



International Association of Oil and Gas Producers

**Providing a secure natural gas supply for Europe**

3rd South East Europe Energy Dialogue on 18-19 June

## Who are OGP?

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- International Association of Oil & Gas Producers:
  - Exploration and production
  - 67 companies + associations
- Members account for more than half of the world's oil output + about 1/3 of global gas production
- Office in London for global affairs since 1974  
OGP Europe in Brussels representing some 30 OGP members active in Europe towards the EU since 1992

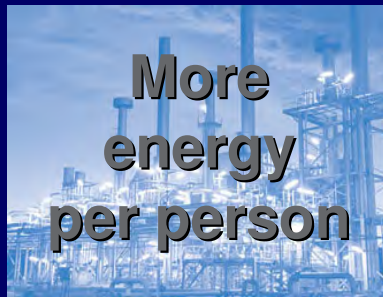


# The global energy challenge

Improved access to modern energy for the world



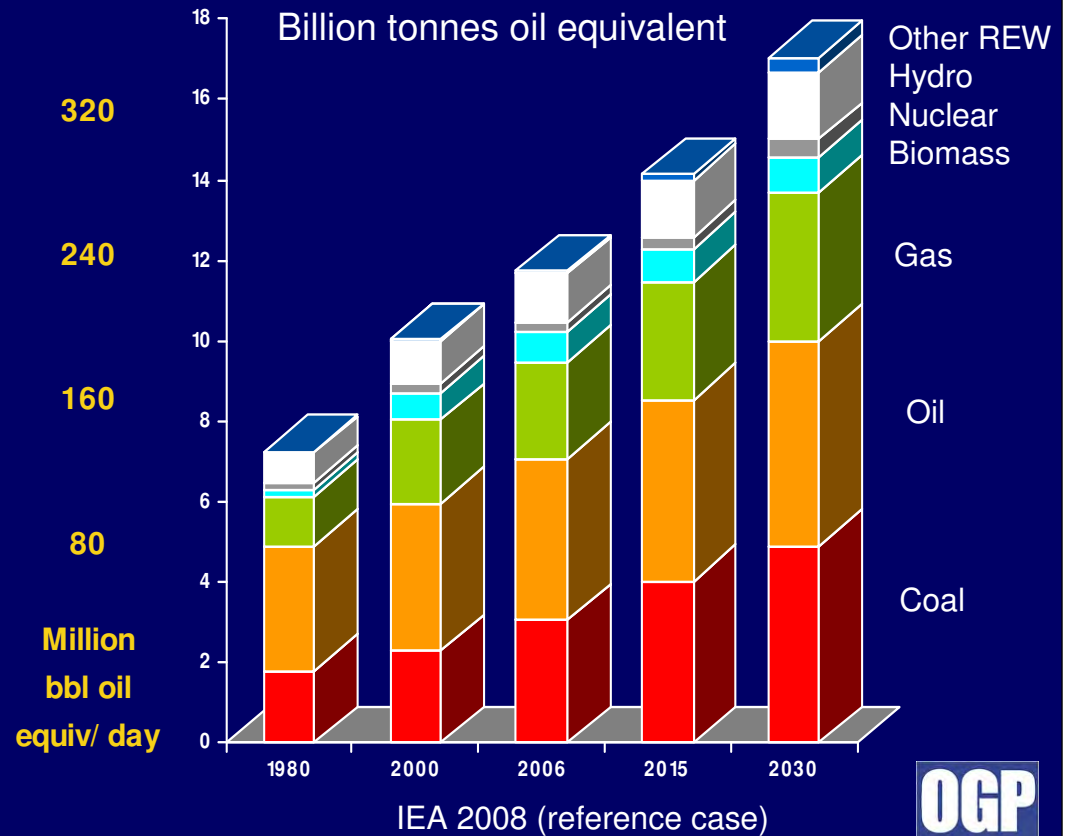
Growing demand for energy to be met by fossil fuels in the short term



