Methane to Markets

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Poland in the Methane to Markets Partnership

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REPUBLIC OF POLAND | MINISTRY OF ECONOMY

Annual methane's emission from coal mines [mln m^3]

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	2005	2008
CH_4 total amount	829	879
CH_4 through ventilation systems	578	610
CH_4 through degasification systems, which covers:	251	269
- CH_4 release to atmosphere	106	103
- CH_4 utilised	145	166

Coal mines

33 coal mines in oparation, among them:

- 29 methane coal mines
- 21 equipped with degasification systems of methane
- 14 utilise methane

Methane emission in JSW S.A. [Mm^3]

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	2007	2008	2009	2010	2012
Total amount	**220,9**	**274,9**	**266,6**	**255,5**	**237,9**
From ventilation systems	**196,3**	**234,2**	**229,1**	**225,4**	**237,9**
Release to atmosphere (excluding from ventilation systems)	**24,6**	**40,7**	**37,5**	**30,1**	**0**
Utilised	**99,2**	**95,2**	**95,7**	**110,1**	**150,1**

Methane's utilization in coal mines [part I]

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1. Energy production for coal mines:
   - Heat
   - Power
   - Cogeneration - heat and power
2. Utilisation outside coal mines

Methane's utilisation in coal mines [part II]

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LNG - Liquefied Natural Gas

As a result of project entitled „*Abandoned mine feasibility study and coal mine methane to liquefied natural gas assessment (Zory Coal Mine)*" coal mines produce LNG.

Methane from Ventilation Systems

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Project of pilot installation to generate electricity by using coal mine methane from ventilation systems as its primary fuel

Support mechanism

- New support mechanism relating to electricity production in cogeneration based on methane (red certificate)

- Comes into force on 8 March 2010

Amendment to Energy Low from 8 January 2010
Dz. U. 21/2010 poz. 104

Landfill [part I]

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As a result of project:

„Study of the capabilities of landfill gas as a potential energy source” (project completed).

- Increase methane utilisation from landfills

Landfill [part II]

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As a result of project:

„Best Technologies of Landfill Gas Utilization - Handbook, Training, and Capacity Building" (project ongoing):

- Technical assistance with economic evaluation
- Training (for example guidebook, study tours, workshops)
- Spread M2M initiative

Oil and gas systems

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1. Methane emission from gas and oil system 7 mln m^3

2. Focus on:
   - emission sources
   - upgrading technologies and equipment

3. Expected:
   - reduction of 20%
   - period: 6 – 8 years

Agriculture [part I]

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1. Poland as a big producer of agricultural goods has huge potential in utilisation of methane

2. It could be generate from:
   - wastes (manure and other organic wastes)
   - animals (digestion)

Agriculture [part II]

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The interest in agricultural biogas is rapidly growing.

In 2009 there were working 5 agricultural biogas plants, and some small ones at individual farms.

Support the development of agricultural biogas instalation

„Biogas plants in every community”

2500 biogas plants for 2020

Challenges for Poland

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- Utilisation of the entire coal mine methane (CMM) obtained from the degasification process
- Providing commercial conditions for utilisation – methane from ventilation systems
- Rapid development gas utilisation
- Utilise waste (manure and other organics waste) to the maximum

For more information

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Thank you for your attention !!!

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