

STATISTICAL REPORT 2014

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Foreword by the secretary general

Welcome to the 2014 edition of the Eurogas *Statistical Report*. As in previous years each autumn kicks off with a survey to our members to collate the annual data for the natural gas industry from among the EU's 28 Member States, as well as Switzerland and Turkey. As a result of that work, this report provides an overview of industry trends.

Over the years, the *Statistical Report* has come to be a key source to inform, discuss and debate the state of play for gas in the energy mix.

The energy landscape is changing. Voter requirements for clean energy on the one hand and cheap energy on the other are forcing governments to rethink their policy. We are moving towards a more integrated approach that encompasses renewable sources, energy efficiency measures, as well as research, development and the demonstration of low-carbon energy technologies, while ensuring security of supply. It is against this backdrop that we bring you this new edition of the report.

Against an overall reduction of primary energy consumption (PEC) of 0.9% in 2013, only renewables (not including hydro) increased, albeit at the lower rate of 5.0% instead of the 10.8% in the previous year.

At 23.1% natural gas remains the second largest source of PEC after oil at 33.1%. Of course, the future prospects for gas could vary considerably. With a strengthened emissions trading system we could see gas playing a much greater role in the reduction of Europe's greenhouse gas emissions.

Furthermore, with the recent introduction of the Alternative Fuels Directive the use of gas in transport could well rise. While the use of natural gas increased slightly from 0.3% of natural gas sales in 2012 to 0.4% in 2013, the volumes delivered were up 18.4% on 2012.

Europe is becoming more efficient, of that there is little doubt. Data for PEC per capita in 2013, the measure of a country's energy efficiency, paints a varied picture across Member States with the lowest PEC/Capita recorded for Malta at 1.57 tonnes of oil equivalent (toe)/ capita to the highest for Luxembourg at 8.19 toe/capita. This may indicate potential energy efficiency savings in several countries. Eurogas has recently published a report on gas in heating which further demonstrates the significant energy savings possible. It is not surprising then that the PEC per capita in the EU decreased by 1.1%, compared with 2012. The EU is still doing better than Japan and the United States. This report also highlights the many and varied sources of natural gas on which countries rely, although some Member States still have a single source dependence. Indigenous production plus Norway, which is a member of the European Economic Area, accounted for 55% of natural gas supplies in the EU-28 in 2013.

The general decrease in gas consumption but also the strong competition for liquefied natural gas (LNG) in the global market led to a drop in LNG supplies of 29.1% in 2013, compared with 2012. This may change in the coming years as more LNG will become available from new projects, which includes the US. However, much will depend on how global demand will develop. Given the extent of Europe's regasification capacity it should stand the region in good stead should the market signals favour LNG.

Despite competition from coal and renewables in recent years, gas remains a sustainable rival to higher carbon fuels and a desirable partner alongside renewable energy sources, be it in power generation, heating or transport.

The gas sector is not resting on its laurels. Technology is constantly developing and becoming even more efficient, and a perfect match for renewables. Examples are power-to-gas technologies and heating systems using variable renewables, such as ambient heat and solar power, when they are available.

To conclude, I would like to thank the members of the Eurogas Statistics and Forecasting Committee for the substantial contribution they have made to this report. Additionally, data was provided by the natural gas company from Estonia (EestiGas), by the Energy Institute Hrvoje Pozar for Croatia, by Energigas Sverige for Sweden and by FEBEG for Belgium.

I hope that you will find this year's *Statistical Report* a useful source of information. Eurogas experts are at your disposal to answer any questions that you may have on this report.

Beate Raabe, Secretary General





In 2013, primary energy consumption (PEC) in the European Union (EU) decreased by 0.9% compared with 2012, to 1 675.8 million tonnes of oil equivalent (Mtoe) (see Figure 1). Consumption of natural gas decreased by 1.5%, oil by 2.2%, solid fossil fuels (i.e. coal and peat) decreased by 2.7%. Consumption of nuclear electricity decreased slightly by 0.3% between 2012 and 2013. The consumption of hydropower increased by 11.0%, other renewable energy sources by 5.0% and the category others, including heat, increased by 16.0%.

Contrary to the previous two years, while the share of gas has continued to decline, coal also dropped for the first time, largely due to the increased competition from renewables in electricity generation.

Oil remained the largest component of PEC with a 33.1% share, natural gas is second with 23.1%. The category "other renewables", including biomass, wind, solar and geothermal energy was up slightly on the previous year from 9.5% to 10.0% (see Figure 2).

