

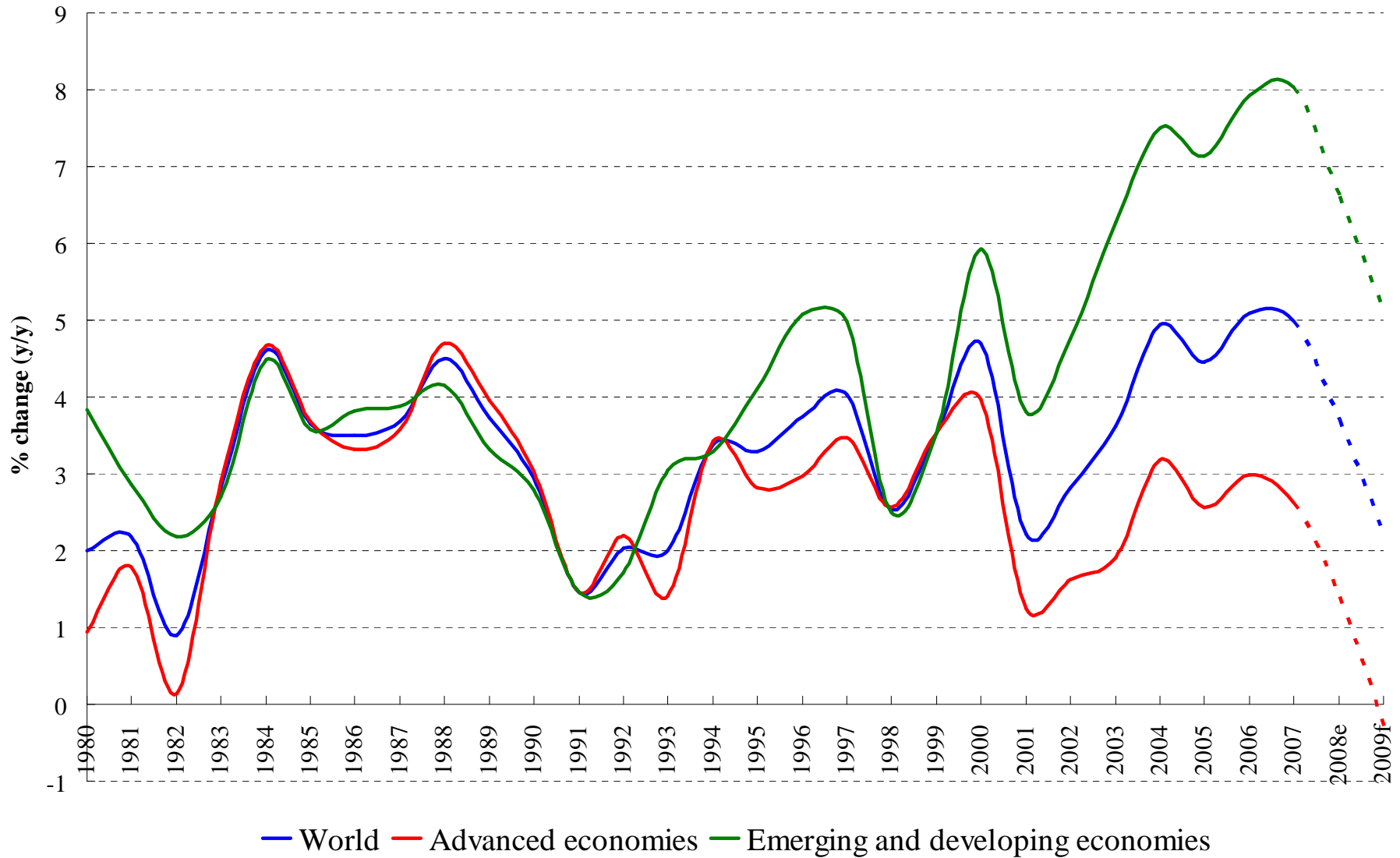


**Convergent and Divergent Commercial Interests between
EU Member States and the Russian Federation**

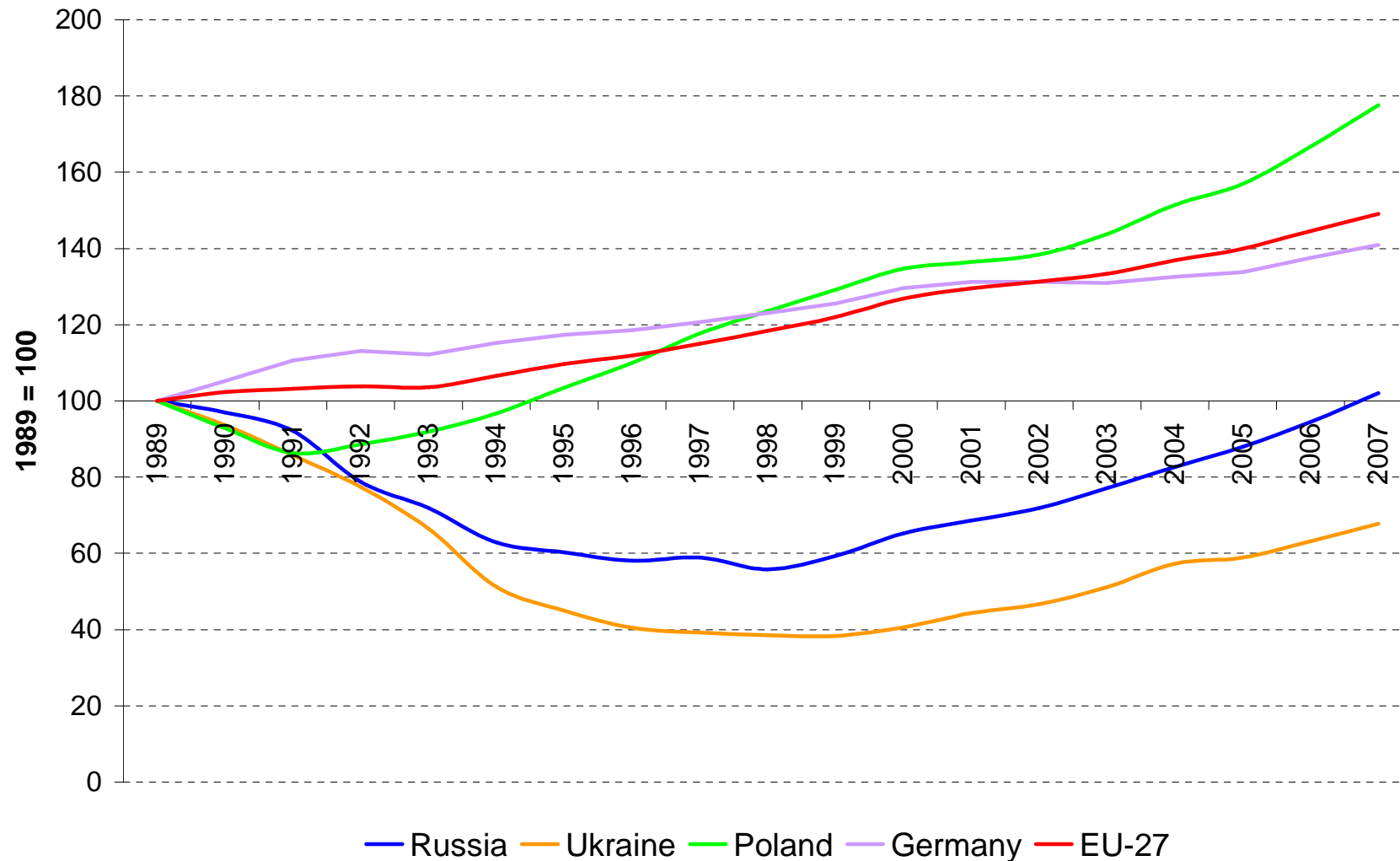
Warsaw - December, 16 - 2008

**Leonid Grigoriev,
President, Institute for Energy and Finance,
www.fief.ru**

World GDP growth, 1980-2009f



The Comparative Dynamics of Real GDP, 1989-2007



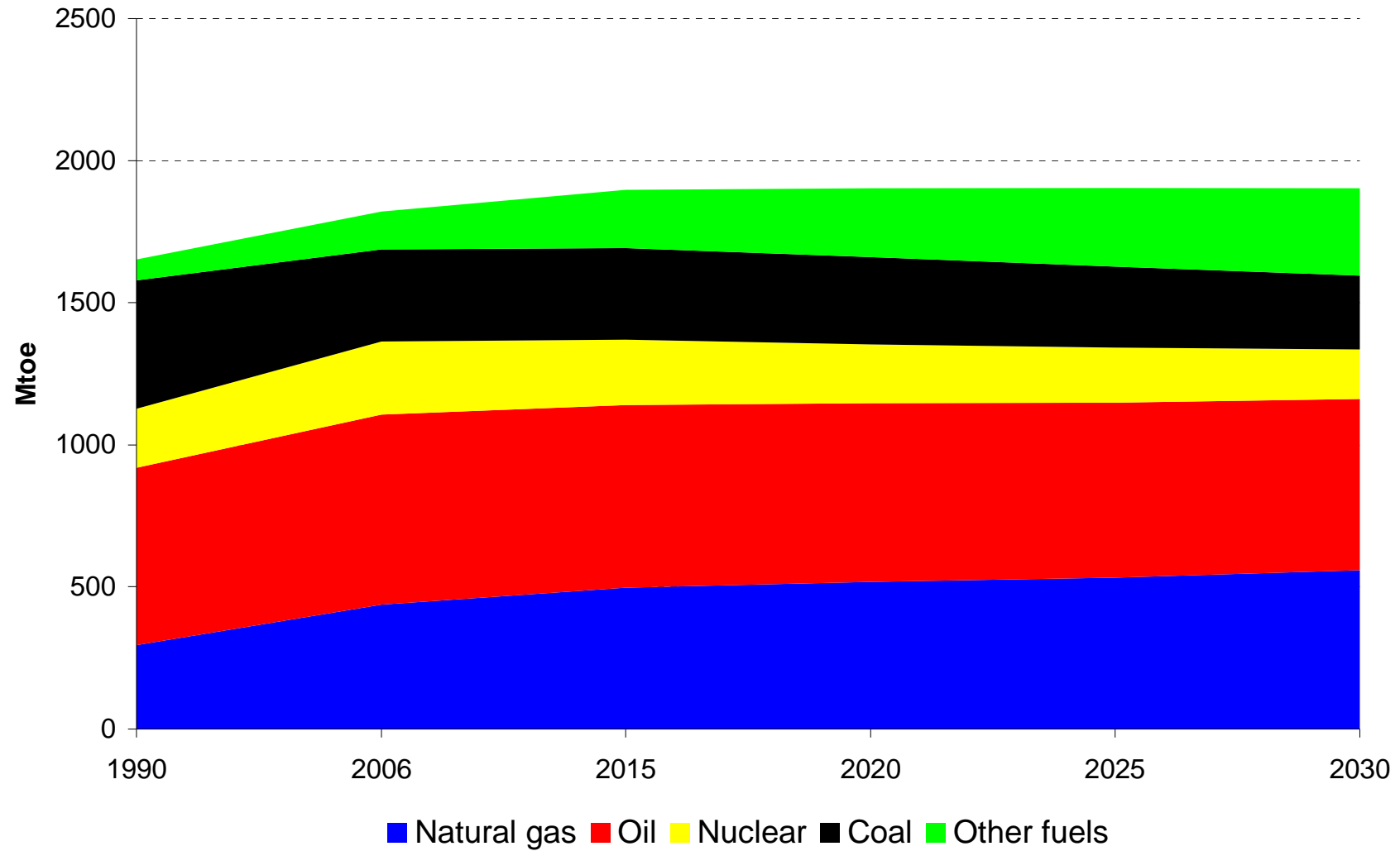
World is entering Recession

- Global Financial Crisis is changing the World
- Cyclical Recession came after the Global GDP growth by one third in 2003-2008
- Recession may be longer and much more severe, than observers expect
- OECD may have more problems, than in the last quarter of the 20 Century
- Global Community will encounter financial difficulties with solution of economic and social problems, including Millennium goals and Climate change

