

Poland in the Methane to Markets Partnership

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Poland is interested in active participation in the Partnership in the following areas:

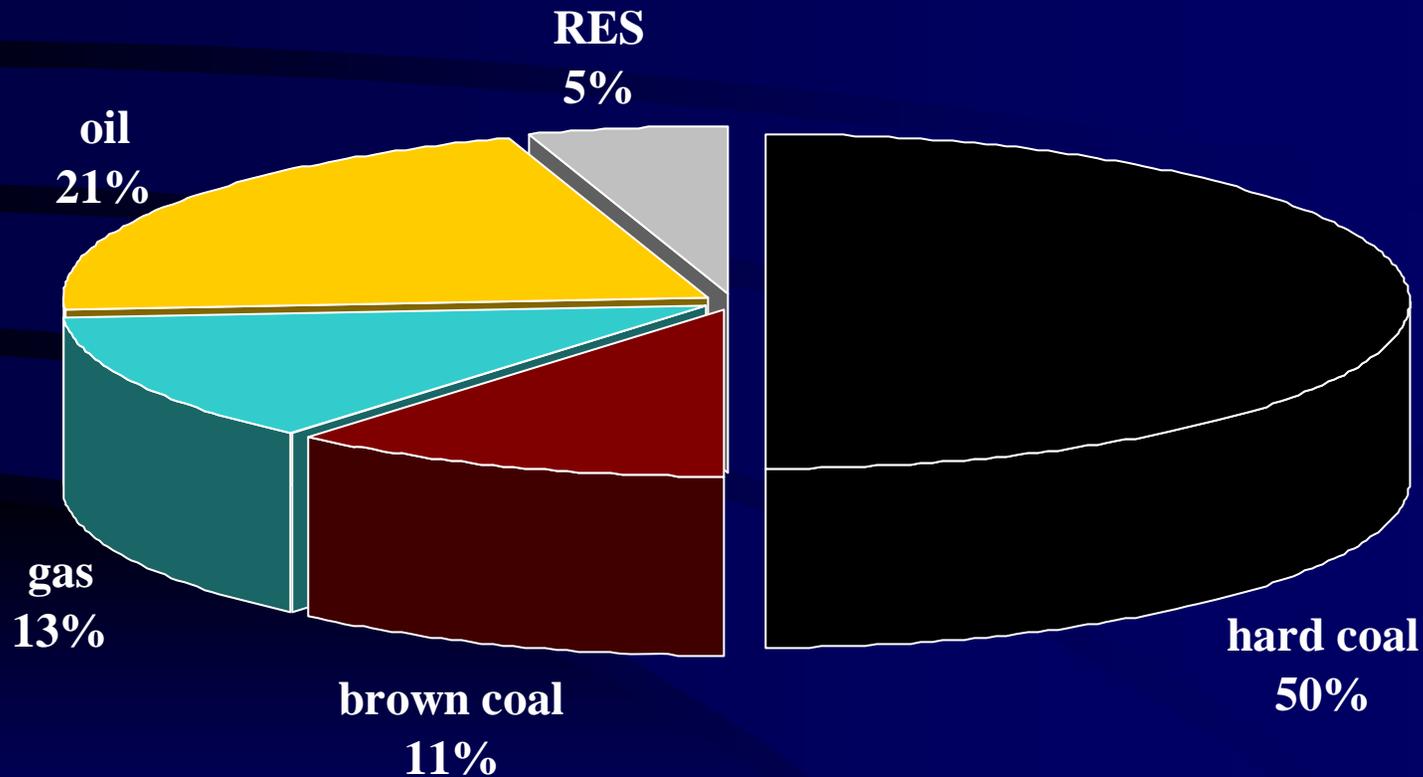
- Coal Mines
- Oil and Gas Systems
- Landfills
- Agriculture

Responsibilities covering issues of capturing and reusing of methane are divided between:

- Ministry of Economy (coal mines, oil and gas systems)
- Ministry of Environment (landfills)
- Ministry of Agriculture and Rural Development (agriculture)

Energy mix in Poland

Consumption of Primary Energy



Coal mines

33 coal mines in operation, among them:

- 29 methane coal mines
- 21 have degasification installations of methane
- 14 utilize methane

Coal mines (2)

Methane from coal mines is used in small scale units for:

- CHP
- electricity generation
- heat generation

Annual methane's capturing from coal mines

Total amount of 829 mln m³ methane is released, this includes:

- 578 mln m³ methane through ventilation systems
- 251 mln m³ methane through degasification systems, which cover:
 - 106 mln m³ methane is released to atmosphere
 - 145 mln m³ methane is utilized

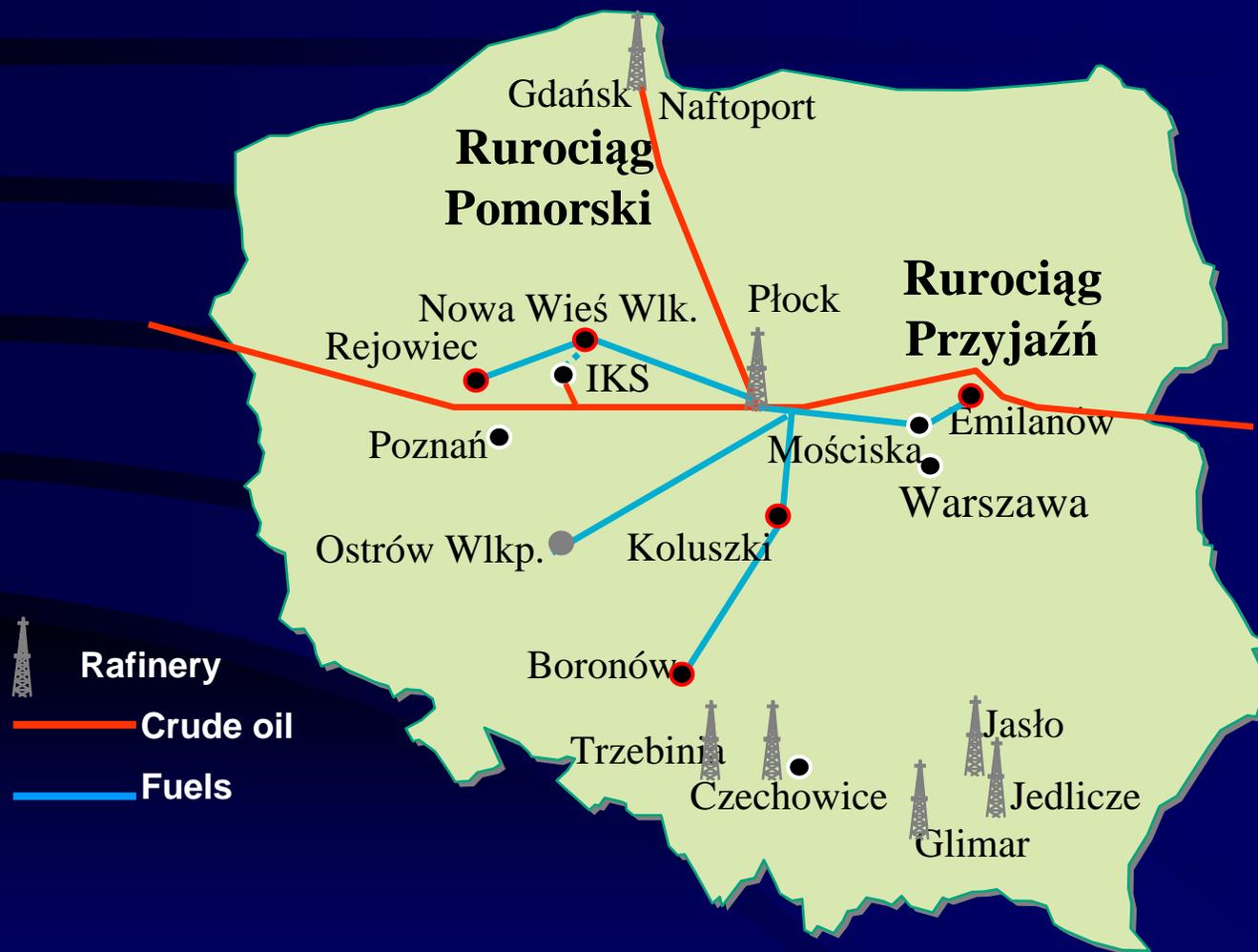
Oil and Gas Systems

Methane from oil and natural gas systems can be cost-effectively reduced by upgrading technologies or equipment, and by improving management practices and operations

