

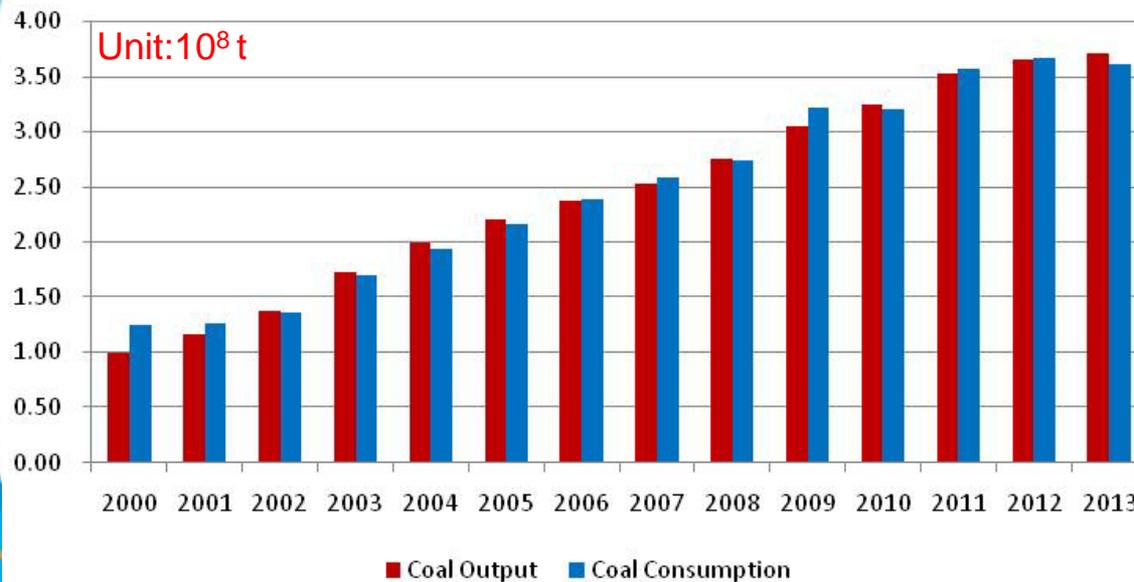
China Coal Sector Update to the Global Methane Initiative (GMI)

May 2014
China Coal Information Institute



China Coal Sector Update

- Any new trends in the coal sector
 - Decrease in consumption growth
 - Coal Production: 3.7 billion tons
 - Consumption of coal is 3.61 billion tons and slightly decreased on the year-on-year basis.

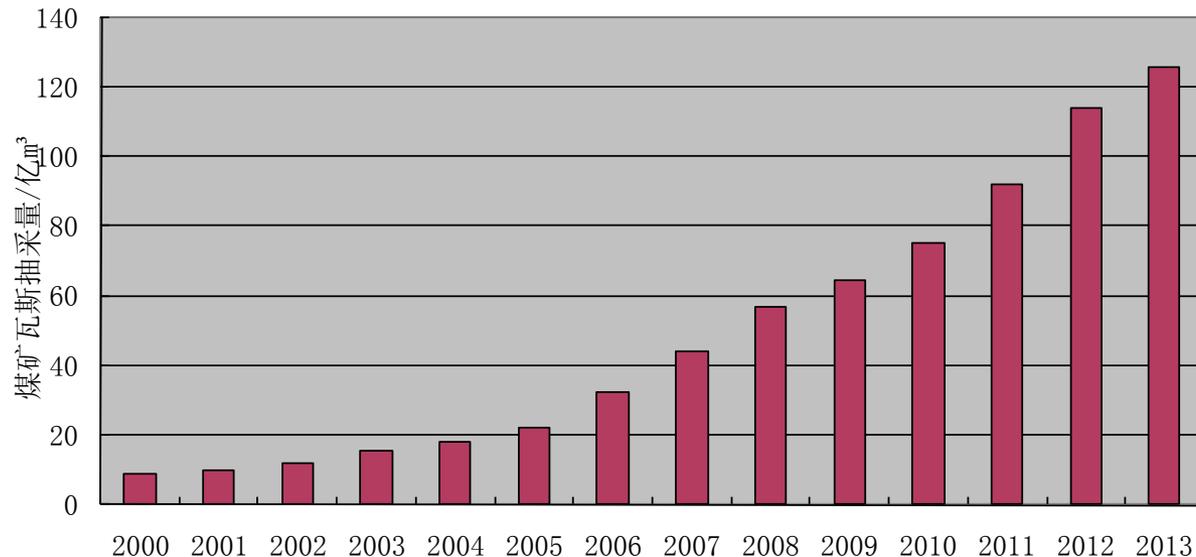


Output and Consumption of Coal from 2000 to 2013 in China

CMM Drainage in China

- CMM drainage

- CMM drainage increased from 2.2 billion in 2005 to 12.6 billion m³ in 2013.