EU Energy and Trade with Russia

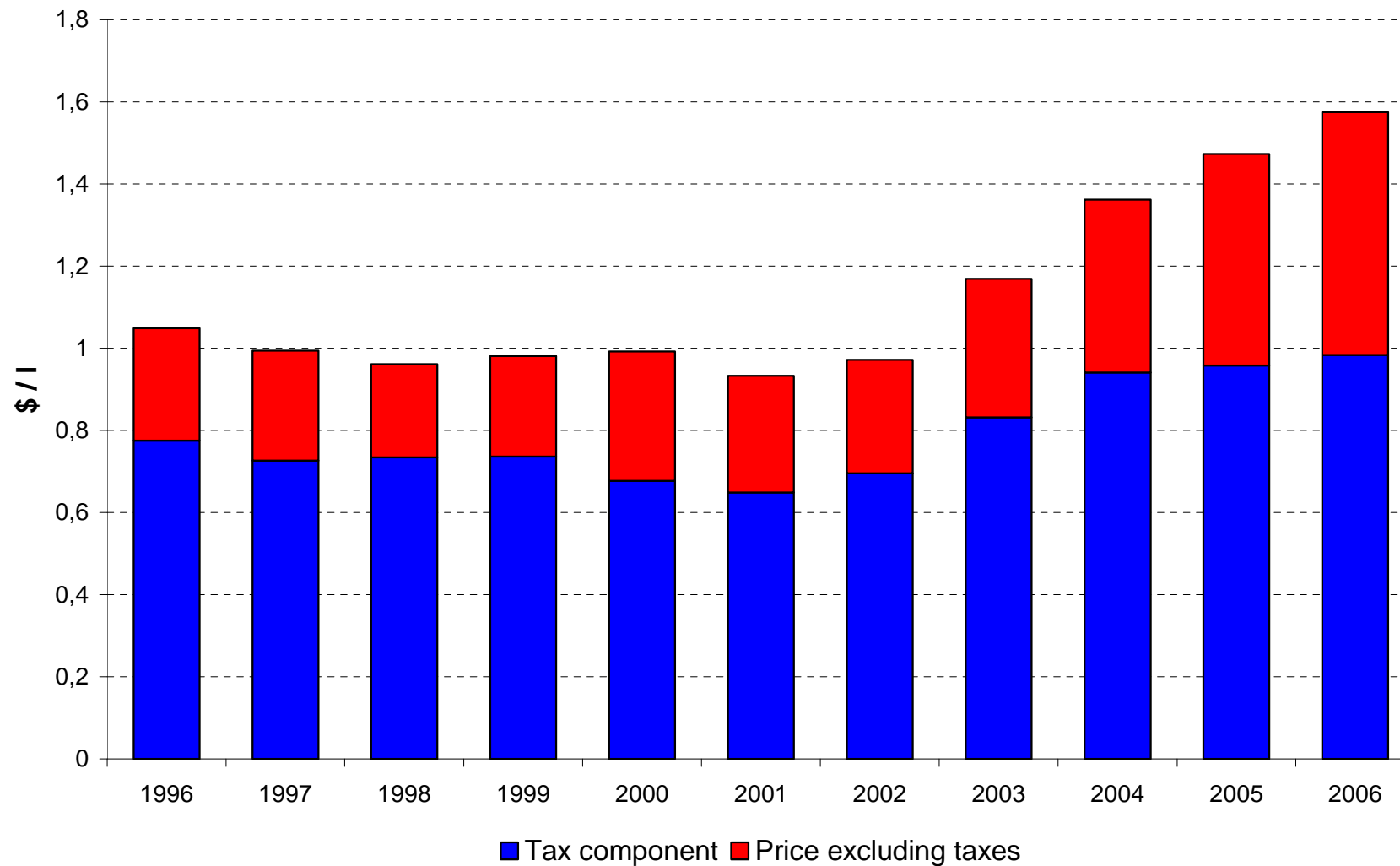
- Russia (2,3% of World Population and GDP) is producing about 10,5% of Global Primary Energy
- 5 p.p. go for Export: 2/3 of Oil, 1/3 of Coal, 1/3 of Gas
- Plus Export of Aluminum, Paper, Fertilizers, etc.
- EU has a growing market in Russia in manufacturing
- Reintegration of Russian companies into the Global market goes as a competition for positioning
- Russian economy will be part of European economy, while staying for some time outside EU legal field
- Russia is the Global supplier with its own difficult domestic agenda - Modernization

EU Structure of Energy Demand, 1990-2030



Source: IEA

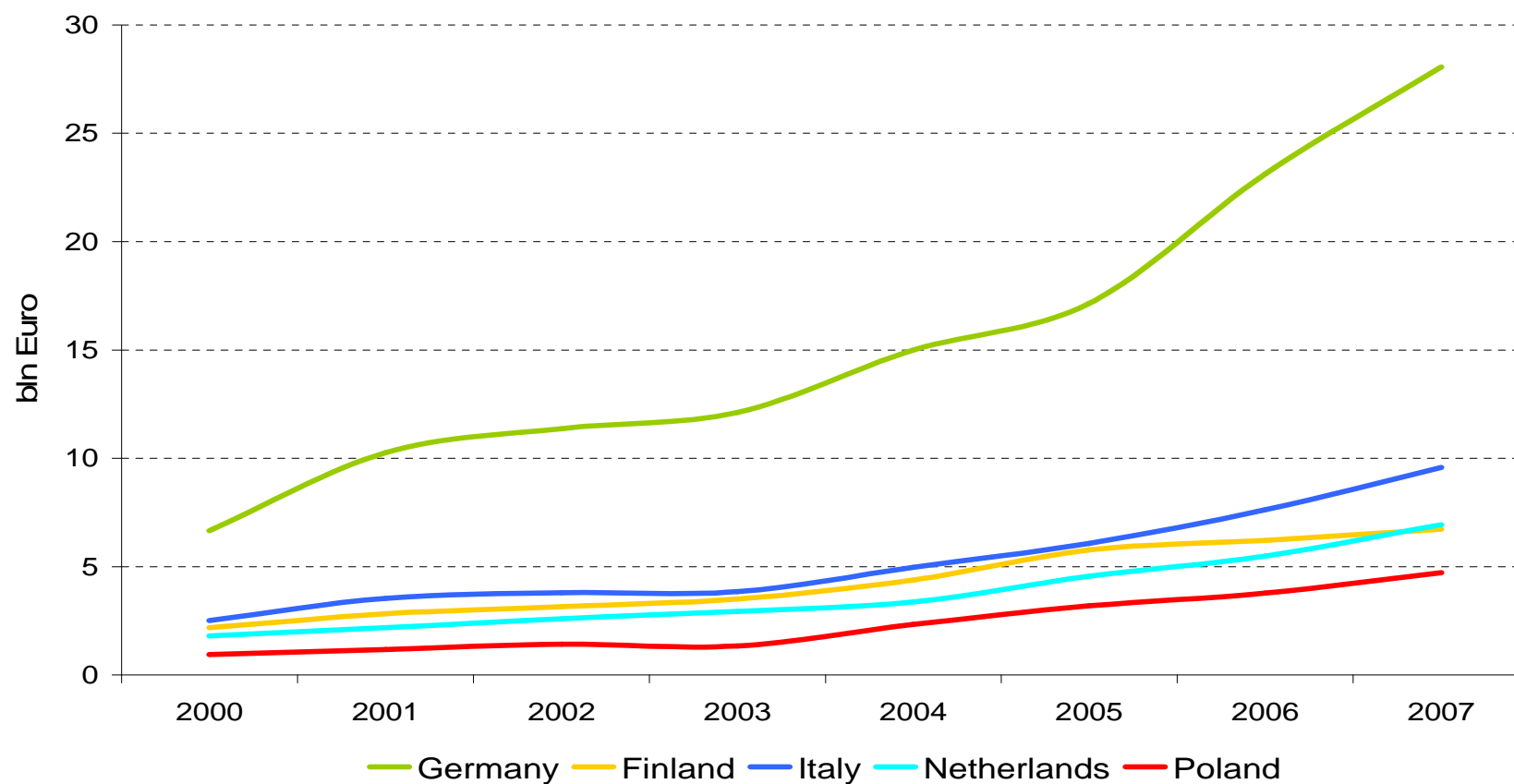
EU 15 Gasoline RON 95 Average Prices and Taxation