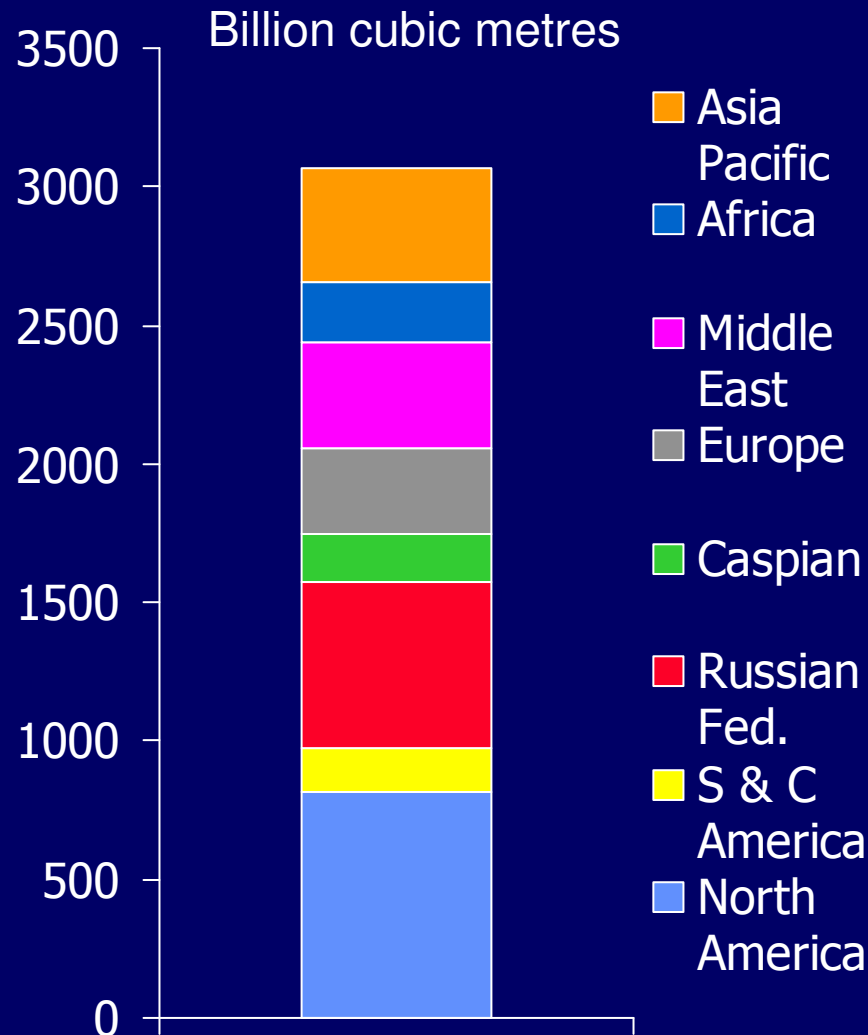
Low CO<sub>2</sub> energies, sustainable CO<sub>2</sub> storage



## World Energy Demand Growth



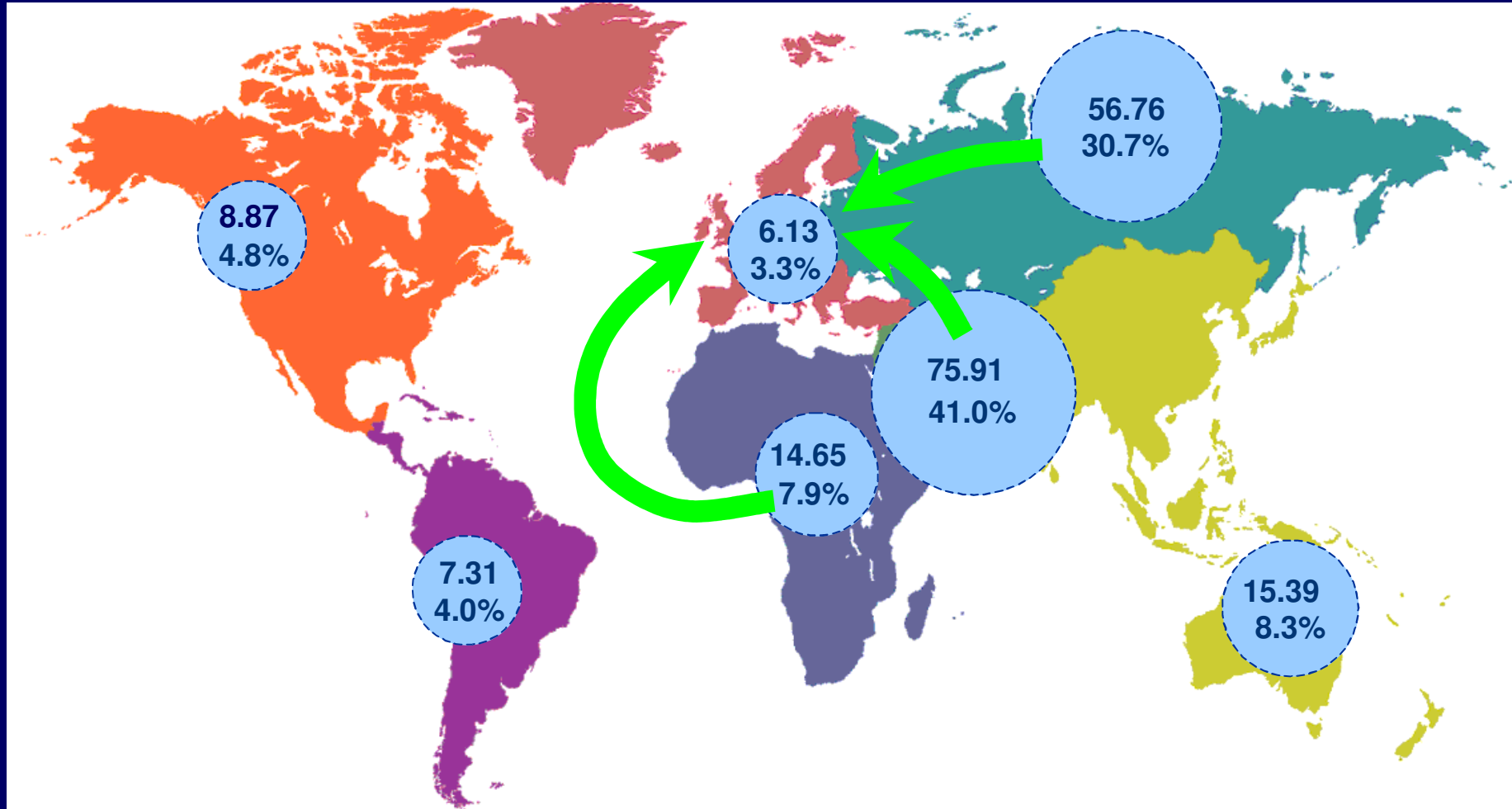
# World gas production 2008



- Global reserves are equal to about 60 years of current production
- Russia, Iran and Qatar hold 56% of the world's gas reserves
- Discoveries continue to exceed production
- World natural gas production is projected to rise:
  - 3.1 tcm in 2008
  - 4.4 tcm in 2030



