"Investment Environment in Turkish Natural Gas Market in Light of Global Energy Trends"

Nusret Cömert

Chairman of the Board

About PETFORM

Established in 2000, PETFORM has played a key role in forming and submitting private sector views to the authorities on the legal framework in Turkey including on Natural Gas Market Law, Petroleum Market Law and Turkish Petroleum Law.

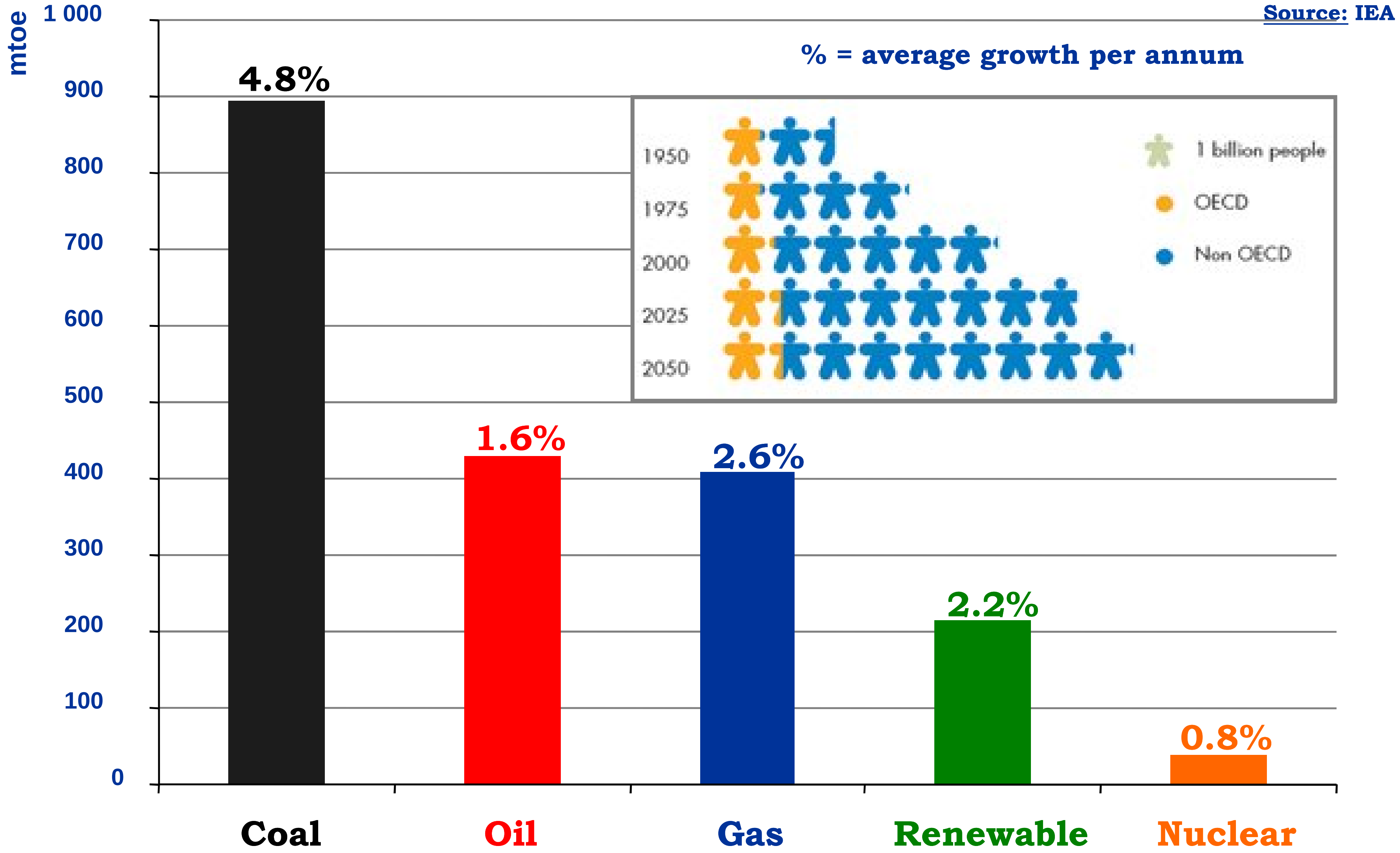
Member companies mainly have activities in 2 sectors:

