

ETN CCS taskforce Minutes of the monthly meeting

15.12.2023, Brussels

Participants		
Present		
Mohammad Mansouri	University of Stavanger / NORCE	
Peter Jansohn	Paul Scherrer Institute	
Jens Walter	BASF	
Simona Calenda	Politecnico di Milano (POLIMI)	
Andrea Zelaschi	Politecnico di Milano (POLIMI)	
Renaud Le Pierres	Meggitt	

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1. POLIMI Presentation

Andrea Zelaschi and Simona Calenda from POLIMI presented their study on part-load performance of CCGT with integrated carbon capture. So far, the study is around greenfield application of large-scale CCGT integrated with carbon capture based on GE 9HA.02.

The preliminary results presented evaluating the effects of load changes on the performance of the cycle (both gas turbine and capture-related indicators). The study is extended to look into other sizes of gas turbines (medium at about 150-200 MW power output and smaller engines with about 20-50 MW power output). The study has the next step on retrofitting similar sizes of gas turbine cycles when they are integrated with carbon capture.

The master program of Simona Calenda is to be concluded by April 2024; hence, it is expected that this study to be finalized by about March 2024.

2. Activities for 2024

Mohammad Mansouri gave a short overview of activities that have been done within the taskforce in 2023. There was a quick discussion around possible activities of the taskforce in 2024. One of the areas seems to be relevant is providing webinars (possibly once per 3-4 months).

Another interesting topic (suggested by Renaud Le Pierres) is to gather more information on approaches to decarbonise widely used small- to medium-scale gas turbines (with not so high efficiency figures) that are typically operated sub-optimally too (examples are being those used widely in the O&G installations).

3. Other topics

Mohammad Mansouri provided a quick update of key highlights of COP28.

4. Actions list

#	Actions	Resp.	Deadline
1	Provide updates on Master thesis	SC/AZ	31.01.2024