Mtoe	Oil	Solid fossil fuels	Natural gas	Nuclear electricity	Hydro	Other renewables		Others	Total	% Change 2013/2012
AUSTRIA	12.3	3.3	7.0	0.0	3.6	6.5	0.6	0.7	34.1	0.4%
BELGIUM	22.0	2.6	14.2	11.1	0.0	5.4	0.8	0.1	56.1	0.3%
BULGARIA	4.1	5.9	2.3	3.2	0.9	0.6	0.0	0.0	17.0	-5.8%
CROATIA	3.1	0.7	2.3	0.0	0.7	0.6	0.4	0.0	7.7	-2.5%
CYPRUS	1.9	0.0	0.0	0.0	0.0	0.1	0.0	0.0	2.1	-6.8%
CZECH REPUBLIC	8.8	18.3	6.8	8.0	3.2	0.2	-1.5	0.0	44.0	0.3%
DENMARK	6.1	3.1	2.8	0.0	0.0	4.9	0.1	0.0	17.0	-6.4%
ESTONIA	0.4	4.4	0.5	0.0	0.0	0.8	-0.3	0.0	5.9	7.0%
FINLAND	7.4	5.0	2.6	5.9	1.1	8.7	1.4	1.1	33.2	1.8%
FRANCE	78.4	11.8	38.6	110.4	5.4	21.3	-4.2	0.0	261.8	0.7%
GERMANY	110.8	81.5	74.2	25.3	1.8	32.5	-2.9	6.5	329.7	2.6%
GREECE	10.7	7.0	3.2	0.0	0.6	2.2	0.2	0.0	23.8	-15.5%
HUNGARY	5.8	2.4	7.8	4.0	0.0	1.9	1.0	0.0	22.9	-2.5%
IRELAND	6.3	2.0	3.9	0.0	0.0	0.9	0.2	0.1	13.4	-0.7%
ITALY	59.0	14.6	57.4	0.0	4.5	26.2	3.6	0.0	165.4	-3.0%
LATVIA	1.4	0.1	1.2	0.0	0.3	1.3	0.1	0.1	4.5	0.0%
LITHUANIA	2.5	0.2	2.2	0.0	0.0	1.2	0.6	0.3	7.0	-5.5%
LUXEMBOURG	2.8	0.0	0.9	0.0	0.0	0.2	0.5	0.0	4.4	-1.3%
MALTA	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	-1.4%
NETHERLANDS	29.1	8.2	33.4	0.7	0.0	3.2	1.6	1.3	77.4	-0.9%
POLAND	22.7	53.3	13.7	0.0	0.2	8.6	-0.4	0.8	98.9	0.4%
PORTUGAL	9.4	2.7	3.7	0.0	1.3	4.0	0.2	0.3	21.6	0.8%
ROMANIA	9.0	5.6	10.3	2.6	3.4	1.1	0.0	0.0	32.0	-4.0%
SLOVAKIA	3.3	3.4	4.3	4.1	0.4	1.1	0.0	0.0	16.6	-0.3%
SLOVENIA	2.3	1.3	0.7	1.4	0.4	0.8	-0.1	0.0	6.8	-2.6%
SPAIN	52.9	10.5	26.1	14.8	3.2	14.0	-0.6	0.2	121.1	-6.0%
SWEDEN	12.0	2.2	1.0	17.2	5.3	11.1	-0.9	0.2	48.0	-6.8%
UNITED KINGDOM	69.1	38.3	65.9	15.4	3.0	8.8	1.2	1.1	202.8	-0.1%
EU-28	554.3	288.5	386.7	224.1	39.4	168.2	1.8	12.8	1 675.8	-0.9%
% Change 2013/2012	-2.2%	-2.7%	-1.5%	-0.3%	11.0%	5.0%	-47.3%	16.0%	-0.9%	
SWITZERLAND	12.0	0.1	3.1	6.5	3.4	1.6	-0.2	1.3	27.8	2.2%
TURKEY	31.6	32.8	37.6	0.0	5.1	8.4	0.5	0.0	116.0	-0.8%

FIGURE 1: PRIMARY ENERGY CONSUMPTION BY FUEL IN THE EU-28, SWITZERLAND AND TURKEY, 2013

Units: million tonnes of oil equivalent (net calorific value).

Note: other renewables includes biomass, wind, solar and geothermal energy.

figures are best estimates available at the time of publication.

FIGURE 2: SHARE OF PRIMARY ENERGY CONSUMPTION BY FUEL IN THE EU-28, 2012 AND 2013



Primary energy use per capita (PEC/Capita) reflects both the geography and the industrial structure of a country, and is also used as a measure of energy efficiency in a country. Accordingly, it varies widely among EU Member States.

The average PEC/Capita in the EU decreased by 1.1% to 3.31 tonnes of oil equivalent (toe) in 2013 compared with 2012, largely due to the sluggish economic growth but also increased efforts for energy efficiency.¹ Since 2007, before the beginning of the economic crisis, the PEC/Capita has decreased by 9% (see Figure 3).

FIGURE 3: PRIMARY ENERGY CONSUMPTION PER CAPITA AND PER UNIT OF GDP, 2013

toe	PEC/Capita*	PEC/GDP**					
AUSTRIA	4.03	0.13					
BELGIUM	5.03	0.17					
BULGARIA	2.33	0.62					
CROATIA	1.81	0.22					
CYPRUS	2.40	0.15					
CZECH REPUBLIC	4.18	0.37					
DENMARK	3.03	0.08					
ESTONIA	4.48	0.46					
FINLAND	6.12	0.20					
FRANCE	3.99	0.14					
GERMANY	4.09	0.13					
GREECE	2.15	0.15					
HUNGARY	2.31	0.26					
IRELAND	2.91	0.08					
ITALY	2.77	0.12					
LATVIA	2.22	0.31					
LITHUANIA	2.35	0.28					
LUXEMBOURG	8.19	0.13					
MALTA	1.57	0.11					
NETHERLANDS	4.61	0.14					
POLAND	2.57	0.30					
PORTUGAL	2.06	0.14					
ROMANIA	1.60	0.33					
SLOVAKIA	3.08	0.33					
SLOVENIA	3.30	0.22					
SPAIN	2.59	0.13					
SWEDEN	5.02	0.14					
UNITED KINGDOM	3.17	0.10					
EU-28	3.31	0.14					
SWITZERLAND	3.46	0.08					
TURKEY	1.53	0.22					
UNITED STATES	6.90	0.19					
JAPAN	3.56	0.12					
* Units: tonnes of oil equivalent per capita. Eurostat figures							

On average, energy use in EU Member States is slightly lower per capita than that of Japan, and substantially lower than in the United States, meaning that the EU is relatively more efficient than these two major economies.