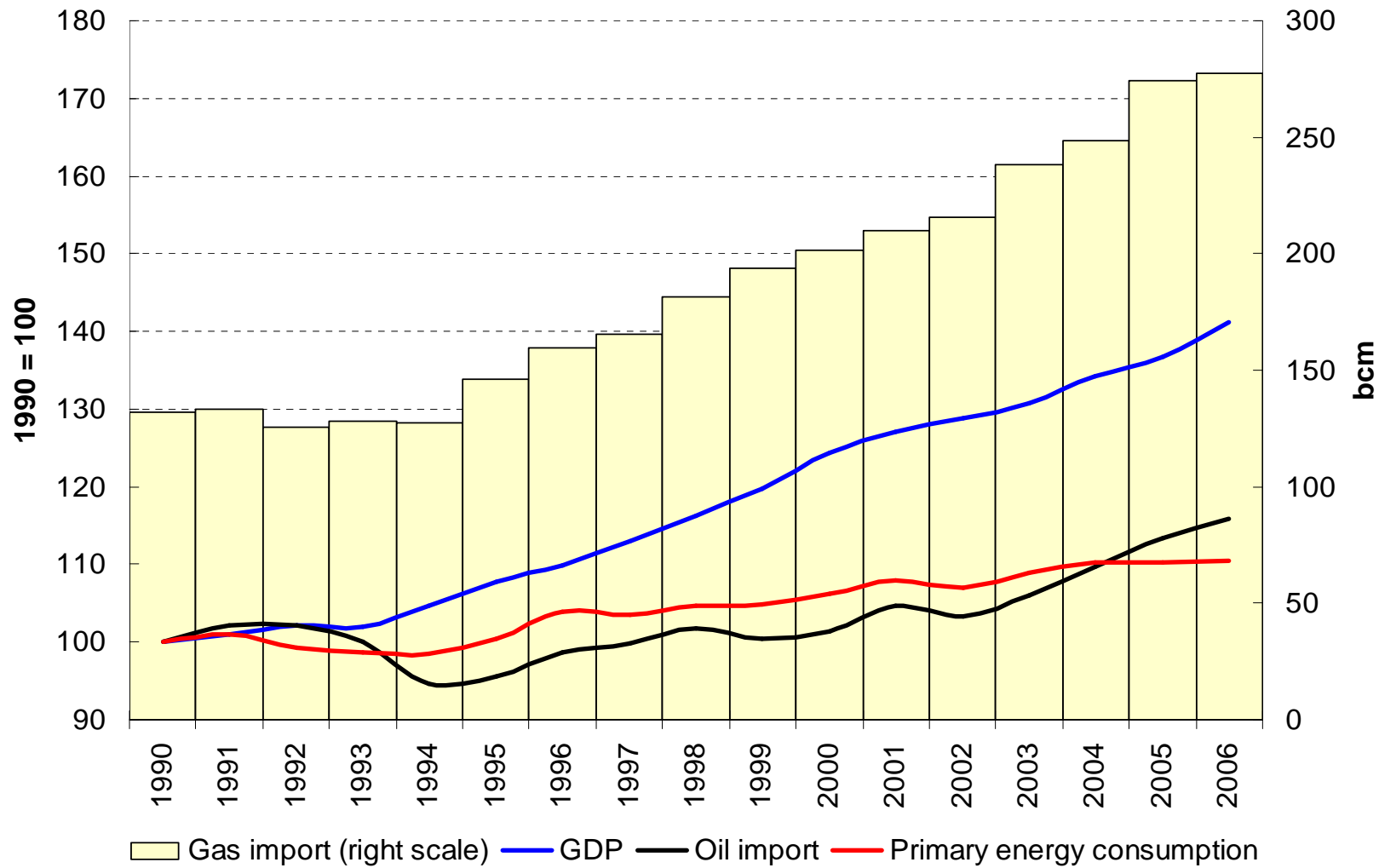
Sources: IEA, Eurostat, IEF

Exports to Russia from EU Members (bln Euro)

	2000	2001	2002	2003	2004	2005	2006	2007
EU15	19,92	27,96	30,47	33,19	40,08	48,39	60,98	74,02
EU27	22,74	31,60	34,42	37,21	46,03	56,70	72,31	89,12

