



Overview of Gas Market in Ukraine

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List of abbreviations

CJSC	closed joint-stock company
GPP	gas processing plant
JV	joint venture
NAC ECU	Ukrainian transliteration of “National Joint-Stock Company “Energy Company of Ukraine”
NERC	National Electricity Regulation Commission
NJSC	national joint-stock company
OJSC	open joint-stock company
SC	subsidiary company
SPFU	State Property Fund of UKraine
UAH	Hryvnia (Ukrainian currency); official exchange rate in the first half of 2007: 1 USD = 5.05 UAH
USD	United States dollar
USF	underground storage facilities

Units

bln	billion (or 10^9)
bcm	billion cubic meters
MW	megawatt (or 10^6 watt)
m ³	cubic meters

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1. General description of gas market

1.1. Consumption

Natural gas accounts for about 40% of primary energy consumption in Ukraine in recent years, making Ukraine one of the world's most gas-intensive economies. Due to its geographical location, Ukraine is one of the largest natural gas transit countries in the world.

Gas consumption in Ukraine has been increasing for years due to low gas prices and energy inefficient economy. In 1990 the volume of domestic gas consumption was at the level of 118 bcm. At that time Ukraine was the third largest gas consumer in the world after the US and the Russian Federation. Over the next fifteen years gas consumption dropped to about 75 bcm.

Table 1. Natural gas balance of Ukraine, bcm, 2004-2005

		2004	2005
	Total demand	96.5	96.0
1.	Total domestic consumption	75.8	75.4
	Energy	6.4	6.6
	Metallurgy	9.9	10.0
	Chemical	8.4	8.5
	Obliderzhadministratsii	33.1	33.4
	Other consumers	10.4	9.1
	Technological losses	7.6	7.8
2.	Pumping in underground storages	16.6	15.6
3.	Export	4.1	5.0
	Total supply	96.5	96.0
1.	Total domestic production	37.3	35.2
	Ukraine's production	20.3	20.4
	Extraction from underground storages, pipelines	17.0	13.8
2.	Imports	59.2	61.8
	Russian gas (in-kind transit compensation)	32.2	23.0
	Middle East gas	26.9	38.6
	Other suppliers	0.1	0.2

Source: State Program on Economic and Social Development of Ukraine for 2006, draft as of 6 July, 2005

At present 73.8% of households are supplied with natural gas in cities and 27% in the countryside, with liquefied gas 26.2% and 53.5% respectively.

1.2. Supply

Till 2005 the gas balance of Ukraine on the supply side was covered at the expense of three major sources: Ukraine extraction, Asian gas and Russian gas.¹

Gas extraction on Ukrainian territory covers about 25% of domestic consumption. It is provided primarily by Naftogaz subsidiaries, namely Ukrgasvydobuvannya, Ukrnafta, and Chornomornaftogaz, which together covered about 94% of domestic gas extraction in 2005. The rest is extracted by private companies, which buy licenses for exploration and boring research via tenders from national company Nadra Ukrainy. There are about 20 private companies that accounted for about 7% of domestic gas extraction in 2006 (see Appendix 1). They are mostly small and medium-sized companies working in joint ventures or under joint activity agreements with state extracting companies. The Law on Production Sharing Agreement² (PSA) and the Oil & Gas Law³ were intended to simplify the procedure of obtaining licenses for oil and gas

¹ This section provides the description until 2005. For future changes, see Section 2 *Gas market structure*

² Adopted in the fall of 1999

³ Adopted in August 2001

exploration and extraction and provide benefits for investors; however, for enacting PSA Law additional legislative acts need to be approved.

