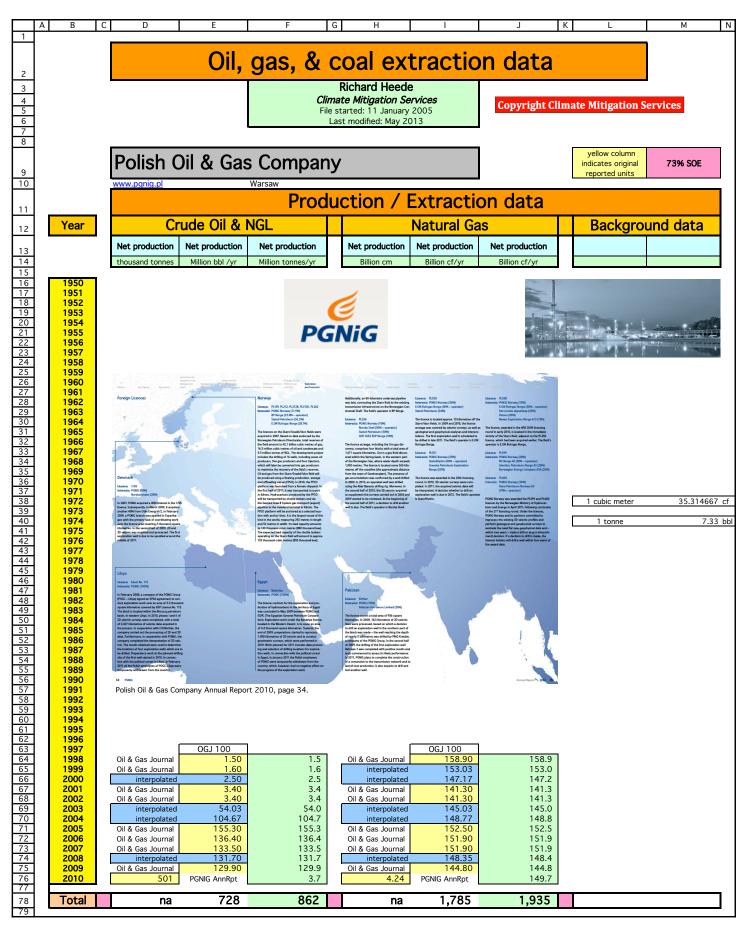
Polish Oil&Gas



### Cell: 19

#### Comment: Rick Heede:

The PGNiG Group is the leader of the Polish natural gas market, with approximately 32 thousand employees. Apart from Poland, where the -PGNiG Group is one of the largest employers, we operate in various countries on many continents, including: Belgium, Denmark, Egypt, Norway, Pakistan, Russia, Kazakhstan, Uganda, the Czech Republic, Austria, Germany, Belarus, Ukraine and Hungary.

PGNiG SA is the largest Polish oil and gas exploration and production company. It is a leader in natural gas segments in Poland that are trade, distribution, oil and gas exploration and production as well as gas storage and processing.

PGNIG webite: www.pgnig.plreports/annualreport2011/en/pgnig-in-numbers.html

The Polish Oil & Gas Company holds interests in Norway, Denmark, Libya, Egypt, and Pakistan.

Annual report 2010, page 19.

Wikipedia states that PGNIG was established in 1976.

# Cell: M9

# Comment: Rick Heede:

PGNiG, whose stock was floated on September 23rd 2005, is one of the largest Polish companies listed on the Warsaw market. In July 2010 the Company's free float increased from 15% to 27%.

PGNIG Annual report 2010, page 20.

### Cell: D11

### Comment: Rick Heede:

On this worksheet we report extractive data for each company or state-owned enterprise. Three columns under crude oil and natural gas allow for data reported in one of three formats (e.g., thousand barrels per day, or million barrels per year, or million tonnes per year). Coal is normally reported in U.S. or metric tonnes per year. Note: the carbon content of the extracted resources is adjusted by a number of factors before emissions estimates are made in the worksheet 1 to the left. Most important is the

subtraction of the fraction typically sequestered in petrochemicals and other non-combusted uses such as road oils, waxes, lubricants, greases, etc. See the comment for each extracted resource for detailed discussions of the combusted vs sequestered fractions.

# Cell: D12

Comment: Rick Heede:

Total net worldwide crude oil plus natural gas liquids produced by each company or state-owned enterprise. Where data is available, we list net production. Crude production includes natural gas liquids (NGL) unless noted.

# Cell: H12

# Comment: Rick Heede:

Natural gas is typically reported as dry gas; natural gas liquids are reported under crude oil.

Carbon dioxide is normally removed from the gas flow at the production site (see "Vented Carbon Dioxide").

"SCM/d" = standard cubic meters per day. "cf/d" = cubic feet per day.

Net production typically excludes a number of diverted gas streams. Quantities and fractions vary; ExxonMobil's exclusions are probably typical of the industry: "Net production available for sale quantities are the volumes withdrawn from ... natural gas reserves, excluding royalties and volumes due to others when produced, and excluding gas purchased from others, gas consumed in producing operations, field processing plant losses, volumes used for gas lift, gas injections and cycling operations, quantities flared, and volume shrinkage due to the removal of condensate or natural gas liquids production."

ExxonMobil Corporation (2004) 2003 Financial and Operating Review, www.exxonmobil.com, p. 55.

#### Cell: E63

# Comment: Rick Heede:

Oil & Gas Journal data for 1998 - 2009, except interpolated years. PGNIG Annual Report for 2010 (no data series, 2010 data only). Inasmuch as the PGNIG datum for 2010 is a fraction of the oil production reported in Oil & Gas Journal, the OGJ must be viewed as potentially erroneous and may be revised if company can provide accurate production data for 1976-2009.

# Cell: 163

#### Comment: Rick Heede:

Oil & Gas Journal data for 1998 - 2009, except interpolated years. PGNIG Annual Report for 2010 (no data series, 2010 data only). The PGNIG datum for 2010 is in good agreement with the oil production reported in Oil & Gas Journal,