

China Coal Sector Update to the 21st Session of the Global Methane Initiative (GMI) Coal Subcommittee

3 June 2015

Bogotá, Colombia

HUANG Shengchu, China Coal Strategic Research Center

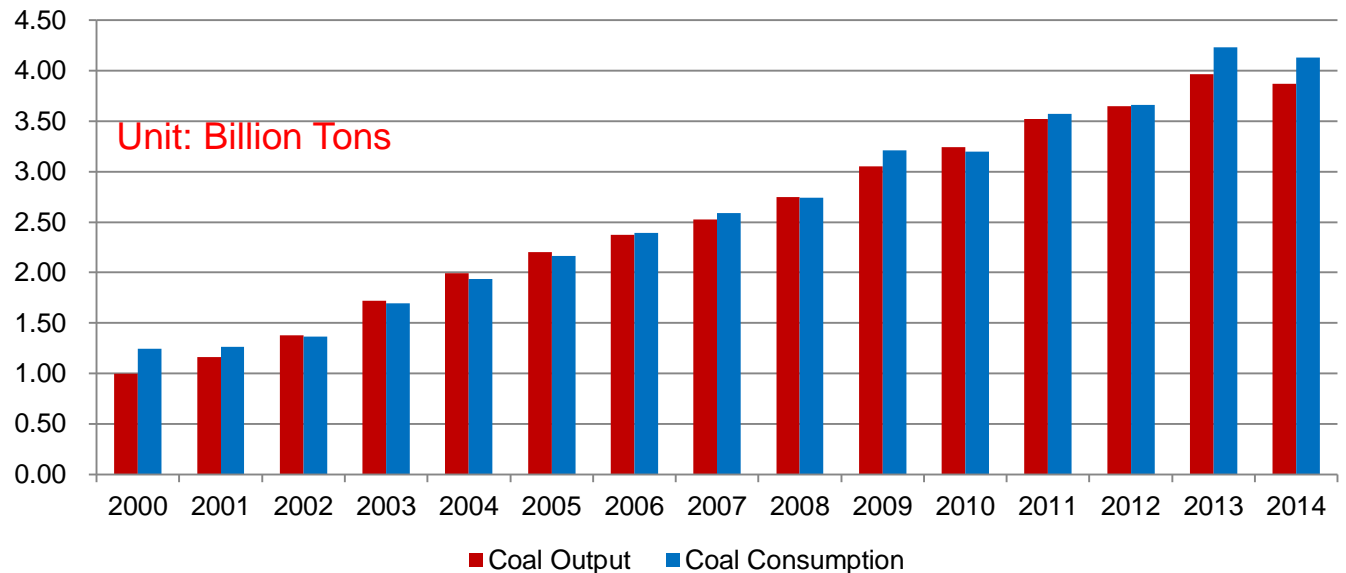
YU Lei, SANG Fengyun, China Coal Information Institute



China Coal Sector Update

■ Coal production and consumption in China

- Coal production was 3.87 billion tons in 2014, decreased 2.9% compared with that in 2013.
- Coal consumption: 4.13 billion tons in 2014, decreased 2.5% compared with that in 2013.

