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**Key Issues to Address Sustainable Supply and Demand of
Natural Gas**

Keynote Address

by

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Mr. Chairman,

[Excellencies,]

Mr. Miller,

Ladies and gentlemen,

Chart 1
(Title chart)

Reviewing the Strategies for Natural Gas - I would like to contribute to this central question of our conference from the European perspective.

As you know, Europe is beside North America and Asia one of the world's main gas-consuming regions, accounting for nearly a fifth of global gas consumption.

At the same time it is the leading absorber of gas from other regions¹.

I am here as representative of a company with a European orientation.

One of our central tasks is to develop a joint portfolio for supplying European markets where the E.ON-group operates.

These markets are on the path to a single European market and are shaped by more and more gas-to-gas competition.

¹ Russia, Africa, Middle East, Others

Chart 2

At first glance and looking from a distance of over 13 hours flying time, the gas industry in Europe (EU-27) does not seem much different today than at the last World Gas Conference in Amsterdam:

- Gas consumption in this region amounts today (2008) to some 440 mtoe, just as it did three years ago in 2005.

This is a quarter of total energy consumption.

- Gas in Europe continues to come mainly from indigenous sources, even though the share of imports is rising:

About 55 % of total gas supplies are currently obtained from reserves in Europe (EU-27 production and supplies from Norway)².

On closer scrutiny, this general and static picture reveals change, momentum and a number of major challenges - these as a mixture of long-term trends, current developments and specific occurrences.

To varying extents they all affect the future of gas in European energy supply, the gas industry and the companies themselves.

² The corresponding figure in 2005 was 57 %.

Changing conditions and environment

Today gas is energy source No. 2 in the European energy balance and forms part of an even energy mix.

Despite differences in individual markets, this is the outcome of a lengthy process of growth.

And it shows how highly gas has been rated until now in Europe by consumers, the public and politicians.

But what are the prospects for the next 10 or 20 years?

I believe we have increasingly become aware that the future, including that of gas, will be less than before a continuation of past trends.

We are experiencing changes in the marketplace, in consumer behaviour and in the role of competing energies.

This increasingly complex picture includes rising demands by society on the affordability, security and climate compatibility of energy supplies.

The European energy industry, not least the gas industry, is also confronted with a growing determination by European and national policy-makers to develop a sustainable energy system.

Intervention in energy supply occurs to varying extents by laying down mandatory goals and using a broad range of tools.

Chart 3

In 2007, the EU agreed on the first binding targets for the period after expiry of the Kyoto Protocol.

These were adopted, so to speak, as a down payment on new, global agreements for combating climate change.

The EU committed itself unilaterally to reducing overall greenhouse gas emissions by at least 20 % by 2020 compared with 1990 - or even by 30 % if a global and comprehensive agreement for the period after 2012 is reached.

To that end, two main approaches were also adopted in binding form:

- By 2020, renewables are to account for 20 % of total energy consumption; today the European average is 7 %.
- Likewise by 2020, energy efficiency in Europe is to be improved by 20 % in relation to a business-as-usual scenario.

These ambitious targets have been broken down to the level of individual member countries.

They are backed up by a package of relevant measures, such as new rules for emissions trading involving full auctioning of carbon allowances from 2013 as well as directives on renewable energies and energy efficiency.

Thus the tracks have been laid.

I feel that basically there cannot be any disagreement about the course taken in European energy and climate policy.

The European gas industry fully acknowledges its responsibility for protecting the climate and environment for the sake of future generations.

The vision which we all have and which we should resolutely pursue is to achieve sustainable, low-carbon energy supply.

Indisputable goals in this context are:

- More energy savings together with the more efficient use of energy and
- a greater share of renewable energies in the overall energy balance.

However, it must not be forgotten that a sustainable improvement in energy efficiency, just like the sustainable expansion of renewables, cannot be achieved over night.

As things stand at present, fossil fuels and nuclear energy must carry on making a significant contribution to European energy supply for a lengthy time.

The target of 20 % renewables in 2020 means, conversely, that 80 % of energy consumption has to be covered by so-called traditional energy sources.

Expectations pinned on natural gas

One of them is undoubtedly gas.

