



“Latest Trends & Dynamics of Turkish Natural Gas Market”

Power Industry Turkey
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Chairman of the Board

About PETFORM



Established in 2000, PETFORM has played a crucial role in the transfer of private sector views to the public authorities regarding to Turkish energy legislation amendments (Natural Gas Market Law, Petroleum Market Law, Turkish Petroleum Law...)

Member companies mainly have activities in 2 sectors:

- Exploration & Production Sector
- Natural Gas Market

PETFORM Member 50 Energy Companies



- AKENERJ
- AKSA DO ALGAZ
- ALADDIN MIDDLE EAST
- ANATOLIA ENERGY
- ANGORAGAZ
- ATT LA DO AN N AAT
- AVRASYA GAZ
- AYGAZ DO AL GAZ
- BM HOLD NG
- BOSPHORUSGAZ
- BP
- ÇALIK ENERJ
- DEM RÖREN EGL
- DO AL ENERJ
- EDISON
- EGE GAZ
- ENEL
- ENERCO ENERJ
- ENERJ SA
- ENI
- E.ON TURKEY ENERJ
- ERDGAZ
- EWE ENERJ
- EXXONMOBIL
- GDF SUEZ
- GENEL ENERGY
- GÜNEY YILDIZI PETROL
- HATTU A ENERJ
- HONEYWELL
- IBS RESEARCH
- MARSA ENERGY
- MEDGAZ
- NATURGAZ
- N.V.TURKSE PERENCO
- OMV
- PALMET ENERJ
- POZ T F DO ALGAZ
- SHELL ENERJ
- SOCAR TURKEY ENERJ
- STATOIL
- TEKFEN N AAT
- TEMI
- THRACE BASIN
- TIWAY TURKEY
- TOTAL
- TURCAS
- VALEURA ENERGY
- VALVITALIA
- ZMB GAZ DEPO
- ZORLU ENERJ

PETFORM Members in Turkish Economy (2011)

