

# Progress of China Coalbed Methane

## Achievement:

2010

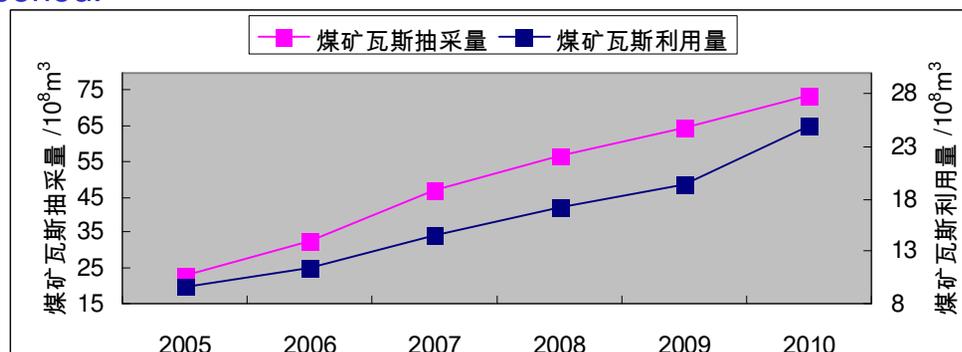
CMM drainage volume 7.35 billion m<sup>3</sup>, and utilization volume 2.5 billion m<sup>3</sup>

CBM drainage volume 1.45 billion m<sup>3</sup>, and utilization volume 1.1 billion m<sup>3</sup>

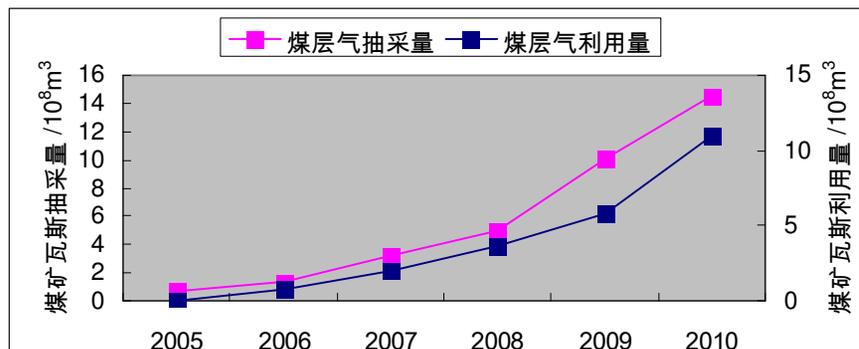
More than 1 million families are using CBM/CMM as household fuel.

The installed capacity of CMM power plants exceeded 1000MW.

From 2006-2010, the newly increased CBM proved reserve reached 220.894 billion m<sup>3</sup>, increased by 192.79% compared with the proved reserve 75.445 billion m<sup>3</sup> in the Tenth Five-years Plan period.



CMM Drainage Volume



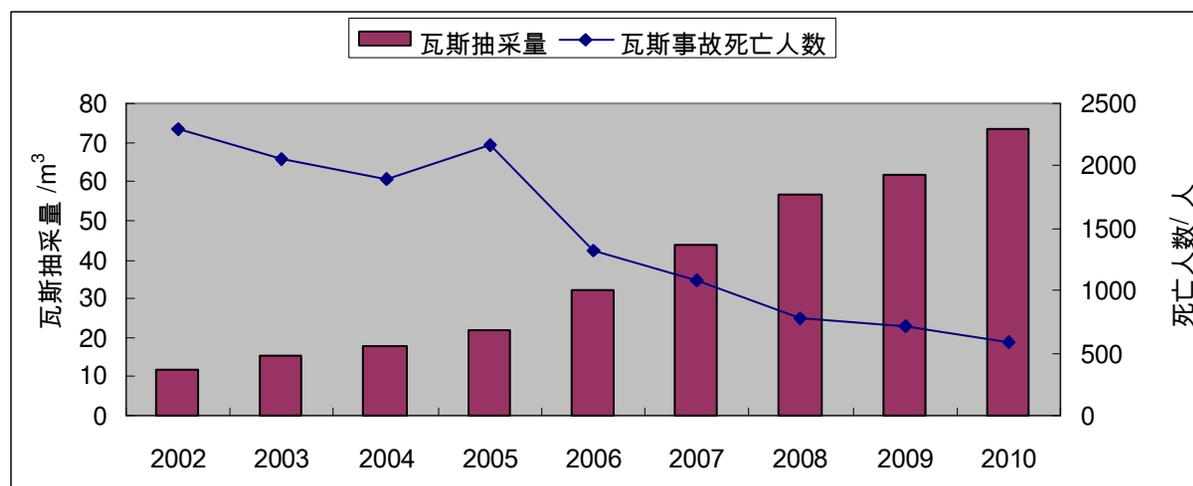
CBM Drainage Volume

2011-6-29

# Progress of China Coalbed Methane

## ◆ Coalbed Methane and Safety:

During the period of Eleventh Five-years Plan, Chinese government invested 15 billion RMB for coal mine safety technology, focusing on coal mine methane prevention and control, and generated 99.3 billion RMB of local investment. The number of gas accidents and death tolls decreased every year. In 2010, the number of gas accidents is 135, and caused 593 of deaths, drop by 67.39% and 72.69% compared with 414 accidents and 2171 deaths in 2005. The average decrease rate reached 25.12% and 29.63% annually. The fatality rate per million tons of coal mined dropped from 2.81 in 2005 to 0.75 in 2010.



Comparison of CMM drainage volume and death toll caused by gas accidents

# Progress of China Coalbed Methane

## ◆ New Development :

- 1、CBM transportation pipelines from Jincheng to Changzhi was successfully built and went through test running

On May 12<sup>th</sup> 2011, CBM transportation pipelines from Jincheng to Changzhi was successfully built and went through test running. The length of the pipelines is 92.236KM. The designed annual gas delivery capacity reaches 385 million m<sup>3</sup>, is expected to be 1 billion m<sup>3</sup> in the future.

- 2、Exclusive right for foreign cooperation

Four ministries and commissions, including NDRC and Ministry of Commerce, jointly issued an notice on Dec. 3<sup>rd</sup> 2010 that CNPC, SINOPEC and Henan Provincial Coal Seam Development and Utilization Co., Ltd. were authorized to have the exclusive right for CBM foreign cooperation. There are all together 4 companies which hold this right, including CUCBM.

- 3、China National Offshore Oil Corp. becomes the shareholder of CUCBM

China National Offshore Oil Corp. begin to get involved in CBM industry by acquiring 50% stake of CUCBM with a price of 1.203 billion RMB.



# Progress of China Coalbed Methane

## ◆ New Policies:

### 1. Compressed Coalbed Methane as Vehicle Fuel, June 1<sup>st</sup> 2011

Guidelines for CBM/CMM Utilization

Compressed Coalbed Methane as Vehicle Fuel

CBM/CMM for Household Use

### 2. Twelfth Five-years Plan for Coalbed Methane Development and Utilization

The total drainage volume reaches 22 billion m<sup>3</sup>, among of which 10 billion m<sup>3</sup> from surface wells, and 12 billion m<sup>3</sup> from CMM drainage.