Energy intensity, as measured by PEC per unit of gross domestic product (PEC/GDP), measures the energy efficiency of a nation's economy and indicates the cost of converting energy into GDP. In 2013, the energy intensity in EU Member States also decreased by 1.0% to 0.14 toe compared with 2012.

50% 0% NETHERLANDS ITALY HUNGARY UNITED KINGDOM TURKEY ROMANIA IITHIIANIA CROATIA IRELAND LATVIA SLOVAKIA BELGIUM EU-28 GERMANY

SPAIN AUSTRIA

LUXEMBOURG

CZECH REPUBLIC

PORTUGAL

DENMARK

FRANCE

POLAND

GREECE

BUIGARIA

SLOVENIA

ESTONIA

FINLAND

SWEDEN

MALTA

CYPRUS

SWITZERLAND

FIGURE 4: SHARE OF NATURAL GAS IN PRIMARY ENERGY CONSUMPTION, 2013

The primary energy consumption of a country is defined as the total gross energy supply (indigenous production plus net imports) before any conversion of primary energy into final energy forms has taken place.

Primary energy consumption includes net energy losses in the production of electricity and synthetic gas, refinery use, and other energy sector uses and losses (i.e. transformation and distribution losses).

for population.

Units: tonnes of oil equivalent per thousand euros of GDP. Eurostat figures for GDP (in millions of euro, chain-linked volumes, reference year 2005 at 2005's exchange rates).

The share of natural gas remained stable at 23% the same as in 2012, which is still far below the highest level of 25% in 2010 (see Figure 4).

Cinal energy consumption, 2012

In 2012, final energy consumption (FEC) in the EU remained relatively stable, decreasing only by 0.5% at 1 182.4 million tonnes of oil equivalent (Mtoe) compared with 2011. Due to sluggish economic recovery,² the final consumption of all fuels decreased, except for natural gas, which increased by 1.8% and the category "others" (including renewables and heat), which increased by 4.8% (see Figure 5). The use of oil products in FEC decreased by 2.2%, solid fossil fuels by 8.6% and electricity by 0.6%.

The increase of natural gas use in FEC reflects the cold winter and particularly the drop in temperatures in February 2012, which led to an increase in gas demand for heating homes. This is in contrast to the same period in 2011, which experienced very mild weather conditions.

In 2012, natural gas was still the second fuel used in FEC with a share of 22.1%, ahead of electricity at 20.3% but behind oil products, which remained the largest component of FEC with a share of 41.2% (see Figure 6).

Mtoe	Oil products	Solid fossil fuels	Natural gas	Electricity	Others	Total	% Change 2012/2011
AUSTRIA	9.7	0.4	4.5	5.4	6.2	26.2	0.6%
BELGIUM	19.8	0.6	10.4	7.0	4.1	41.9	-10.7%
BULGARIA	3.2	0.5	1.4	2.4	2.1	9.6	-0.6%
CROATIA	2.7	0.1	1.5	1.3	0.8	6.4	-5.6%
CYPRUS	1.0	0.0	0.0	0.4	0.1	1.5	-8.6%
CZECH REPUBLIC	6.8	3.7	5.8	4.7	3.6	24.6	-4.5%
DENMARK	6.3	0.1	1.5	2.7	4.1	14.7	-4.1%
ESTONIA	1.0	0.1	0.1	0.6	1.1	2.9	6.1%
FINLAND	9.4	0.7	1.2	7.1	9.5	27.9	6.1%
FRANCE	74.6	5.3	33.8	37.6	14.8	166.1	3.1%
GERMANY	79.6	10.3	49.7	45.0	28.4	213.0	0.4%
GREECE	11.6	0.3	1.0	4.5	1.5	18.9	-4.1%
HUNGARY	5.5	0.4	5.5	2.8	2.2	16.3	-7.8%
IRELAND	6.1	0.5	1.6	2.1	0.4	10.7	-4.0%
ITALY	54.3	4.0	39.0	25.5	4.9	127.9	-5.2%
LATVIA	1.4	0.1	0.4	0.6	1.6	4.1	0.0%
LITHUANIA	1.8	0.2	1.6	0.8	1.7	6.1	2.1%
LUXEMBOURG	2.8	0.1	0.6	0.5	0.2	4.2	-1.9%
MALTA	0.2	0.0	0.0	0.2	0.0	0.4	-9.2%
NETHERLANDS	29.1	2.1	20.2	9.2	16.2	76.7	0.3%
POLAND	21.5	11.9	10.7	10.5	12.0	66.6	-1.2%
PORTUGAL	7.5	0.0	1.5	4.0	2.6	15.6	-7.6%
ROMANIA	7.1	0.7	7.0	3.7	5.3	23.8	-0.2%
SLOVAKIA	2.5	0.7	2.6	2.1	1.1	9.1	-2.9%
SLOVENIA	2.5	0.1	0.6	1.0	0.8	5.0	-0.6%
SPAIN	45.5	1.5	15.0	20.7	6.3	89.0	3.3%
SWEDEN	8.9	1.2	0.6	10.9	11.3	32.9	0.0%
UNITED KINGDOM	64.3	2.4	43.0	27.3	3.7	140.6	2.0%
EU-28	486.6	47.9	260.8	240.5	146.6	1 182.4	-0.5%
% Change 2012/2011	-2.2%	-8.6%	1.8%	-0.6%	4.8%	-0.5%	
SWITZERLAND	11.0	0.1	2.7	5.1	1.9	20.9	2.8%
TURKEY	29.8	15.8	18.1	16.6	7.0	87.3	6.9%