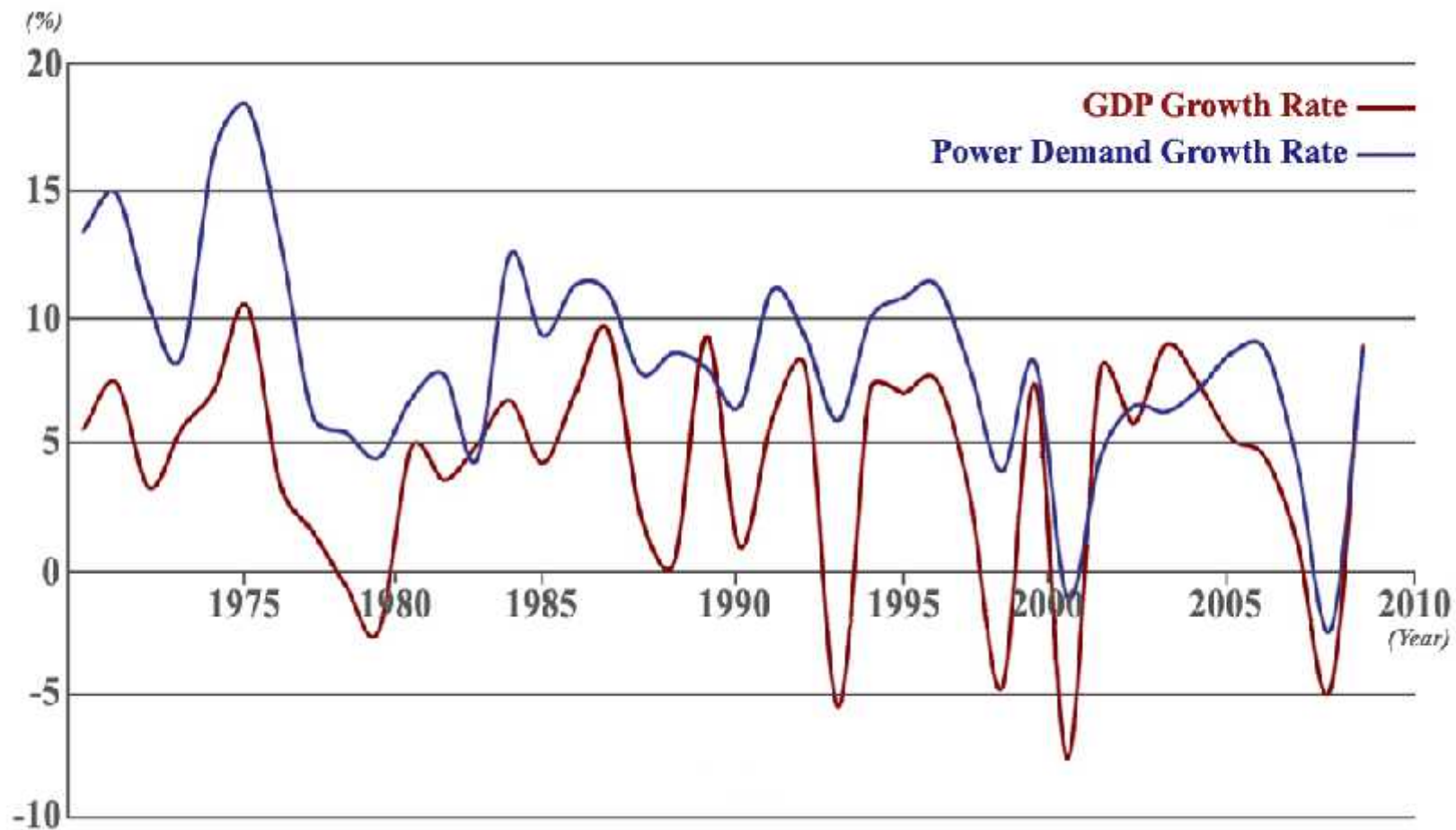


Total Turnover : 63.7 billion TL
(~ 35.2 billion USD = 5% of GDP)

Total Tax : 4.3 billion TL
(~ 2.4 billion USD)

Total Employment : 31,500