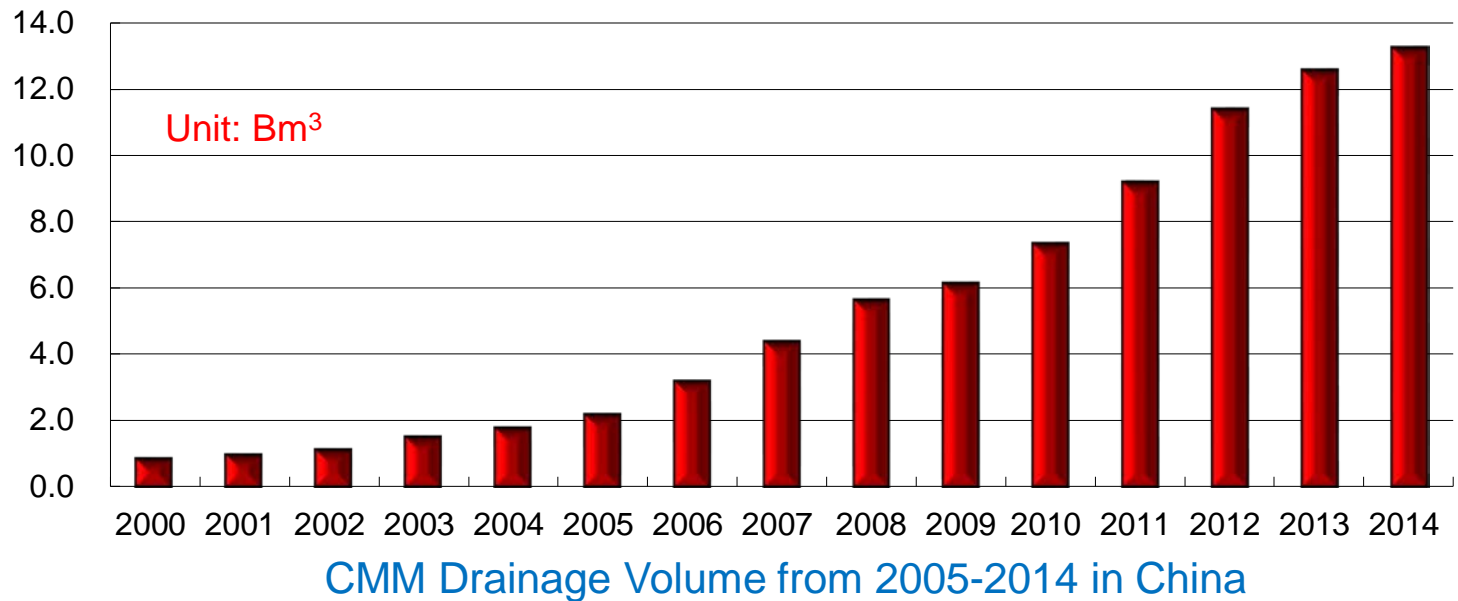


Output and Consumption of Coal from 2000 to 2014 in China

China Coal Sector Update

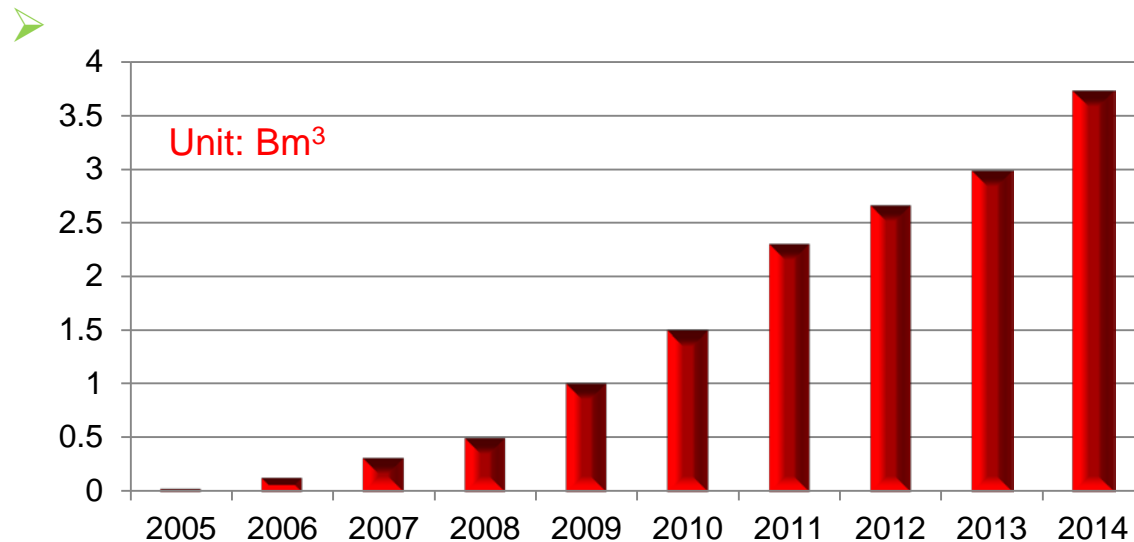
- CMM drainage

- CMM drainage volume increased from 2.2 Bm³ in 2005 to 13.3 Bm³ in 2014, increased by more than 5 times compared with that in 2005.