FIGURE 5: FINAL ENERGY CONSUMPTION BY FUEL IN THE EU-28, SWITZERLAND AND TURKEY, 2012

The final energy consumption is calculated from the sectoral use of energy, for which reliable data is available with a significant time lag. The FEC figures are shown for 2012. FEC is equivalent to PEC but excludes net energy losses from the production of electricity and synthetic gas, refinery use and other energy sector uses and losses (i.e. transformation and distribution losses). The major part of the difference can be attributed to the conversion of primary fuels into electricity.

Units: million tonnes of oil equivalent (net calorific value). Note: figures are best estimates available at the time of publication.



FIGURE 6: SHARE OF FINAL ENERGY CONSUMPTION BY FUEL IN THE EU-28, 2011 AND 2012

² According to Eurostat, over the whole year 2012, GDP fell by 0.4% in the EU-28.

3 Inland deliveries of natural gas, 2013

Total gas consumption in the EU's 28 Member States has decreased for the third year running, with demand in power generation affected the most. Natural gas demand from 2012 to 2013 decreased by 1.5%, to 4 996.0 terawatt hour (TWh) (see Figure 7).

Despite a slight increase in EU gas demand recorded in the first six months of 2013, due to exceptionally cold weather, a range of factors continued to have a negative effect on demand for the third year in a row.

Throughout 2013 and since the beginning of 2011, increased competition from renewables and coal have resulted in a further decline of gas use in power generation of 12.3% (see Figure 7). However, other factors such as the decrease in electricity demand due to Europe's slow economic growth have completed the picture, driving gas consumption down.

In the first half of 2013, the colder weather experienced across the EU in 2013 resulted in an increase in demand for gas by 2.6% in the residential and commercial sector compared with 2012. The longer-lasting cold spell in spring was, nevertheless, counterbalanced by less severe winter temperatures during the fourth quarter of 2013. Preliminary data for 2014 indicates that the mild temperatures drove gas demand further down (see section 9).

Gas demand from industry increased slightly by 0.7% in 2013 in comparison with 2012. The analysis at a country level gives a mixed picture across the EU with some Member States recording an increase in gas demand for industry, counterbalancing the decrease from other Member States.

The use of gas in transport increased slightly from 0.3% of natural gas sales in 2012 to 0.4% in 2013, but the volumes delivered increased by 18.4%, compared with 2012 (see figures 7 and 8).

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FIGURE 8: EU-28 NATURAL GAS SALES BY SECTOR, 2012 AND 2013



Inland deliveries represent deliveries of marketable gas to the inland market, including gas used by the gas industry for heating and operating their equipment, and includes losses in distribution.

TWh	Residential & commercial	Industry	Power plants	Transport	Others uses	Total inland sales	% Change 2013/2012
AUSTRIA	22.6	37.5	24.1	2.3	3.7	90.2	-6.0%
BELGIUM	77.3	59.7	45.7	0.3	0.0	183.0	-1.4%
BULGARIA	1.1	11.5	10.3	0.7	4.3	27.9	-6.5%
CROATIA	8.1	9.6	7.7	0.0	4.0	29.5	-5.4%
CYPRUS	0.0	0.0	0.0	0.0	0.0	0.0	-
CZECH REPUBLIC	39.1	47.0	0.0	0.2	1.6	88.0	1.9%
DENMARK	9.1	9.5	5.8	0.0	11.4	35.8	-4.4%
ESTONIA	0.9	1.0	3.9	0.0	1.2	7.0	3.2%
FINLAND	0.9	18.9	17.0	0.0	0.0	36.8	-5.1%
FRANCE	293.8	157.1	30.0	1.2	19.5	501.6	1.6%
GERMANY	441.3	353.0	148.0	2.8	11.0	956.0	6.4%
GREECE	4.6	8.8	28.0	0.2	0.0	41.6	-11.7%
HUNGARY	52.1	23.9	24.3	0.0	3.9	104.2	-7.1%
IRELAND	13.7	7.6	27.5	0.0	0.8	49.7	-5.5%
ITALY	321.3	161.8	228.3	10.4	19.8	741.6	-6.5%
LATVIA	3.2	1.7	10.1	0.0	0.0	15.0	-0.8%
LITHUANIA	3.5	13.7	10.4	0.0	0.3	28.0	-18.5%
LUXEMBOURG	4.8	3.0	3.8	0.0	0.0	11.6	-14.9%
MALTA	0.0	0.0	0.0	0.0	0.0	0.0	-
NETHERLANDS	217.2	139.5	66.0	0.0	8.3	431.0	1.1%
POLAND	68.3	87.7	16.5	0.0	6.0	178.5	0.3%
PORTUGAL	4.6	39.8	3.4	0.0	0.0	47.8	-4.4%
ROMANIA	44.9	54.3	21.4	0.0	12.0	132.6	-8.3%
SLOVAKIA	24.9	18.5	10.6	0.1	0.2	54.3	-2.0%
SLOVENIA	2.6	4.3	0.6	0.0	0.0	7.6	-8.4%
SPAIN	48.2	128.0	156.4	1.0	0.0	333.5	-8.0%
SWEDEN	1.4	5.4	4.8	0.7	0.0	12.4	-4.0%
UNITED KINGDOM	450.4	148.2	225.5	0.0	26.9	851.0	-1.1%
EU-28	2 159.7	1 551.1	1 130.1	19.9	135.1	4 996.0	-1.5%
% Change 2013/2012	2.6%	0.7%	-12.3%	18.4%	13.9%	-1.5%	
SWITZERLAND	24.5	12.3	2.4	0.2	0.4	39.8	5.4%
TURKEY	141.0	122.7	224.0	0.9	-3.1	485.5	0.9%