- **Exploration & Production**
- **Natural Gas**

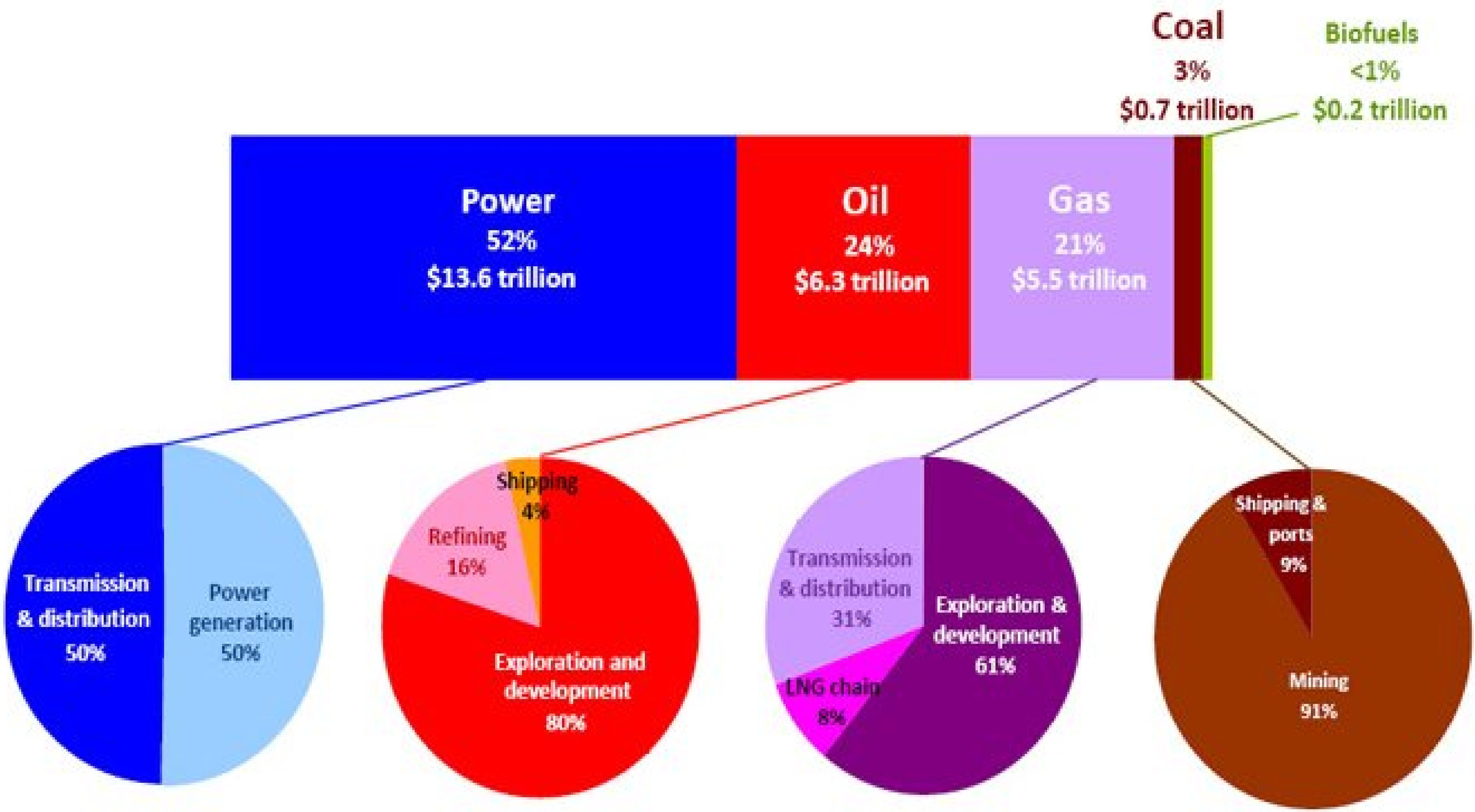
36 Member Companies

- AKENERJİ
- AKSA
- ALADDIN MIDDLE EAST
- ARGM
- ATTİLA DOĞAN İNŞAAT
- AVRASYA GAZ
- AYGAZ
- BOSPHORUSGAZ
- BP
- ÇALIK ENERJİ
- EDISON
- EGEGAZ
- ENERCO ENERJİ
- ENERGY OPERATIONS TURKEY
- ENERJİSA
- ENI
- E.ON RUHRGAS
- EWE ENERJİ
- GENEL ENERJİ
- GÜNEY YILDIZI PETROL
- IBS RESEARCH
- N.V.TURKSE PERENCO
- OMV
- OPALİT
- PALMET
- PEMI
- PETOIL
- PETROL OFİSİ
- SHELL ENERJİ
- STATOILHYDRO
- TEKFEN
- THRACE BASIN
- TOTAL
- TURCAS
- TURUSGAZ
- ZORLU ENERJİ