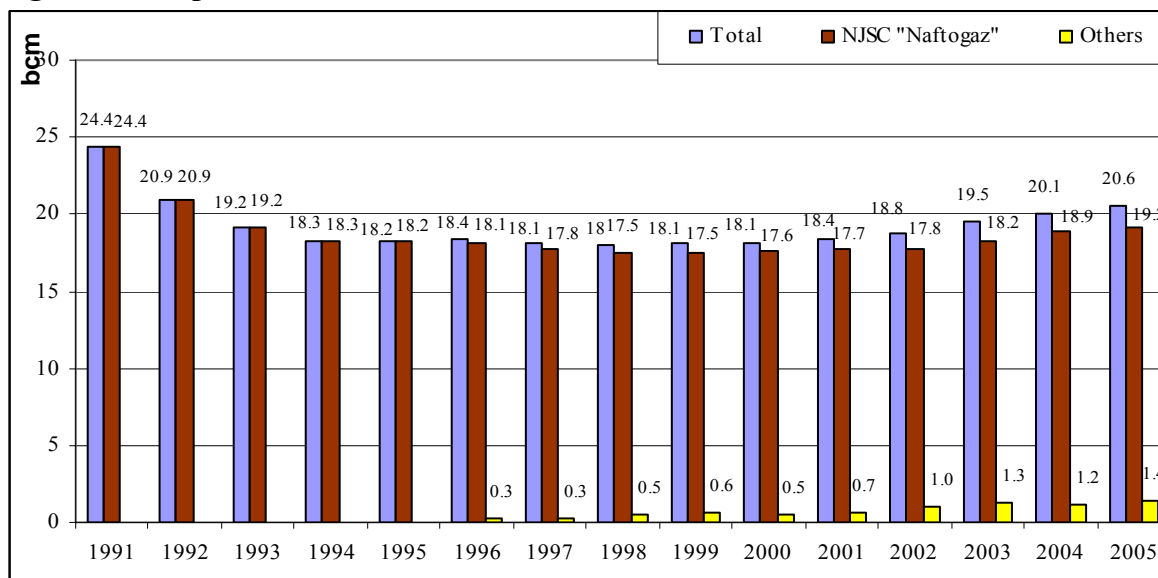
Until 2005 Asian gas provided about 40% of the domestic needs; noteworthy, the Turkmen supplies constituted the major bulk (more than 90%, or about 30 bcm yearly), while the rest came from Uzbekistan and Kazakhstan. In 2000-2002 Turkmenistan sold natural gas to Ukraine at USD 38 per 1,000 cubic meters on the Turkmenistan and Uzbekistan border (USD 40 in 2001) on the terms of 60% paid in kind and 40% by cash. At Ukrainian border gas price amounted to USD 52.44 (including transportation cost at 38% from gas price at the Turkmenistan border). In 2003-2004 the price was increased to USD 44 at the Turkmenistan and Uzbekistan border and to USD 60.72 per 1,000 cubic meters at Ukraine-Russia border. The terms of payments changed to 50% paid in kind and 50% paid by cash. Gas from Turkmenistan was sold primarily to industrial consumers.

Russian gas (from Gazprom) was accounted as a payment for transportation services and covered 30% of the balance. In 2000-2005 Ukraine obtained Russian gas at about USD 50 as in-kind payment for transit. For the detailed information, see Appendix 2.

State company Nadra Ukrainy provides gas and oil deposits exploration in Ukraine. Many of gas deposits that are being exploited nowadays are almost exhausted. About 94% of domestic production in Ukraine is provided by three Naftogaz subsidiary companies: Ukrgasvydobuvannya, Ukrnafta, and Chornomornaftogaz. According to the Cabinet of Ministers' Decree⁴ gas produced in Ukraine by Naftogaz subsidiaries must be supplied to households. Independent licensed gas producers started gas extraction in Ukraine in 1995.

Gas motor fuel is produced in Ukraine by five gas processing plants (GPPs), which are a part of larger gas producers. Three of them (Hnydytsevsky, Kachanivsky and Dolynsky) are incorporated into Ukrnafta; two of them (Shebelynsky and Seleshevsky) – in Ukrgasvydobuvannya/Naftogaz structure. GPPs are involved in the purification of light crude oil, processing petroleum gas and production of propan-butane and motor fuel. They are not significant in the motor fuel market due to low output capacity.