Units: terawatt hours (gross calorific value).

Note: figures are best estimates available at the time of publication.

Hatural gas supplies, 2013

Indigenous production registered a slight decrease of 0.6% to 1 699.7 TWh (157 billion cubic metres (bcm)), in comparison with 2012. The decrease can be attributed to the fact that although the Netherlands increased production, this was offset by the decline in the UK's North Sea fields due to increased costs and underperformance (see Figure 9). Nevertheless, EU production still remained the largest source of gas for EU-28 customers,

making up 34% of the total net supplies. Russia supplied 27%, Norway 21% and Algeria 8%. In total approximately 55% comes from Western European fields (see Figure 10). Liquefied natural gas (LNG) flows to the EU were again challenged in 2013 by strong competition on the global market (see Figure 10). The share of gas from Qatar in EU supplies, the EU's main LNG supplier, decreased from 6% in 2012 to 5% in 2013.

FIGURE 9: NATURAL GAS SUPPLIES IN THE EU-28, SWITZERLAND AND TURKEY, 2013

TWh	Indigenous production	Norway	Russia	Algeria	Qatar	Other sources*	Changes in stocks**	Others balances	TOTAL NET SUPPLIES	% Change 2013/2012
AUSTRIA	14.5	16.1	55.8	0.0	0.0	-3.9	7.7	0.0	90.2	-6.0%
BELGIUM	0.0	71.4	2.0	0.0	34.4	74.5	0.7	0.0	183.0	-1.4%
BULGARIA	1.8	0.0	27.0	0.0	0.0	0.0	1.2	-2.1	27.9	-6.5%
CROATIA	19.5	0.0	0.0	0.0	0.0	9.4	0.6	0.0	29.5	-5.4%
CYPRUS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
CZECH REPUBLIC	1.6	9.9	55.7	0.0	0.0	24.3	-2.8	-0.7	88.0	1.9%
DENMARK	56.0	4.2	0.0	0.0	0.0	-14.4	-2.9	-7.1	35.8	-4.4%
ESTONIA	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	7.0	3.2%
FINLAND	0.0	0.0	36.8	0.0	0.0	0.0	0.0	0.0	36.8	-5.1%
FRANCE	3.7	191.8	90.0	59.1	20.8	129.5	8.2	-1.5	501.6	1.6%
GERMANY	115.8	225.0	436.0	0.0	0.0	175.2	4.0	0.0	956.0	6.4%
GREECE	0.0	0.0	27.6	6.9	0.0	7.4	-0.1	-0.2	41.6	-11.7%
HUNGARY	19.2	0.0	86.0	0.0	0.0	-11.7	8.2	2.5	104.2	-7.1%
IRELAND	1.8	0.0	0.0	0.0	0.0	48.3	-0.5	0.1	49.7	-5.5%
ITALY	81.9	27.5	254.0	132.3	56.9	182.7	6.3	0.0	741.6	-6.5%
LATVIA	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	15.0	-0.8%
LITHUANIA	0.0	0.0	28.0	0.0	0.0	0.0	0.1	0.0	28.0	-18.5%
LUXEMBOURG	0.0	7.4	2.9	0.0	0.0	1.3	0.0	0.0	11.6	-14.9%
MALTA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
NETHERLANDS	796.4	168.9	22.1	0.0	5.5	-566.0	1.8	2.2	431.0	1.1%
POLAND	49.4	0.0	102.3	0.0	0.0	29.3	-3.6	1.1	178.5	0.3%
PORTUGAL	0.0	2.8	0.0	24.4	3.6	17.8	0.3	-1.1	47.8	-4.4%
ROMANIA	112.3	0.0	20.3	0.0	0.0	0.0	0.6	-0.6	132.6	-8.3%
SLOVAKIA	1.0	0.0	58.3	0.0	0.0	-6.2	1.2	0.0	54.3	-2.0%
SLOVENIA	0.0	0.0	5.5	0.0	0.0	1.9	0.2	0.0	7.6	-8.4%
SPAIN	0.5	13.4	0.0	192.0	40.6	87.1	0.0	-0.1	333.5	-8.0%
SWEDEN	0.0	1.1	0.0	0.0	0.0	11.4	-0.1	0.0	12.4	-4.0%
UNITED KINGDOM	424.2	306.6	0.0	4.5	95.2	19.2	-0.6	2.0	851.0	-1.1%
EU-28	1 699.7	1 046.1	1 332.3	419.2	257.0	216.9	30.4	-5.5	4 996.0	-1.5%
% Change 2013/2012	-0.6%	-3.9%	12.6%	-12.3%	-20.5%	-23.6%	-1 531.8%	-214.8%	-1.5%	
SWITZERLAND	0.0	0.0	0.0	0.0	0.0	39.9	0.0	0.0	39.8	5.4%
TURKEY	5.7	0.9	278.9	42.6	3.3	148.7	6.1	-0.8	485.5	0.9%