World Primary Energy Demand



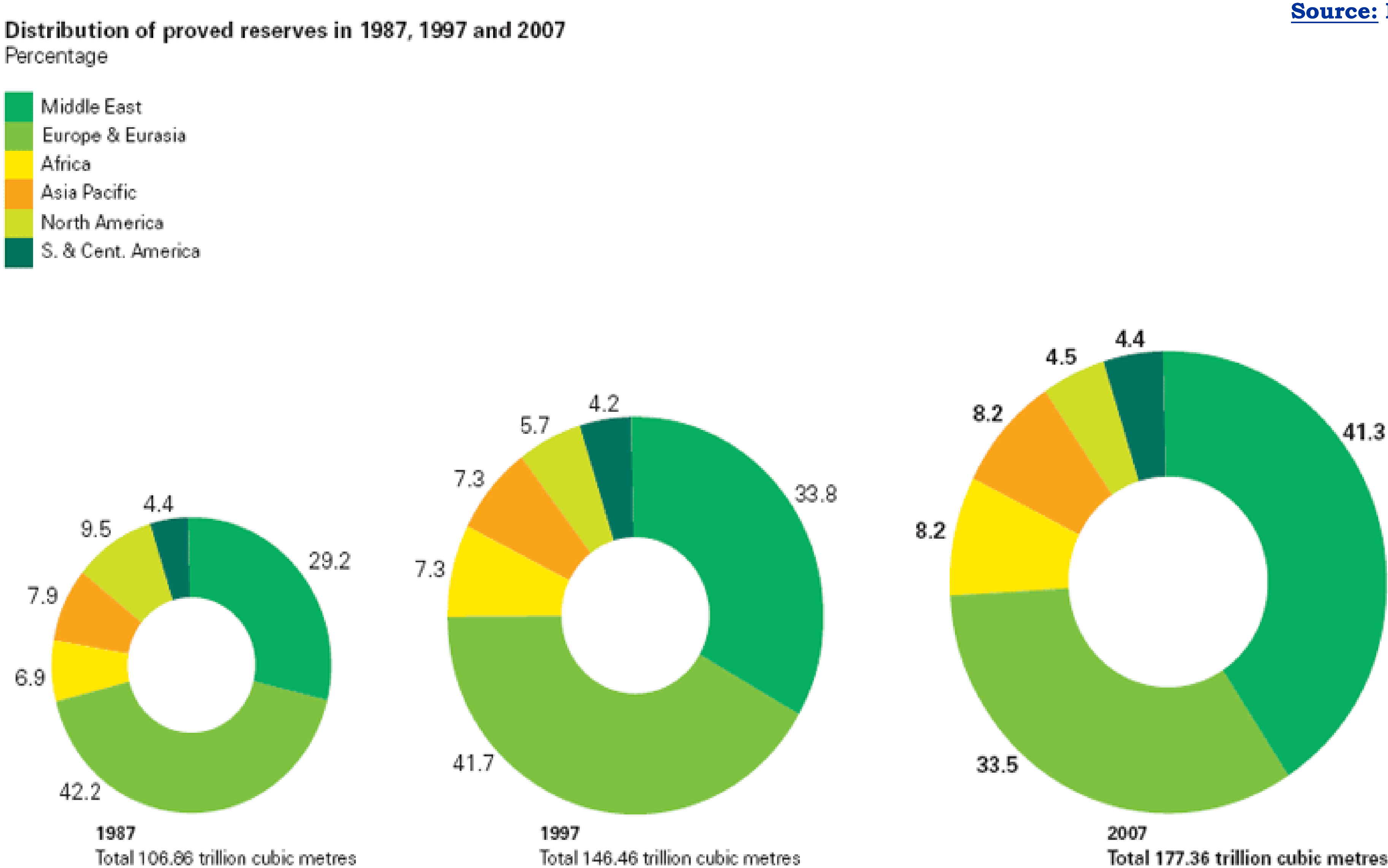
Required Energy Investments (2007 – 2030)



