



# PLUG-N-HARVEST

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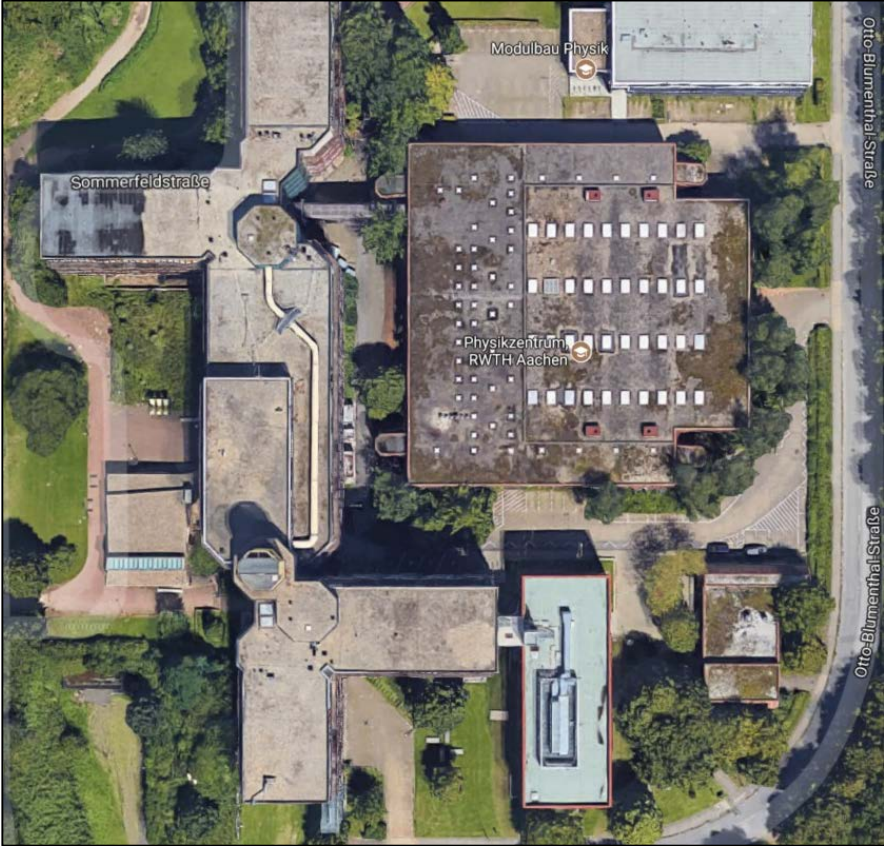
WP4: THE GERMAN PILOT SITE