Units: terawatt hour (gross calorific value).

Note: Figures are best estimates available at the time of publication.

* Including net exports.

** (-) Injection / (+) Withdrawal.

FIGURE 10: BREAKDOWN OF EU-28 SUPPLIES, 2012 AND 2013



Natural gas supplies (or inland consumption calculated) are defined as: indigenous production + imports exports + stock changes.



rts, 2013

Factors such as the drop in gas demand in the EU and the strong competition for liquefied natural gas (LNG) on the global market, especially from Asia, led to a decrease in LNG imports in 2013. Compared with 2012, LNG supplies in the EU decreased by 29.1% in 2013 to 447.0 TWh (see Figures 11 and 12). Qatar remained Europe's leading LNG provider with a share of 51% in the EU LNG imports (see Figure 12).

FIGURE	11: LNO	SUPPLIES	IN EU-28	AND	TURKEY,
2013					

TWh	LNG NET IMPORTS	% CHANGE 2013/2012
BELGIUM	18.0	-35.0%
FRANCE	92.4	-17.1%
GREECE	7.1	-51.8%
ITALY	60.1	-22.6%
NETHERLANDS	6.4	-32.4%
POLAND*	0.1	0.0%
PORTUGAL	17.1	-25.9%
SPAIN	142.1	-33.9%
SWEDEN	1.1	22.2%
UNITED KINGDOM	102.6	-31.6%
EU-28	447.0	-29.1%
TURKEY	42.6	-3.1%

Units: terawatt hours (gross calorific value).

Excluding re-exports

* LNG from terminals in Europe and transferred to Poland by road transport

In 2013, 14% of the EU's net imports was made up of LNG (see Figure 13).



2012

100%

2 OTHERS

QATAR

EGYP

PERU

16

NIGERIA

TRINIDAD TOBAGO

NORWAY

ALGERIA

FIGURE 13: NET IMPORTS TO EU-28 FROM NON-EU COUNTRIES BY TYPE OF TRANSPORT, 2012 AND 2013



In 2013, the 19 EU LNG import terminals increased their regasification capacity per year from 191 bcm in 2012 to 197 bcm (or about 2 123 TWh) in 2013.³ With lower

LNG imports the average utilisation rate of regasification terminals dropped again in 2013.

FIGURE 12: LNG IMPORTS TO EU-28 AND TURKEY, 2005-2013



2013

100%

PIPELINES

LNG

6 Storage facilities, 2013

The figures show natural gas storage facilities for peak shaving, seasonal variations and strategic security of supply. A peak shaving facility is used to store surplus natural gas to meet demand requirements during peak consumption periods, typically deep winter or high summer.

FIGURE 15: NATURAL GAS STORAGE IN THE EU-28, SWITZERLAND AND TURKEY, 2013

End 2013	Number of storage facilities		Peak output**
AUSTRIA	8	8 166	94.4
BELGIUM	2	967	57.0
BULGARIA	1	550	4.2
CROATIA	1	553	6.0
CYPRUS	0	0	0.0
CZECH REPUBLIC	8	3 497	57.4
DENMARK	2	1 035	25.0
ESTONIA	0	0	0.0
FINLAND	0	0	0.0
FRANCE	16	11 709	191.0
GERMANY	51	23 821	638.0
GREECE	0	0	0.0
HUNGARY	5	6 330	80.1
IRELAND	1	230	2.7
ITALY	13	16 676	277.8
LATVIA	1	2 300	30.0
LITHUANIA	0	0	0.0

	Number of storage facilities		Peak output**
LUXEMBOURG	0	0	0.0
MALTA	0	0	0.0
NETHERLANDS	5	5 378	220.2
POLAND	8	2 109	41.4
PORTUGAL	5	181	7.2
ROMANIA	8	3 100	30.0
SLOVAKIA	2	3 160	45.1
SLOVENIA	0	0	0.0
SPAIN	4	2 533	13.7
SWEDEN	1	9	1.0
UNITED KINGDOM	8	4 680	154.0
EU-28	150	96 984	1 976.2
SWITZERLAND	0	0	0.0
TURKEY	3	2 699	20.6

* Units: million cubic metres.