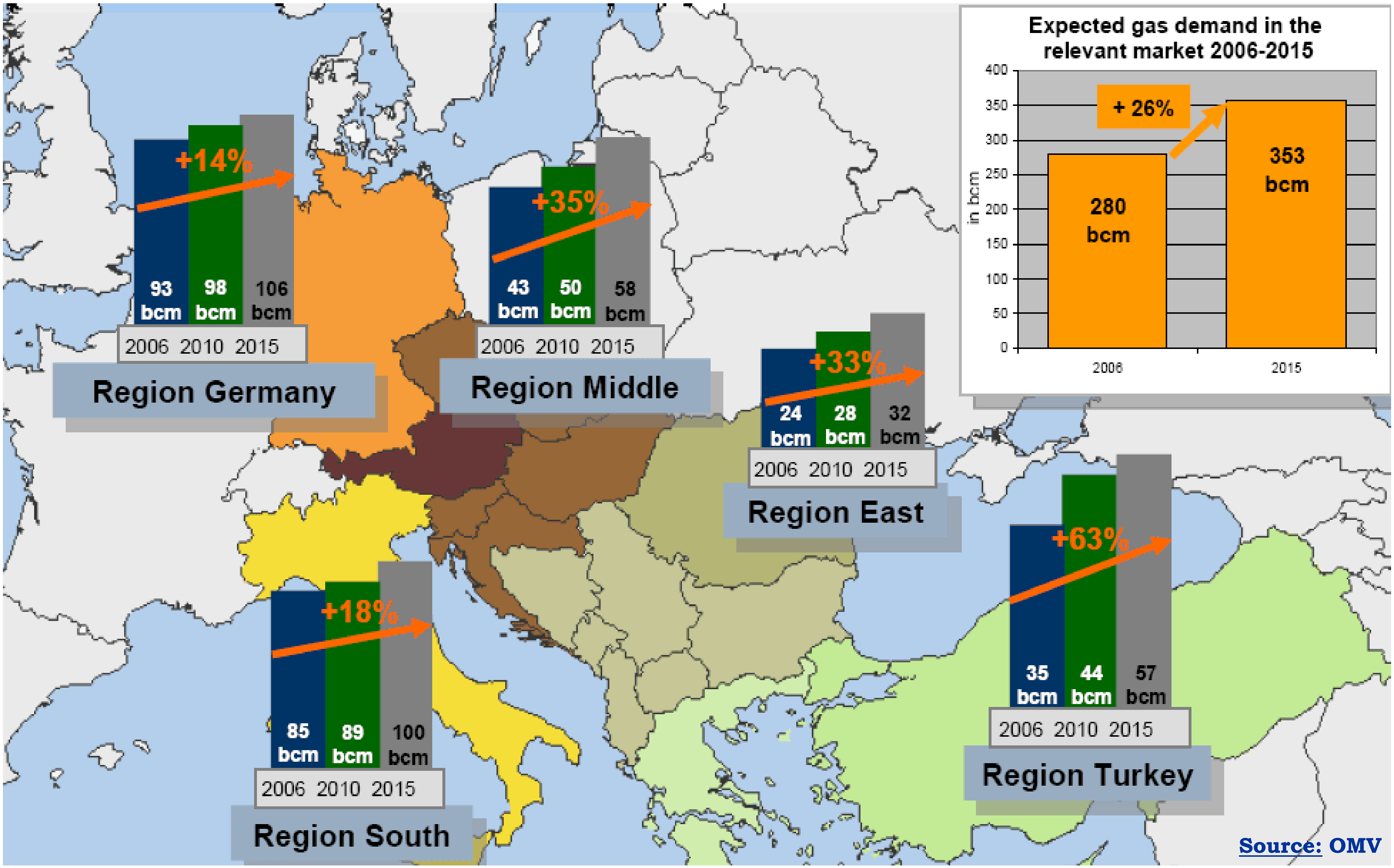
Source: IEA

Distribution of World Gas Reserves

Source: **BP**

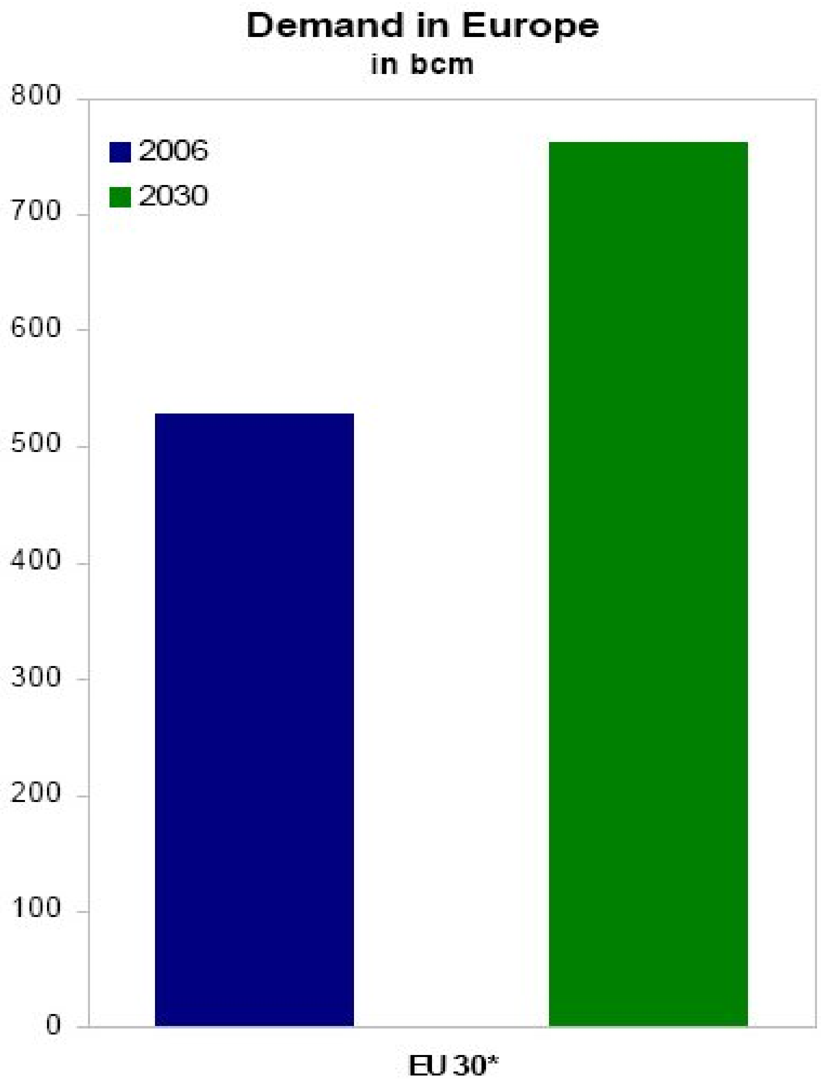


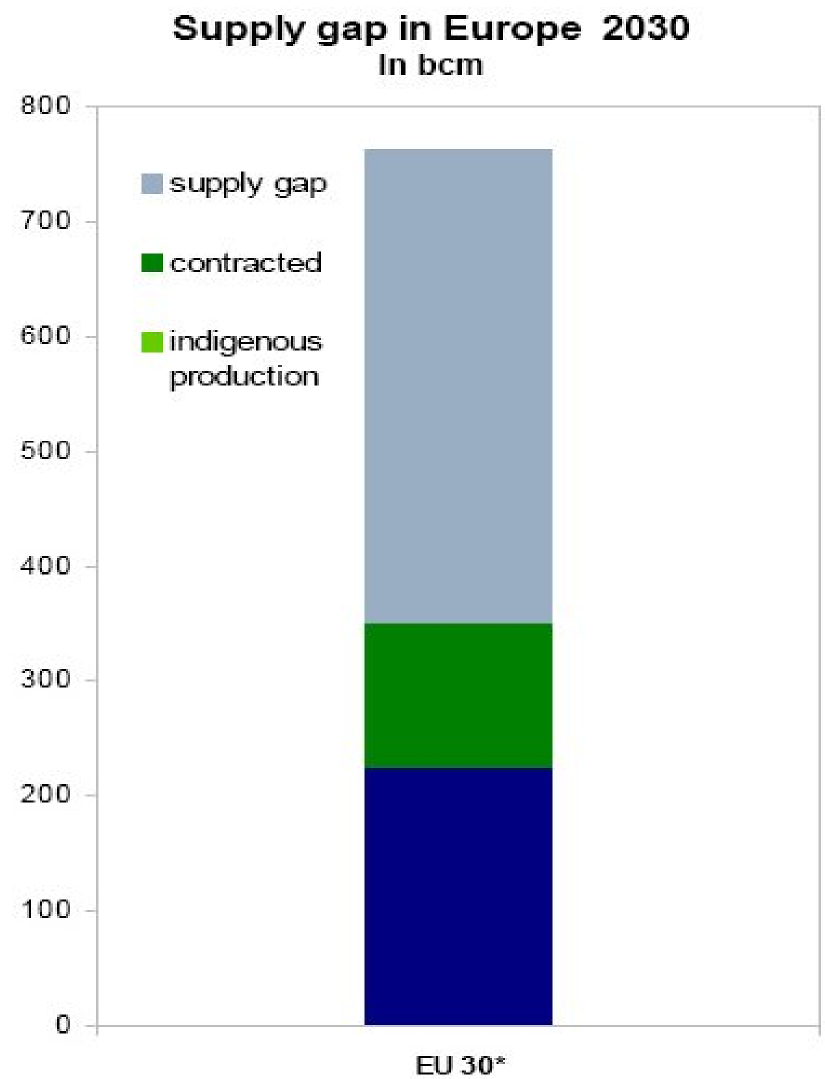
Europe's Gas Demand Forecast



Source: OMV