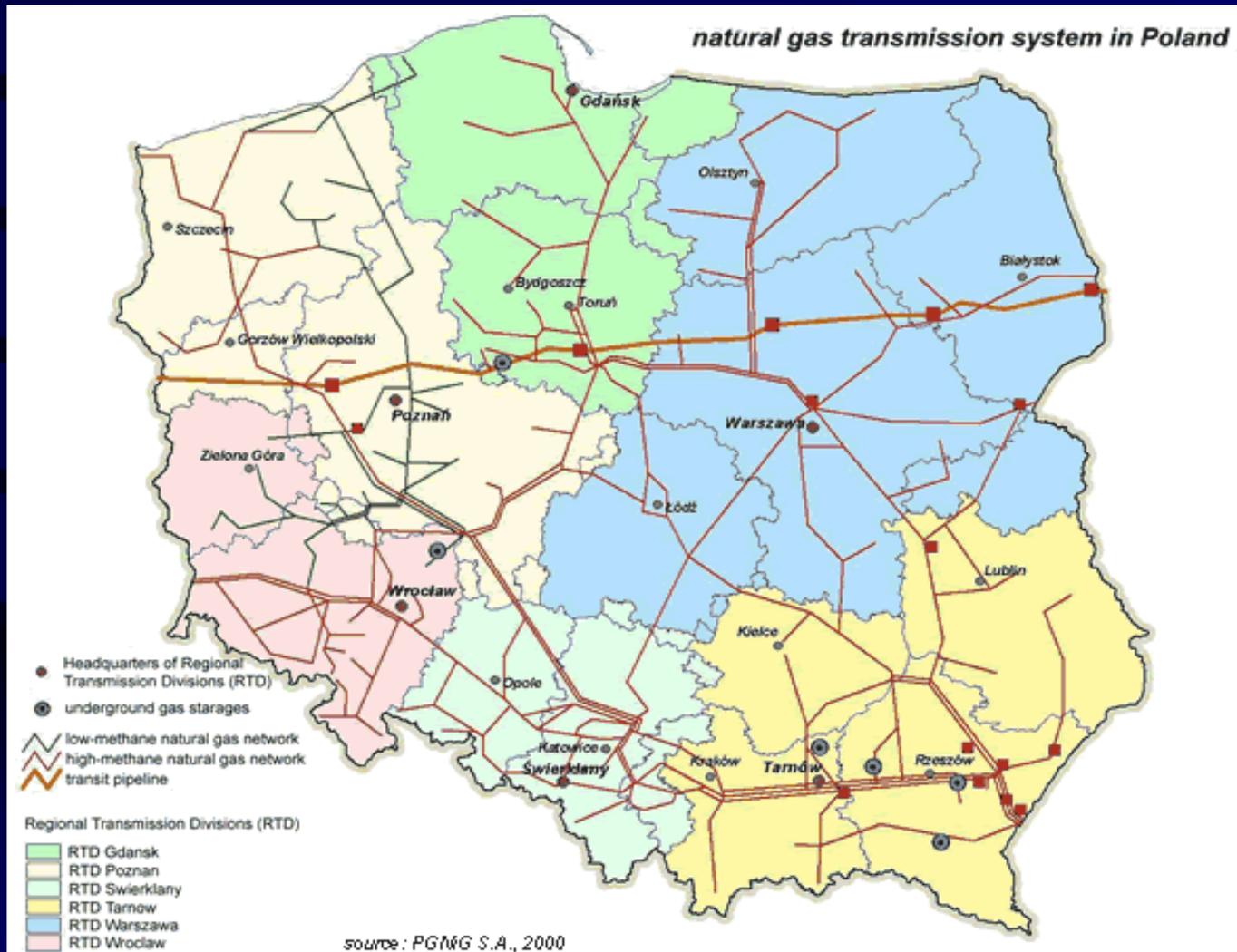
Poland consumed in 2005:

- 21,3 mln tons of crude oil
- 14,4 bln m³ of natural gas

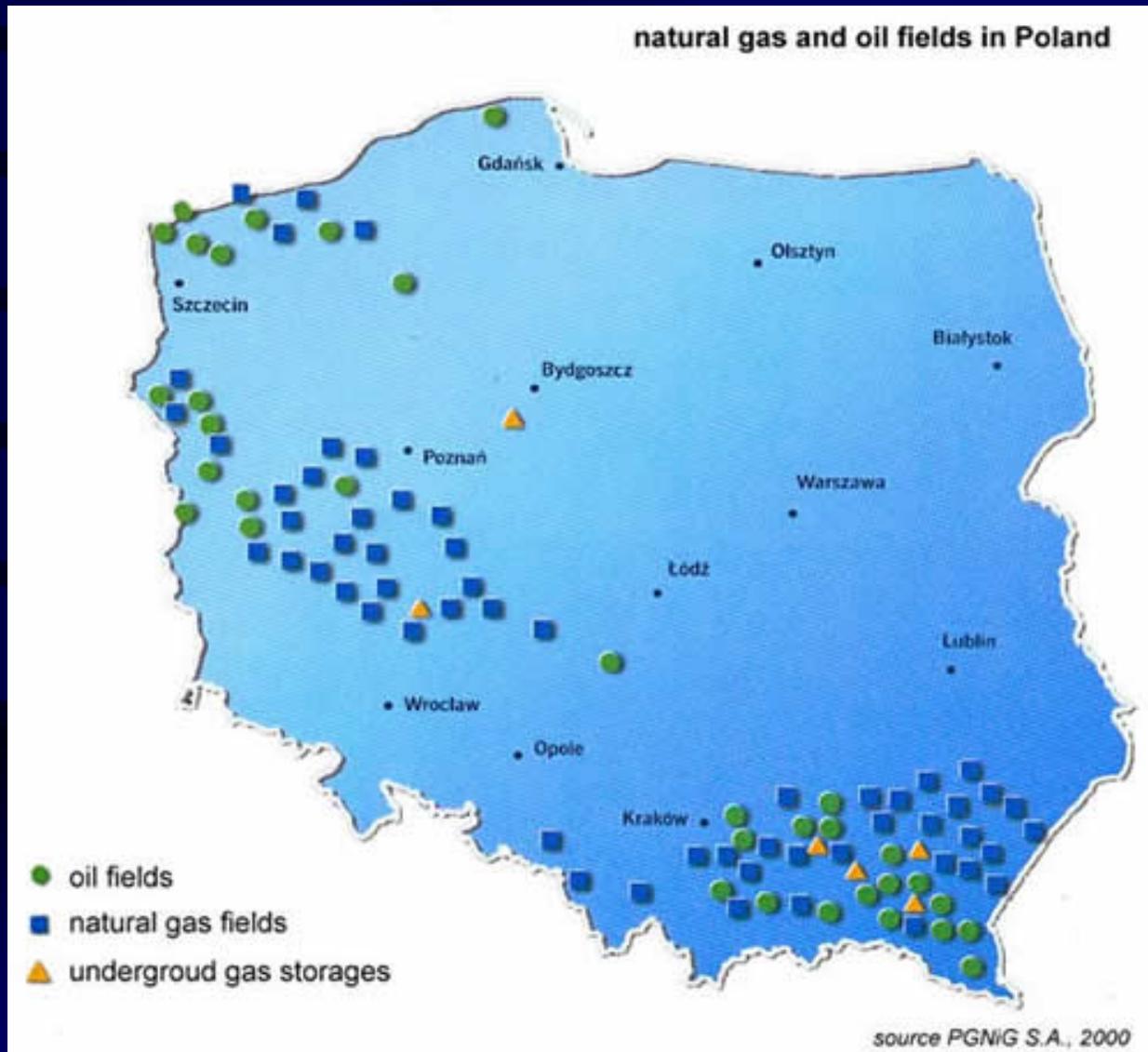
Crude oil infrastructure



Natural gas transmission system



Existing natural gas and oil fields



Landfills

There are app. 1049 landfills among them:

207 with degasification systems:

- 168 release methane to atmosphere
- 41 make methane harmless
 - 27 electricity generation
 - 5 heat generation
 - 9 firing in burners

Agriculture

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

It could be generated from:

- wastes (manure and other organic wastes)
- animals

It is a great challenge for recovery of methane.

Electricity generation from biogas

Electricity generation [GWh]	2002	2003	2004	2005
Total	48	56	83	109
Landfill gas	48	45	64	73
Agricultural biogas	-	9	1	1
Biogas from municipal sewage plants	-	2	18	35

Installed capacity

Installed capacity [MW]	2002	2003	2004	2005
Total	15,0	18,0	25,6	34,5
Landfill gas	15,0	15,0	17,8	23,7
Agricultural biogas	-	1,0	2,0	2,0
Biogas from municipal sewage plants	-	2,0	5,8	8,8

Support scheme for using methane

For methane from coal mines:

- new support for CHP units through „red certificates” mechanism
- excise tax exemption for electricity generation

Support scheme for using methane (2)

For methane from agriculture and landfills as renewables:

- „green certificates” mechanism
- excise tax exemption for electricity generation

Additional financial support

- Support from the National Fund for Environmental Protection and Water Management and provincial, district and local funds
- ECOFUND supporting environmental projects
- EU Funds

Thank you for your attention

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