# World reserves of natural gas



World Total estimated at 185.02 tcm

BP Statistical Review 2009



# European energy demand

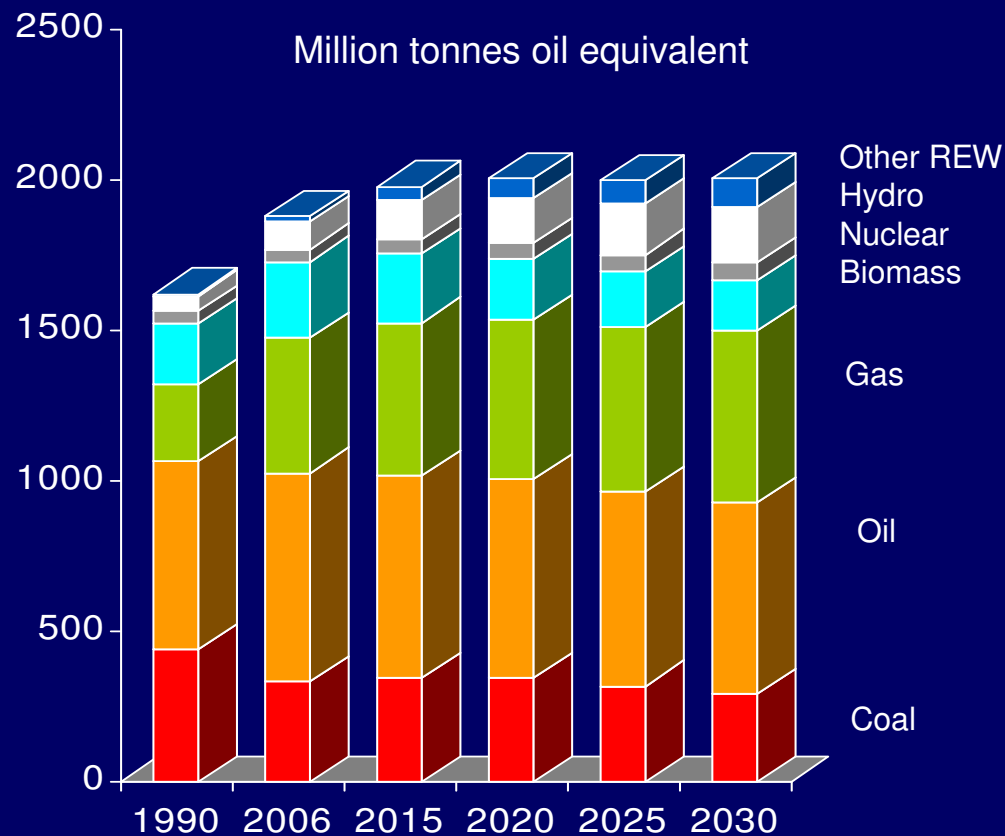
Improved access to modern energy through inter-connectors