GDP vs. Power Demand Growth (1970 – 2010)



Source: Energy Market Regulatory Authority

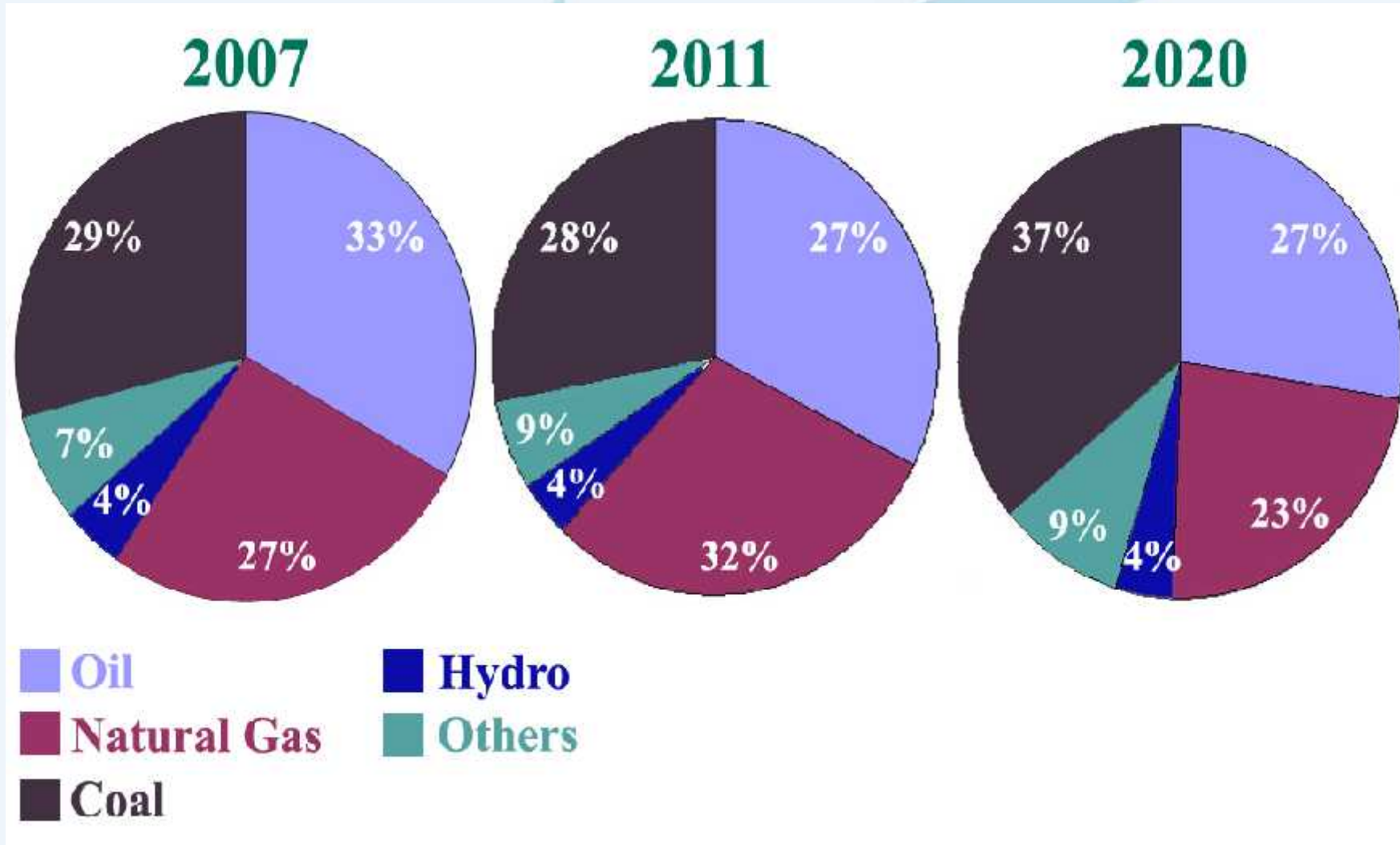
Change in Energy Balance (1990 – 2010)



