



# Developments in Ukraine and “Best Practices” for Regulatory Policies

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# Overview

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- Progress in Ukraine and policy update: CMM and Green Tariff Laws, project update
- Drawing from international experience: key issues
- Conclusions

# Progress in Ukraine and policy update

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- Growing government interest at high level
- Green Tariff Law (adopted April 2009, new revisions for methane soon)
- Law on Coalbed Methane (adopted Spring 2009)
- Inter-agency Working Group on Mine Degasification and CMM Collection and Use (Feb. 2009)



# Policy update: Green Tariff Law

- Provides a guaranteed feed-in tariff for renewable energy, including CMM, for 20 years, although need to update due to technical error with Law
- Rate of about 15 eurocents, indexed to Euro (several times more than average wholesale rate)
- The National Electricity Regulatory Commission (NERC) has issued regulations allowing companies to apply for licenses under the Green Tariff Law.
  - Dozens of companies have applied (mostly wind and mini hydro projects)
  - Two developers have applied for projects relevant to methane (Zasyadko Mine and a dairy)



# Policy update: Coal Mine Methane Law

- A first step to clarify legally what CMM is and how to promote it
  - Government should issue CMM leases with coal mining leases to mine operator
  - Allows coal mines to sell their rights to the CMM, but does not require them to do so
- Requires mines to limit CMM emissions according to norms, fines for non-compliance— very controversial provision



# JI projects in Ukraine: overview

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- 9 JI projects approved by Ukraine (e.g., Projects at Zasyadko and Komsomolets Donbassa )
- Most would install CHP or new heat boilers
- All submitted for approval in 2006 or later

# Some challenges facing CMM in Ukraine

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- Rights to the methane not easily transferred and there is ambiguity behind ownership of CMM
- Most coal enterprises not profitable, only a few have seen significant private investment
- Most CMM low-grade, less than 30% methane

# Analysis of international best practice

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- Assessment of global best practices to promote coal mine methane policy (January 2009)
- There is no univocal answer to what is the “best” policy.
  - The most appropriate policy depends on the socio-economic, political and other conditions in different countries.
- However, similarities drawn from the successful policies and institutional choices of different countries can be very useful.



# Drawing from international experience

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- Potential uses of methane are important:
  - Power/heat or feed into natural gas pipeline
- Important to consider legal framework
  - For ownership of the methane
  - For sale of power, heat or gas
  - More supportive the overall legal framework, fewer incentives for coalmine methane needed
- Two general policy areas: information support and incentives



# Policy implementation comparison

	Feed-in Tariff	Mandatory Requirements	Tax Incentives	Liberal Energy Markets
Australia		+		+
China			+	
Germany	+			
India			+	+
UK			+	+
USA				+

- Also considered: other economic incentives, education and information dissemination, etc.

Source: Gagurin, E., M. Rapsun, D. Lozin and M. Evans, "Analysis of International Best Practices for Coal Mine Methane Recovery and Utilization" January 2009



# Case of Germany: solution to CMM ownership

- Germany takes leading place in the world in utilized CMM as a percent of its total mine-related methane emissions
- Legal framework adopted at the federal level states.
  - Federal Mining Authority responsible for the administration of activity related to CMM exploration, extraction and processing
  - CMM ownership rights transferred to coal mining company for the duration of a coal mining license
  - License can be refused or withdrawn by the Federal Mining Authority



# Economic and financial incentives

- Various economic and financial incentives have been developed to foster CMM utilization projects.
  - Feed-in tariffs (France, Germany, Ukraine)
  - Obligations and grants (Australia)
  - Tax incentives (UK)



# Education and information dissemination

- CMM clearinghouses, information centers and technology transfer programs:
  - China (China Coalbed Methane Clearinghouse - 1994)
  - Russia [Russian International Coal and Methane Research Center (Ugletmetan) - 2002]
  - India (India CMM Clearinghouse - 2008)
- International cooperation programs:
  - Methane to Markets partnership
  - United Nations (UN) Economic Commission for Europe
  - International Energy Agency
  - Bilateral (eg. U.S. EPA with several countries)

# Conclusions

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- Ukraine has a huge potential for greater use of CMM and reduced emissions
- Growing number of projects under development, growing interest in government
- New laws and regulations should help, particularly if they are implemented effectively
- Learning from international best practices can help Ukraine address major challenges (clarifying ownership of CMM and finance)

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