** Units: million cubic metres per day.

In 2013, six new storage facilities were completed in the EU (three underground storage facilities, one in Austria, one in Germany, and one in Portugal, and three LNG peak

shaving units in Italy). This additional storage increased total working volumes by 3% and peak output by 4%.

7 Natural gas industry in figures, 2013

FIGURE 16: NATURAL GAS INDUSTRY IN FIGURES, 2013

End 2013	Total length of pipelines (in kilometres)	Number of gas customers (in thousands)*	Number of employees	Number of natural gas vehicles**	Gas power generation capacity installed (in megawatts)
AUSTRIA	42 900	1 351	3 010	8 575	5 119
BELGIUM	74 795	3 226	7 000	344	6 851
BULGARIA	6 710	69	875	61 320	990
CROATIA	19 904	647	2 053	155	1 202
CYPRUS	0	0	0	0	0
CZECH REPUBLIC	77 489	2 860	3 037	7 100	838
DENMARK	17 924	420	1 400	15	3 000
ESTONIA	2 880	52	335	230	200
FINLAND	3 218	34	490	1 680	2 842
FRANCE	232 027	11 301	32 000	13 300	15 597
GERMANY	510 000	21 179	34 229	97 969	26 658
GREECE	7 125	307	848	830	4 900
HUNGARY	89 004	3 468	2 5 2 0	5 118	4 520
IRELAND	15 647	655	530	3	3 742
ITALY	288 091	22 941	36 319	846 523	52 108
LATVIA	6 146	443	1 267	350	1 141
LITHUANIA	10 307	559	1 364	380	2 658
LUXEMBOURG	3 089	84	210	261	492
MALTA	0	0	0	0	0
NETHERLANDS	133 546	7 152	9 500	6 879	12 654
POLAND	187 304	6 810	33 323	3 600	1 065
PORTUGAL	18 010	1 354	1 068	461	4 739
ROMANIA	53 666	3 282	40 918	0	4 0 2 0
SLOVAKIA	35 452	1 503	4 307	1 400	1 344
SLOVENIA	5 436	134	530	62	350
SPAIN	81 188	7 473	6 627	3 990	26 251
SWEDEN	3 220	40	250	46 713	790
UNITED KINGDOM	285 600	23 003	54 178	559	35 320
EU-28	2 210 677	120 348	278 188	1 107 817	219 391
SWITZERLAND	19 484	423	1 631	11 300	603
TURKEY	82 859	9 856	77 800	3 850	n/a

* Number of gas customers are counted by number of meters, and include domestic as well as non-domestic (industrial, commercial and other) customers, except Germany for which the number of domestic customers is equivalent to the number of dwellings supplied with natural gas for heating.

** Eurogas and NGVA Europe. Note: Figures are best estimates available at the time of publication; n/a: not available.

Ontural gas reserves, 2013

FIGURE 17: GLOBAL GAS AND OIL RESERVES BY REGION, 2013⁴



Total proved reserves at end 2013: 186 tcm * Commonwealth of Independent States Total proved reserves at end 2013: 1688 billion barrels

Global reserves-to-production ratios of gas vs oil (years)⁴ The reserves-to-production (R/P) ratio represents the length of time the remaining discovered reserves would last if production was to continue at the same level of that year, and if no new reserves were to be discovered.

In 2000, the R/P ratio for gas was about 58 years, and for oil 46 years. By 2013, the gas R/P ratio had only slightly decreased to 55 years for gas and increased to 53 years for oil (see Figure 18). This reflects the fact that the discovery of gas has kept pace with the production and use of gas.

Unconventional gas, estimated global resources

New advanced production techniques mean that gas can now be produced from shale rock, coalbeds, and other "tight" formations (natural gas in low permeability rock). It is difficult to predict the additional reserves that will come from





recoverable unconventional resources as there are currently no reliable industry estimates. It is expected that the volumes of recoverable resources will be many times higher than those from the reserves referred to in the figures above.



9 Expectations for 2014

In addition to this report, Eurogas also carried out a survey in September 2014 forecasting the 2014 gas consumption. Our latest estimates indicate that gas demand across the European Union will drop by 9% this year, compared with 2013. In the first half of 2014 demand decreased by 18%, compared with the same period in 2013.

The significant decline in gas consumption in the first half of this year is mainly the result of mild weather conditions although other factors such as slow economic recovery, the low price of coal coupled with a weak carbon price and growing share of electricity generation from renewables have also played their part.

Demand for gas in heating in the commercial and residential sectors has so far experienced the biggest decrease. However, gas still remains the fuel of choice in the EU for heating and is likely to remain so thanks to the continued investment in highly efficient, modern gas appliances that can deliver significant energy savings and reduce greenhouse gas emissions throughout Europe.⁵

These latest estimates also point to a lower demand for electricity than in 2013, which in turn has and will continue to affect gas demand in power generation.

As in previous years, the low price of coal, coupled with a weak carbon price, have continued to favour coal above gas. The growing share of electricity produced from renewables, including a relatively high hydroelectricity production, further reduced the demand for gas in power generation. However, as the economy picks up, so too may the demand for gas in power generation as it remains a cleaner, more flexible and more available backup fuel for electricity from variable renewables than alternatives.

Outlook for the rest of 2014

Early indications from the Eurogas data also suggest that gas demand in Europe for the second half of 2014 is likely to stabilise at last year's level over the same period.