	1990	2010	Change
Total Energy Demand (million toe)	52.9	109.2	106%
Total Domestic Production (million toe)	25.6	32.4	26%
Total Energy Imports (million toe)	30.9	87.4	182%
Coverage of Domestic Production to Total Consumption	48%	29%	- 40%

Source: Ministry of Energy and Natural Resources

Energy Consumption by Source (2007 – 2011 – 2020)



Source: Ministry of Energy and Natural Resources

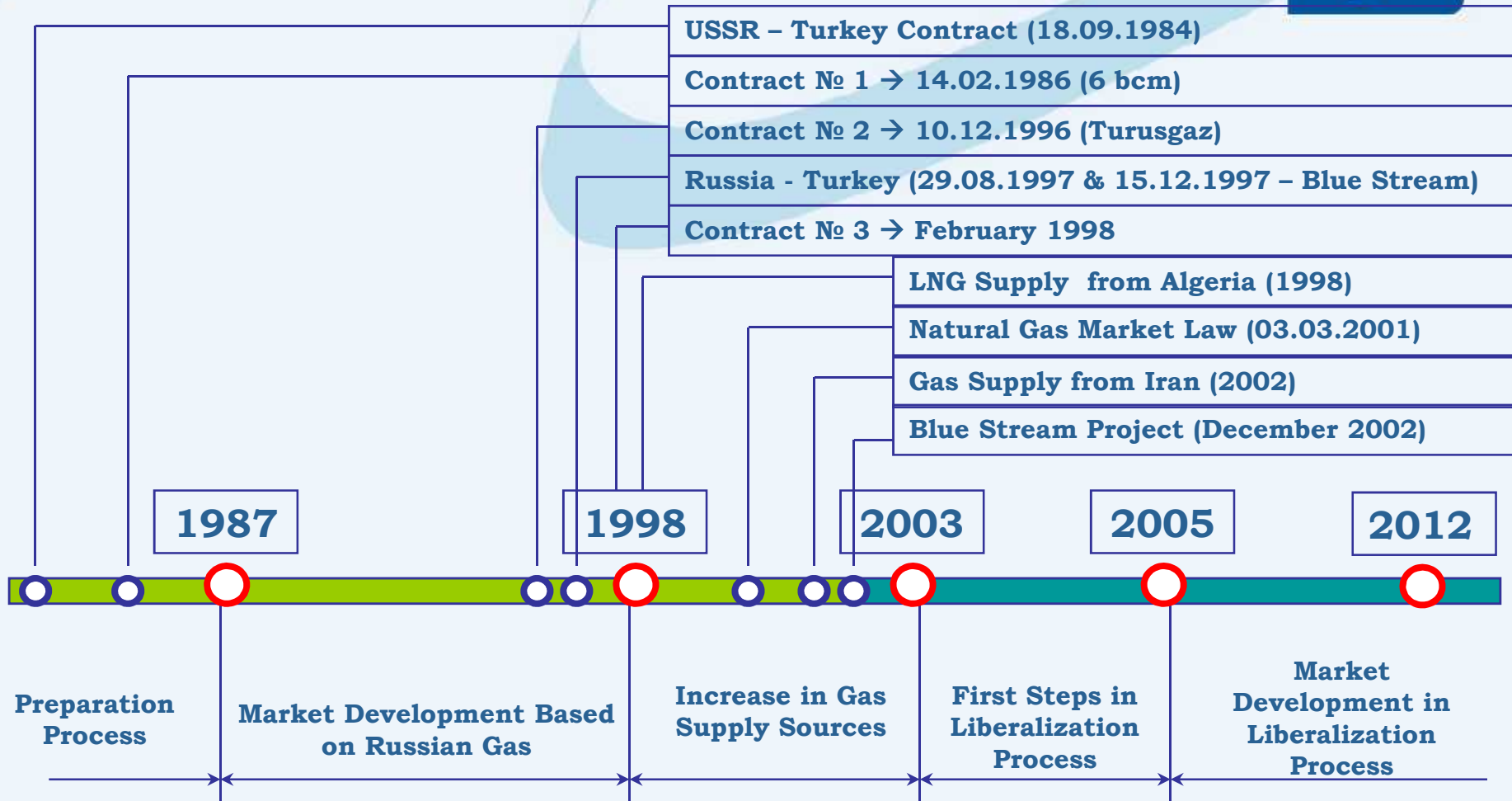
Share of Energy in Turkey's Total Imports