Chart 4

Gas will and must play an important part in the transition to a low-carbon energy supply and in a sustainable energy mix.

This has been the case until now, and I believe that the European gas industry can uphold that conviction in the foreseeable future with a clear conscience.

Natural gas is the fossil fuel particularly suited to perform a bridging function and most compatible with the path of sustainability:

- Natural gas is the cleanest of all fossil fuels, with the best climate and environmental credentials.
- Efficient gas technologies are available.

Here I have in mind, for example, gas-fired condensing systems, distributed heat and power production in efficient packaged cogeneration plants, or combined-cycle gas turbines in power generation.

- Natural gas can already be combined effectively with renewables, for instance it can be used in tandem with solar-thermal systems.

It is the carrier for a rising renewable share, thus allowing further reductions of CO₂ emissions.

The gas industry also has a renewable pillar: biomethane.

"Natural gas goes renewable" is the motto.

The integration of biomethane leads to further significant CO₂ reductions.

- A sustainable contribution by gas to meeting the energy needs of future generations in the world will not fail because of a lack of gas reserves.

In terms of global reserves, gas is in a fairly comfortable position.

Thus the starting conditions for a positive future with natural gas are basically favourable.

Chart 5

However, we should not overlook the fact that gas in Europe is no longer rated as highly by consumers, politicians and the public as it was for a long time.

In Europe, it has increasingly gained the image of an insecure imported energy that is problematic in geopolitical terms and is also expensive and subject to price volatility.

Regardless of whether this is true or not, the European gas industry cannot ignore this state of affairs.

Under these changed conditions it is essential to position gas better as an economically viable, modern, environmentally and climate-friendly energy source.

This must be achieved in the marketplace, in politics and simply in the minds of the players themselves.

It is also imperative for the gas industry not to rest on its laurels technologically, but to display innovative strength, bring new technologies to market maturity as quickly as possible and open up new areas of use.

Examples in this respect are the gas heat pump, micro-cogeneration systems and fuel cells.

The gas industry must also present itself to policy-makers as a partner in reaching the climate targets.

In turn the gas industry expects policy-makers to acknowledge the significance of gas in terms of efficiency and climate protection and to take this into account.

We therefore advocate policies which set targets open to all technologies and energy sources, promote competition between technologies and bear in mind the cost-effectiveness of climate protection and efficiency enhancement measures.

Security of demand?

Chart 6

What does this actually mean for the prospects for gas on the European energy market in the next 10 or 20 years?

Nowadays demand forecasts involve even more uncertainty and imponderables than in the past.

This is reflected not least in a broad spectrum of predictions and scenarios for the development of demand in the European market.

In this context, we are no longer dealing just with the extent of the rise expected in the long term.

We are also looking at the direction in which energy and gas consumption will already develop in the medium term.

Given the EU's 20-20-20 strategy already mentioned, there are already projections which consider it possible and desirable for European gas consumption to be almost a quarter (22 %) lower in 2020 than today.

I shall refrain from giving you my own detailed forecast.

I will merely outline the basic long-term trends in European gas consumption in individual sectors, as we see them today.

This leaves aside the fact that there will continue to be differences from one country to another:

- In the residential and commercial sector, gas is already the leading energy in Europe, with a market share of just over a third.

Here we see potential for a further slight improvement in the position of gas - bearing in mind the saturation trends on some national markets, increased energy saving and growing competition by renewables.

- In industry, the share of gas is likewise one third.

There, too, we see the possibility of a slight rise in gas consumption.

- We feel that the main growth will occur in power generation where gas currently accounts for about one fifth of the energy used in this sector in Europe.

In the medium to long term, this area of use will be able to overtake the residential and commercial sector.

The advantages of using gas in power generation are evident: low investment costs, short construction times, flexible operation, high efficiencies, etc.

But at the same time this sector is marked by especially great uncertainty.

Competitive gas prices, not least in relation to coal for new power station projects, and the development of European emissions trading will play a decisive part.

Another important factor is the reassessment of nuclear energy occurring in a number of European countries.

- As far as other uses are concerned, we feel that there is potential not least for increasing use of natural gas or of natural gas together with biogas in motor vehicles.

However, this sector will remain a niche when compared with the use of gas in the aforementioned traditional areas.