Demand for energy still largely met by fossil fuels



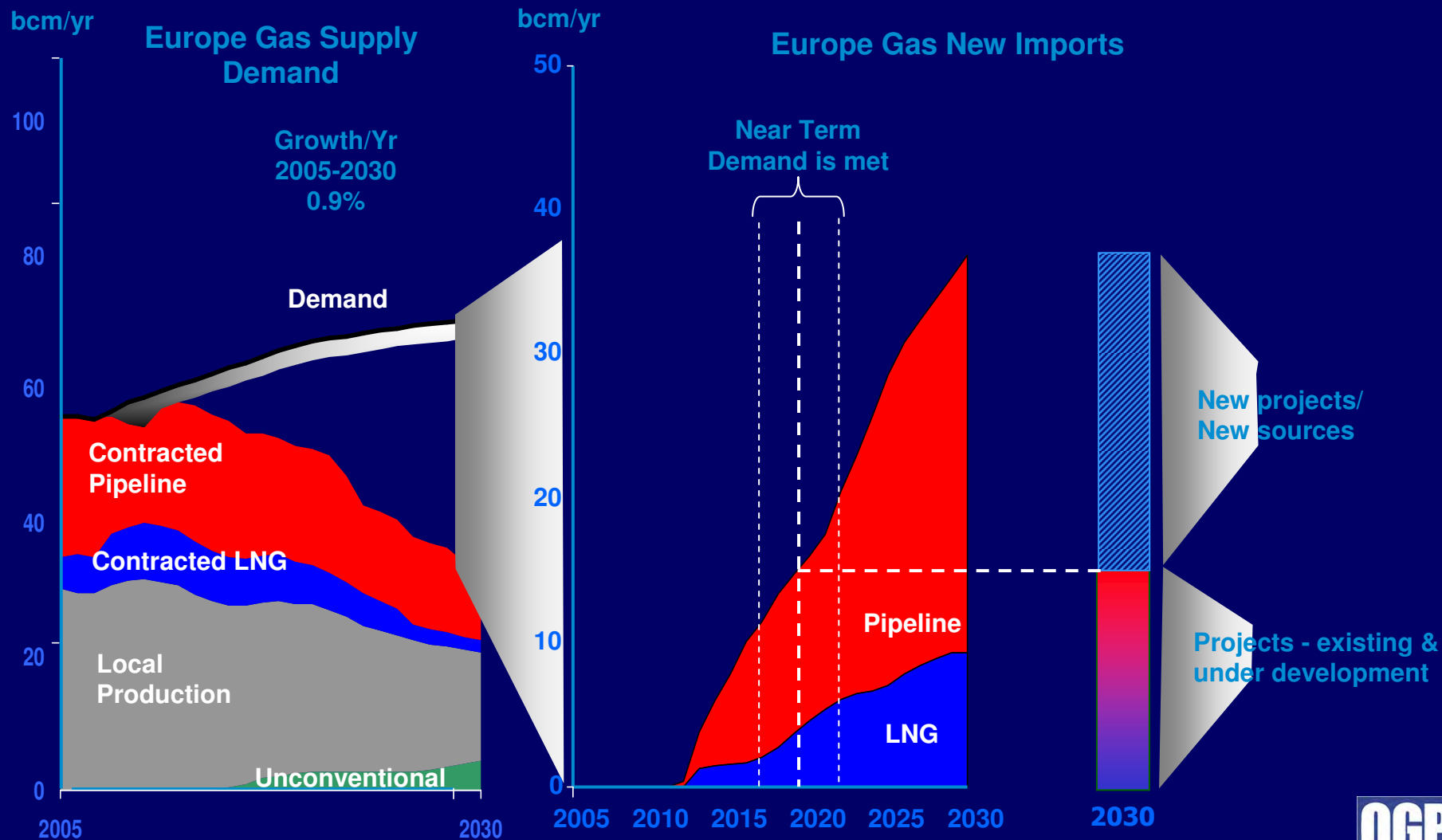
Low CO<sub>2</sub> energies, sustainable CO<sub>2</sub> storage



IEA 2008 (reference case)



# Europe Gas Supply and Demand

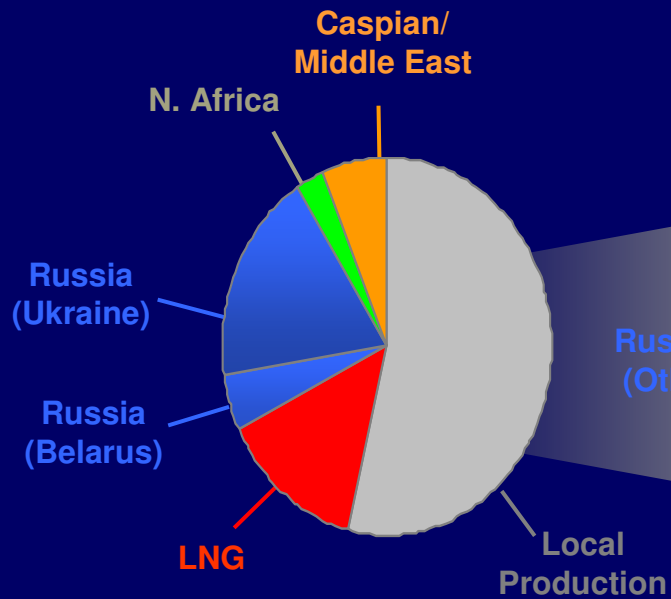


ExxonMobil

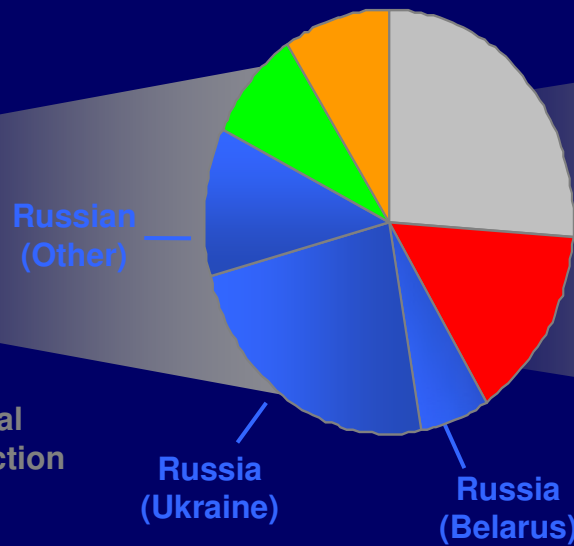


# Europe Supply Diversity

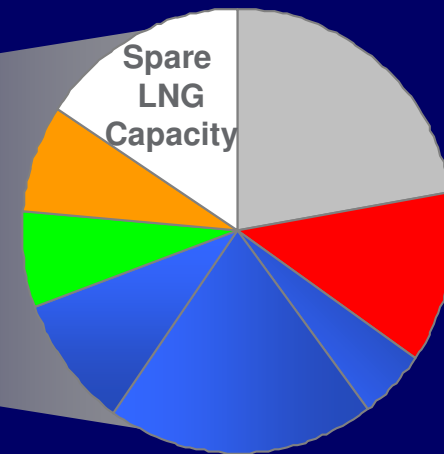
2008 Supply  
(~570 bcm/yr)