(billion USD)	2009	2010	2011
Crude Oil & Petroleum Products	14.9	20.6	29.2
Natural Gas	11.6	14.1	20.2
Coal	3.1	3.2	4.1
Total Energy Imports	29.9	38.5	54.1
Turkey's Total Imports	140.9	185.5	240.8
Share of Oil & Gas in Turkey's Total Imports	18.8%	18.7%	20.5%

Source: Ministry of Economy

Development Process of Turkish Natural Gas Market



Gas Purchase Agreements



Contract	Date of Signature	Date of Operation	Duration (Years)	Volume (Plateau bcma)	Date of Expiration
Russia (West)	Feb 1986	Jun 1987	25	6	2012
Algeria (LNG)	Apr 1988	Aug 1994	20	4	2014
Nigeria (LNG)	Nov 1995	Nov 1999	22	1.2	2021
Iran	Aug 1996	Dec 2001	25	10	2026
Russia (B.Stream)	Dec 1997	Feb 2003	25	16	2028
Russia (West)	Feb 1998	Mar 1998	23	8	2021
Azerbaijan	Mar 2001	Jul 2007	15	6.6	2022

Source: Energy Market Regulatory Authority

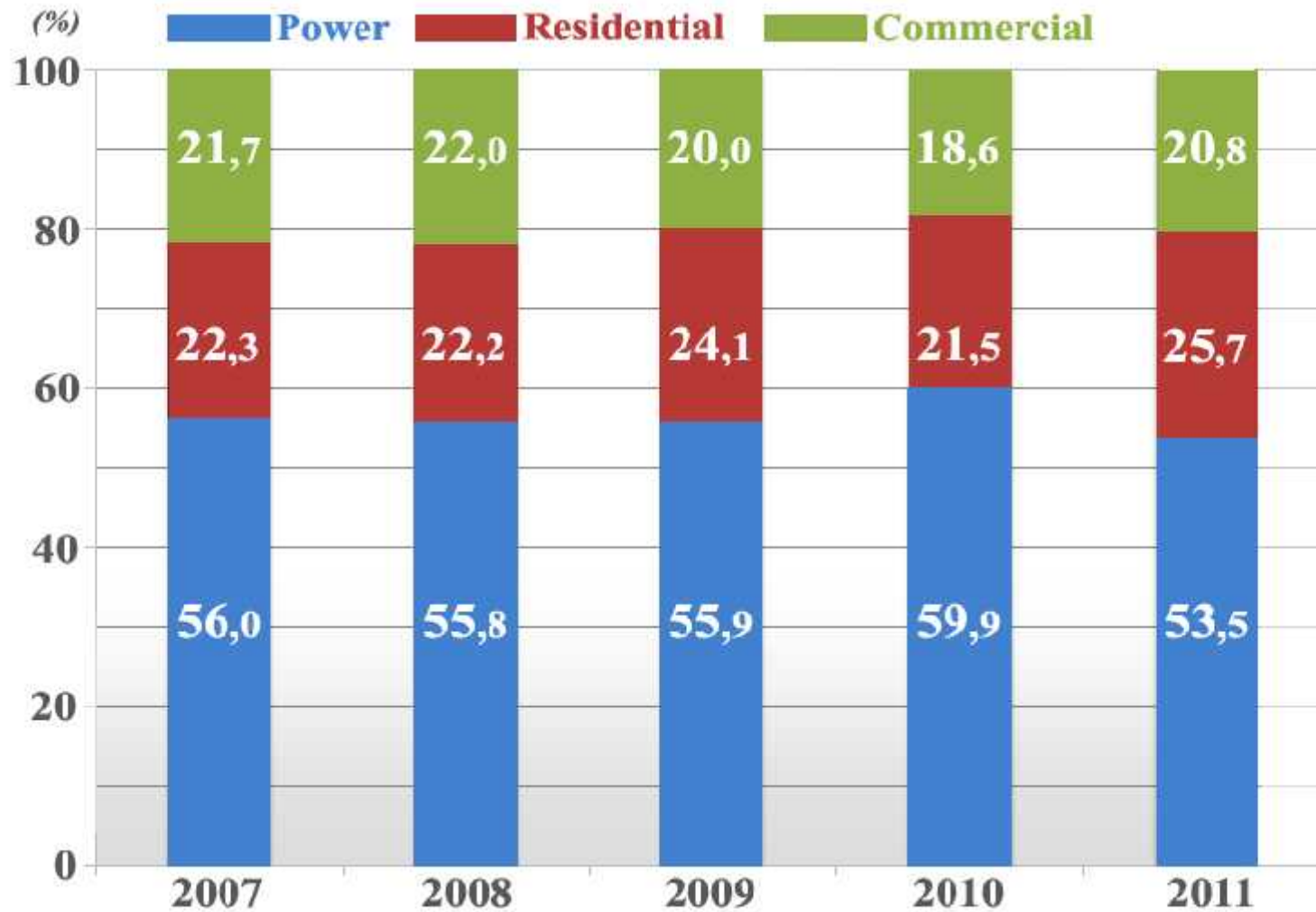
Gas Imports by Source Country (2009 – 2010 – 2011)



(bcm)	2009	2010	2011	Share in Total (2011)
Russia	19.473	17.576	25.406	57.9%
Iran	5.252	7.765	8.190	18.7%
Azerbaijan	4.960	4.521	3.806	8.6%
Algeria (LNG)	4.487	3.906	4.156	9.5%
Nigeria (LNG)	0.903	1.189	1.248	2.8%
Spot LNG	0.781	3.079	1.069	2.5%
Total	35.856	38.036	43.874	