China Coal Sector Update

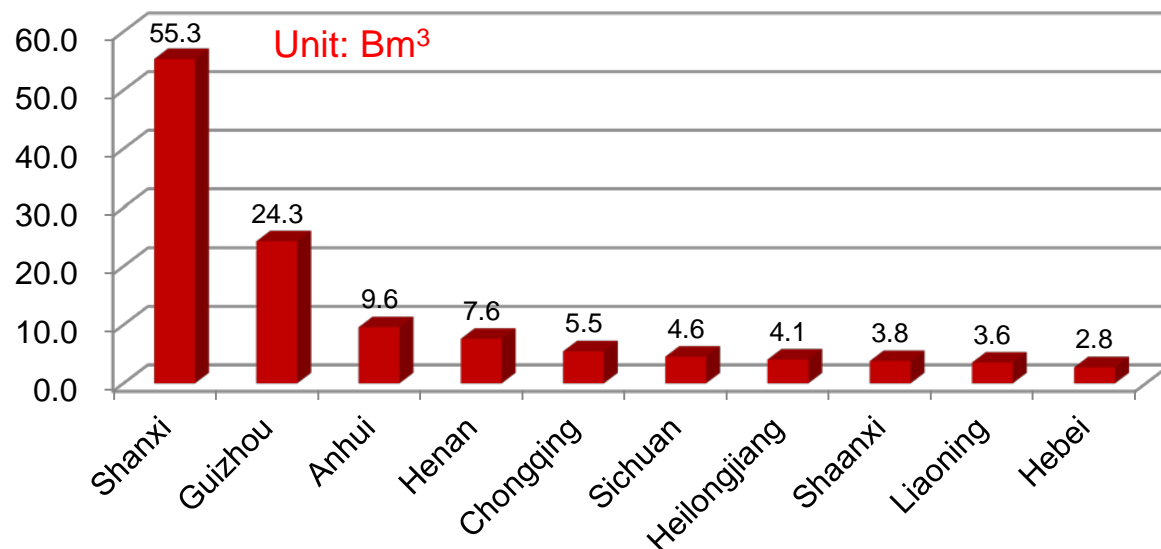
- **CBM Recovery from surface wells**
 - CBM Production Volume is 3.73 billion m³ in 2014.
 - Jincheng Anthracite Mining Group (JAMC) is the largest CBM producing company in China, produced 1.43 Bm³ in 2014, accounting for 38.3% total in china.



CBM Production Volume from 2005 to 2014 in China

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- CMM underground drainage
 - The top 10 provinces with CMM drainage are Shanxi, Guizhou, Anhui, Henan and others in 2014, see following figure
 - Drainage volume of CMM in Shanxi Province was 5.53 Bm³ in 2014, accounting for 41.7% of total CMM in China.

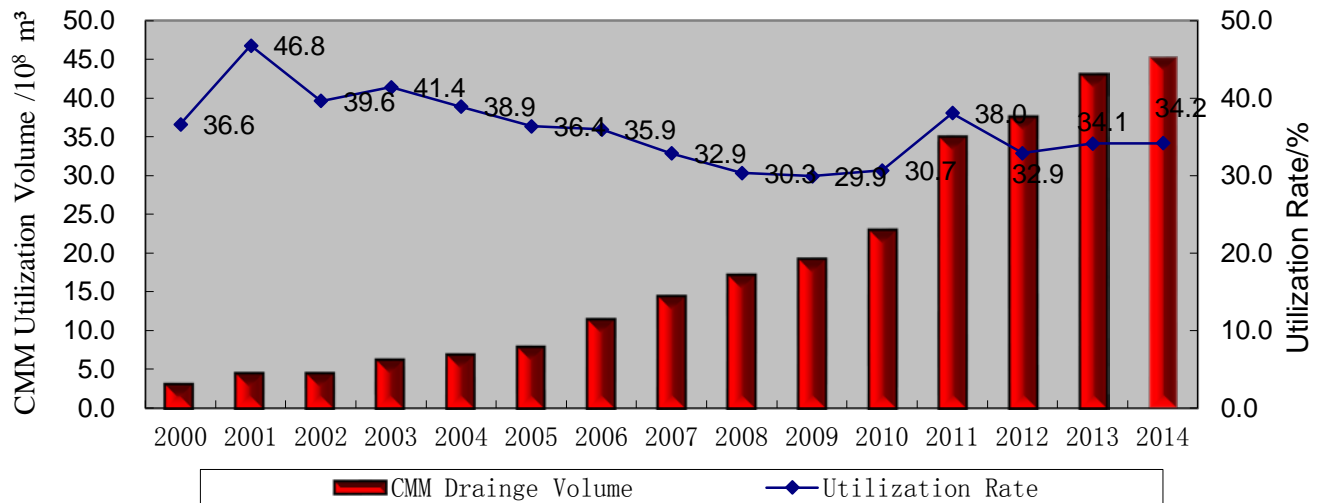


Top 10 Provinces with drainage volume of CMM in first half year of 2014

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■ Utilization of CMM

- The volume of CMM utilization was 4.53 Bm³ in 2014 with the utilization rate of 34.2%.