ORGANIZATION: RWTH

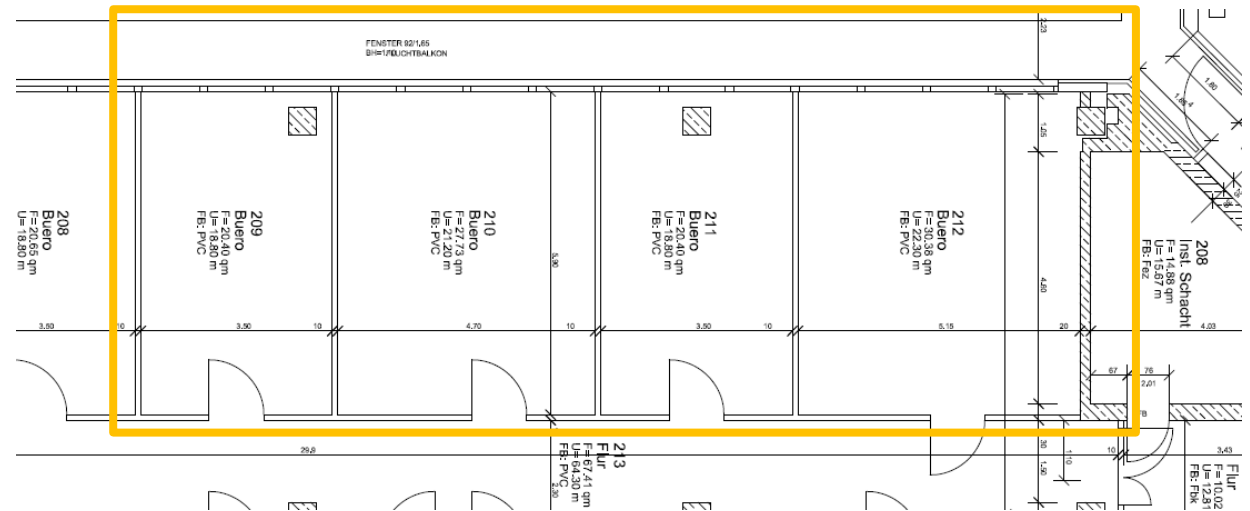
PRESENTER: SEBASTIAN REMY, MARIUS VONTEIN

MEETING: 7<sup>TH</sup> MEETING 26-27 FEBRUARY, BRUSSELS, BELGIUM

# The German Pilot Site



# German Pilot:

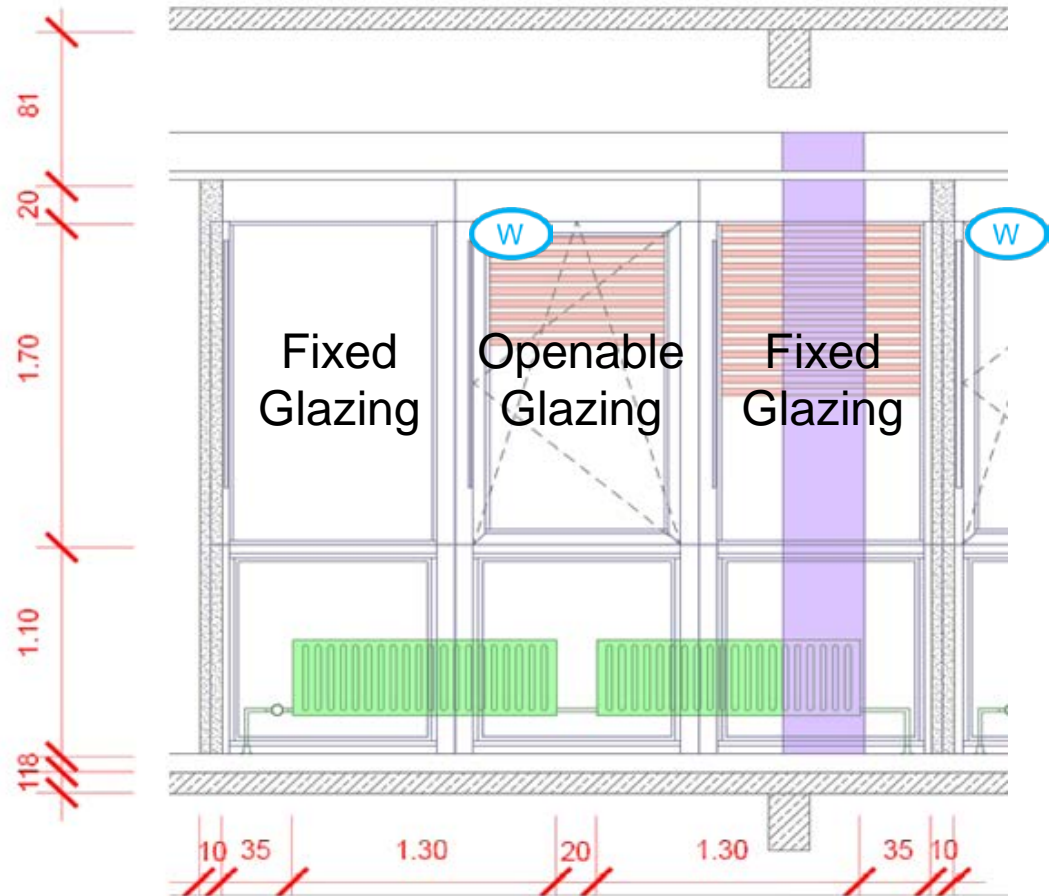
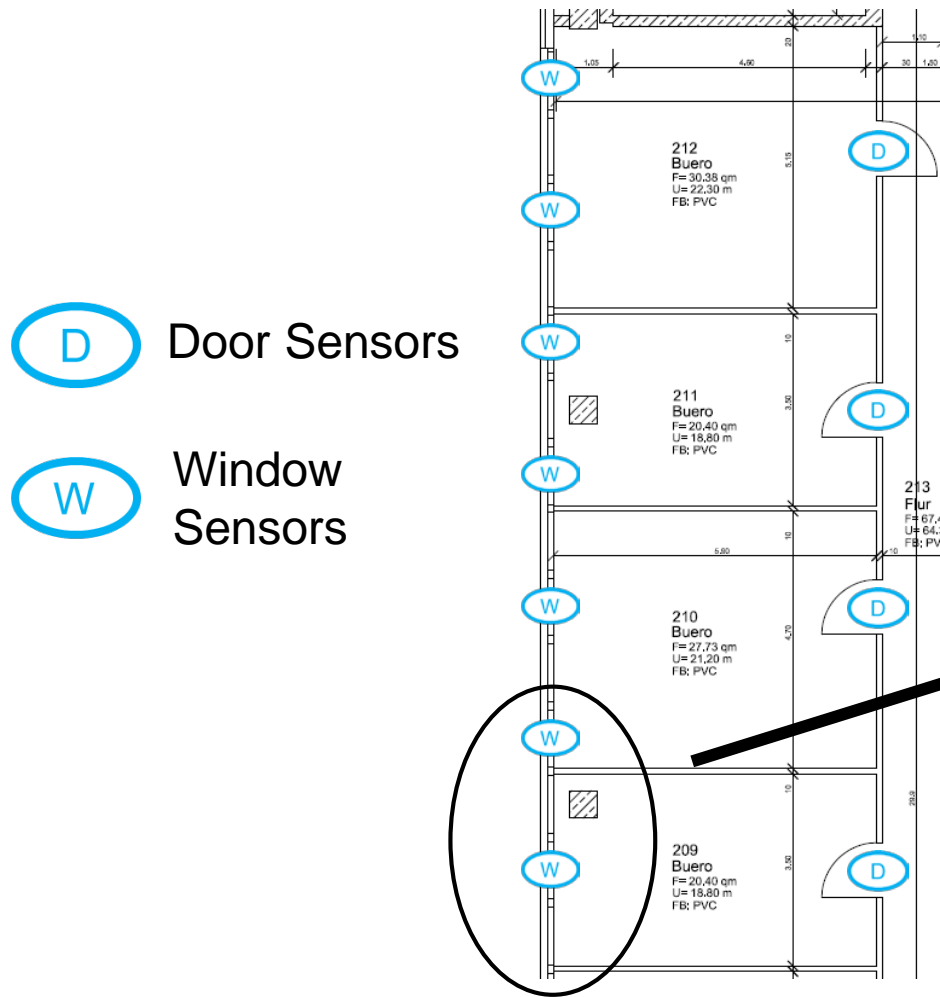