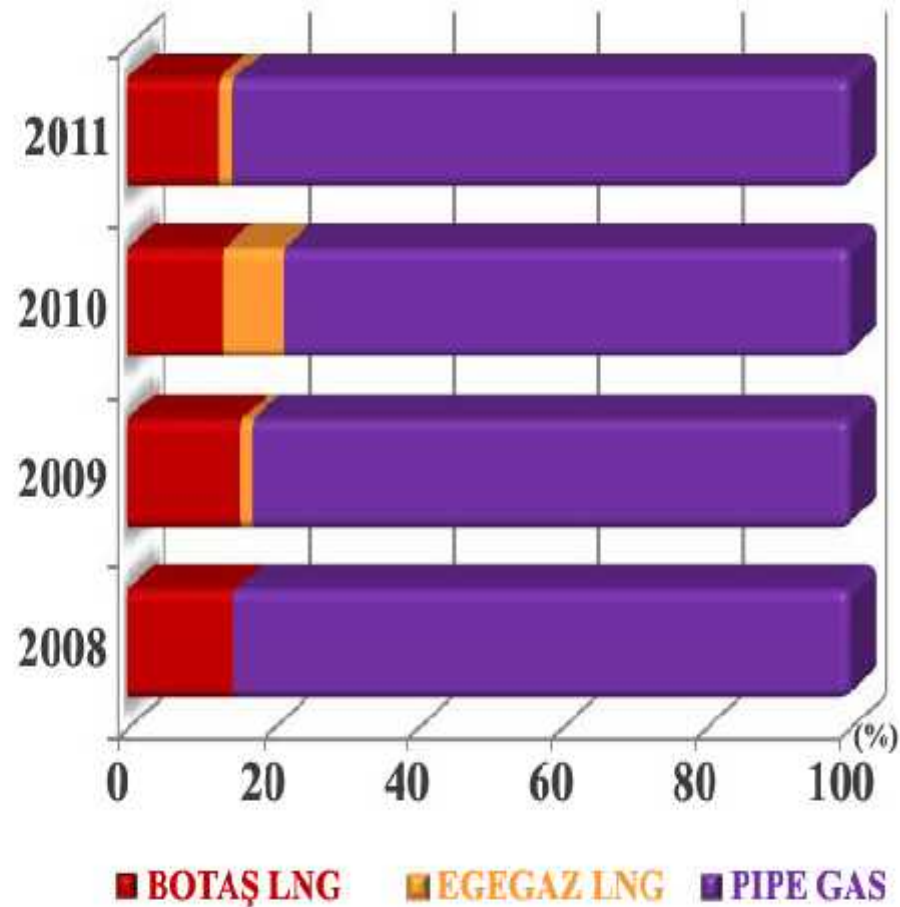
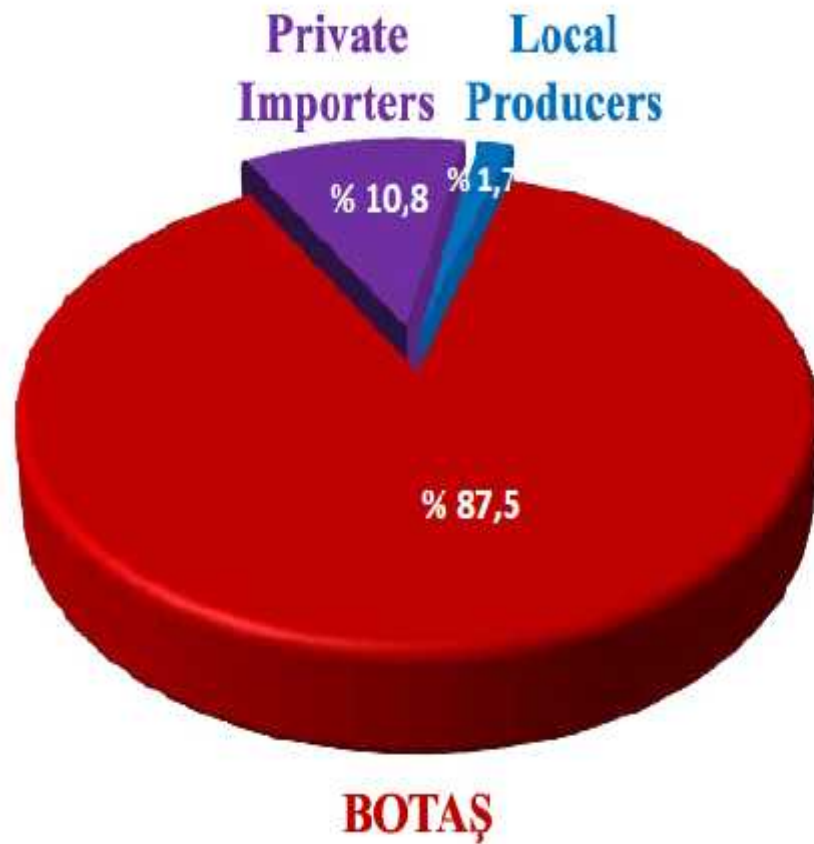
Source: Energy Market Regulatory Authority

Sectoral Breakdown of Gas Consumption (2007 – 2011)