2030 Supply  
(~720 bcm/yr)



2030 Capacity  
(~930 bcm/yr)

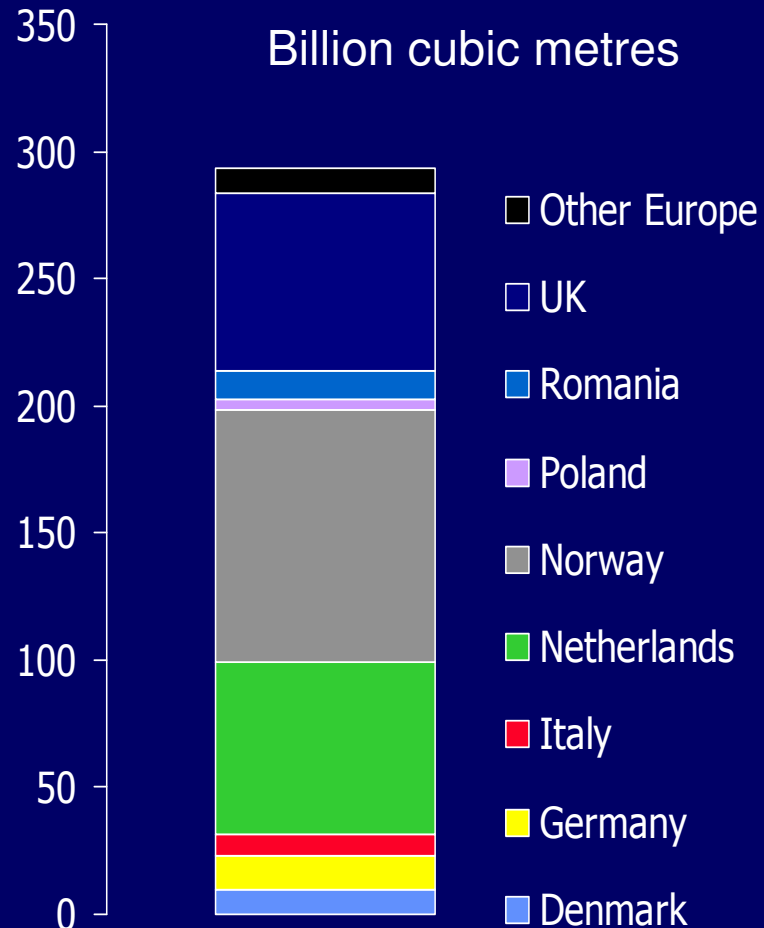


ExxonMobil





# European gas production 2008

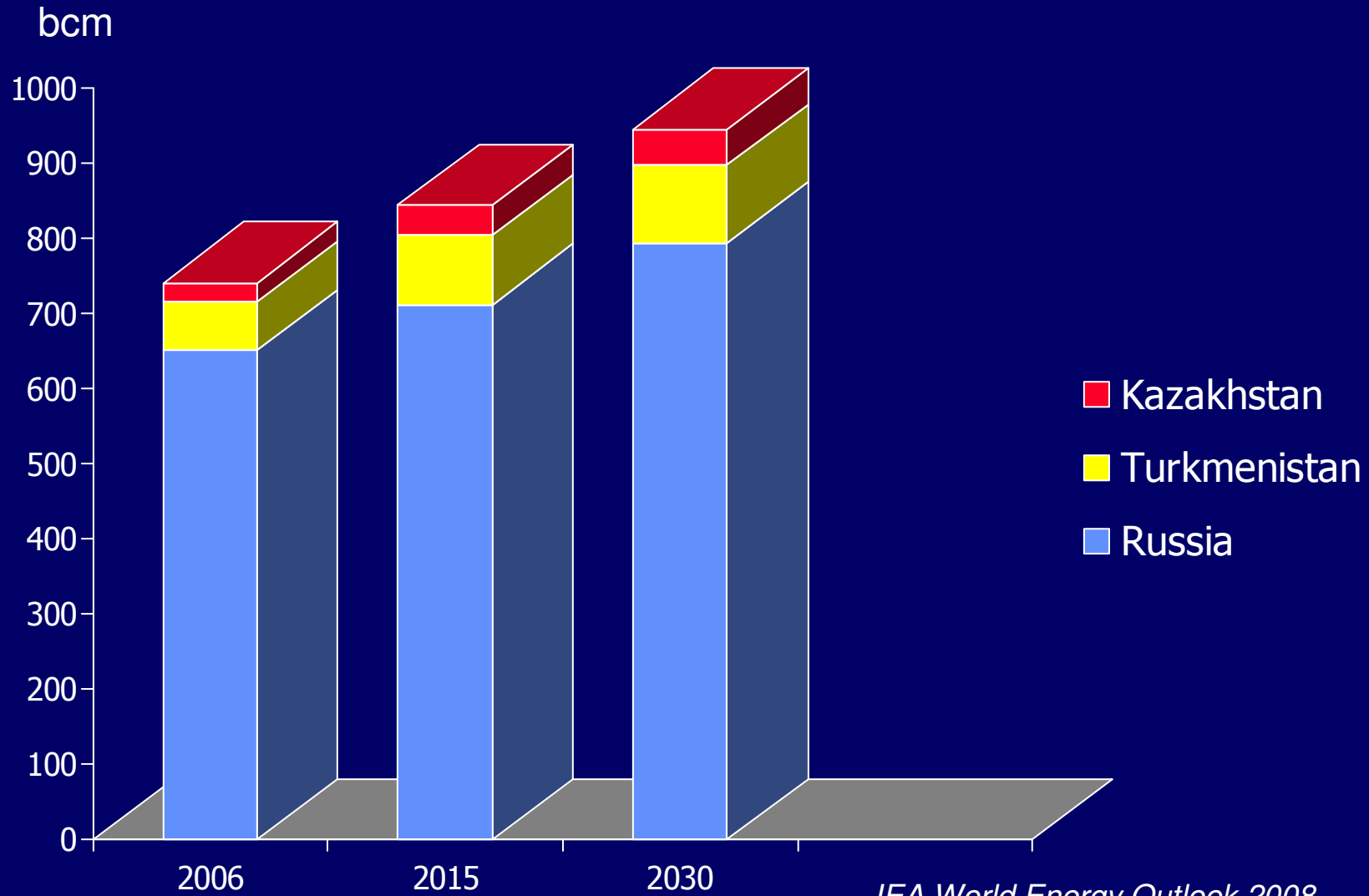


- European gas production peaked in 2004 at close to 330 bcm
- Norway is Europe's leading gas producer, the sixth largest in the world
- Growth from Norway has not offset a rapid decline in UK output
- European production is predicted to decline:
  - 294 bcm in 2008
  - 217 bcm in 2030