Area of investigation: Four office rooms

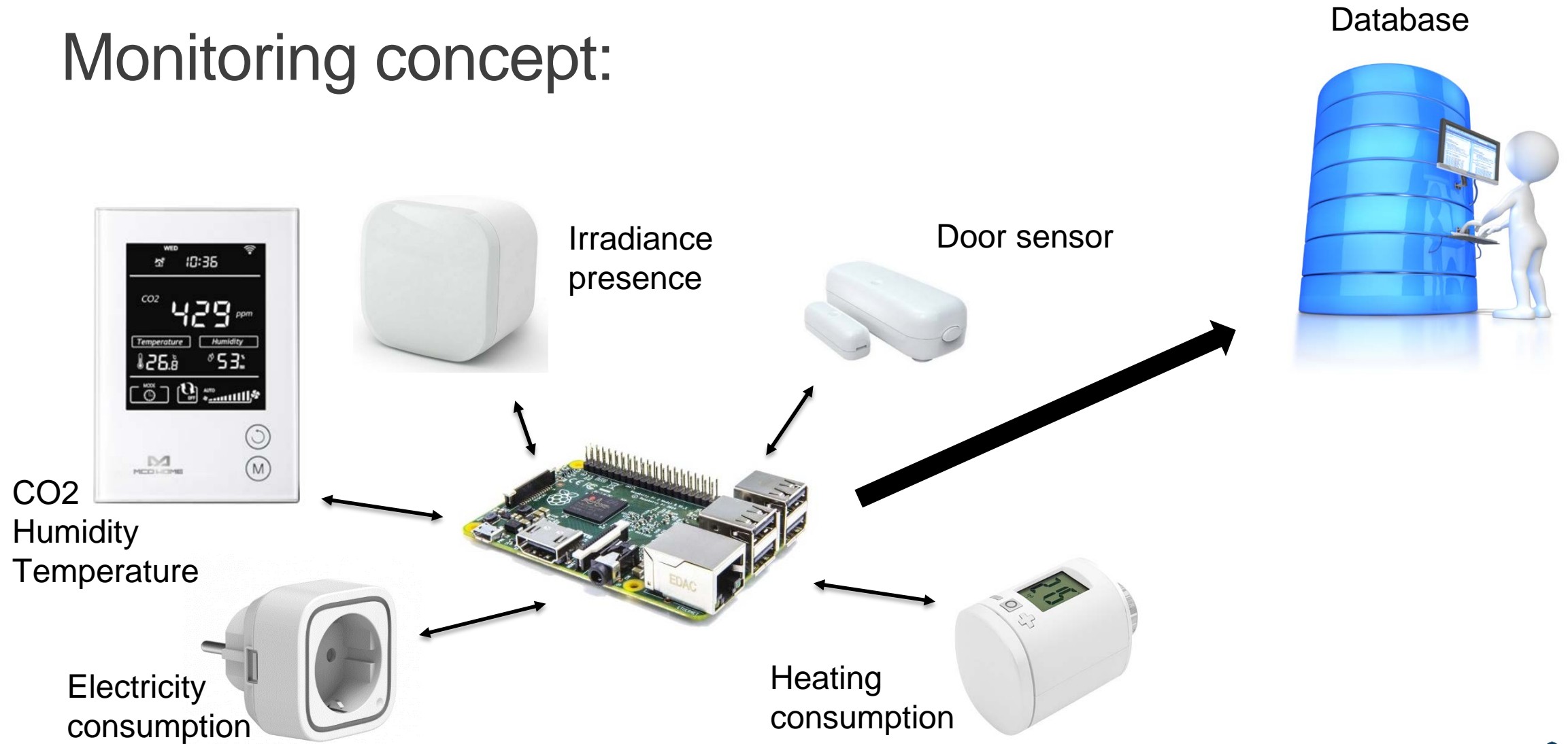
➤ Monitoring started in Mid-August