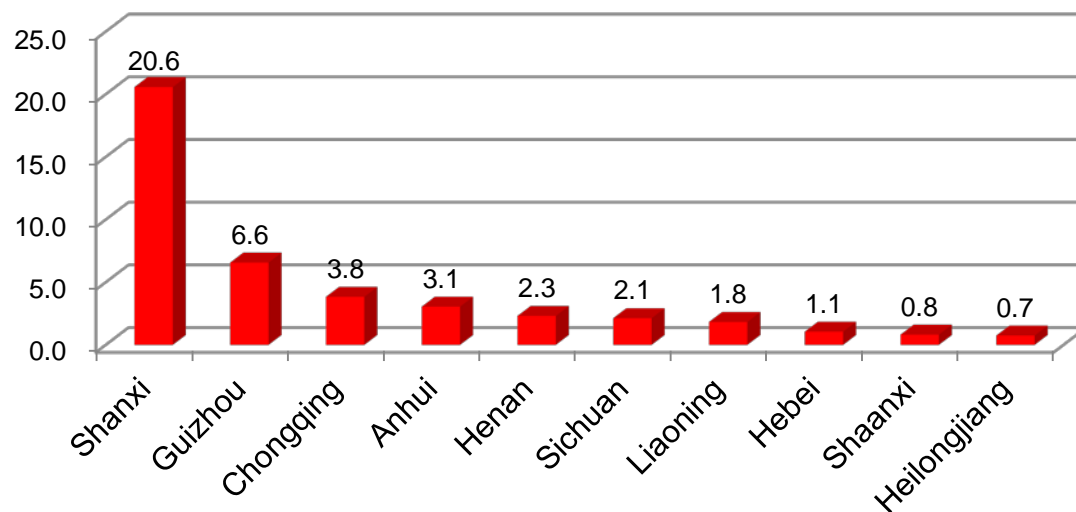


CMM utilization from 2000 to 2014 (10⁸ m³)

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■ Key Areas of CMM Utilization

- Utilization volume of CMM was 2.06 Bm³ in Shanxi Province in 2014 , accounting for 45.4% of total utilization volume in China.
- The recovered CMM was mainly used as fuels for power plants , households, industries, etc.



Top 10 Provinces with utilization volume of CMM in the 2014

China Coal Sector Update

- Regulatory Updates
 - Guideline on Further Accelerating the CBM/CMM Exploitation and Utilization issued by the State Council of P.R. China in Sep. 22, 2013.
 - Increase Government Funds Support
 - Increase Indirect Financial Incentives
 - Encourage Private Investment in CBM/CMM
 - Market Pricing Mechanism
 - Encourage Power plants to use CBM/CMM as fuel
 - Regulations and Actions for Coal Mine Safety
 - Revising coal mine safety regulations, calling for comments.
 - Recovery CBM from virgin coal seams before construction of a mine

China Coal Sector Update

- CBM Exploitation and Development Action and Plan 2020 had been published on February 3, 2015
 - Building 3-4 bases of CBM development,
 - Proven CBM reserves reaches 1 trillion Bm^3 .
 - The CBM(CMM) production Volume will reach 40 Bm^3 per year, CBM production volume is 20 Bm^3 , and should be used 100 %. CMM drainage volume is 20 Bm^3 , utilization rate of CMM is more than 60%.
 - Integrating CBM recovery and coal mining in the key coal mining areas

CMM Project Outlook

- Emission reduction projects in China:
 - 89 CDM projects have been approved, therein, 58 projects were registered and 33 projects with CERs issuance in use of CMM up to May 22, 2015 .
 - GMI provides the total grants of USD\$ 2.17 million for 11 CMM projects in China from 2006 to 2015

CMM Project Outlook

- Policy barriers
 - Coal companies suffered from economic losses as coal price reduced since 201, hence reduced financial support for CMM projects
 - CMM projects could not produce profits without CDM funds
- Approaches to overcoming challenges
 - NDRC is reviewing the suggestions on increased subsidies for CMM recovery and utilization.
 - NDRC issued the Temporary Rules for Voluntary Greenhouse Gas Emissions Reduction and Trading Management in June, 2012.
 - By the end of April 8, 2015, 24 projects of CMM utilization projects had been approved as voluntary emission reduction projects in NDRC, 3 had been registered.