Gas Demand & Supply Gap in Europe

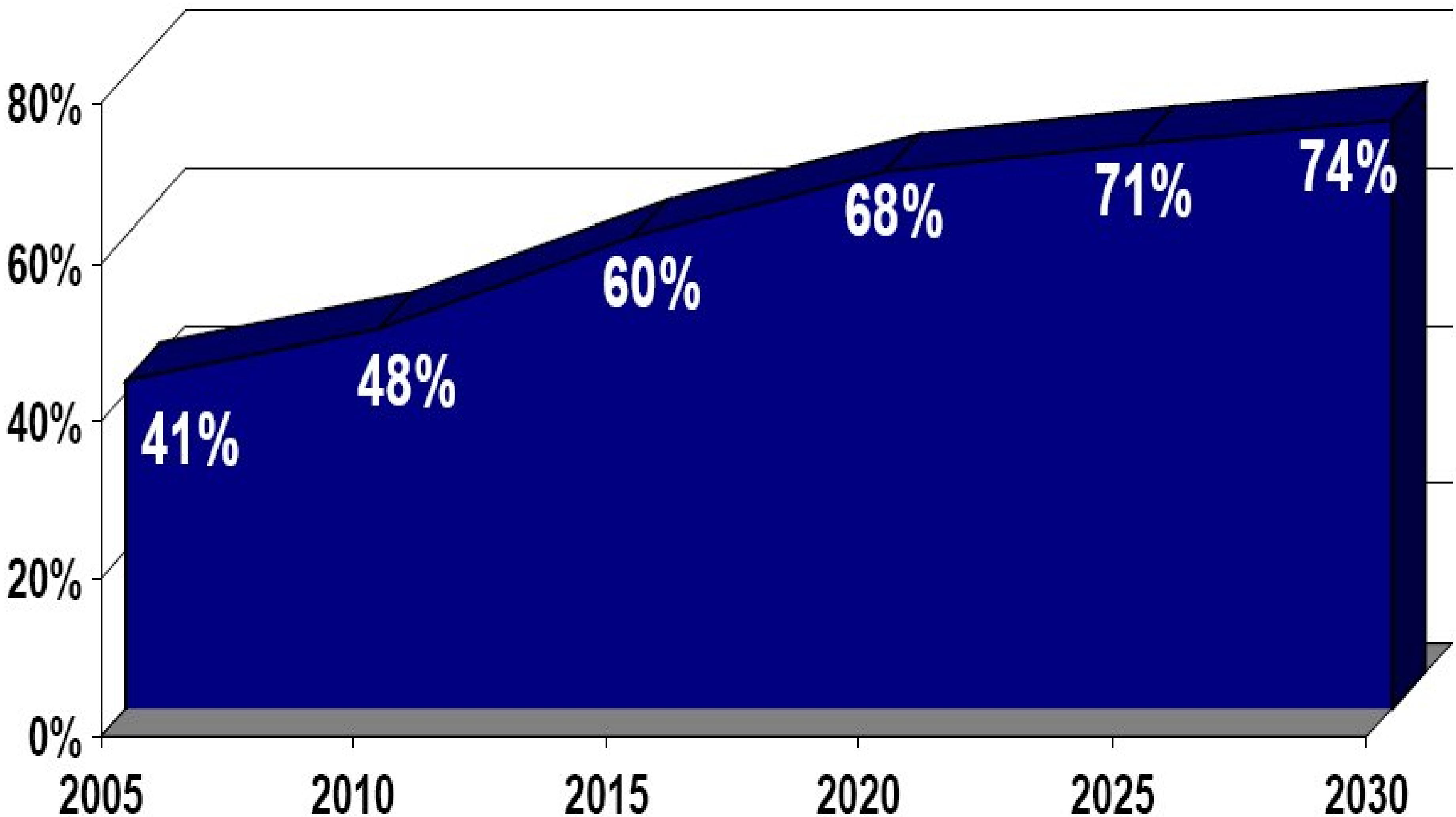




* Europe 30 (EU 25 + Rumania, Bulgaria, Croatia, Turkey, Norway

Source: OMV

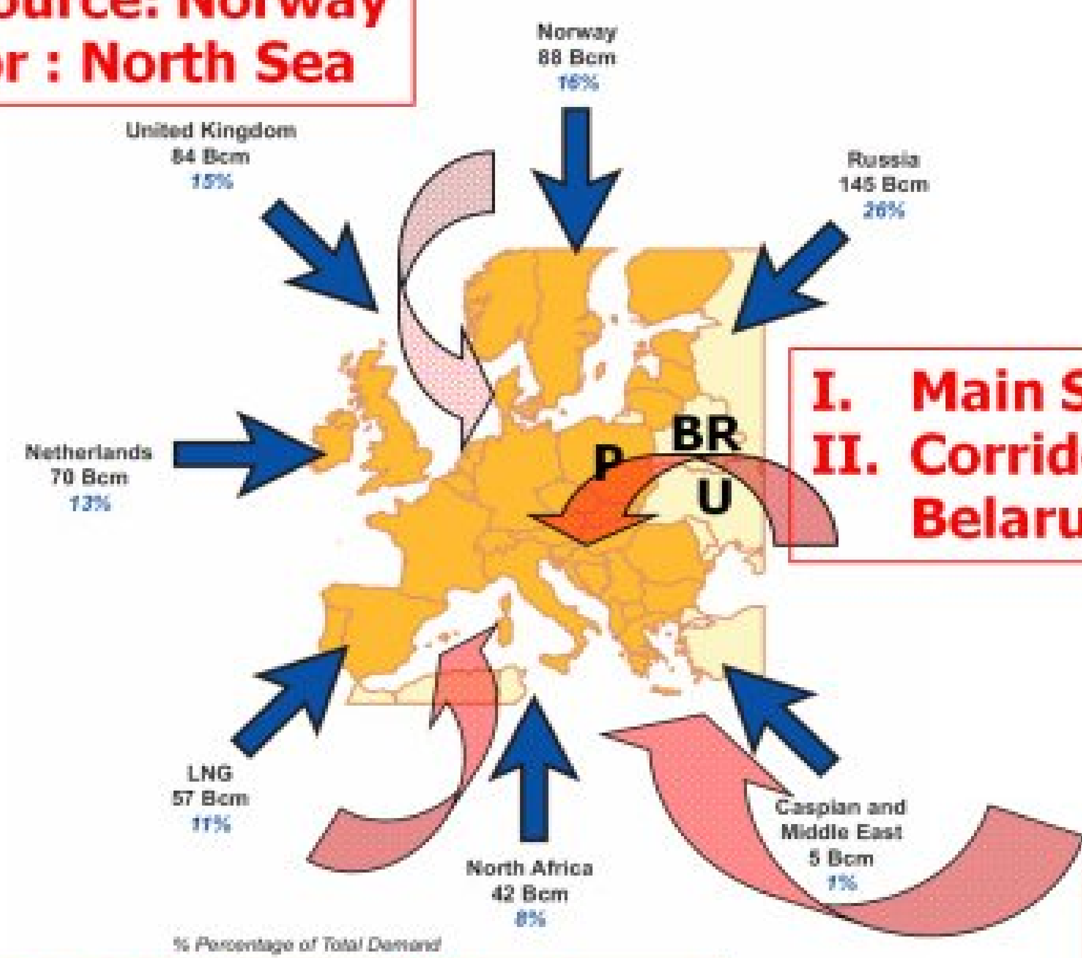
Europe's Gas Import Dependency



Source: OMV

Europe's Gas Corridors

II. Main Source: Norway
II. Corridor : North Sea



I. Main Source: Russia
II. Corridor: Ukraine / Belarus + Polond

III. Main Source: Algeria
III. Main Corridor: North Africa

IV.

