

# The Global Methane Initiative and Coal Mine Methane Mitigation

Felicia Ruiz, U.S. Environmental Protection  
Agency

---

Opening of the Center of Excellence on Coal Mine  
Methane in Katowice

8 June 2017



# Why Methane?

---

- Over 60% of total CH<sub>4</sub> emissions come from human activities
- Coal production 4th (8%) among sources of anthropogenic methane emissions
- Methane is a potent, well-mixed greenhouse gas in the atmosphere, so reducing methane emissions anywhere has equal impact on climate.
- Reducing methane has very important benefits:
  - Environmental Quality and Public Health
  - Energy Supply and Reliability
  - Economic
  - Industrial Safety

# U.S. EPA's Coalbed Methane Outreach Program

## ■ Our Mission

- Work with the private sector to cost-effectively reduce CMM emissions through recovery and use projects



## ■ Our Focus

- Greenhouse gas emission reduction opportunities: **coal mine methane (CMM)** rather than coalbed methane (CBM)

## ■ Our Activities

- Identify profitable opportunities for CMM recovery
- Identify and help overcome market, regulatory, technical barriers
- Offer technical and analytic support where appropriate
- Conduct direct outreach to coal mines

## ■ Our Accomplishments

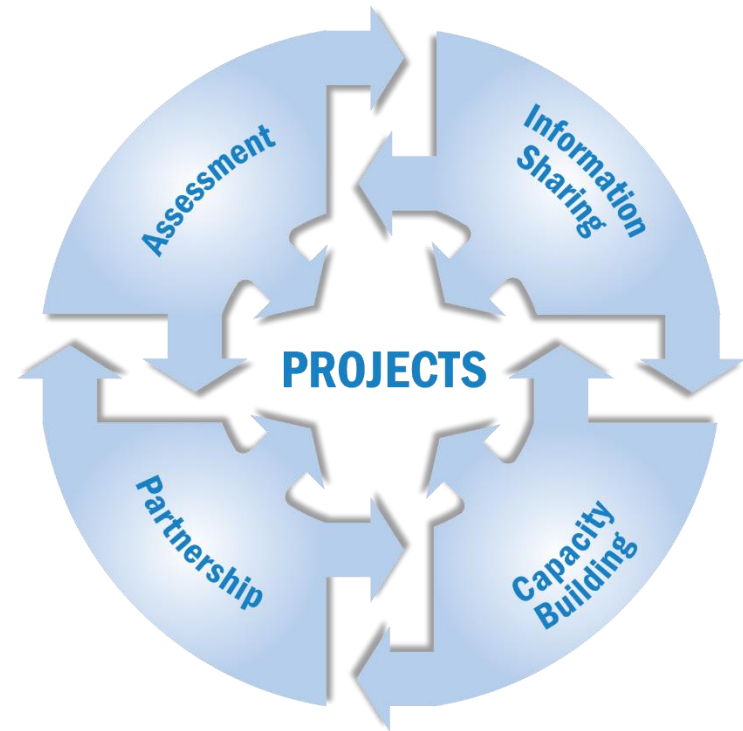
- The US CMM industry is robust. Over 84% of methane from US coal mine degasification systems is recovered and used today, compared to ~25% in 1993.



# Global Methane Initiative

**GMI is a voluntary, multilateral partnership that aims to reduce methane emissions and to advance the abatement, recovery and use of methane as a clean energy source.**

- Established in 2004 (Poland joined in 2007)
- Now 42 partner countries + EC
- Targets 5 sector-specific areas for methane reduction
  - Agriculture
  - **Coal Mines**
  - Municipal Solid Waste
  - Municipal Wastewater
  - Oil & Gas Systems





# Strategies for Success

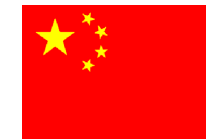
- Promote international cooperation on methane reduction
- Provide reliable methane emission data
- Support capacity building in partner countries
- Assist in the removal of barriers for methane project development
- Identify cost-effective opportunities for methane projects
- GMI activities support data collection and feasibility studies, etc. to build a “pipeline of projects” and other capacity building efforts – not direct project investment



# United States Coal Sector Methane Action Plan

---

- **Reduce GHG emissions, promote use of clean energy source, achieve profitable recovery of CMM**
- **Activities to Promote Methane Mitigation / Abatement**
  - Identify, evaluate and promote CMM recovery and use opportunities; provide support for potential projects
- **International activities under auspices of GMI**
  - Partnering with and supporting the work of the UNECE Group of Experts on CMM to promote best practices
    - *Best Practice Guidance for Effective Methane Drainage and Use in Coal Mines* (BPG)
    - Dissemination of the BPG through technical workshops
  - Creating and fostering CMM/CBM Clearinghouses
  - Conducting pre-feasibility and feasibility studies
  - Technical and financial resources; tools; policy white papers



# Coal Subcommittee

- **Coal mine methane sector activities focus on recovering methane that is released from coal seams as a result of mining activities**
  
- **Work of the Subcommittee and GMI Project Network includes:**
  - ⑩ Comprehensive profiles that characterize the coal and coal mine methane sectors of 37 countries (29 Partners)
  - ⑩ Identification of 200+ operational CMM/VAM projects worldwide
  - ⑩ Country-specific action plans for ten Partners
  - ⑩ 100+ project opportunities and success stories showcased at methane forums in China, India, Canada and Washington, D.C.
  - ⑩ Workshops, meetings and technical trainings in 12+ countries
  - ⑩ Technical resources and tools

**Coal Subcommittee Statement of Purpose and Action Plan:**  
**<http://www.globalmethane.org/sectors/index.aspx?sector=coal>**



# Get Involved!

---

- **Attend GMI Coal Subcommittee Meetings**
  - October 23-25, 2017 in Geneva, Switzerland
  - Hosted by UNECE in conjunction with meeting of the Group of Experts on CMM
  
- **Join the GMI Project Network**
  - Brings necessary actors from the private sector, NGOs, and multilateral investment organizations (World Bank, ADB, etc.) together to implement reduction projects.
  - Members can business, identify financial and technical support for potential projects

# Contact Information

---

## **Felicia A. Ruiz**

Coalbed Methane Outreach Program (CMOP), U.S. EPA  
Co-Chair, Global Methane Initiative (GMI) Coal  
Subcommittee

+ 1 (202) 343-9129, [ruiz.felicia@epa.gov](mailto:ruiz.felicia@epa.gov)

## **Monica Shimamura**

Director, Administrative Support Group  
Global Methane Initiative (GMI)

+1 (202) 343-9337, [Shimamura.monica@epa.gov](mailto:Shimamura.monica@epa.gov)

[www.globalmethane.org](http://www.globalmethane.org)

[www.epa.gov/cmop](http://www.epa.gov/cmop)