



The International Coal Mine Methane Recovery and Utilization Project Database

Coal Subcommittee Meeting
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Presented by:

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The International Coal Mine Methane Recovery and Utilization Project Database



- ~ Database Framework is Under Development ~
- ★ Clearinghouse of information about existing Coal Mine Methane (CMM) Recovery and Utilization Project projects around the world
- ★ Developed by U.S. EPA's Coalbed Methane Outreach Program (CMOP) at the request of the Methane to Markets Partnership's Coal Technical Subcommittee
- ★ For each CMM project, the Database will contain information on general and technical features, project partners, coal mine physical characteristics, methane drainage, and contact information.



Key Features



- **★** Transparent
- ★ Control of data entry authorized users only
- ★ Public access to centralized data
- ★ Projects can be sorted by:
 - Country
 - Region
 - Mine Name
 - Project Type
 - Mine Status



Home Page





The international database of coal mine methane (CMM) recovery and utilization projects contains general and technical information on over 200 current and planned CMM projects around the world. It was developed by U.S. EPA's Coal Technical Methane Outreach Program (CMOP) at the request of the Methane Coal Technical Subcommittee. Collecting methane gas from underground coal mines and using it in profitable and practical ways can improve worker safety, enhance mine productivity, increase revenues, and reduce greenhouse gas emissions. Data was compiled using publicly available resources and in consultation with international industry experts.



Flags designate countries for which CMM data has been included in this database. For a list of all partner countries visit the Methane to Markets web site.

The Methane to Markets Partnership is a voluntary, non-binding framework for international cooperation to advance the recovery and use of methane as a valuable clean energy source from four sectors, including coal mining.

This database is the product of an ongoing data collection effort, so please contact <u>Barbora Jemelkova</u> if you would like to submit updated or new information related to a CMM project.

Disclaimer:

U.S. EPA does not:

- Make any warranty or representation, expressed or implied, with respect to the accuracy, completeness, or usefulness of the information contained in this database; or
- Assume any liability with respect to the use of, or damages resulting from the use of, any information disclosed in this database.



List of Projects





The Coalbed Methane Projects Database contains the following projects. Click on a Mine Name to view details about the project. To request adding a project to the database please contact <u>Barbora Jemelkova</u> (+202.343.9899).

Country O	Region	Mine Name	Project Type ?	Mine Status
Austrailia	New South Wales	Appin & Tower Collieries	Power Generation	Active
China	Shanxi	Shie Mine	Power Generation	Active
Germany	North Rhine-Westphalia	<u>Westfalen 6</u>	Power Generation	Active
Japan	Hokkaido	Akabira Coal Mine	Power Generation	Abandoned
Mexico	Coahuila	Esmeralda Mine	Boiler Fuel	Active
United Kingdom	South Yorkshire	Rossington Colliery	Flaring	Active
USA	Pennsylvania	Oak Grove	Town Gas	Active



Project Information Page





Appin & Tower Collieries

General Information
Technical Information
Project Partners
Coal Mine Physical Characteristics
Methane Drainage
Contact Information

General Information

Full Mine Name: Appin & Tower Collieries

Project Type: Power Generation

Project ID Number: C00001

Methane to Markets Project ID C1234

Number:

Country: Australia

Region/State/Province/Coal Basin: New South Wales

Type of Mine Ownership: (Unknown)

Status of Mine: Operating

Project Status: Proposed



Project Information Page (cont.)



Project Information Source(s): http://www.p2pays.org/ref/04/03317.htm

http://www.deh.gov.au/settlements/industry/corporate/eecp/case-

studies/bhp.html

http://www.epa.gov/coalbed/pdf/019red.pdf#search=%22Appin%

20%26%20Tower%20Collieries%22

http://www.epa.gov/coalbed/pdf/ic_engine.pdf#search=%22Appin%

20%26%20Tower%20Collieries%22

http://www.australiancoal.com.au/environmentmethane.htm http://www.worldcoal.org/assets_cm/files/PDF/appin.pdf

Technical Information

First Year of Project Operation: 1996

(existing or anticipated)

Estimated Project Lifetime: (X)

(years)

Quantity of Gas Sold (billion cubic (Y)

meters):

(applicable for injection or town gas projects)

Capacity (megawatts): 94

(applicable for heat or power generation projects)

Annual Greenhouse Gas Emissions (Z)

Avoided:

(metric tonnes of C equivalent)

Amount of Carbon Credits (XYZXYZ)

Generated/Sold (if applicable):

(metric tonnes of C equivalent)

Equipment Used: 16-cylinder Caterpillar G3516 bulldozer engine connected to a

CatSR4 brushless generator

Additional Project Information: (Lorem ipsum dolor sit amet, consectetuer adipiscing elit,

sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl

ut aliquip ex ea commodo conseguat)



Project Information Page (cont.)



Project Partners

Mine Owner: BHP Billiton & Energy Ltd (Operator)

Parent Company Name: (XYZ Incorporated)

Project Developer: BHP Collieries Division (Operator), in conjunction with Energy

Developments Limited and Land Lease Infrastructure

Equipment / Technology Vendor(s): Caterpillar

End-User(s): Households in nearby town (name?, # of households?)

Funding Source(s): (Unknown)

Other Parties Involved: (Unknown)

Coal Mine Physical Characteristics

Coal Production of Mine:	Year	Metric Tonnes
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Not Specified	3,500,000
(XYZX)	(X,YZX,YZX)

Type of Coal: (Unknown)

Depth of Coal Seam: (Unknown)

(meters)

Mining Method: Longwall

Methane Drainage

Number of Drainage Wells at Mine: (XYZ)

Number of Ventilation Shafts at Mine: (XYZ)



Project Information Page (cont.)



Type of Drainage System: (Unknown)

Total Volume of Methane Drained:

 Year
 Billion Cubic Meters

 (Not Specified)
 (XY)

 (XYZX)
 (YX)

Total Volume of Methane Ventilated:

 Year
 Billion Cubic Meters

 (Not Specified)
 (XY)

 (XYZX)
 (YX)

Methane Concentration in Drained Gas:

 Year
 Average % Total Volume

 Not Specified
 50 - 85

 (XYZX)
 (YX)

Methane Concentration in Ventilation

 Year
 Average % Total Volume

 Not Specified
 0.5 - 1.0

 (XYZX)
 (Y)

Total Volume of Methane Used:

Year	Billion Cubic Meters	
(XYZX)	(YX)	
(XYZX)	(YX)	

Contact Information

Contact Name: Wal Hammonds

Contact Title: Operations Manager, Appin Tower Power Plant

Email Address: wal.hammonds@edl.com.au

Telephone Number: +(61) (246) 311-259



Next Steps



- ★ When the database framework is complete, population of data will begin
 - We already have information on ~ 300 projects
- ★ Database will be available for public view by the end of 2006 on the M2M website
- ★ Once the database is public, users will be able to submit updated information for listed projects or new information on unlisted projects.
 - Using a PDF or Microsoft Word form with all fields
- ★ Future enhancements are possible