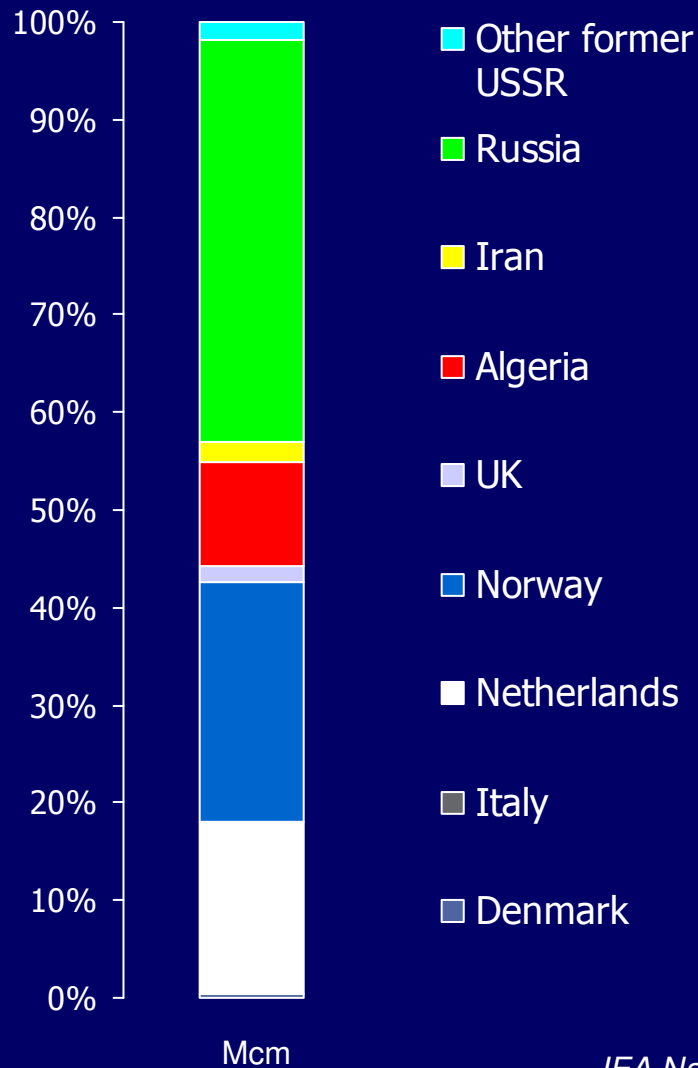
BP Statistical Review 2009

IEA World Energy Outlook 2008

# Natural gas production in Russia / Caspian



# Natural Gas to the EU by pipeline

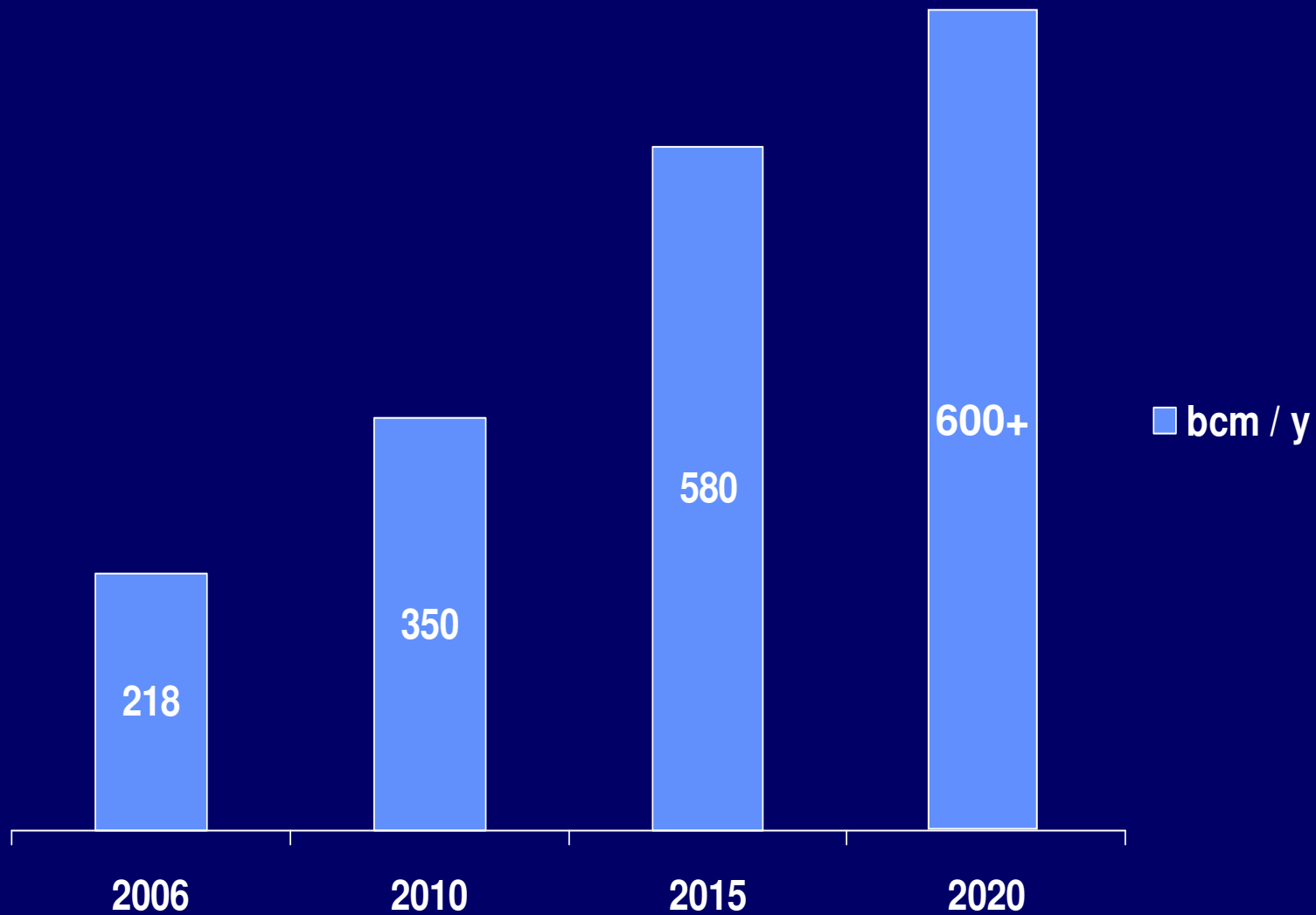


- The European Union will see the biggest increase in imported natural gas volumes
- Additional long-distance gas pipelines will be required to meet demand
- Planned pipeline projects bringing gas to the EU present significant technical challenges
- Huge investments that represent a substantial call on capital are required