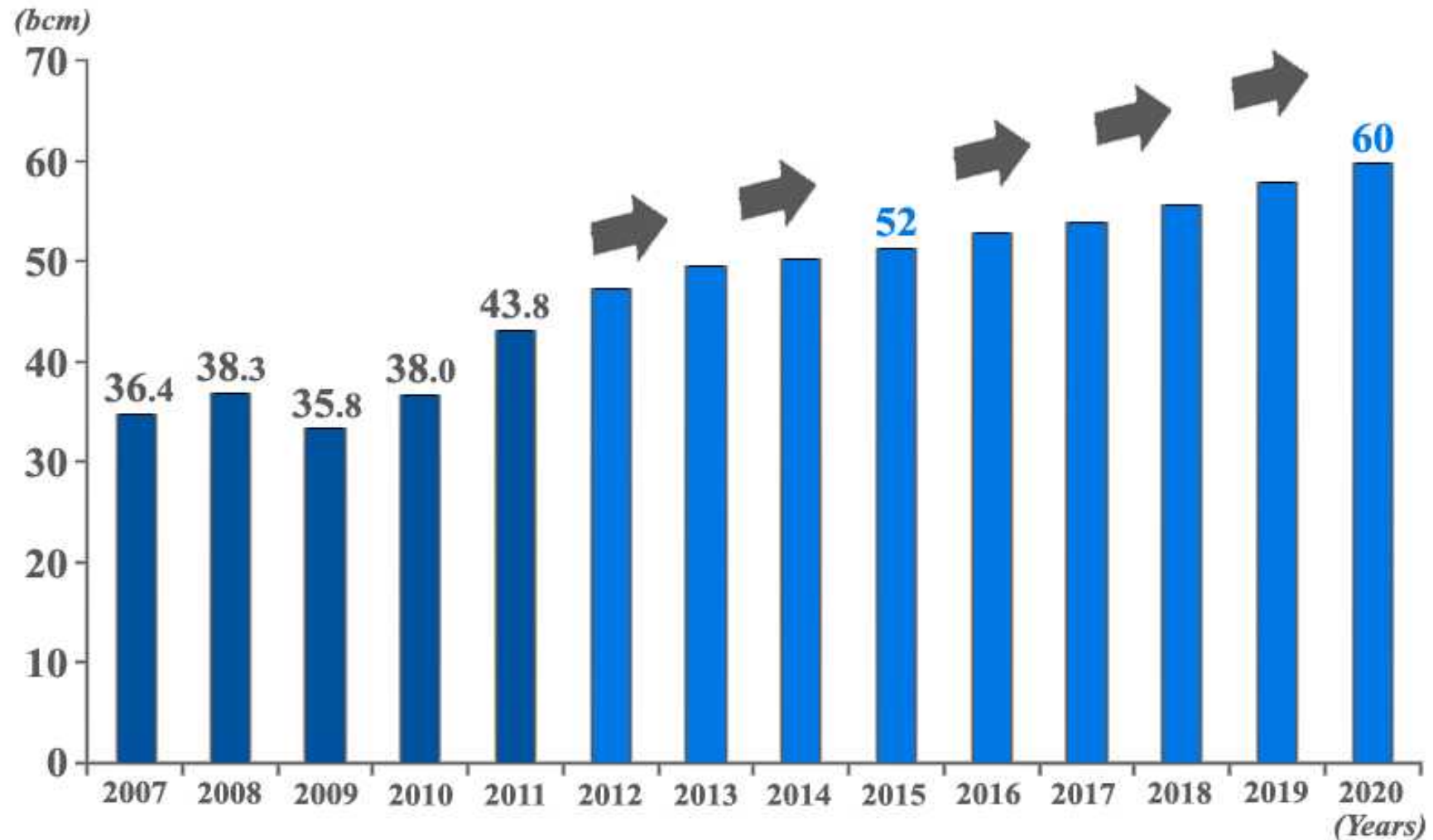
Source: Ministry of Energy and Natural Resources

