



Best Practices Workshop

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“Best Practice Guidance for Effective Methane Drainage and Use in Coal Mines” —

A Living Document

- Lead Organisations:
 - Global Methane Initiative, formerly Methane to Markets Partnership
 - UN Economic Commission for Europe Secretariat
 - UN Economic Commission for Europe Group of Experts on Coal Mine Methane
 - 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 continued

- 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

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

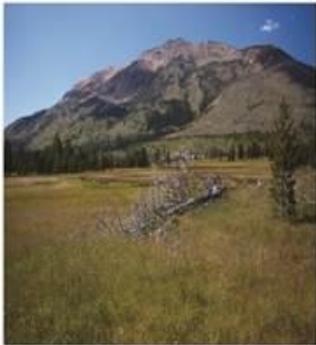
- Presentations from three experts with diverse backgrounds and perspectives
- All three will talk about opportunities that are presented to mine operators at various stages in the life cycle of coal mining
- Each has a persuasive argument for considering and implementing innovative approaches to capturing 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

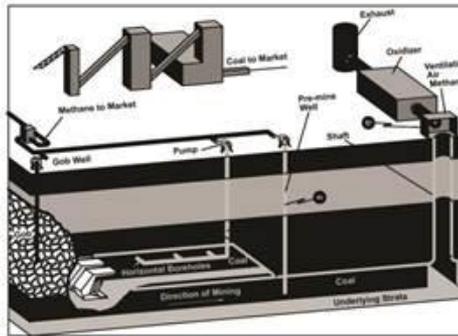


Gas Resources Evaluated and Production Plan Adopted

Exploration

Active Mining

Developed Coal Reserves

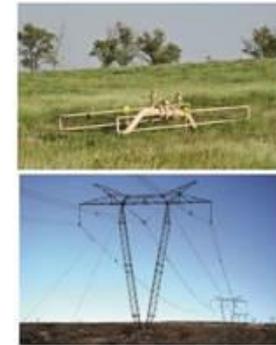


Gas Produced and Sold During Mining

Pre-mine and Gob Drainage

Mine Closed

Depleted Coal Reserves



Enhanced CH₄ Recovery and CO₂ Sequestration

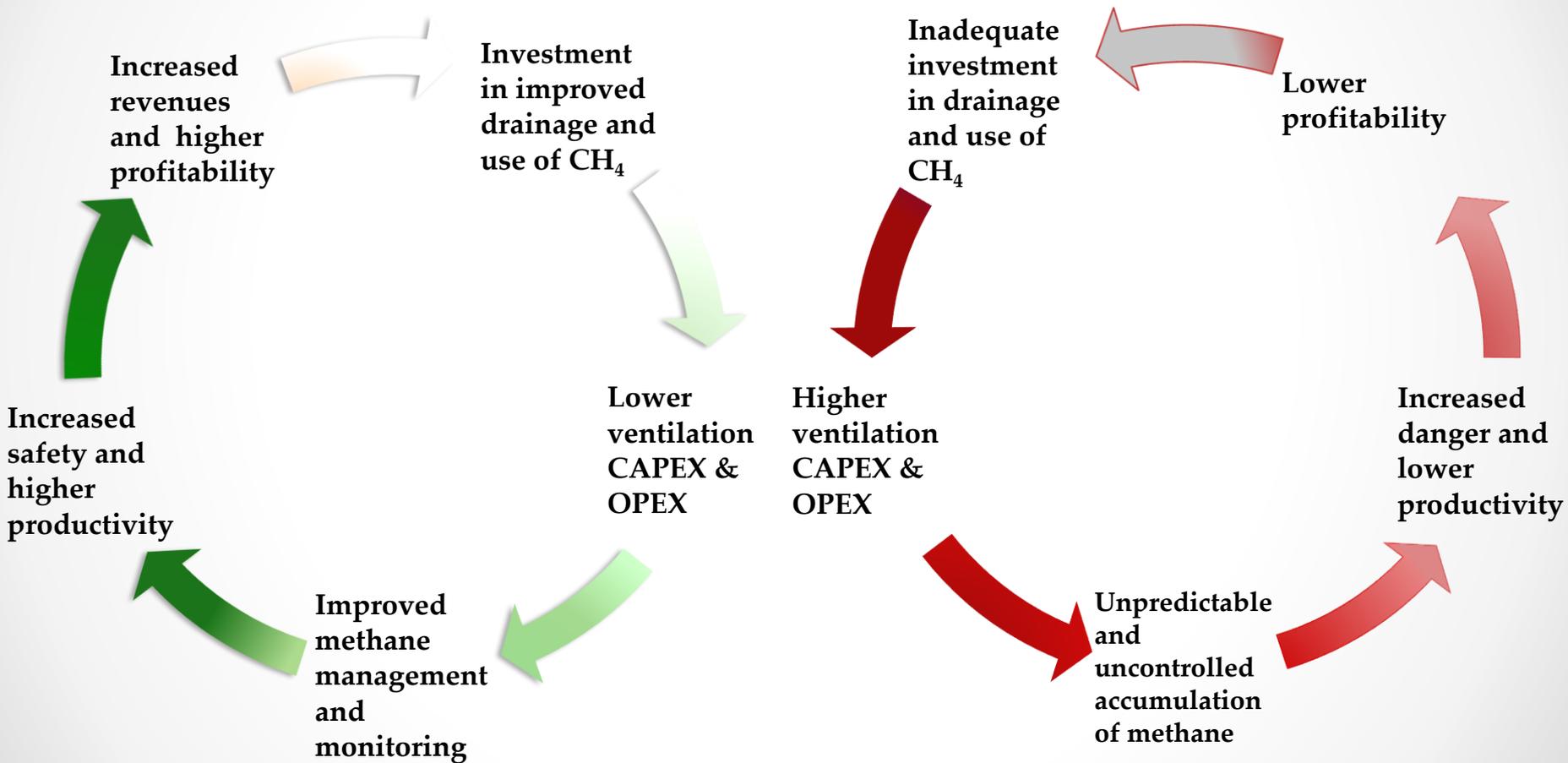
Post-mining Gas Production

Gas Production Life Cycle

Pilcher, 2013

Why Implement Best Practices?

The Virtuous Cycle or the Vicious Spiral?



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