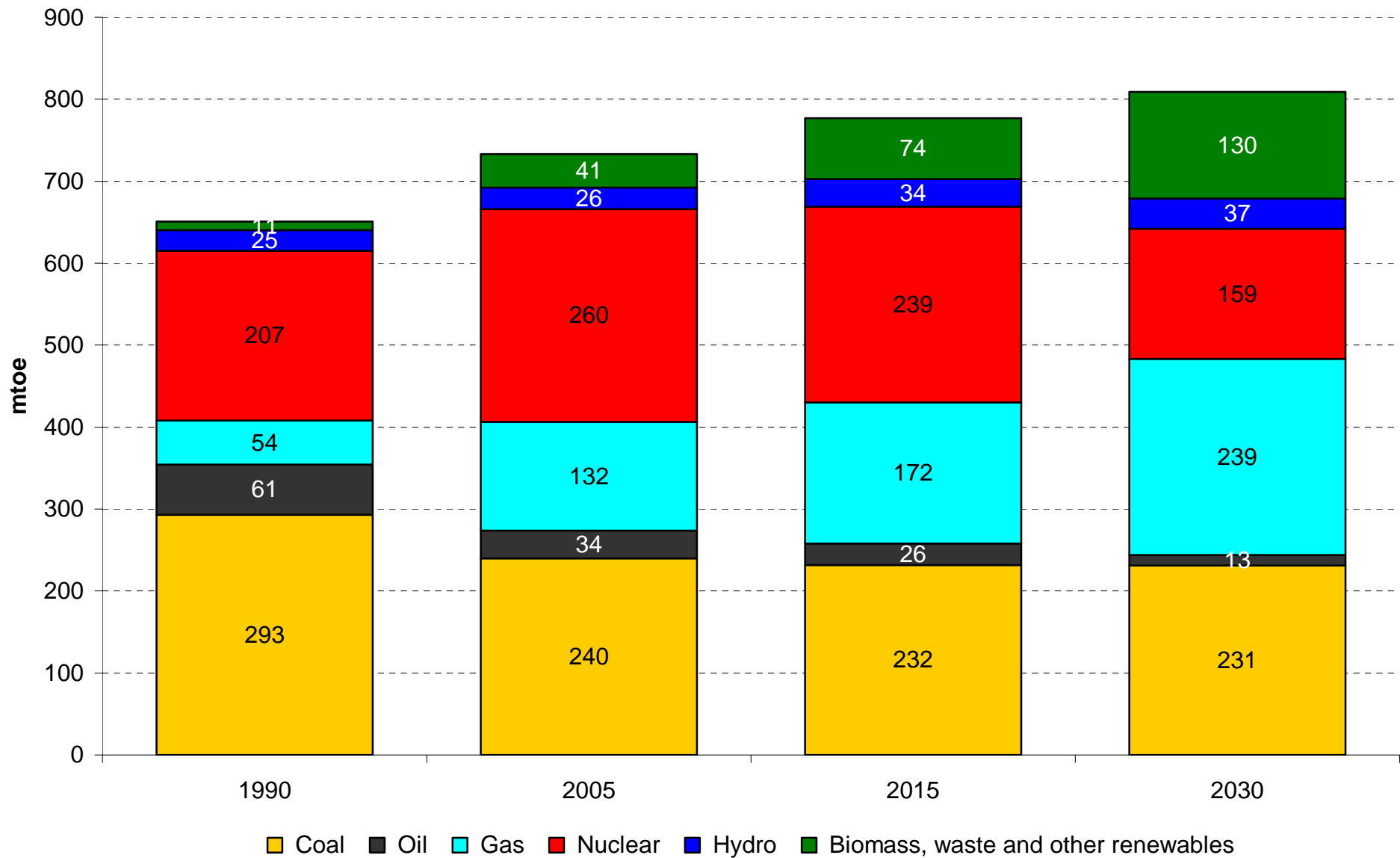


GDP, primary energy consumption, import of gas and



Source: IMF, BP

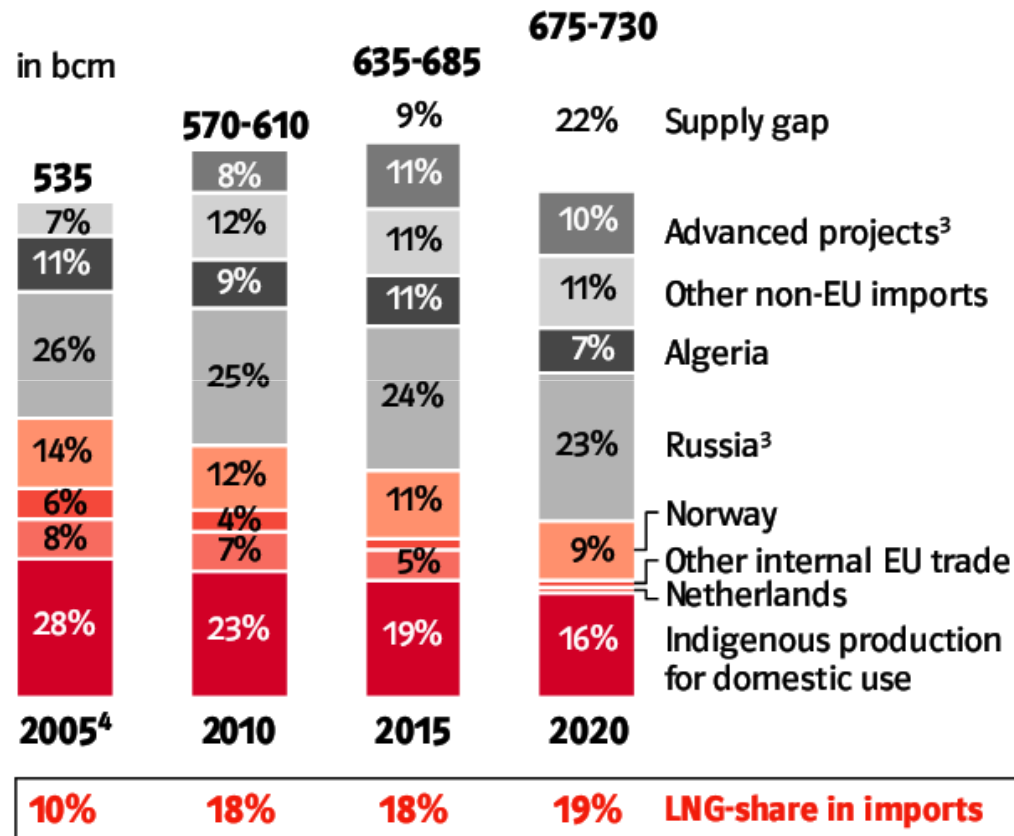
World Energy Outlook, IEA 2007: Power generation in EU



Source: IEA WEO 2007

One (typical) view on European gas future (E.ON)

Western Europe¹ will increasingly rely on gas imports



E.ON's response to Europe's increasing reliance on gas imports²

- Long-term gas import contracts remain backbone of security of supply
- Equity gas to cover part of E.ON's supply needs
- Contribution to necessary development of gas import infrastructure
- Growth in LNG business to diversify supply sources

1. EU-25 + Romania, Bulgaria, Turkey, Norway and Switzerland

2. Basis for imports: contracted volumes and prospective contract prolongations

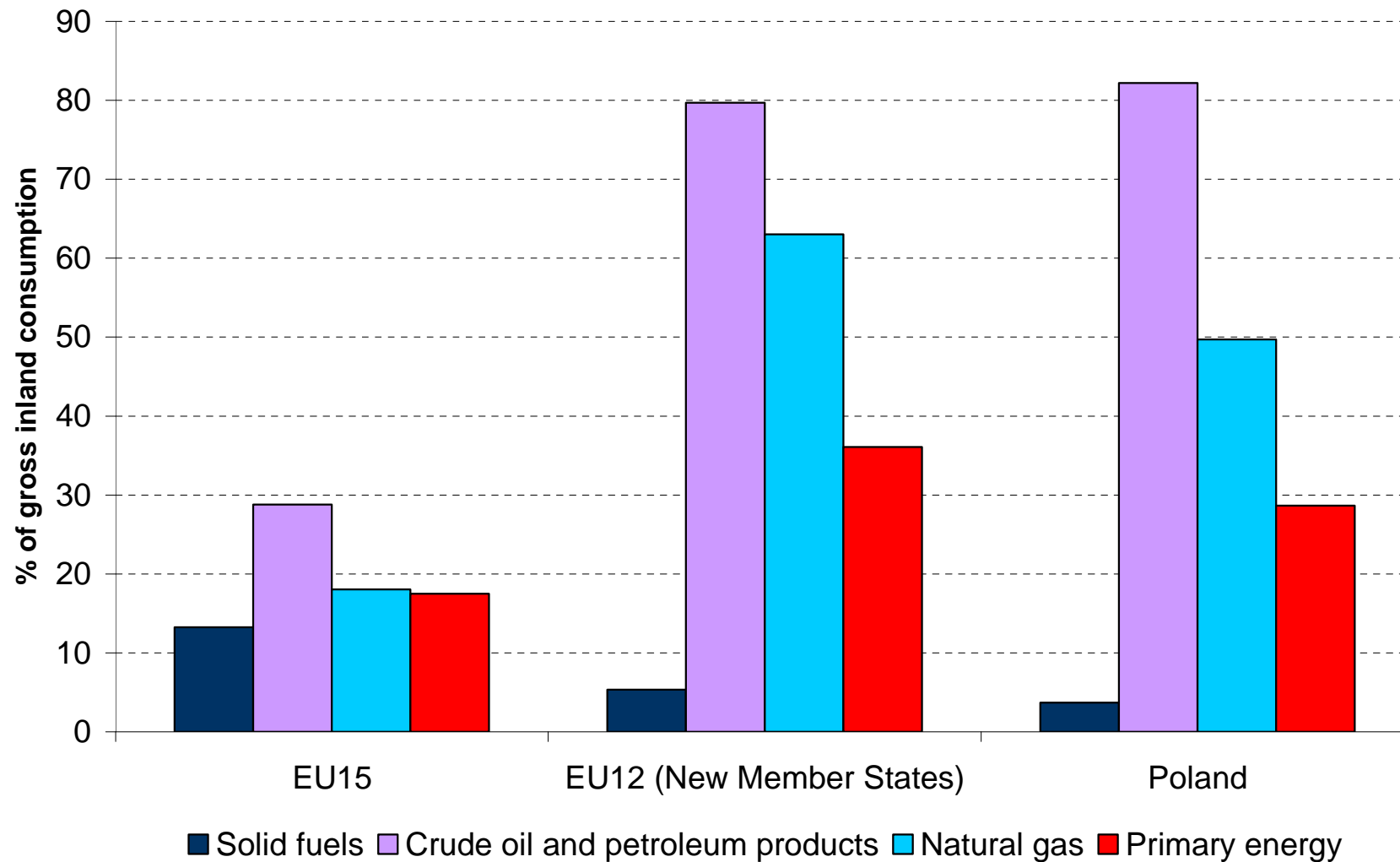
3. Russia without volumes via the North European Gas Pipeline (NEGP) which are included in advanced projects

4. Provisional data for 2005

EU and Poland Energy Balances (mtoe), 2006

	<i>EU15</i>	<i>EU12 (NMS)</i>	<i>Poland</i>		<i>EU15</i>	<i>EU12 (NMS)</i>	<i>Poland</i>
<i>All Products</i>				<i>Natural Gas</i>			
Primary production	694,0	177,3	76,9	Primary production	162,9	16,5	3,9
Total imports	1 334,2	160,2	39,9	Total imports	287,4	45,3	8,9
Total exports	425,7	58,6	20,2	Total exports	65,7	0,7	0,0
Gross inland consumption	1 543,3	281,9	98,3	Gross inland consumption	378,1	59,9	12,4
<i>Solid Fuels</i>				<i>Renewable Energies</i>			
Primary production	82,1	108,3	67,1	Primary production	107,9	19,5	5,1
Total imports	149,1	16,7	3,4	Total imports	3,3	0,2	0,0
Total exports	10,3	21,6	15,7	Total exports	0,7	1,01	0,1
Gross inland consumption	218,3	107,0	57,0	Gross inland consumption	110,6	18,6	5,0
<i>Crude Oil & Petroleum Products</i>				<i>Nuclear Energy</i>			
Primary production	110,7	8,0	0,8	Primary production	230,4	25,0	-
Total imports	872,8	93,1	27,2	Gross inland consumption	230,4	25,0	-
Total exports	330,3	27,6	3,1				
Gross inland consumption	600,4	73,1	24,2				

