Best Practices Workshop

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Global Methane Forum    30 March 2016
“Best Practice Guidance for Effective Methane Drainage and Use in Coal Mines” — A Living Document

• Lead Organisations:
  o Global Methane Initiative, formerly Methane to Markets Partnership
  o UN Economic Commission for Europe Secretariat
  o UN Economic Commission for Europe Group of Experts on Coal Mine Methane
  o US Environmental Protection Agency

• First published in 2010 and being updated for publication in mid-2016. Additional case studies will be added to the GoE webpage.
“Best Practice Guidance for Effective Methane Drainage and Use in Coal Mines” — A Living Document

• Technical input and editorial oversight from an international team of experts and stakeholders
• Provides background and basis for ongoing work and technical workshops that will be held in various countries over the next 2 years
• Will be the guiding document for the International Center of Excellence on Coal Mine Methane opening in 2016 at the Central Mining Institute in Katowice Poland

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Objectives of the Best Practice Guidance

• Complement bilateral and multilateral initiatives to support improved mine safety
• Develop a guidance that is principle based that can be adapted to varying mining conditions
• Provide for industry a standard set of recommended principles and standards for methane recovery and utilisation
• Intended audience: mine operators, regulators, government officials and technical professionals
Today’s Presentations— Examples of Best Practices and Principles

• Presentations from three experts with diverse backgrounds and perspectives
• All three will talk about opportunities that are presented to mine operators at various stages in the life cycle of coal mining
• Each has a persuasive argument for considering and implementing innovative approaches to capturing methane that will otherwise be a lost or under-utilized resource
Coal-Associated Gas Resources and the Coal Mining Life Cycle

Coal Mining Life Cycle

- Mine Planning
  - Undeveloped Coal Reserves
  - Gas Resources Evaluated and Production Plan Adopted
  - Exploration

- Active Mining
  - Developed Coal Reserves
  - Gas Produced and Sold During Mining
  - Pre-mine and Gob Drainage

- Mine Closed
  - Depleted Coal Reserves
  - Enhanced CH₄ Recovery and CO₂ Sequestration
  - Post-mining Gas Production

Gas Production Life Cycle

Pilcher, 2013
Why Implement Best Practices?

The Virtuous Cycle or the Vicious Spiral?

- Increased revenues and higher profitability
- Improved safety and higher productivity
- Increased methane management and monitoring
- Investment in improved drainage and use of CH₄
- Lower ventilation CAPEX & OPEX

- Inadequate investment in drainage and use of CH₄
- Higher ventilation CAPEX & OPEX
- Unpredictable and uncontrolled accumulation of methane
- Lower profitability
- Increased danger and lower productivity

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