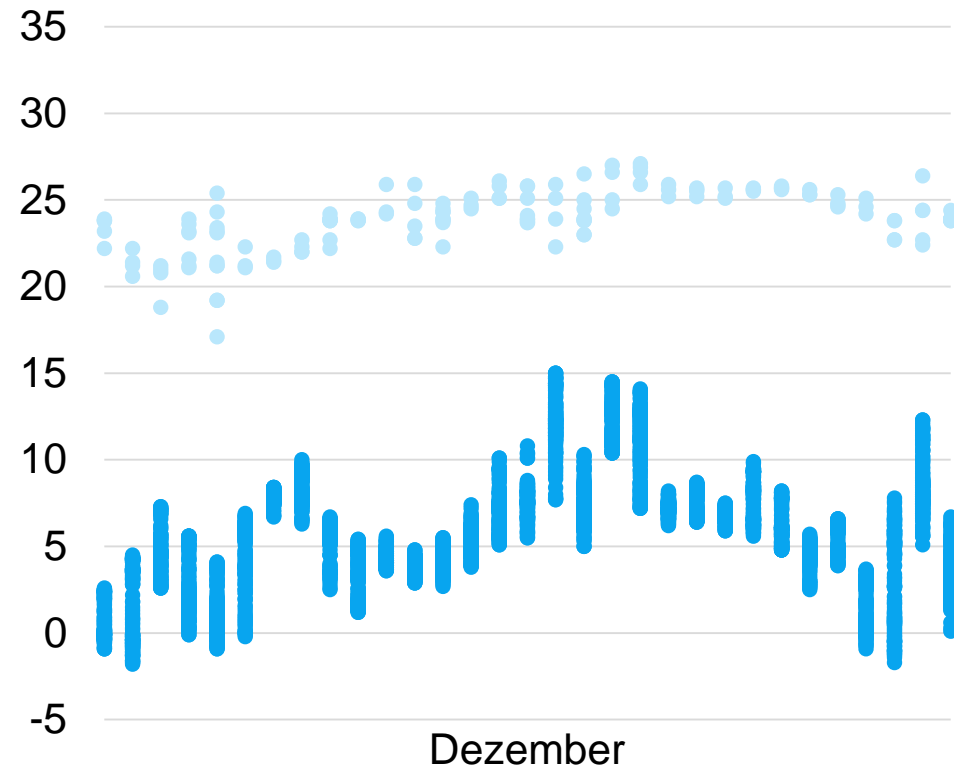
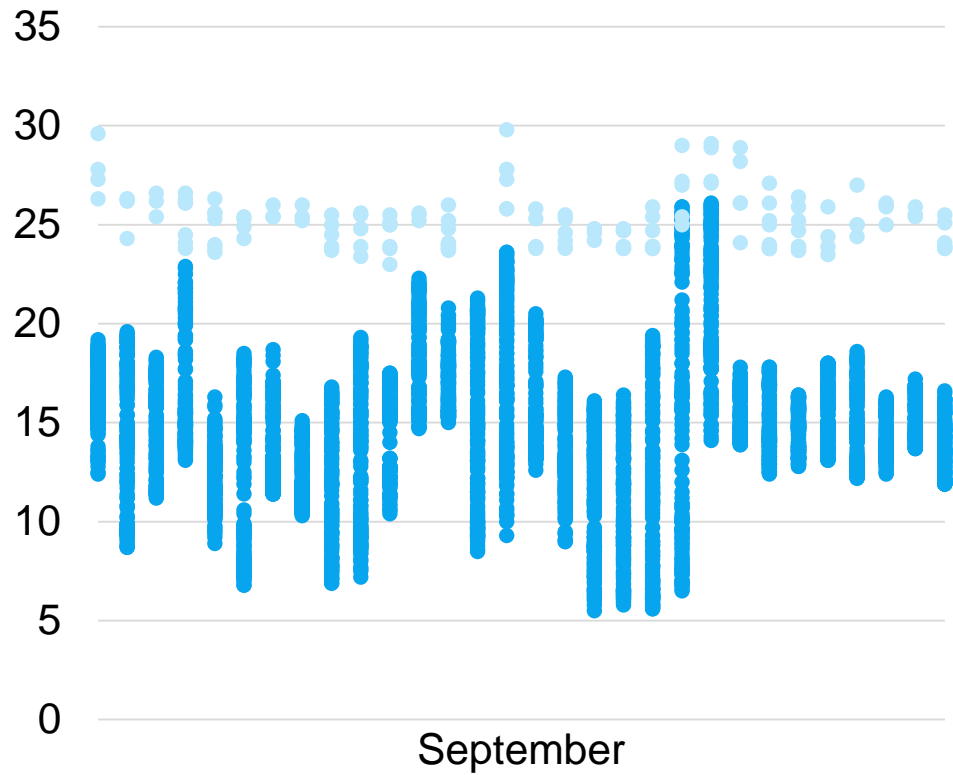
# Monitoring Plans at the German Pilot – Windows/Doors