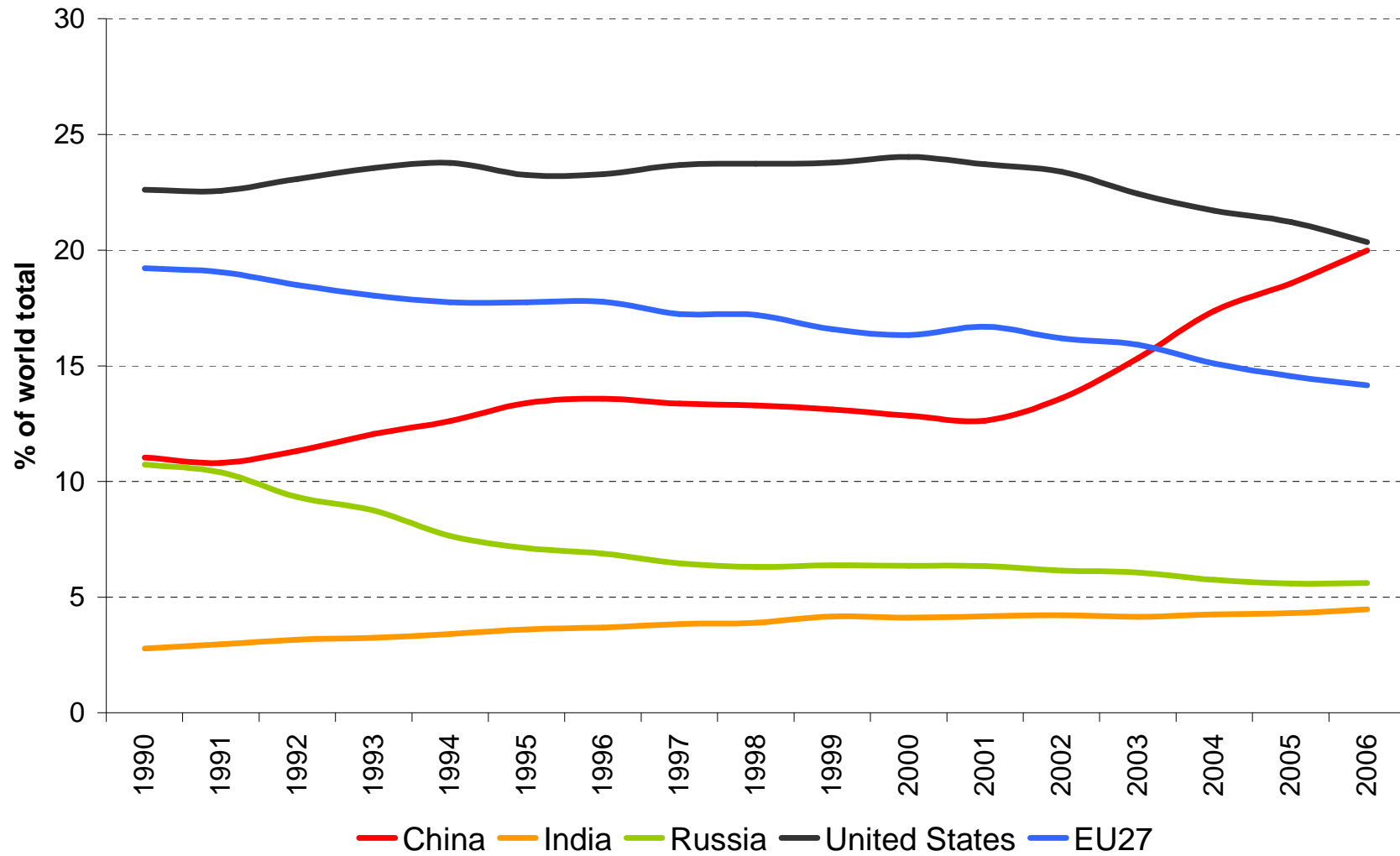
EU and Poland – share of Russia's Energy Supplies, 2006



Russian Growth in 2000s – Emission declines

- Russian Transition crisis has brought huge reduction of Emission
- Economic Growth in 2000s was energy efficient – with 0,22 elasticity of energy consumption by GDP, 0,31 by electricity
- Russia went to 4 and will go to 5th place globally
- Emission in 2006 was still 30% below 1990
- Decree of the President #889 – June 4, 2008:
Reduction of energy intensity by 2020 by 40%

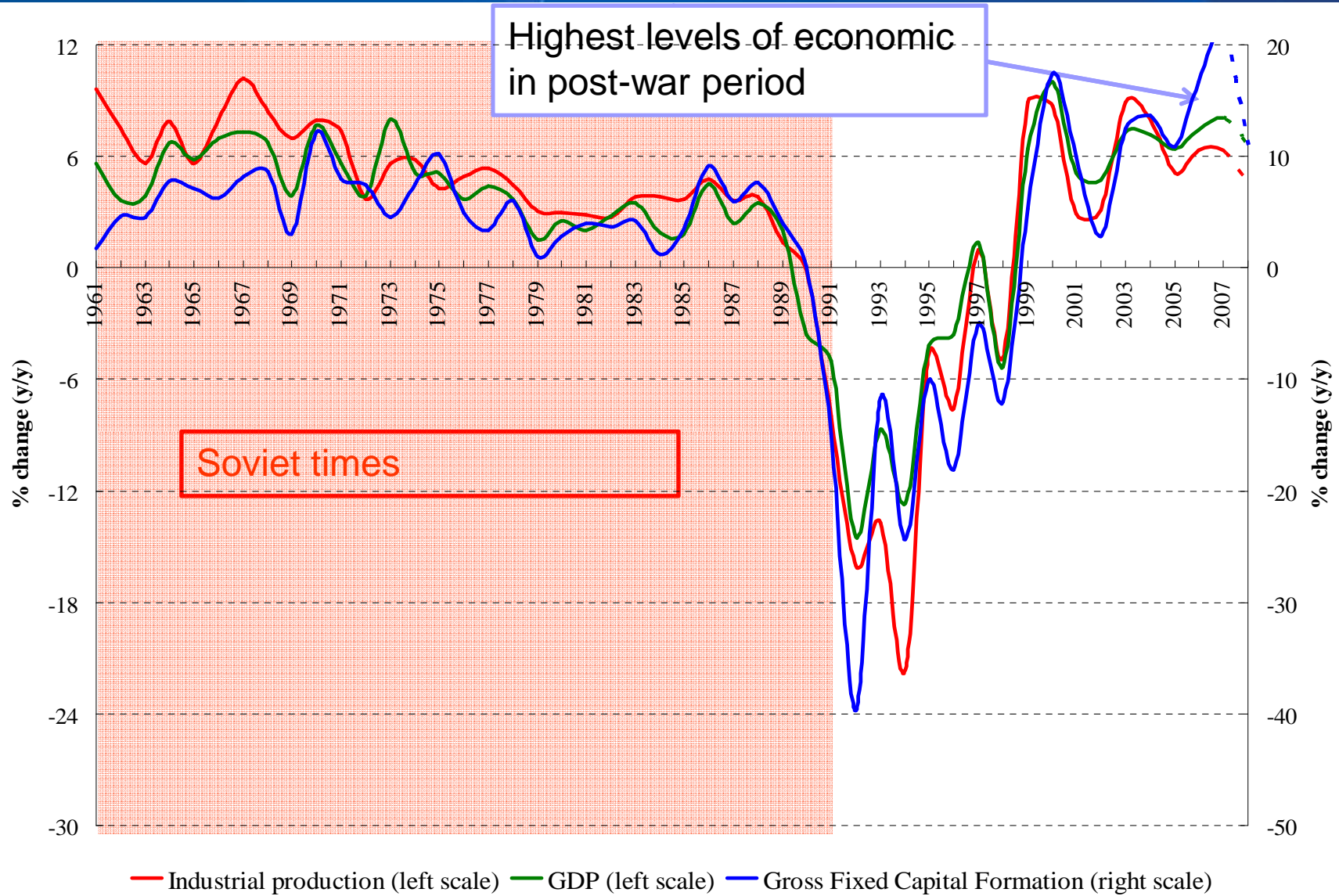
Carbon Dioxide Emissions, 1990-2006



Carbon Dioxide Emissions, IEA, Reference Scenario

	2006		2015		2030	
	<i>mln t</i>	<i>rank</i>	<i>mln t</i>	<i>rank</i>	<i>mln t</i>	<i>rank</i>
USA	5,7	1	5,8	2	5,8	2
China	5,6	2	8,8	1	11,7	1
EU	3,9	3	4,0	3	3,8	3
Russia	1,6	4	1,9	4	2,0	5
Japan	1,2	6	1,2	6	1,1	6
India	1,3	5	1,8	5	3,3	4