IEA Natural Gas Information 2008



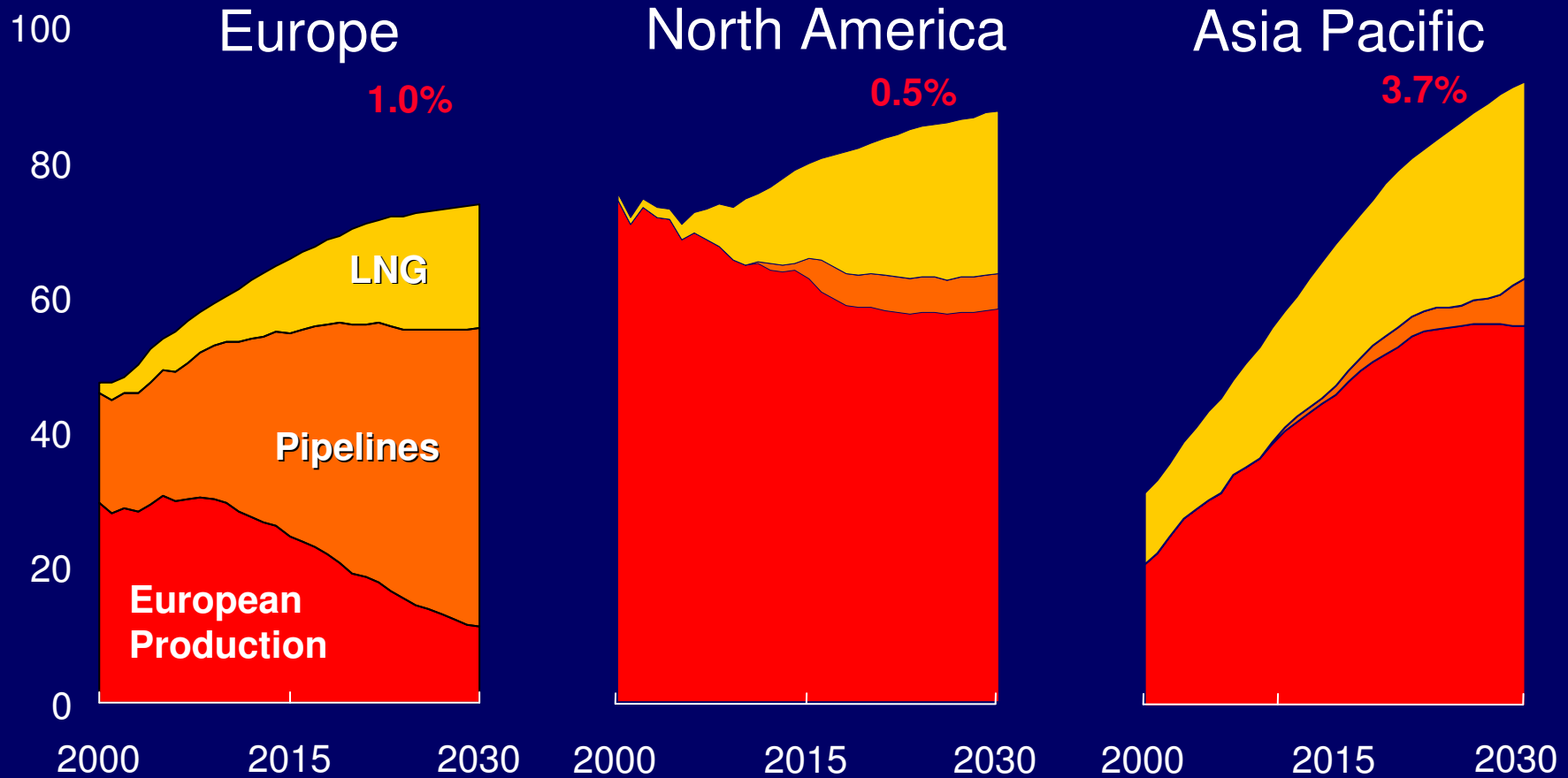
# Worldwide LNG Production Prediction



*All data from IEA and production company sources*



# Competition for world LNG supplies



ExxonMobil



## Challenges and Recommendations

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- To secure the future natural gas supply for Europe , the following should be considered:.....

## Stimulate Investment

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- Economic and regulatory frameworks
- Encourage investments with differing risk profiles
- Recognise the role of Third Party Access exemptions
- European regulators should also take the external view
- Speed up permitting procedures
- High risk, high capital investments need long-term contracts
- Solidarity agreements should not distort the market
- Accurate pricing signals at all times
- Rules for supply and use of non economic capacity

# European Production

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- Good communications with producers
- Promoting European production will promote production flexibility
- Claim the benefit of existing infrastructure
- Encourage unconventional gas
- Access to exploration acreage
- Promote development of marginally economic fields
- Promote proportionate application of environmental rules
- Flexible and attractive licence conditions



## Technology development

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- Less than half of the remaining natural gas resources can be recovered with existing technology
  - New technologies are required to unlock the potential of unconventional oil and gas resources and to enhance recovery

# The increasing technical challenge

## INCREASING TECHNICAL CHALLENGES IN OIL & GAS PRODUCTION

Conventional Hydrocarbons



Enhanced Oil Recovery

Contaminated Oil & Gas

Tight Oil & Gas

Oil Sands

Coal Bed Methane

Technical challenge

Difficult Hydrocarbons



Difficult Reservoirs  
e.g. fractured carbonates

Ultra Deep Water

The Arctic

Oil & Gas Shale

Gas Hydrates

# Transmission Pipelines

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- Capacities devoted to flexibility
- Linkages to sources of supply:
  - Storages
  - LNG terminals
  - Adjacent countries
- Interconnection network that has spare capacity available
- Tariffs that reflect uneconomic capacity and direction flow provision
- Diversification of gas supply routes to the EU from producing countries

## Natural Gas Storage

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- Recognise the strengths and weaknesses of different types of storage
- Reliant on pipelines for transportation to the consumer.