BOTAŞ vs. Private Importers LNG vs. Pipe Gas



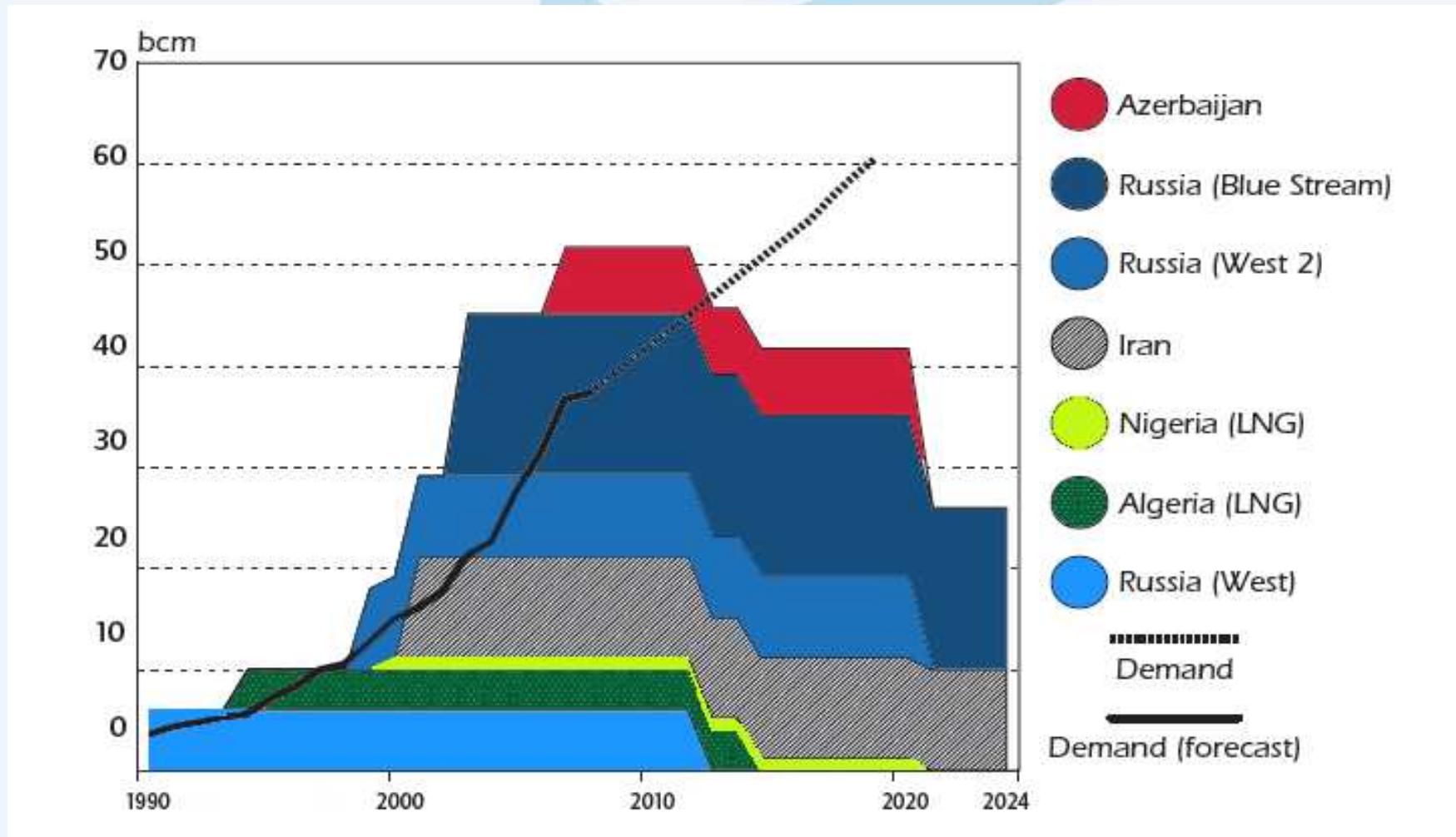
Source: Energy Market Regulatory Authority

Gas Imports Realizations & Projection (2007 – 2020)



Source: BOTAS & EMRA

Gas Supply – Demand Balance (1990 – 2024)



Source: ; IEA Turkey 2009 Review

PETFORM's Suggestions for a Competitive Gas Market



- 1. Cost-Based Pricing Mechanism**
- 2. No restrictions for private sector's imports**
- 3. Legal unbundling of BOTTA**
- 4. Clear Roadmap for Gas Release**
- 5. Legal and Commercial Ground for Gas Hub**



THANK YOU...