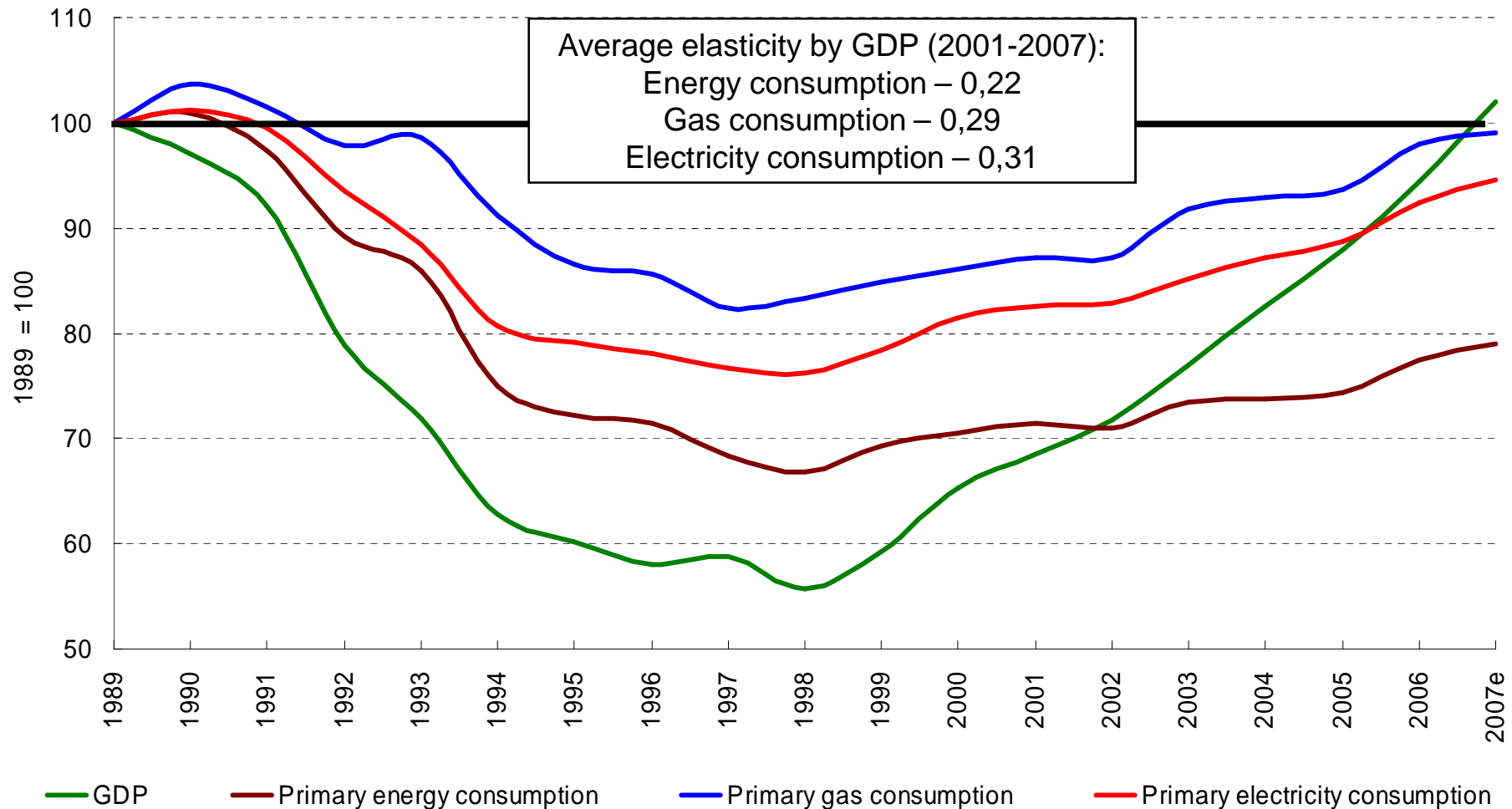
Even more long term trend, 1961-2008e



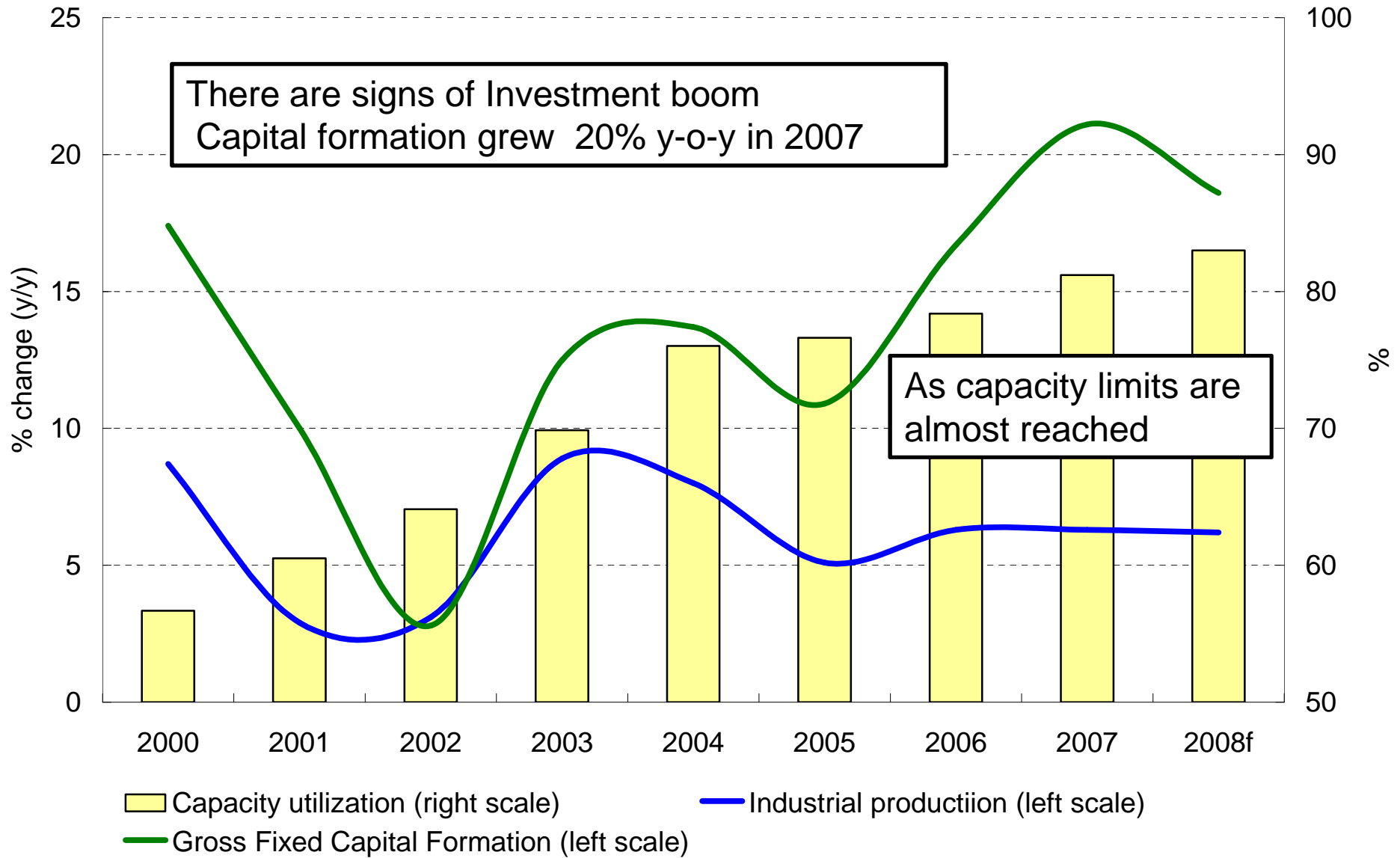
Russia: main indicators, 1996-2008 est.

	1996-1999 (avg)	2000-2004 (avg)	2005	2006	2007	2008 Est.
GDP in current prices, bln \$	316	395	764	988	1 292	1 673
GDP per capita, \$	2,1	2,7	5,3	6,9	9,1	11,8
GDP growth, %	-0,3	6,9	6,4	6,7	8,1	6,8
Investment rate, % GDP	17,2	18,1	16,7	17,6	20,1	21,6
Savings, % GDP	27,1	33,8	33,5	33,8	32,0	31,0
Export of oil and oil products, % GDP	6,7	12,3	15,3	14,9	15,0	16,1
Trade balance, % GDP	8,4	16,2	15,7	14,1	10,1	9,5
Current account, % GDP	3,9	11,2	10,9	11,4	6,0	4,8
CPI, %	38,5	15,5	10,9	9,0	11,9	13,2
Industrial production, %	0,8	6,5	4,0	6,3	6,3	3,0
Real personal income, %	-5,3	11,4	9,3	10,0	10,7	7,0

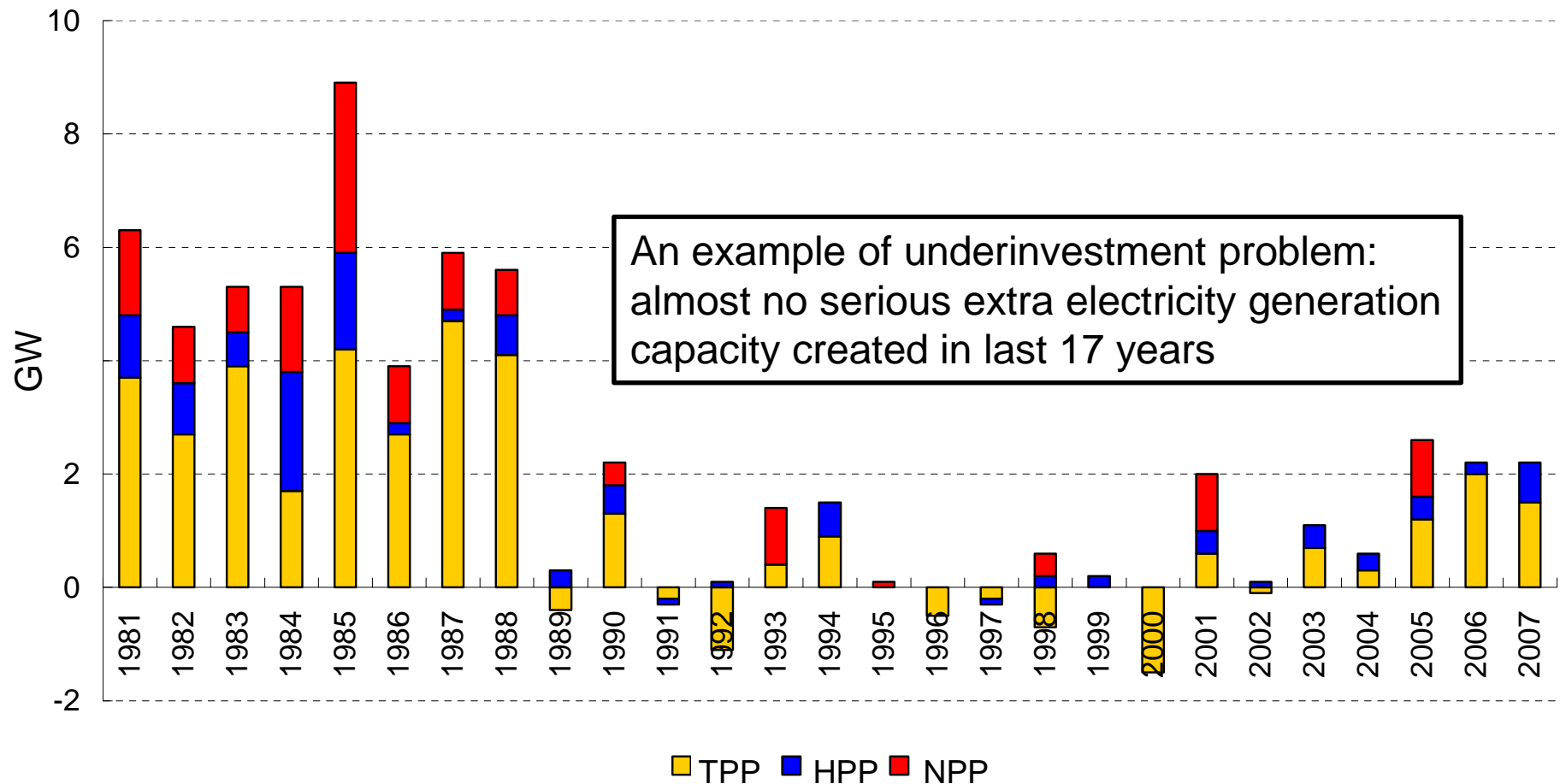
Russia: GDP and energy consumption, 1989-2007, 1989 = 100