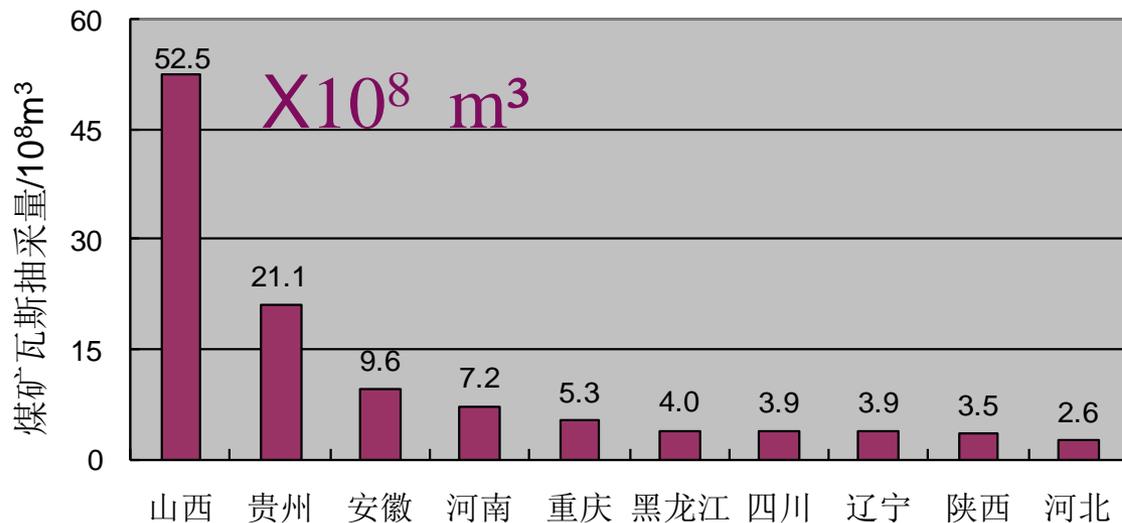


CMM production from 2005-2013 in China

CMM Drainage in China

■ Key Areas of CMM drainage

- The top 10 provinces with CMM drainage are Shanxi, Guizhou, Anhui, Henan and others , see following figure
- Drainage volume of CMM in Shanxi Province is 5.25 billion m³, and accounts for 41.8% of total drainage volume in China.

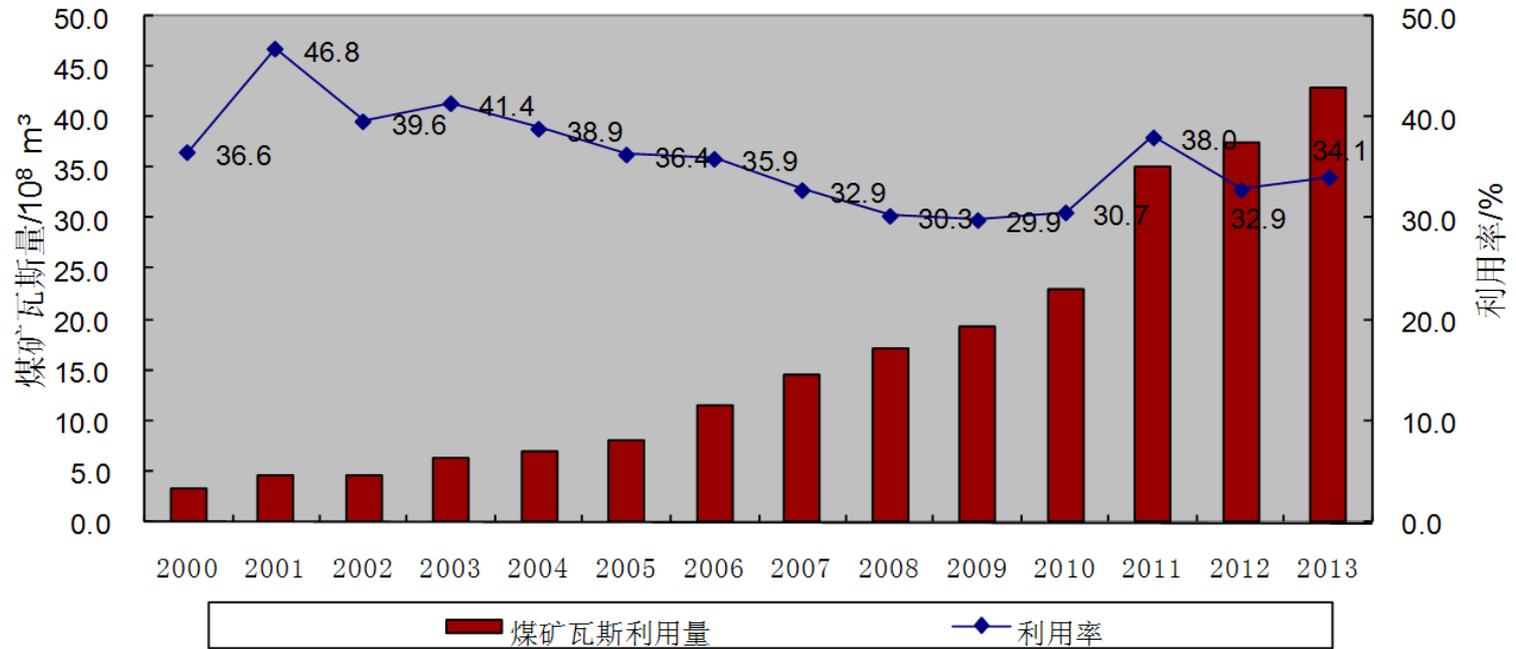


Top 10 Provinces with drainage volume of CMM in 2013

CMM Utilization in China

■ CMM utilization

- The volume of CMM utilization are 4.25 billion m³ in 2013, and utilization rate is 34.1%. About 8.33 billion m³ of gas are available for more gas utilization projects.