This forecast is based on gas consumption for heating being at the normal seasonal levels throughout the year. Furthermore, the market fundamentals that had an impact on gas consumption in the first half of the year will continue to be present for the rest of the year.

On this basis, taking 2014 as a whole, gas demand would correspond to an EU-28 & Switzerland annual consumption of about 4 500 terawatt-hours or 417 billion cubic metres.⁶

⁵ See Gas: the right choice for heating in Europe, by Eurogas, Marcogaz and GERG, published September 2014, part I and part II.

⁶ Based on terawatt-hours gross calorific value, the applied calorific value of one cubic metre equals 10.8 kilowatt hours is representing a European average.

10 The European natural gas grid in 2014



Appendix

Definitions and Units

The *gross calorific value* (GCV), or higher heating value, measures the total (maximum) amount of heat that is produced by combustion, including latent heat before combustion or generated in the combustion process. The *net calorific value* (NCV), or lower heating value, excludes this latent heat.

Natural gas in international trade is usually measured on the basis of GCV. Modern technologies in gas combustion are able to capture the latent heat of condensation. But since the most current technologies for other fossil fuels are still not able to recover the latent heat, NCVs need to be used rather than GCVs

Conversion factors

when building an energy balance. Natural gas data presented in million tonnes of oil equivalent (Mtoe) is expressed as NCV. For natural gas, the NCV is 10% less than the GCV.

Natural gas sales and supplies are stated in terawatt hours (TWh) because of different national gas qualities. The data is provided in GCV. When the Eurogas data is converted into billion cubic metres (bcm), we advise you to use an assumed energy content of 1 million cubic metres (mcm) of natural gas of 10.8 kilowatt hours (kWh) (GCV), which implies that 1 TWh equals approximately 92.6 mcm of natural gas. This corresponds closely to the weighted average heat content of all natural gas that is sold in the EU.

conversion factors					
Units glossary					
cm \rightarrow		billion cubic metres			
GJ	\rightarrow	gigajoule			
GWh	\rightarrow	gigawatt hour			
kWh	\rightarrow	kilowatt hour			
MBtu	\rightarrow	million British thermal units			
mcm	\rightarrow	million cubic metres			
Mtoe	\rightarrow	million tonnes of oil equivalent			
MWh	\rightarrow	megawatt hour			
m³	\rightarrow	cubic metres			
Pcal	\rightarrow	petacalories			
PJ	\rightarrow	petajoule			
TWh	\rightarrow	terawatt hour			
toe	\rightarrow	tonnes of oil equivalent			
tcm	\rightarrow	trillion cubic metres			
General conversion for units of energ	y and volume				
1 Mtoe = 10 Pcal	41.86 PJ (NCV) = 11.63 TWh (NCV)				
1 cubic metre (m³)	\rightarrow	35.315 cubic feet (cf)			
1 mcm of LNG	\rightarrow	593 mcm of gas			
Eurogas conversion factors from volume to energy units					
92.3 mcm gas	\rightarrow	1 TWh (GCV)			
1 m³ of natural gas	\rightarrow	39 MJ (GCV) = 10.83 kWh (GCV)			
Common conversion factors from gro	ss to net calorific value				
Natural gas: NCV	\rightarrow	→ 0.9 GCV			
Oil: NCV	\rightarrow	0.95 GCV			
Solid fossil fuels: NCV	\rightarrow	0.97 GCV			
Equivalente					
1 giggwatt bour	10 ⁶ kWb (GWb)				
1 gigawatt hour	<u> </u>	10 ³ kWh (MWh)			
1 negawatt hour		10 ¹² kWh (PWh)			
1 terawatt hour		10 ⁹ kWh (TWh)			
I telawatt lloui		10 KWII (1WII)			
Heat unit equivalents					
	GJ	kWh	MBtu	th	therm
1 Gigajoule (GJ)	1	277.8	0.948	238.9	9.479
1 kilowatt-hour (kWh)	3.6 10-3	1	3.411 10-3	0.86	3.411 10-2
1 Million British thermal units (MBtu)	1.055	293.2	1	252	10
1 thermie (th)	4.186 10-3	1.162	3.968 10 ⁻³	1	3.968 10 ⁻²
1 therm	0.1055	29.32	1 10-1	25.2	1

Eurogas is the association representing the European gas wholesale, retail and distribution sectors. Founded in 1990, its members include 44 companies and associations from 24 countries.

Eurogas represents the sectors towards the EU institutions and, as such, participates in the Madrid Gas Regulatory Forum, the Gas Coordination Group, the Citizens Energy Forum and other stakeholder groups.

Its members work together, analysing the impact of EU political and legislative initiatives on their business and communicating their findings and suggestions to the EU stakeholders.

The association also provides statistics and forecasts on gas consumption. For this, the association can draw on national data supplied by its member companies and associations.

Figures from this report may be used, provided that reference is made to Eurogas as the source.

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Objectives of Eurogas

- To help improve knowledge of natural gas, of its performances and of its use;
- To promote the development of natural gas in Europe particularly in the legal, economic, technical and scientific areas, to prepare studies and to promote cooperation within the gas industry;
- To promote the smooth functioning of the European internal gas market and to take stance on issues
 of interest to the European natural gas industry with respect to international and supranational
 organisations including but not limited to the European Institutions and to public opinion.

