

**Methane to Markets Partnership  
Coal Subcommittee Meeting  
22-23 May 2006**

**Country Report Update  
JAPAN**

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# 1. Coal Industry in Japan

- Coal: 19 % of Japan's primary energy supply.
- Japan is the largest importer of:
  - Steam coal for power generation, paper plants, and cement production, and
  - Coking coal for its steel industry.
- Japan accounts for about 22 % of total world coal imports mainly from:
  - For steam coal: Australia, South Africa, US and China
  - For coking coal: Australia, Canada, US and Russia
- Japanese coal production in FY2005 was
  - 0.74 Mt from underground coal mines, and
  - 0.51 Mt from surface mines.

## Table 1: Coal Mine Data- Japan

Mine	Operator	PJ Type	CBM/CM M/VAM/A MM	Status	Output	Notes
Akabira Coal Mine	(Closed)		.	Closed (Feb. '94)		
	(Until Mar. '05) Sumitomo	Power Generation	AMM	Closed (Mar. '05)	(Until Mar. '05) 0.15 MW Electric	Power Generation – microturbine (5X30kW) Closed Now
Kushiro Coal Mine (Taiheiyo Coal Mine until 2001)	Kushiro Coal Mine			0.74 M ton Coal /yr		
	(Until 2000) NKK Corp, Sumitomo, Taiheiyo	DME Production For Industrial Feedstock	CMM	Closed (2000)	(1997 Mar. 2000) 5ton DME /day	Closed Now

# Potential Stakeholders in Japanese CMM Development

(Category: Other)

- JBIC : Finance provider
- NEDO: Carbon Credit Purchaser
- METI : Policy Maker
- JCOAL: Technical Cooperation

## Status of Coal and Coal-Mining Industry

Japan's coal industry declined steadily since the 1950s. This decline is the result of difficult mining conditions in Japanese coal mines, and increasing reliance on imported oil and liquefied natural gas (LNG), and the importation of cheaper Australian and Indonesian coal. As of 2006, Japan had only one major active underground coal mine Kushiro, in addition to several surface mines.

## 2. Overview of CMM Emissions, Projects and Potential

- CMM Emissions from Operating Mines (UNFCCC, 2005a)

Underground mining activities:	4.05M m <sup>3</sup>
Post-underground emissions:	1.79 M m <sup>3</sup>
Surface mine emissions:	21.43 M m <sup>3</sup>
Post-surface mining emissions:	0.06 M m <sup>3</sup>
Total-liberated:	27.32 M m <sup>3</sup>
- CMM Emissions from Abandoned Coal Mines: N.A.
- CBM from Virgin Coal Seams: N.A.

### 3. Opportunities and Challenges to Greater CMM Recovery and Use

- Japan's commitment under the Kyoto Protocol: - 6% (vs. the 1990 level)
- Good technical resources to develop CMM, including:
  - High efficiency CMM recovery systems and power generation systems,
  - Well-developed town-gas systems for subsidence area in coal mining region, &
  - Technologies for DME production from CMM.
- Ownership: Coal Mine Owners have ownership rights over CMM
- Legal systems: No specific legal systems for CMM  
(Existing legal systems): Mining Law, Mine Safety Law, electricity Utilities Industry Law, Gas Utility Industry Law, Basic Environmental Law, Air Pollution Control Law...
- Potential Support: JBIC/ Support for Environmental Conservation and Improvement projects, ODA loans

## Table 2: Ownership Regulation in Japan

<i>Country</i>	<i>Methane Owned By?</i>	<i>Methane Use Rights Conveyed By?</i>	<i>Methane Use Requirements?</i>
<b>Japan</b>	Mine owner	Mining Law, Mine Safety Law	License fee Taxes

## 4. Japan's Policy for CMM Promotion through CDM

- To maintain and strengthen a domestic CMM network
  - *Current Japanese Project Network Members (25):* NEDO, JCOAL, Univ. of Tokyo, Hokkaido Univ., Sojitsu, JGC, MHI, IHI, KHI, Toyo Engineering, Mitsui Mining, Mitsubishi Materials, CoalinQ, DIA Consultants, Suncoh Consultants, JBIC
- To support M2M through NEDO's travel support fund project
  - *Support 5 people for the 1st Regional WS in Beijing (2 Dec 2005)*
  - *Support 5 people for this Coal Subcommittee meeting*
- To support the Asian Pacific Partnership for Clean Development and Climate (AP6): Coal Sector