









**Organizer** 



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## CCS & CO2 to High Value Chemicals 2018



## **Background**

According to <Paris Agreement>, which came into effect in 2016, the goal of controlling global warming to within 2°C in this century, requires effective control of CO2 emissions. Thus, the share of renewable energy will need to increase significantly from 23% in 2015 to 68% in 2050. At the same time, it is necessary to actively develop carbon capture and storage (CCS). By 2040, about 2,500 CCS facilities will be officially put into operation worldwide, and the total amount of CO2 captured and stored each year will be about 4 billion tons.

CCS technology has been safely put into commercial operation for 45 years. By the end of 2018, 21 large-scale CCS facilities will be put into operation worldwide, and 37 million tons of CO2 will be captured annually. ASIACHEM Consulting believes that through sustained technological research and development, the development of low-cost and efficient CO2 capture, enrichment and transport technology, reliable storage technology, as well as commercially valuable downstream utilization technology, is essential to achieve these carbon reduction goals.

CO2-EOR technology is an acknowledged method for enhancing oil recovery at late stage of oilfield development. PetroChina Changqing Oilfield, Daqing Oilfield, Sinopec Zhongyuan Oilfield, Shengli Oilfield, and Yanchang Petroleum have carried out the application of CO2-EOR to enhance oil recovery. Xinjiang Dunhua 100,000 t/a CO2 capture project using PSA relaxation gas from a methanol plant, was commissioned in 2016. The captured CO2 was used for heavy oil recovery in Karamay oilfield.

In recent years, Chinese enterprises and scientific research institutes have made a series of progress in the CO2 to high-value chemicals such as methanol, olefins, aromatics, gasoline, formic acid; CO2 and methane reforming to syngas; and CO2 to degradable plastics, and are implementing industrialization. In July 2018, Lanzhou New Area Petrochemical Industry Investment Group, Suzhou Gaomai New Energy and DICP of CAS signed a 1000-ton CO2 hydrogenation to methanol technology development project agreement.

CCS & CO2 to High Value Chemicals 2018 will be held in 18-19 December in Wuxi, Jiangsu, China. The upcoming conference will discuss China's carbon tax policy outlook in the context of Paris Agreement, low-cost and high-efficiency CO2 capture, enrichment and transportation technologies, CCUS demonstration of large coal chemical, power generation and petrochemical plants, CO2-EOR experience, CO2 to methanol, olefins, aromatics, gasoline, formic acid and degradable plastics and other high-value chemicals technology and demonstration, food-grade CO2 market research, etc.

## **Topics**

- 1. Vision and implementation path of global warming control within 2°C
- 2. Prospects for China's carbon tax policy in the context of the Paris Agreement
- 3. Low cost and efficient CO2 capture, enrichment and transportation technologies
- 4. Quantitative verification and standardization of CCS projects of global energy and chemical giants
- 5. CCUS demonstration of large coal chemical, power generation and petrochemical plants
- 6. CO2-EOR demonstration experience and application practice
- 7. CO2 hydrogenation to high value chemicals methanol, olefins, aromatics and formic acid
- 8. CO2 hydrogenation to liquid fuels gasoline or polyalcohol
- 9. CO2 and methane reforming to syngas (CO+H2)
- 10. CO2 to degradable plastic technology and demonstration plant visit
- 11. Food grade CO2 market research
- 12. Combined application of large-scale H2 production and CCS

## **Preliminary Agenda**

Dec.17,2018	Monday
16:00-21:00	Pre-conference Registration
Dec.18,2018	Tuesday
09:00-12:00	Speech
12:00-14:00	Networking Lunch
14:00-18:00	Speech
18:00-20:00	Banquet
Dec.19,2018	Wednesday

09:00-17:00 Industrial Visiting