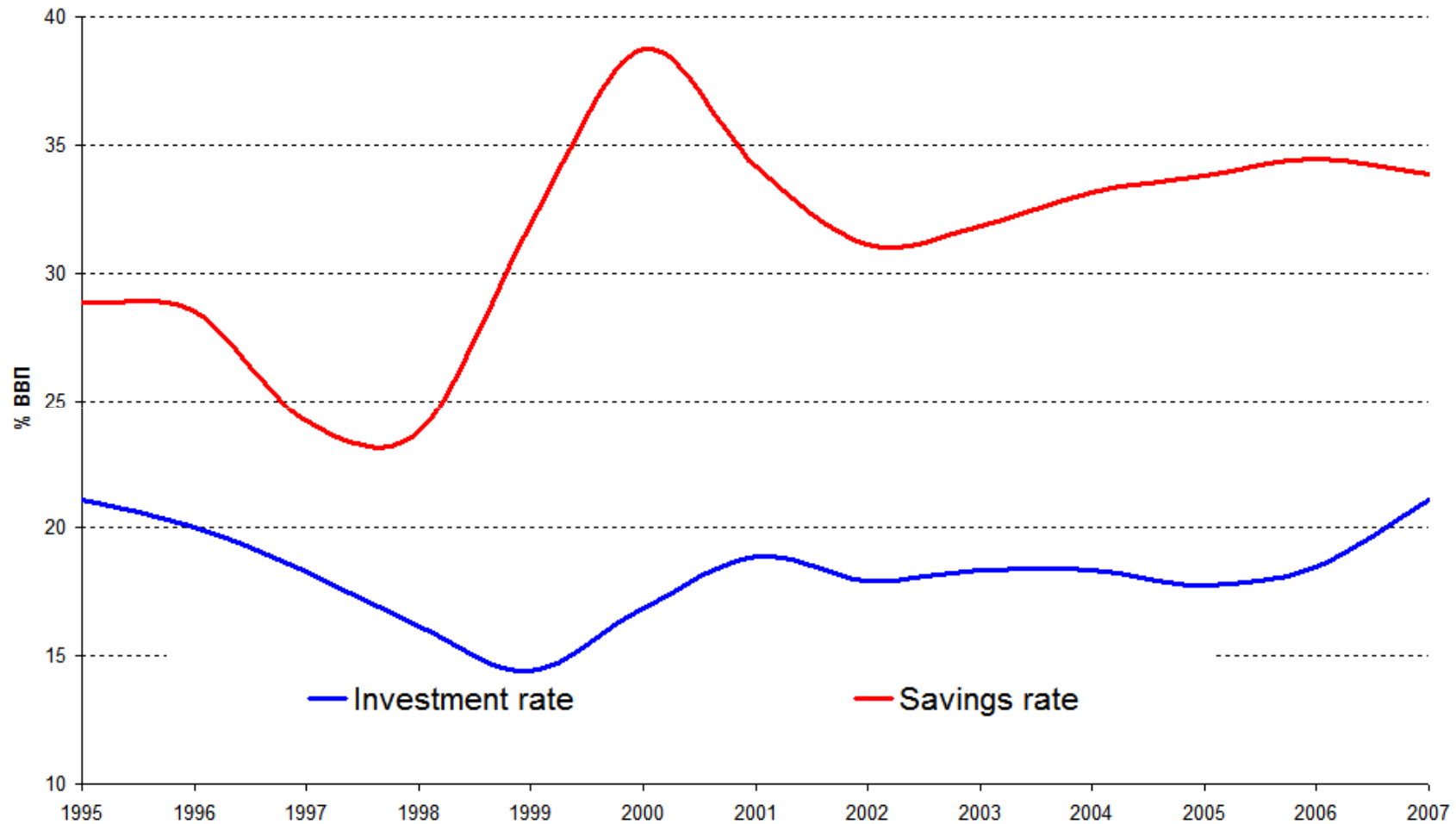
Investment boom, 2000-2008



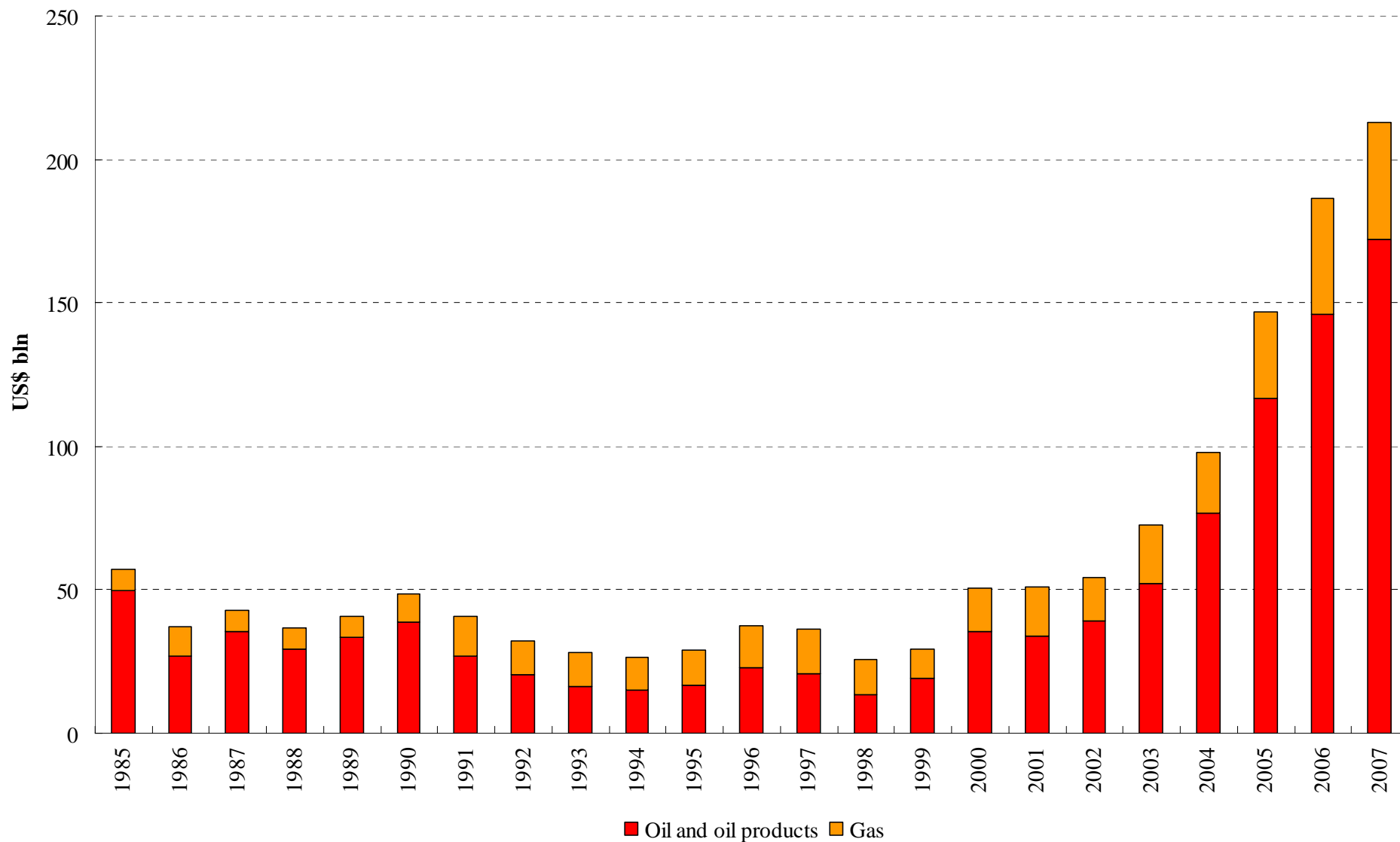
Electricity: Increase in generating capacity, GWT



Savings V Capital formation



Net export of oil and gas, 1985-2007 (\$ bln)