All in all, we are convinced that in the medium to long term there continue to be prospects for limited volume growth in Europe.

Gas will also be able to expand further its relative position in the European energy mix.

It will thus make a valuable contribution to achieving climate targets in Europe, which are not attainable solely by the expansion of renewables or further improvement of energy efficiency.

Current consumption trend: Start of a reversal?

Chart 7

The question that remains is whether and to what extent the current consumption trend makes it necessary to revise this justified expectation of a continued favourable development for gas in Europe.

After years of more or less steady growth, the European gas industry is now confronted with decreased consumption on an unprecedented scale.

This is due above all to the slump in industrial production which already started in the final months of last year.

Also affected was the use of gas in power generation, which additionally suffered from the relatively high gas prices.

Initial data for the first quarter of this year show an overall decline in gas consumption of about 7 % on an EU average³.

The slump in consumption would have been even greater if there had not been increased demand for gas for heating purposes because of low temperatures.

All in all, a significant drop in gas consumption is conceivable throughout Europe this year; it could also be in the order of 7 %.

Next year, a slight recovery of gas consumption at this year's level is anticipated because of the improved prospects for overall economic development⁴.

We do not know whether the present, unexpected and substantial decrease in demand will be overcome in two to three years.

As things stand at present, we do not assume, however, that it has triggered a lasting reversal of the long-term demand trend for gas in Europe.

³ According to the latest Eurogas survey on the impact of the economic crisis on the gas sector; ER-internal figure for the 1st half of 2009: - 9 %

⁴ Eurogas estimate for 2010: + 1 % compared with 2009

Yet we cannot ignore the current demand slump and its direct, far-reaching consequences and simply return to business as usual.

One of the serious consequences in the marketplace is that Europe currently has more gas than needed.

There is the risk of persistent oversupply because this weak demand is accompanied by abundant supplies.

For years producers, especially those of LNG, invested in new capacity as they expected global markets to expand.

These expectations are now not being fulfilled.

For example, the United States has for the foreseeable future withdrawn from the world market as a major importer owing to its unmatched efforts in producing unconventional gas.

Now Europe is becoming a catchment area for gas from significant excess capacity.

We are thus in a situation which seems rather unusual for a region heavily dependent on energy imports.

Yet the market is not prepared for this, and gas prices are collapsing at the hubs.

It is no secret that this extraordinary constellation can jeopardise the economic basis of existing long-term import contracts.

These contracts have until now served as the backbone of European gas supply, and we are convinced that they must continue to do so.

If they are to perform their function, they must be carefully adapted flexibly to major market changes.

This is urgently needed at present, and the contracts themselves have the clauses for doing so.

This essentially concerns price and volume arrangements that are geared towards a fair balance of interests, constancy and reliability.

But it also involves guaranteeing the competitiveness of gas under all market conditions.

Coping with this acute challenge simultaneously secures the basis for long-term cooperation between importers and producers in a spirit of mutual trust.

It is also a major prerequisite for the continued positive development of gas in the European market, which will be increasingly dependent on imports in the long run.

Conclusion / outlook

Let me briefly sum up my review:

Chart 8
(title chart
again)

In an European energy market increasingly characterised by energy saving and efficiency enhancement, by the expansion of renewables and competition between energy sources, there will be limits for natural gas, too.

However, in the transition to a low-carbon energy system, gas will be able to play an important role in the European energy market under these changed conditions.

I am convinced that gas can, as before, follow a good path in Europe.

But this will not occur automatically.

The gas industry must make greater efforts to draw attention to the advantages of natural gas in respect of its efficiency and convenience, climate compatibility and combinability with renewables.

The message now is: Natural gas unites climate and environmental protection with efficiency, convenience and economic viability.

This message must be underpinned with attractive, forward-looking technological solutions.

Any doubts emerging about the security and reliability of gas supply must be dispelled.

And it must be demonstrated time and again that gas is an affordable and competitive energy.

We expect European and national policy-makers to provide an appropriate and reliable framework that does not impede natural gas in making a positive contribution to sustainable energy supply.

To put it in a nutshell:

Natural gas has a future in Europe, even in a changing market and under significantly different conditions!