# Monitoring concept:



# Temperature: Room 212

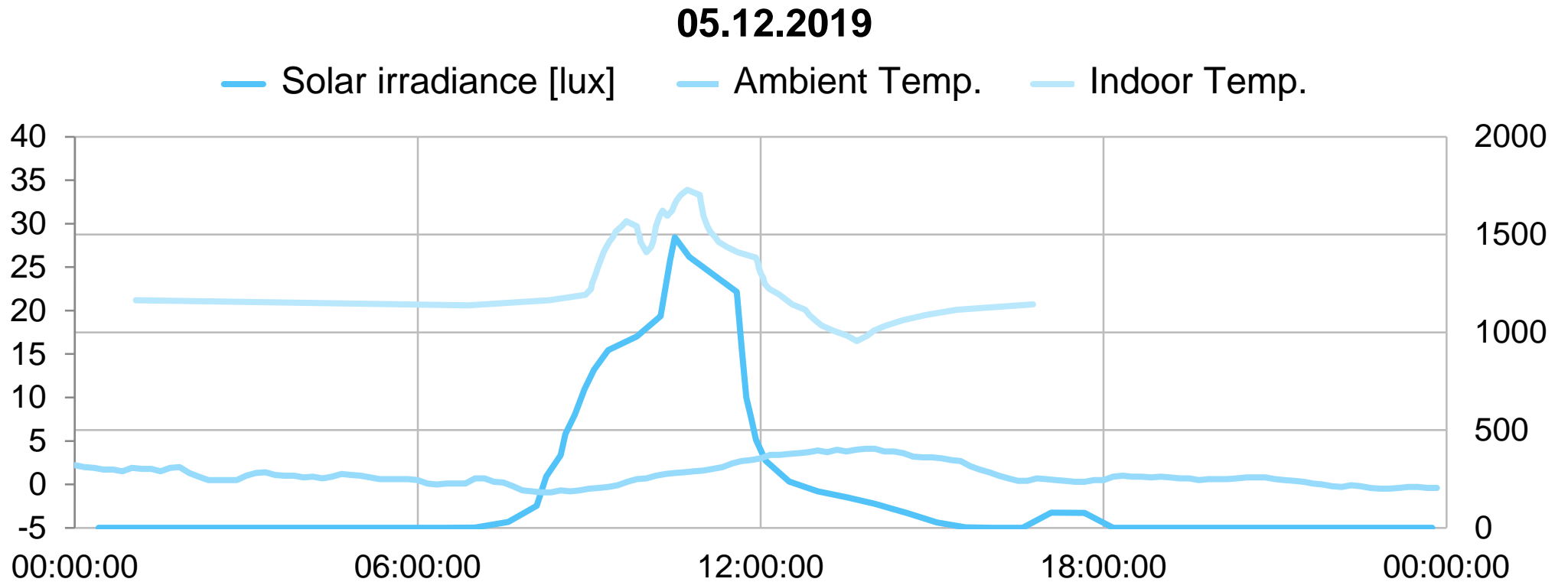


Indoor  
Temperature

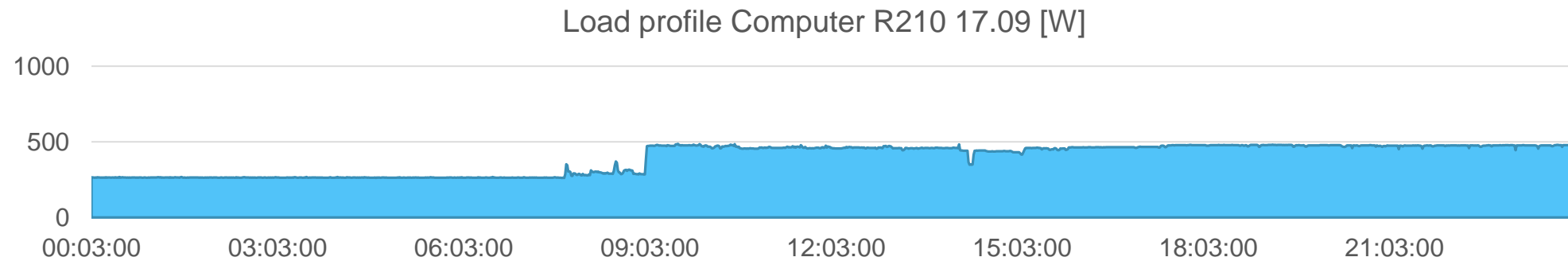
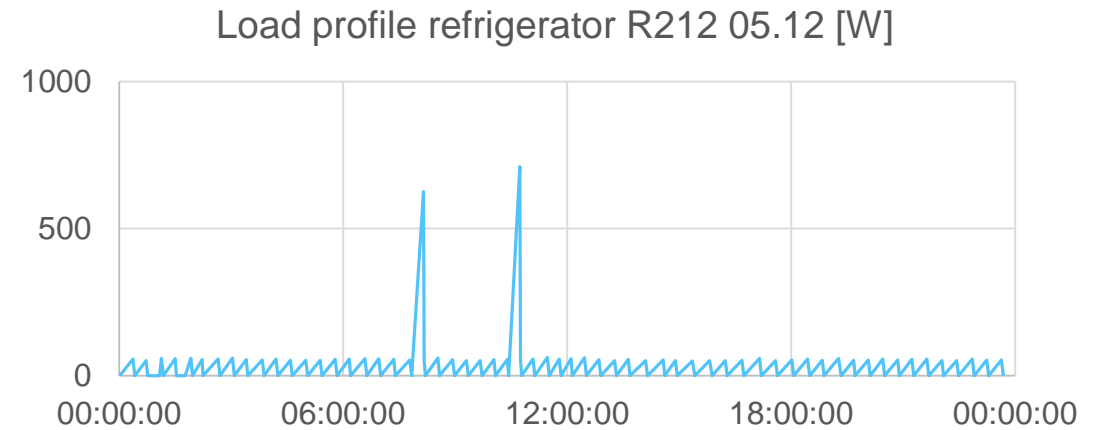
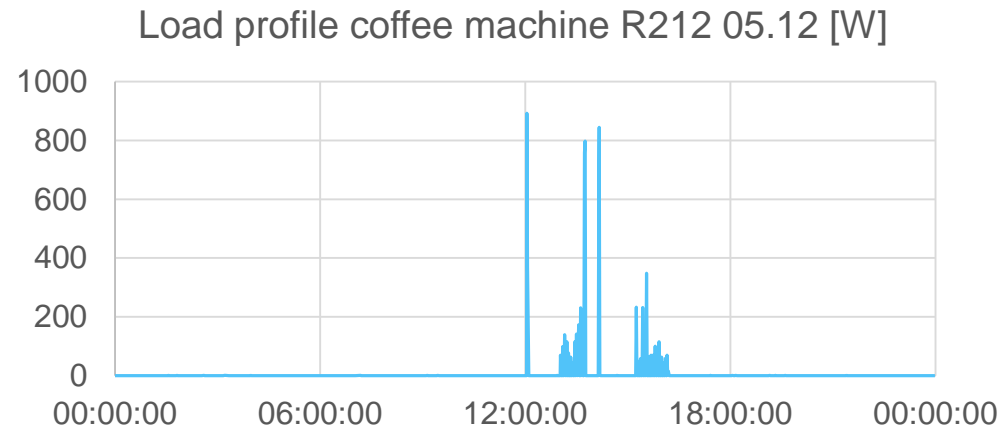
Ambient  
Temperature