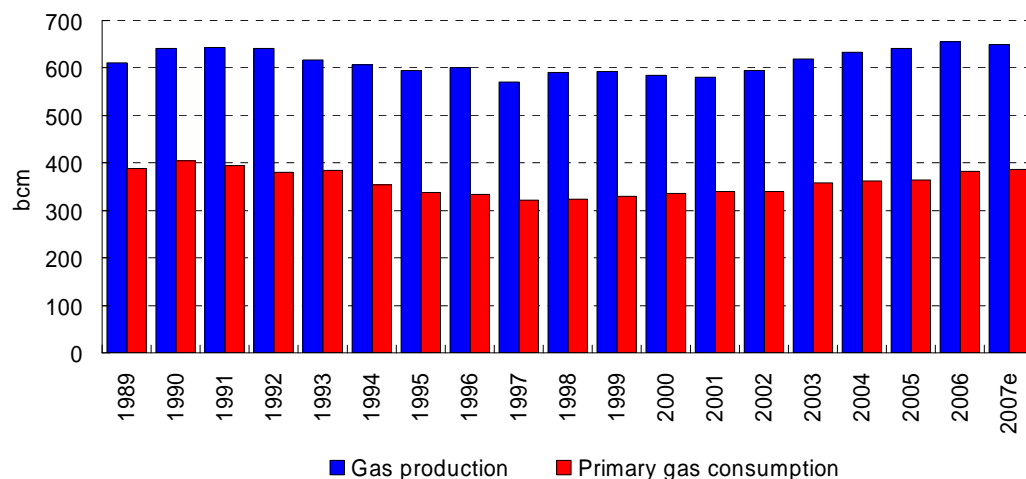


Russia Energy Output: fact 2006 and Energy Strategy

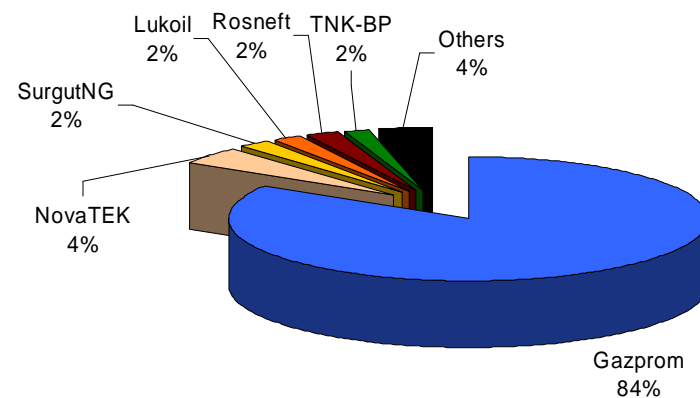
	Actual data			Russia Energy Strategy (2003) – optimistic scenario		
	2005	2006	2007*	2005	2010	2020
Oil, mln t	470	480	491	445	490	520
Gas, bcm	641	656	651	615	665	730
Coal, mln t	298	309	314	280	330	430
Electricity, TWh	952	995	1015	935	1 070	1 365

Russia: gas production, consumption and export, 1989-2007

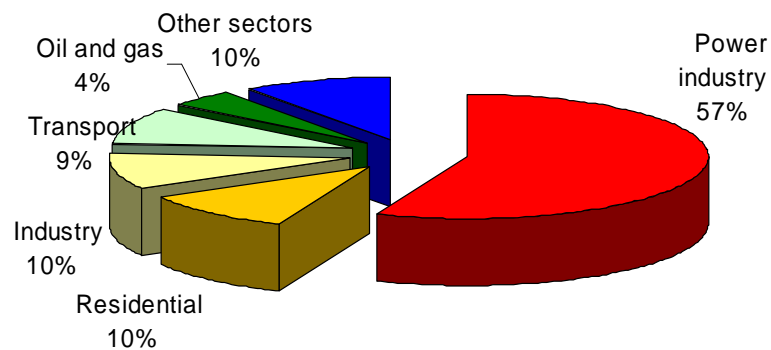
Gas production and consumption, 1989-2007



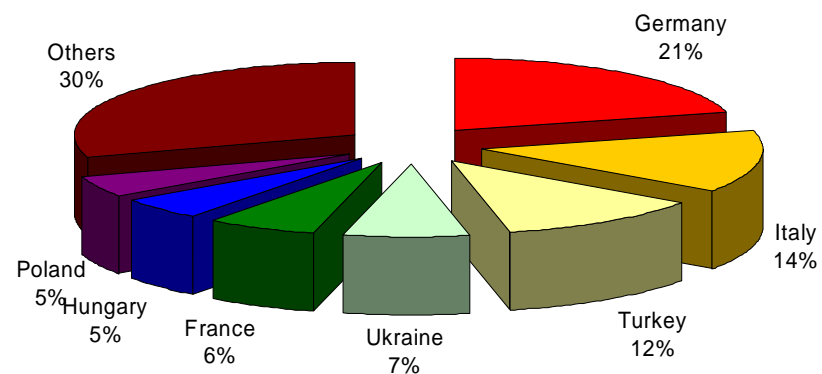
Gas production, 2006



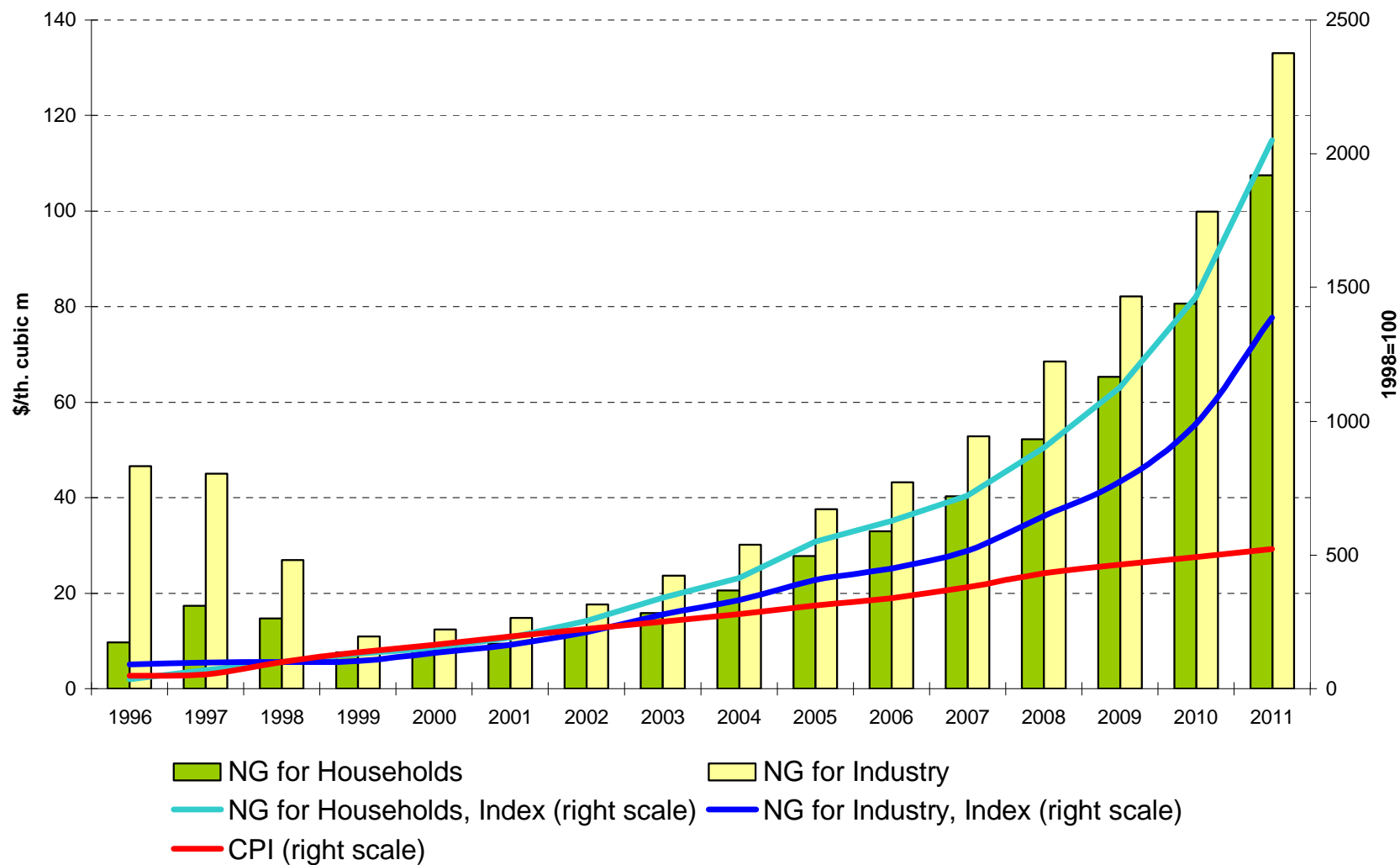
Structure of gas consumption, 2006



Gas export from Russia, 2006



Russia's Domestic Natural Gas Prices, 1996-2011



Source: Ministry for Economic Development, FTS, World Bank, IEF. Estimates start after 2008

Capital investments by large&mid size enterprises, bln \$

	2005	2006	2007	2008e
Total	95,0	129,9	192,2	256,6
Oil and gas	14,6	24,1	34,2	43,1
Metallurgy	5,7	7,5	9,3	12,8
Foodstuffs	2,5	3,4	4,7	5,4
Engineering industry	2,1	2,9	4,6	6,1
Power industry	5,0	6,1	11,4	16,9
Construction	5,7	8,8	15,7	23,6
Wholesale and retail trade	3,1	4,1	6,1	7,1
Transportation	12,8	16,1	19,0	24,3
Communications	6,3	7,0	8,1	9,2
Other sectors	37,1	49,8	79,2	108,1

Russia: from Transit Crisis to Growth

- GDP 2007 is equal to GDP 1989
- Personal Consumption – well above 1989 level
- Huge investment gap – new start of infrastructure projects is expected
- Concept of Long term Development is approved
- New Energy Strategy till 2030 was expected to be formatted in 2008 – now in 2009
- Investments in Energy sector are 5% GDP
- Modernization and Innovations are the main domestic objective
- Russian per capita GDP is still 2 times lower than in EU – Russia is focused on picking up after 2 decades