Source: CERA

Turkey's Natural Gas Reserves

Total Reserve	**: 22.6 bcm**
Recoverable Gas	**: 16.9 bcm**
Cumulative Production	**: 9.5 bcm**
Remaining Recoverable Gas	**: 7.3 bcm**
Production in 2007	**: 0.9 bcm**
Distribution of Production	**: 54% » Private 46% » TPAO**

Source: **GDPA**

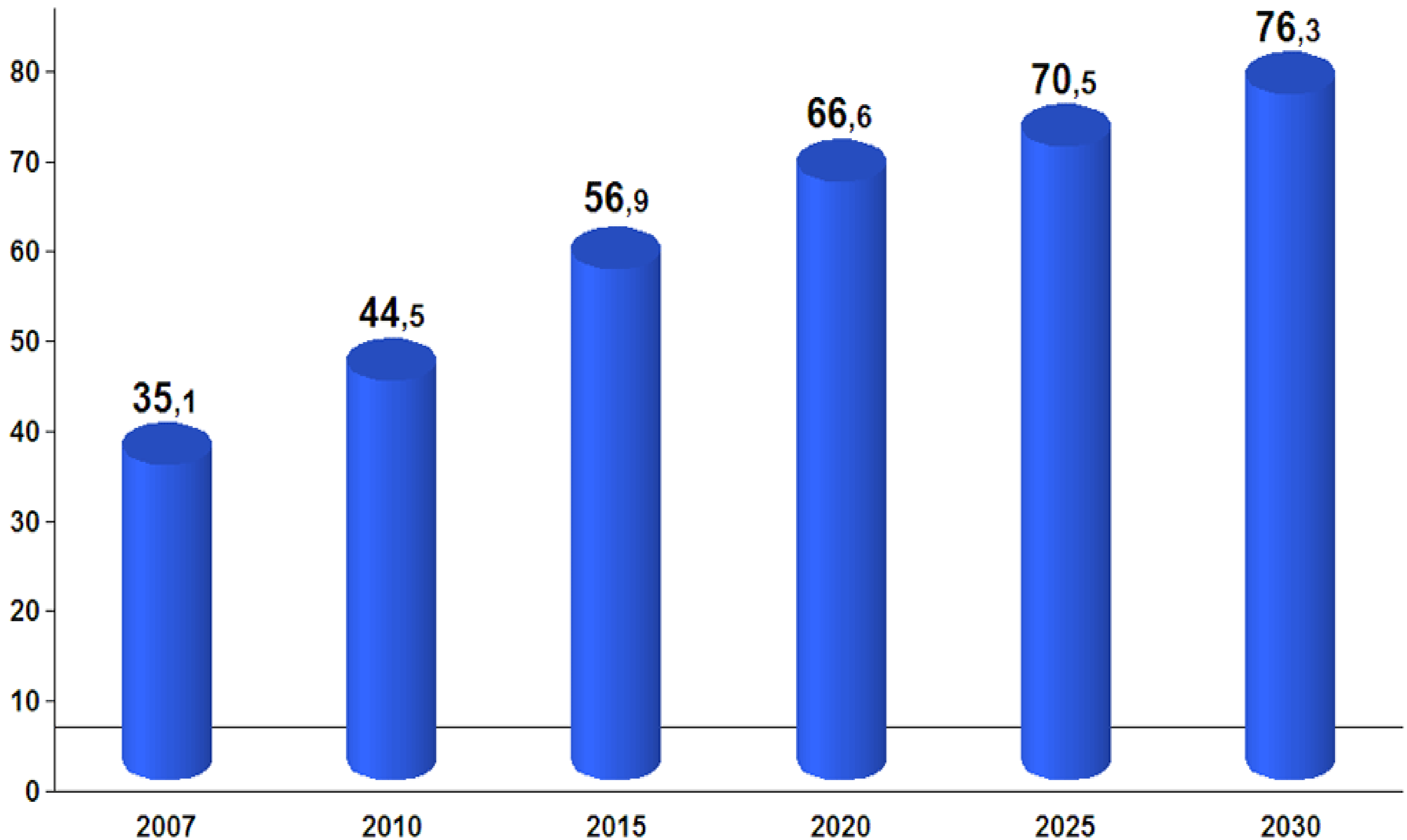
Turkey's Gas Imports (2007)

Source: BOTAŞ

	%	bcm
• Russia	: 63.5	23.1
• Iran	: 16.9	6.1
• Algeria	: 11.8	4.2
• Nigeria	: 3.9	1.4
• Azerbaijan	: 3.4	1.2
• Spot LNG	: 0.5	0.1
		36.4