# Temperature: Room 212

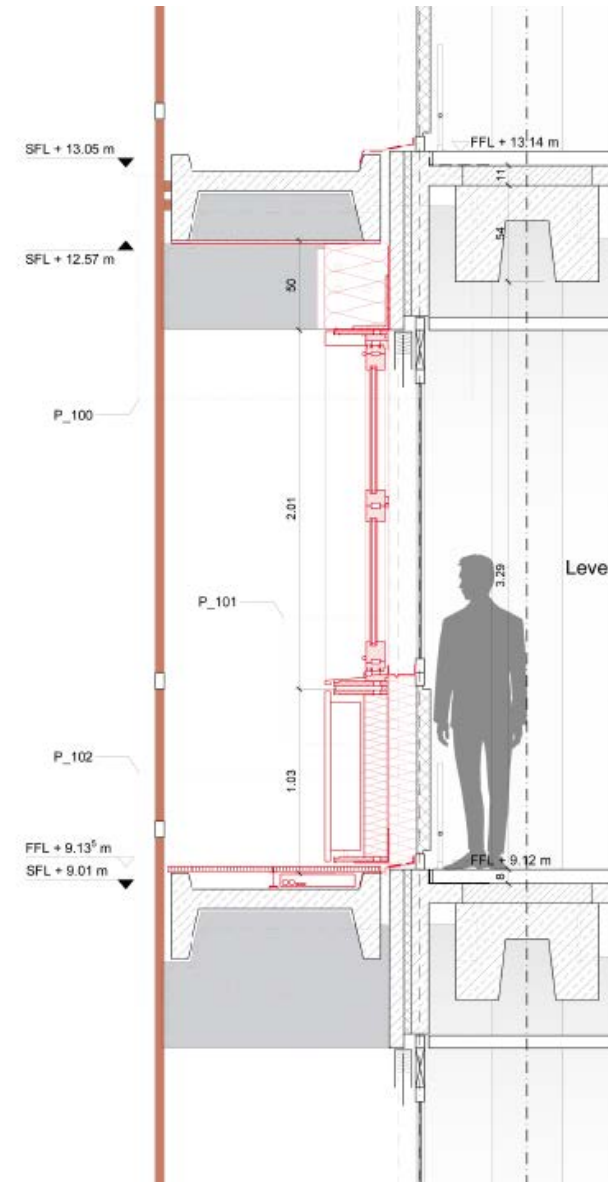
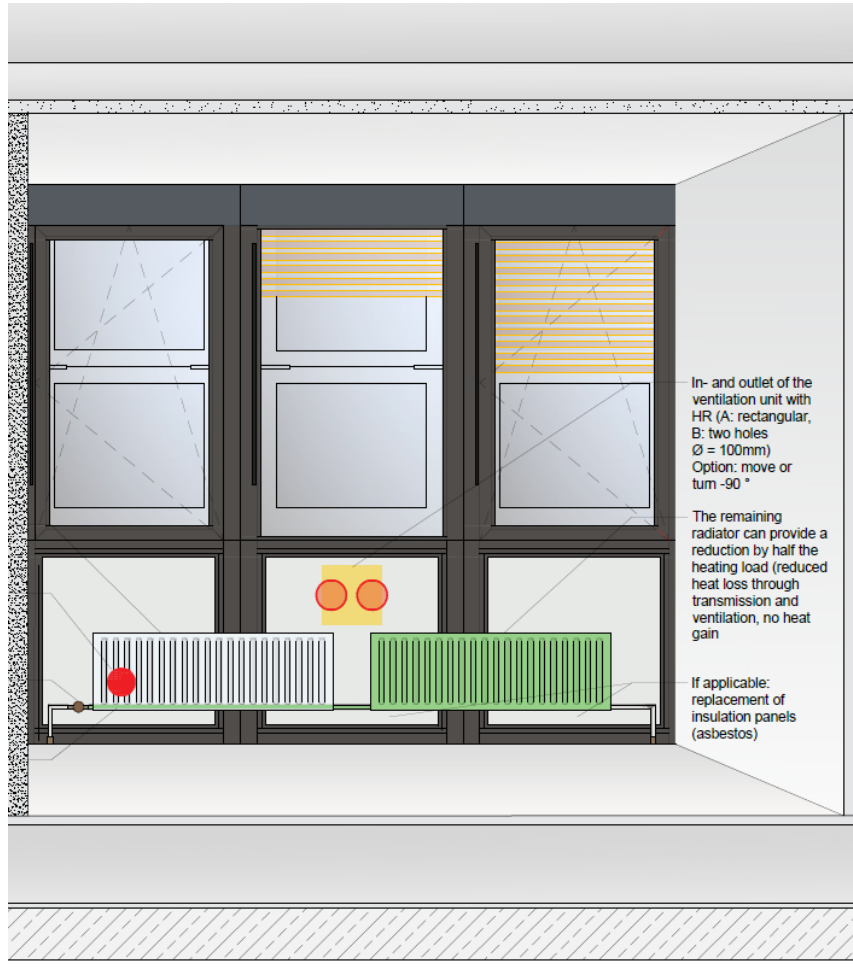