- If strategic stocks are held, clearly define the conditions of their use
- Arbitrary use of gas stocks will undermine the market and may result in a loss of confidence for investors in commercial storage
- Allow the market to see accurate price signals at all times

# LNG

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- Recognise the global nature of the LNG market
- Increase access to multiple sources of LNG
- Additional LNG supplies will facilitate regional trading platforms with transparent pricing mechanisms
- Ensure the compatibility of LNG re-gasification facility capacity and transmission networks
- Encourage flexible import capacity and recognise the risk profile of providing spare capacity

## External Gas Supply Relations

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- Develop interdependent relationships with non – EU producer and transit countries
- Maintain an effective dialogue with producer countries
- Encourage access to and development of, non – EU oil and gas resources and infrastructure
- Foster a framework for energy trade that focuses on the investment challenge
- Allow companies, investors and governments to make realistic and reliable analysis of risk and reward
- Promote legal stability, reliable institutions and respect for contractual agreements



## In summary

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Demand growth



Surplus capacity

Foreign relations



Access to resources

Political stability



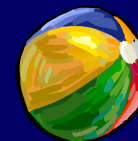
Technology

Costs



Regulation

Taxation



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Thank you for your attention!

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**About OGP.** The International Association of Oil and Gas Producers (OGP) is the single association representing companies and associations engaged in the exploration and production of oil and natural gas both at global and at EU level, with offices in London and Brussels.

At EU level, OGP represents members who are active in Europe. OGP Europe participates in the Berlin Fossil Fuels Forum as well as the Madrid European Gas Regulator Forum and it is the prime interlocutor for energy policy, environmental and other issues related to this industry.

Globally, OGP membership accounts for more than half of the world's oil output and about one third of global gas production. OGP fosters cooperation in the area of health, safety and the environment, operations and engineering, and represents the industry before international organisations, such as the UN, IMO and the World Bank, as well as regional seas conventions, such as OSPAR, where it has observer status."

