

United States Coal Sector Update to the 18th Session of the Global Methane Initiative (GMI) Coal Subcommittee

19-20 November 2013

U.S. Environmental Protection Agency



United States Coal Sector Update

- Coal sector trends
 - Coal production increased from 984 MMt in 2010 to 993 MMt in 2011, decreased to 922 MMt in 2012
 - CMM emissions decreased from 78 MMtCO₂e in 2010 to 68 MMtCO₂e in 2011 (including abandoned and surface mines)
 - Greenhouse Gas Reporting Rule Data
 - 2012: 151 active underground mines, 28 million metric tons CO₂e
 - 2011: 159 active underground mines, 30 million metric tons CO₂e
- New trends in the energy sector
 - Increase in natural gas consumption, price is starting to rebound slowly
 - Coal consumption relatively steady with modest price decreases
- Regulatory Update
 - N/A
- Implementation of national plans/directives
 - N/A
- New project: Elk Creek CMM Power Generation Project, Colorado



CMM Project Outlook

- Challenges to emission reduction projects in United States:
 - Ownership, leasing authorities on federal lands remain unclear
 - A lack of infrastructure (e.g., pipelines) in certain regions of the country (i.e. particularly in the west) to move CMM from mines to natural gas markets.
 - Low power prices (electricity) in some parts of the country (e.g., the west) that make CMM power generation projects unattractive from an economic perspective.
 - A weak domestic voluntary offsets market due to extremely low carbon prices.



CMM Project Outlook (2)

- Approaches to overcoming challenges
 - Voluntary GHG registries and carbon markets
 - State alternative energy and renewable energy programs
 - State capital investment, loans, and tax benefits and credits
 - US EPA GHG Reporting Rule
 - Support for technology demonstration projects
 - Development of technical documents, tools and resources

- Update
 - New project opportunities presented by potential California Air Resources Board inclusion of CMM as compliance offset (Mine Methane Capture protocol)



United States Coal Sector Methane Action Plan

- Updated, available online at <https://www.globalmethane.org/coal-mines/index.aspx>
- Priorities:
 - Reduce GHG emissions
 - Promote use of clean energy source
 - Achieve profitable recovery of CMM
- Activities to Promote Methane Mitigation and Abatement
 - Between 1994 and 2010, U.S. CMM emissions reductions have effectively removed the equivalent of more than 357 million metric tons of carbon dioxide from the atmosphere
 - U.S. identifies, evaluates and promotes CMM recovery and use opportunities; provides support for technology demonstration projects; and develops technical documents, tools and resources
 - International activities under the auspices of GMI
 - CMM/CBM Clearinghouses; pre-feasibility and feasibility studies
 - UNECE Best Practice Guidance for Effective Methane Drainage and Use in Coal Mines, technical seminars
 - Technical resources / tools
 - Policy white papers



Contact Information and Announcements

USEPA Coalbed Methane Outreach Program

www.epa.gov/cmop

Felicia Ruiz

ruiz.felicia@epa.gov

+1 202 343 9129

Jayne Somers

somers.jayne@epa.gov

+1 202 343 9896

- Announcements: US CMM Conference 2014