# Electricity consumption:



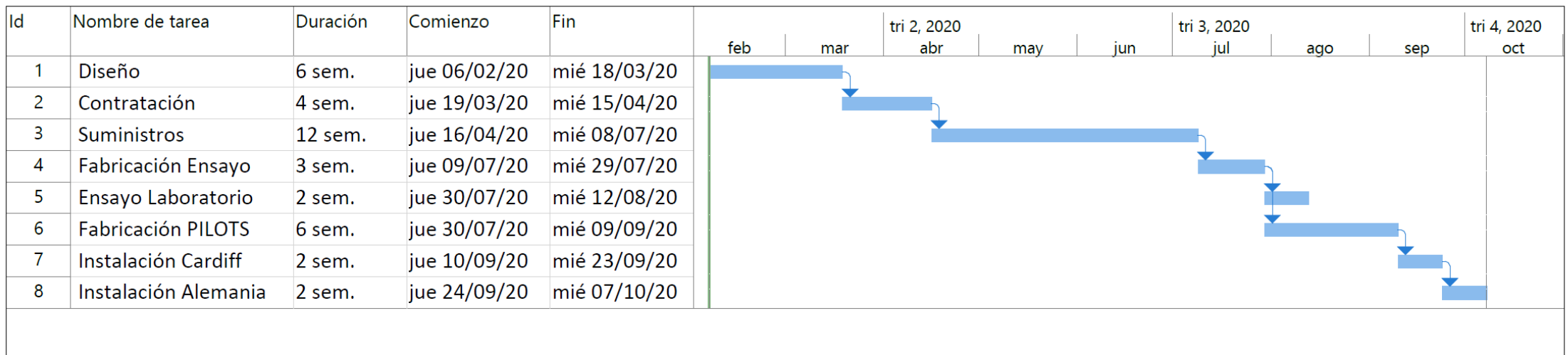


# The German Pilot Site



# The German Pilot Site – schedule by GF

- Schedule based on GF announced delivery dates:
  - Design until 18.03.2020; ADBE until 10.09.2020



# The German Pilot Site – schedule

- Schedule based on GF announced delivery dates:
  - Design until 18.03.2020; ADBE until 10.09.2020

Nr.		Period / Duration	April	May	June	July	August	September	Oktober
1.0	Tender & Award	01.04.2020 - 29.05.2020	■	■					
1.1	Contracting Garcia Faura	maximum 5 weeks	■						
1.2	Tendering and awarding the metalworking contract (local company)	maximum 5 weeks		■	■				
2.0	Preparatory action	During summer holidays				■			
2.1	Replacement of parapet elements (asbestos)					■			
2.2	Dismantling of radiators					■			
3.0	Installation ADBE	24.08.2020 - 23.10.2020					■	■	■
3.1	Preparation of construction site & deconstruction of railing						■	■	
3.2	Waterproofing balcony 3rd floor						■	■	
3.3	Installation of ADBE (delivered by GF)							■	10.09.
3.4	Insulation & complementary works: Edges, etc.							■	■
3.5	Technical equipment							■	■
3.6	Grating installation: 2nd escape route								■
4.0	Measurement								■

