

United Nations Economic Commission for Europe



Ad Hoc Group of Experts on Coal Mine Methane

**Update on Best Practices
Guidelines for Effective Methane
Drainage and Use in Coal Mines**

BEST PRACTICE GUIDANCE FOR EFFECTIVE METHANE DRAINAGE AND USE IN COAL MINES

Coal mines are not only a safety management challenge but also a major source of greenhouse gas emissions. By 2020, a total of 793Mt carbon dioxide equivalent of gas could be emitted from coal mines (ESMAP 2007), over 95% of which will come from underground mines. If international aspirations on climate change mitigation are to be achieved, these emissions must be reduced.

Methane released during coal mining creates unsafe working conditions in underground coal mines around the world. Although methane is not a problem in every mine, methane-related accidents are notable for their frequency and horrific devastation in loss of life and property. Many factors increase the risks of methane explosions, including difficult geologic conditions, underinvestment in mine operations, poor operational practices, ineffective or even counter-productive regulatory standards, and poor enforcement of safety regulations. The concern over loss of life and the negative publicity surrounding mine accidents have provided a strong incentive for cooperation on mine safety among international organizations and the mining industry in emerging economies and developed countries alike.

This "Best Practices Guidance" is intended to provide a genuine contribution to improve mine safety practices at active underground coal mines, by supporting safer mining practices to reduce fatalities, injuries, and property losses, while encouraging the use of coal mine methane (CMM) to reduce greenhouse gas emissions and utilize otherwise-wasted energy resources. This guidance should facilitate the coal industry's effectiveness in achieving the following:

- (a) Striving towards a goal of zero fatalities, injuries, and property losses.
- (b) Demonstrating the global coal industry's commitment to mine safety, climate change mitigation, corporate social responsibility, and good citizenship.
- (c) Establishing an intra-industry dialogue and network among the coal mining industries in the developed and emerging economies.
- (d) Creating the necessary linkage between the industry and the government / regulatory officials.
- (e) Linking effective CMM capture and management as part of an effective risk management portfolio.

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UNECE THE ECE ENERGY SERIES BEST PRACTICE GUIDANCE FOR EFFECTIVE METHANE DRAINAGE AND USE IN COAL MINES No. 31 UNITED NATIONS

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METHANE TO MARKETS PARTNERSHIP

BEST PRACTICE GUIDANCE FOR EFFECTIVE METHANE DRAINAGE AND USE IN COAL MINES

No. 31



UNITED NATIONS



Methane to Markets

The *Best Practice Guidance* Publication

- Written by the members of UNECE *Ad Hoc* Group of Experts on CMM
- Funded by US EPA and GMI
- Launched in March 2010 in New Delhi
- Printed in June 2010
- Available in English, Russian, French and Chinese
- Available online as a pdf at ECE-SED website:
http://live.unece.org/fileadmin/DAM/energy/se/pdfs/cmm/pub/BestPractGuide_MethDrain_es31.pdf

BPG Primary Aims

- Improve mine safety practices at active underground coal mines, and thus save lives
- Encourage the use of coal mine methane to reduce greenhouse gas emissions
- Utilize otherwise-wasted energy resources

BPG Workshops

- To disseminate BPG publication, UNECE organized workshops in countries that experienced severe accidents in the recent past
- China, 20 October 2010
- Kazakhstan, 25 May 2011
- Ukraine, 22 September 2011

***BPG* as a Global Standard**

- In July 2011 ECOSOC endorsed *BPG* publication
- Official ECOSOC resolution/decision is expected soon
- *BPG* will be recommended as a “global standard” for CMM management and coal mine safety

Some Plans for the Future

- Organize more stand-alone, targeted workshops in ECE countries (e.g., Ukraine, Turkey, Russia)
- Disseminate *BPG* globally, as a follow-up to ECOSOC endorsement (e.g., in China, South Africa, South America)
- Seek adoption and endorsement of *BPG* by professional mining institutions
- Initiate a series of supporting technical documents such as, e.g., “Best practice drilling for capture of gas in coal mines”

Thank you

**For more information on UNECE activities in
coal mine methane please visit:**

<http://www.unece.org/energy/se/cmm.html>

or email: branko.milicevic@unece.org