CMM Project Outlook

- Anticipated or planned projects
 - Low Quality CMM Utilization (Concentration <30%) :Enrichment and purification with PSA for civil use or power
 - Comprehensive Utilization Project of Low Quality CMM and VAM
 - CCII submitted application for the R&D project – *Synthesis and its reaction kinetic model research of novel Pd-based monolithic catalysts for ventilation air methane to be funded by the National Science Foundation in 2013.*

国家自然科学基金委员会 项目批准通知

国科金计项〔2013〕57号

关于批准资助2013年度第二批项目的通知



国家安全生产监督管理总局信息研究院(单号:2013-57-0292)

根据《国家自然科学基金条例》有关规定和专家评审意见,国家自然科学基金委员会(以下简称自然科学基金委)决定批准资助你单位2013年度(第二批)国家自然科学基金项目1项,金额75.0万元。其中,面上项目1项,上述资助项目清单详见附件。

自评审结果通告发布之日起25日内,项目负责人须按要求填写并提交《国家自然科学基金资助项目研究计划书》(以下简称计划书)电子版。2013年9月11日16点前,依托单位将审核后的计划书电子版通过自然科学基金网络信息系统(<https://isis.nsf.gov.cn>)提交至自然科学基金委。自然科学基金委同期对计划书电子版进行审核。审核通过的,项目负责人可打印计划书纸质版(建议双面打印);审核未通过的,退回至项目负责人修改,依托单位须在2013年9月18日16点前,将修改后的计划书电子版及时审核并再次提交至自然科学基金委。2013年9月27日16点前,依托单位须将自然科学基金委审核通过后的计划书纸质版(一式两份,应保证与电子版一致)加盖单位公章,报送至自然科学基金

CMM Project Outlook

- Anticipated or planned projects
 - Recovery and Utilization of Abandoned Coal Mines
 - Supported by Prosperity Fund of UK, Policy Framework for AMM Recovery and Utilization in China had been accomplished, which effectively promote the AMM development in china
 - Feasibility study of AMM recovery and utilization pilot project and policy recommendation for AMM recovery and utilization in China had been approved by the UK Embassy this year.



SPF.F2.13.

PROJECT PROPOSAL FORM.
(For projects worth between £10k and £30k).

Project Title.	Policy recommendations to improve China's Abandoned Mine Methane Recovery and Utilization.		
Which Programme is the funding being sought from *. <i>Policy Programme Title or Bilateral Programme Budget.</i>	Prosperity Fund.		
Project Code. <i>To be added once the Project has been approved and the code is provided by the Programme Team.</i>	Embassy to Complete		
Is the Project ODA eligible *. <i>Yes/No.</i>	Embassy to Complete.		
ODA Codes *. <i>To be added by Post using guidance in Annex 2 and 3 of 'ODA Project Reporting Template - Technical Instructions' here... http://ubs.sharepoint.com/sites/finance/strategicfinance/oda/Guidance%20on%20completing%20ODA%20template/Forms/Allite.ms.aspx</i>	Input Sector Code.	Embassy to Complete.	
	Channel of Delivery Code.	Embassy to Complete.	
Cost. <i>-What is the TOTAL cost of the Project. -Please detail the cost to the FCO and, if relevant the cost to co-funders. -If relevant, please provide costs for future Financial years. Please note, the cannot guarantee funding for future years. -Project funds are paid quarterly in aemars.</i>	FY14/15.	£59,260.	
	Cost to FCO.	£ 40,000 GBP.	Cost to Co-funders. £19,260.
	FY 15/16.	£.	
	Cost to FCO.	£.	Cost to Co-funders. £.

Welcome you to attend

15th International Symposium on CBM/CMM and Shale Gas in China

Landmark Hotel, Beijing, P.R. China

November 12-13, 2015

Supporters: EPA, USA

State Administration of Coal Mine Safety, China



Contact Information

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