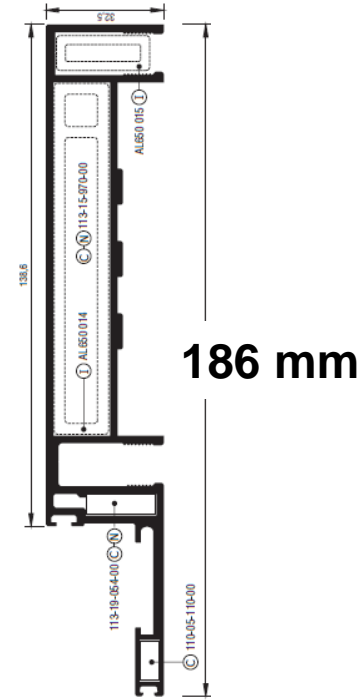


# The German Pilot Site – local solution

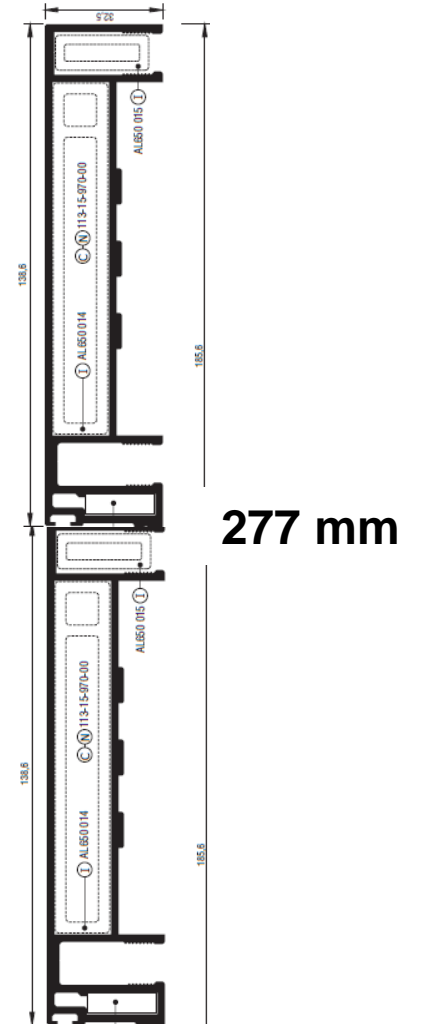
- If GF wants to leave the project, we can switch to a local solution
- We still have remains of Alumils M85
  - 21 x 6 m and 7 x 3 m
  - Cut & double it for a depth of > 250 mm
  - It is good for 2 (maximum 3) rooms



Remains of Alumil profile M85



Alumil profile M85



# The German Pilot Site – schedule

- Schedule based on local solution:
  - Last possible date for the new tender 22.05.2020
  - Until then we need the costs, the final design and a final delivery confirmation from GF.

Nr.		Period / Duration	April	May	June	July	August	September	Oktober
1.0	Tender & Award	01.04.2020 - 29.05.2020	█						
1.1	Contracting Garcia Faura	maximum 5 weeks	█						
1.2	Tendering and awarding the metalworking contract (local company)	maximum 5 weeks		█	█				
2.0	Preparatory action	During summer holidays				█			
2.1	Replacement of parapet elements (asbestos)					█			
2.2	Dismantling of radiators					█			
3.0	Installation ADBE	24.08.2020 - 23.10.2020					█	█	█
3.1	Preparation of construction site & deconstruction of railing						█		
3.2	Waterproofing balcony 3rd floor						█		
	Disposition: Material planning, ordering, etc.	5 weeks				█			
	Fabrication of ADBE based on M85 (remains of Pre-Pilot) by local company	6 weeks					█		
3.3	Installation of ADBE (delivered by local company)							█	
3.4	Insulation & complementary works: Edges, etc.							█	
3.5	Technical equipment							█	
3.6	Grating installation: 2nd escape route								█
4.0	Measurement								█

22.05.2020

10.09.



# The German Pilot Site – cost estimation

## PNH PILOT BUDGET

budget source	
EUROPEAN COMISSION	200,000.00 €
PROJECT OWNERS	0.00 €
<b>TOTAL</b>	<b>200,000.00 €</b>

	TASK	BUDGET	FINAL BENEFICIARY	CONTRACTUAL RELATION with	NOTES	
1	MATERIAL	Production of ADBE modules (includes anchors, edging)	47,750.00 €	GF	RWTH	Cost estimation 19.02.2019, Cost estimation 20.02.2020 PiAg
		PV panels & equipment for ADBE modules	25,000.00 €	GF	RWTH	
		Supply of batteries and invertors for PV supply	10,000.00 €	Local provider	RWTH	
		Supply of monitoring equipment for ADBE	4,000.00 €	Consortium	N/A	
	TRANSPORTATION	Transportation to site	10,000.00 €	GF	RWTH	Cost estimation 19.02.2019, Cost estimation 20.02.2020 PiAg
3	SITE WORKS	ADBE modules installation	30,050.00 €	Local	RWTH	Cost estimate of the RWTH construction department
		Additional onsite works (include auxiliary material)	46,600.00 €	Local	RWTH	
		ADBE modules licencing	2,000.00 €	GF	RWTH	
		Electrical installation	10,000.00 €	Local	RWTH	
		PV licencing	0.00 €	PV provider	RWTH	
7	LOCAL DESIGN & PERMITTS	Local Structural Engineer consultant	10,148.00 €	Engineer 01	RWTH	Offer of local engineering company
		Local Building Services Engineer consultant	2,000.00 €	Engineer 02	RWTH	
		Building permitt and related works	0.00 €	Consortium	N/A	
10	OTHERS	Contingency	10,000.00 €	Local		Offer of local engineering company for deconstruction at the end of the project
		<b>207,548.00 €</b>				

### Notes:

1. Site specific design is included in the Innovation contract
2. Testing procedure is included in the AHC contract
3. Monitoring equipment for the sensors other than the ones related particularly to the ADBE modules have been already installed