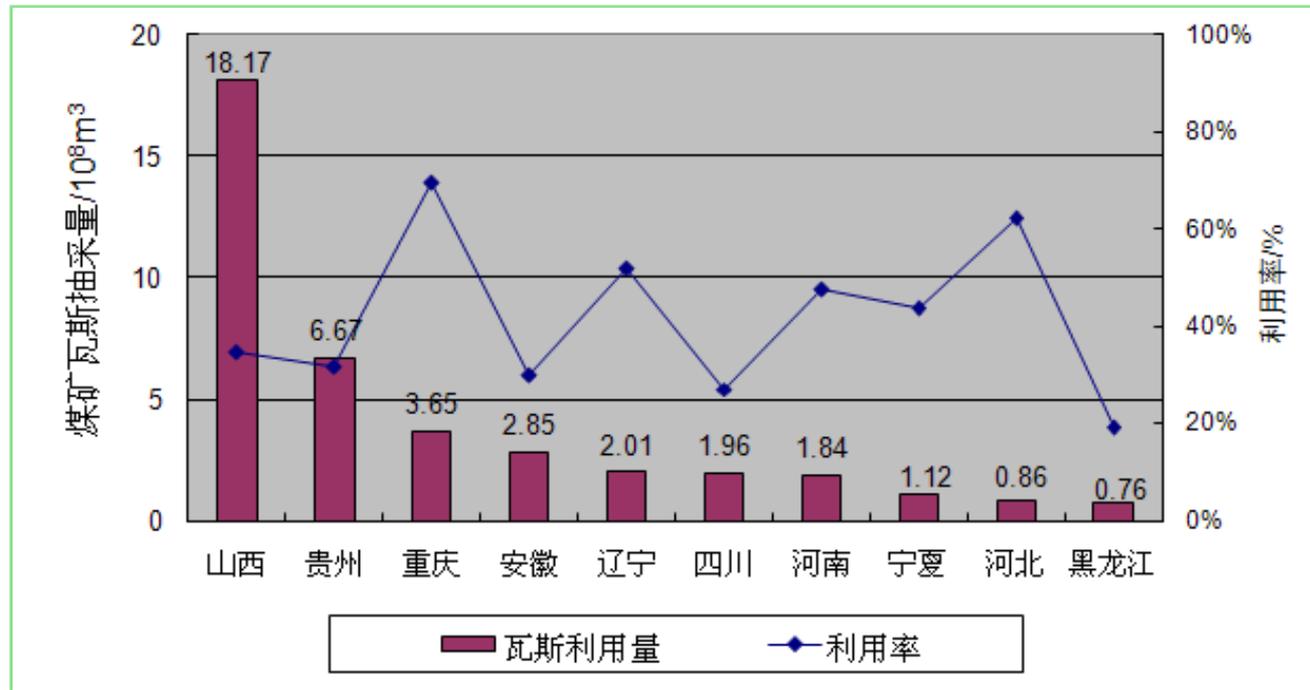


CMM utilization from 2000 to 2013 (10⁸ m³)

CMM Utilization in China

■ Key Areas of CMM Utilization

- Utilization volume of CMM is 1.82 Bm³ in Shanxi Province in 2013, and accounts for 42.8% of total utilization volume in China.



Top 10 Provinces with utilization volume of CMM in 2013

Emission from Unutilized CMM in China

- Emission from Unutilized CMM
 - The emission volume of unutilized CMM in China is about 8.33 billion m³ in 2013.



China Coal Sector Update

- Regulatory Update
 - Guideline on Further Accelerating the CBM/CMM Exploitation and Utilization issued by General Office of the State Council in China in Sep. 22, 2013.
 - Increase Government Oriental Support
 - Increase Indirect Financial Incentives
 - Encourage Private Capital Invest CBM
 - Market Pricing Mechanism
 - Encourage CBM/CMM to Power



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
 - Recovery and Utilization of Abandoned Coal Mines
- Infrastructure development
 - CBM/CMM Transportation by Pipeline
 - 5 CBM/CMM pipelines have been built, and transportation capacity is 10.2 B m³.
 - 3 CBM/CMM pipelines are under construction, and transportation capacity is 3.4 B m³.



Contact Information and Announcements

2014 14th International Symposium on CBM/CMM and Shale Gas in China

Landmark Hotel, Beijing, P.R. China

December 16-17, 2014

