentation of Power Hub implementation for balancing energy demand and supply												X				
D.5.6.1	Documentation of implementation of different mobility solutions, such as car-pooling including electric vehicles and their charging															X	
D.6.3	Report on energy performance of the project in close collaboration with WP7															X	
D.9.3.4	Periodic report 3 incl. cost statements															X	

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Upcoming deliverables in 4th period

Deliverables		2018 S 46	O 47	N 48	D 49
D.5.3.1	Documentation of large-scale demonstration of low temperature district heating supply and consumer units (district heating substations and flat stations)			X	
D.5.4.1	Documentation of renewable district heat production by a large-scale heat pump and integration of DH and renewable electricity systems, including ancillary services - hand out certificates			X	
D.6.2	Report on energy performance of the project in close collaboration with WP7			X	
D.6.5	Report on energy performance of the project in close collaboration with WP7			X	
D.6.6	Behavioural campaign in close collaboration with WP5			X	
D.6.7	Updated Sustainable Energy Action Plans (SEAPs) for Växjö and Kaunas WP6			X	
D.6.8	Documentation of implementation of EV charging infrastructure			X	
D.5.5.1	Documentation of use of 2nd life batteries and the integration with an energy system with a high amount of renewables				
D.5.5.2	Documentation of EV battery charging demonstration				
D.5.7.1	Note on food waste disposers pilot				
D.7.3	Report on the evaluation of the operational monitoring data of the demonstration projects				
D.6.1	Report on energy performance of the project in close collaboration with WP7				
D.7.4	Report on the strategic development and possibly policy measures related to Aarhus and Växjö and the assessment of the possible future impact of the demonstration projects				
D.8.2	Innovation management achievements report				
D.8.5	Replicability assessment for READY solutions				
D.8.9	READY Training module for the advanced training programme and report				
D.9.3.5	Final report incl. cost statements				

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Kaunas input needed:

- D.3.1.2 Input to report on utilisation of industrial surplus heat (LEI-LT) M30 Urgent
- T.2.5.3 Water efficiency solutions - Baltic market assessment (LEI-LT) replication potential for 120 kindergartens and 500 secondary schools to be addressed (tecno- / economic feasibility of waste water heat recovery and water saving measures) => working note
- T.2.4 Analyse feasibility of smart kitchen solutions for Lithuania (market and technology options) => working note
- D.3.4.3 Report describing the dissemination case study featuring the city of Kaunas (UNI-DK/LEI-LT) M37 (summarizing findings of the above solutions)

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Updated time schedules, Aarhus

Aarhus				2017								2018												2019										
				M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N
BEST	Area, m²	PVT, m²	HP, kW	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
BEST DK-1																																		
Ringgaarden, dept. 21	23.960								PQ			Tender				Design				Construction									Monitoring (12 months)					
BEST DK-2																																		
Ringgaarden, dept. 20	19.464			PQ				Tender				Design				Construction																		
BEST DK-3																																		
Dybedalen 1A	2.068								PQ			Tender				Design				Construction									Monitoring (12 months)					
BEST DK-4																																		
Junivej 36, 8210 Aarhus	174								Monitoring																									
Remaning houses												Construction																						
Other																																		
Large heat pump																																		
Energy storage																																		
EV Chargers																																		

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Updated time schedules, Växjö

Växjö				2017												2018												2019											
				J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N
BEST	Area, m²BTA	PVT, m²	HP, kW	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
BEST SE-1	17.494																																					
Alabastern, phase 1				Finalized - Monitoring ongoing																																		
Alabastern, phase 2				Construction																																		
Specialhouse	4.133	300?	?	PreDesign												Design							Construction					Monitoring (12 months)-specialhouse										
BEST SE-2.1																																						
Bärnstenen																																						
Specialhouse	2045	150	?		Negotiating																																	
BEST SE-2																																						
Bärnstenen	13567				Negotiating																																	
BEST SE-3																																						
Office building	3.340	560	-		Tender		Design		Construction			Monitoring																										
Other																																						
Computer server central						Monitoring																																
Computer server central														Tender		Design		Construction		Monitoring																		
District cooling																																						
LT district heating				2a piping			Piping 2b																		LT														

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