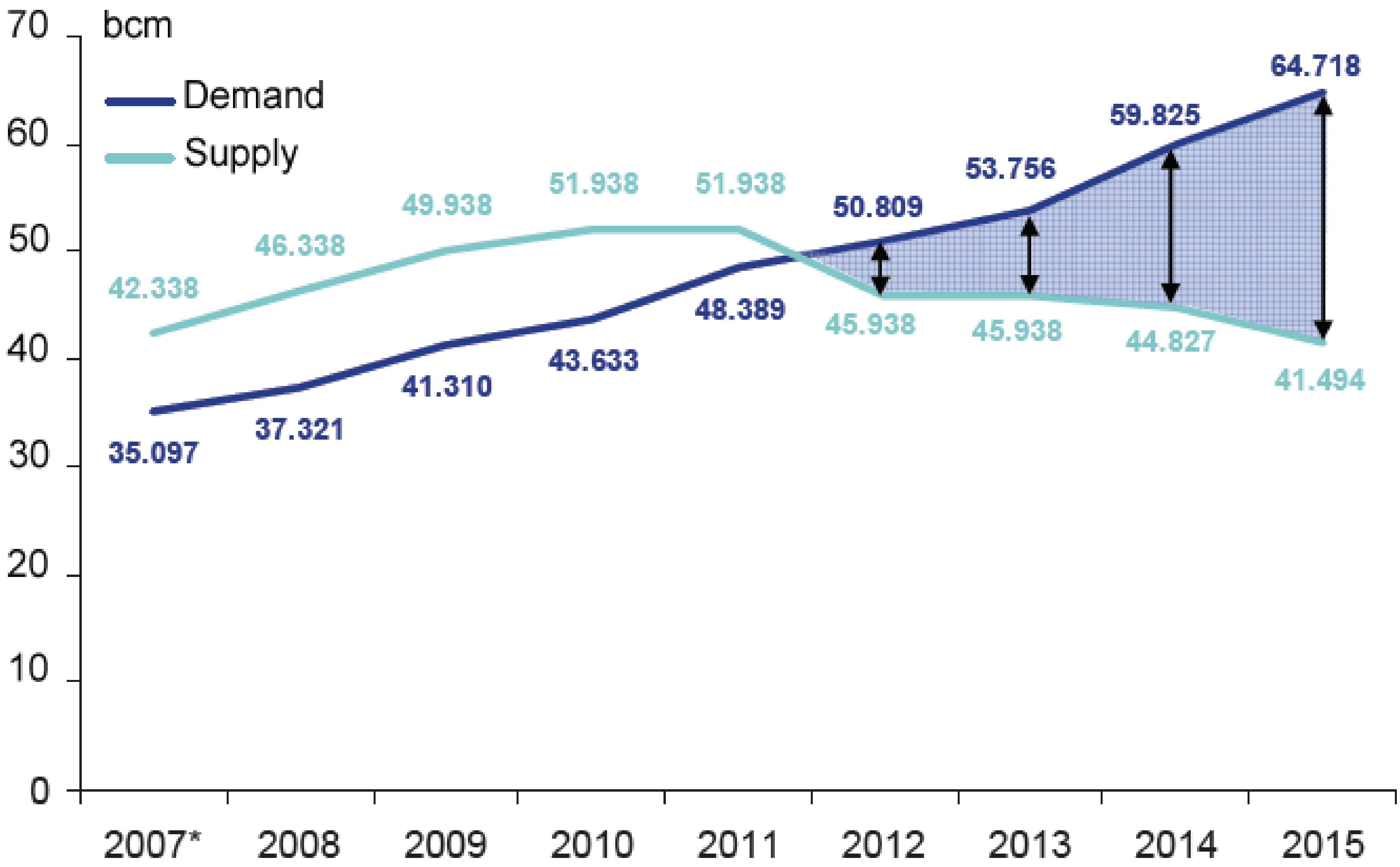
Turkey's Gas Demand Forecast

Source: BOTAŞ



Turkey's Supply – Demand Balance

Source: Deloitte



Natural Gas Market Law (2001)

- **Creating a liberal and competitive gas market**
- **Providing benefits to customers by supplying sustainable, cost-effective and environment friendly source of energy**
- **Reducing the market share of BOTAŞ to 20% by 2009 through a gas release programme**
- **Legal unbundling of BOTAŞ**

1st Contract Release Programme

- **Shell Enerji : 0.25 bcm**
- **BosphorusGaz : 0.75 bcm**
- **Enerco Enerji : 2.50 bcm**
- **Avrasya Gaz : 0.50 bcm**

4.00 bcm

PETFORM Members' Expectations

- **Immediate legal unbundling of BOTAŞ**
- **Implementation of 'Cost - Based Pricing Mechanism' fully in order to provide a healthy competition in the market**
- **Continue contract and/or volume release programmes to reduce market share of BOTAŞ**
- **To free up importation for the security of supply and market liberalization purposes**

Mergers & Acquisitions in Turkish Energy Market

	2005	2006	2007	2008
• Utilities	20%	3%	86%	90%
• Oil & Gas	80%	97%	14%	10%
• Total (US$ bn)	0,87	5,75	1,22	6,64

Source: PwC

Utilities Deals in Turkey (2008)

Target	Acquirer	Value (US$ mn)
• Başkent Elektrik	EnerjiSA	1225
• Sakarya Elektrik	AkCEZ	600
• Ankara Elektrik	Zorlu Enerji	510
• Meram Elektrik	Alsim Alarko	440
• Akenerji	CEZ	303
• İzgaz	GDF SUEZ	232

Source: PwC

Oil & Gas Deals in Turkey (2008)

Target	Acquirer	Value (US$ mn)
• Akpet	Lukoil	555
• Akçakoca Natural Gas Project	Petrol Ofisi	80
• KoçStatoil	Aygaz	14

Source: PwC

Thank You

PETFORM