

CCS: Options for Energy Intensive Industry

Tentative Agenda

Venue: Beijing Xinyuan Hotel, European Style Multifunctional Hall on the Second Floor
No. 6 Shifangyuan, Haidian, District Beijing, 100036
Beijing, P.R. China

Thursday, December 5
09:00-18:00

09:00 – 10:15 Session I: Opportunities for CCS in key energy-intensive industries

Session Chair: **Zhang Jiutian, Director, ACCA21**

Peng Sizhen, Deputy Director-General, ACCA21, Opening Remarks

Philippe Benoit, Division Head, Energy Efficiency and Environment, International Energy Agency, Opening Remarks

Juho Lipponen, Head of CCS Unit, IEA , Role of CCS Globally – Perspectives from 2013 IEA CCS Roadmap

Dennis Best, Policy Analyst, IEA, CCS in Energy Intensive industry in China - Findings from 2012 IEA-MOST Workshop

10:15 – 10:30 Tea Break

10:30 – 12:00 Session II: Sectoral applications for CCS: Examining costs and policy considerations

Session Chair: Juho Lipponen, IEA

Dennis Van Puyvelde, Global CCS Institute, *Global industry demonstration and sector specific costs*

Li Huiquan, Institute of Process Engineering, *Application of CCUS in Steel Industry*

Dr. Xu Jinhua, CCS Application in China's Cement Industry: Carbon Abatement Potential and Challenges.

Robert Williams, Senior Research Scientist, Princeton Environmental Institute (PEI), Princeton University

15 minute Q&A

12:00 - 13:00 Lunch (Champs-Élysées Ave Cafée on the Ground Floor)

13:00 - 14:30 Session III: Sectoral applications: Emerging areas and early opportunities

Session Chair: Simon Bennett, IEA

Zhang Xian, ACCA21, CO₂ Utilization Technology Assessment in China

Wei Wei, Shanghai Advanced Research Institute, *Early opportunities of CO₂ utilization in China*

Huang Kaiyao, Institute of Hydrobiology, CAS, *Combination of bio-technology and CCS in cement and steel industries in China*

Zhai Rongrong, North China Electronic Power University, *Renewable technology and CCS*

15 minute Q&A

14:30 - 14:45 Tea Break

14:45 - 16:30 Session IV: Early opportunities: CCS options for the cement industry

Session Chair: Wang Yutao, China Cement Association

Rob van der Meer, Director EU Public Affairs, Global Environmental Sustainability, Heidelberg Cement, *Global Experience with CCS Pilot Projects*

Thomas Hills, Researcher, Imperial College, *Technical Options for Capture and CCS Applications in the Cement Industry*

Liu Ruizhi, Tianjin Cement Research and Design Institute - *Effective approaches to designing systems fit for CCS in China*

Sui Tongbo, Sinoma, *Sinoma's Effort and Perspective on Energy Saving and CO₂ Mitigation*

15 minute Q&A

16:30-17:45 CCS in Cement Applications: Industry roundtable dialogue
Chair: Wang Yutao, CCA

Li Xiaochun, Institute of Rock Soil Mechanics, Chinese Academy of Science,
Potential and Opportunities for CCS in China's Cement Industry (15 minutes)

Discussion:

- *With a focus on capture technologies, what are key technical areas that Chinese enterprise may consider as they engage in R&D and pilots?*
- *What steps can link Chinese enterprise to international/consortium projects to develop global cement or similar industry CCS pilots?*
- *What critical barriers specific to china's Cement enterprises create the biggest barriers to CCS, how can industry overcome these challenges?*

17:45 – 18:00 Workshop closing remarks

Philippe Benoit, Head of Energy Efficiency and Environment Division, IEA
Peng Sizhen, Deputy Director-General, ACCA 21

18:00 Jixiang Hall, Chaoxianggong Restaurant on the First Floor