Figure 1. Gas production in Ukraine, bcm, 1991-2005



Source: www.naftogaz.com

⁴ Cabinet of Ministers' Decree "On Supplying Consumers with Natural Gas" No. 1729 as of December 27, 2001

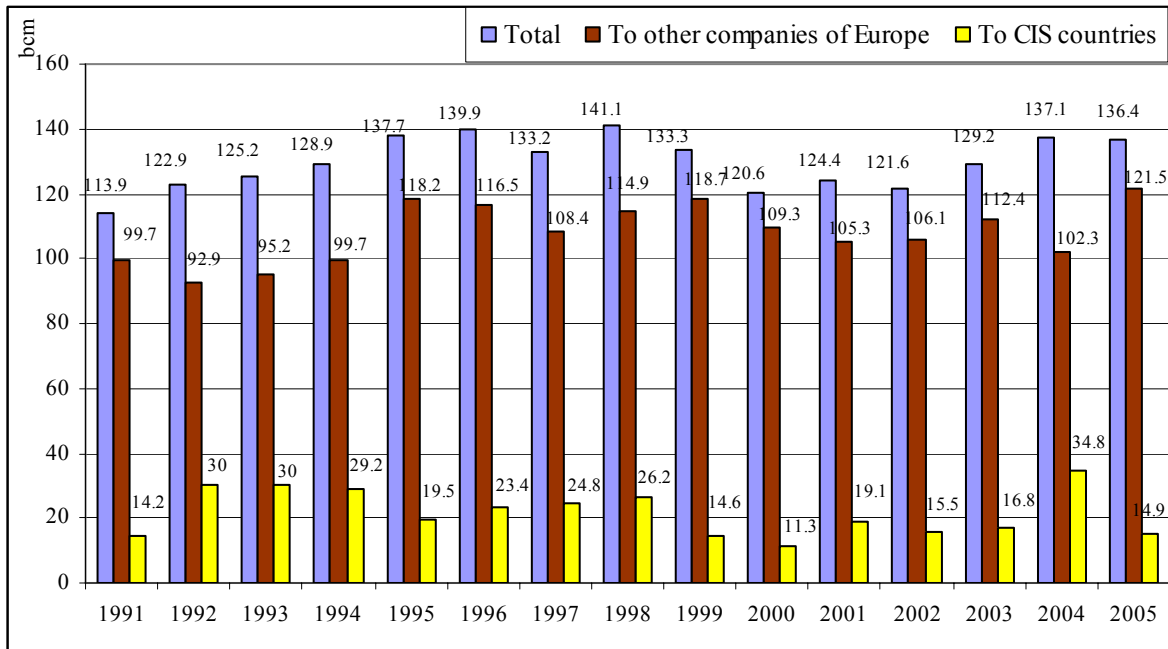
1.3. Transmission

Ukraine is the main export route for Russian gas to the European consumers. The transit gas deliveries through Ukrainian gas pipelines amount to 130-140 bcm per year. About 80% of Russian gas deliveries to Central and Eastern European countries (110-120 bcm per year) come through Ukrainian pipelines. In 2005 Ukraine received 23 bcm per year as payment in kind from Gazprom for transportation services.

Ukraine has an extensive gas transmission system, which consists of 37,800 km of pipelines, including 14,000 km with a diameter ranging from 1,020 to 1,420 mm, 73 compressor stations (110 compressor shops) providing a total capacity of 5,400 MW, and 13 underground gas storage facilities. The input capacity of the system is 290 billion, and the output stands at 178.5 bcm a year.

Transmission capacities of Ukraine are state-owned (by State Property Fund of Ukraine). Ukratransgaz, a subsidiary company of Naftogaz, is granted exclusive right to operate gas transmission system.

Figure 2. Natural gas transit via Ukraine, bcm, 1991-2005



Source: www.naftogaz.com

Ukraine has 13 underground gas storage facilities with 32 bcm of active volumes capacities. Gas storage facilities are operated by Naftogaz subsidiary, Ukrgazvydobuvannya. It is necessary to pump gas in storages in order to provide continuous gas delivery to European countries at winter period. Usually 18-24 bcm are pumped in gas storages during March-September.

2. Gas market structure

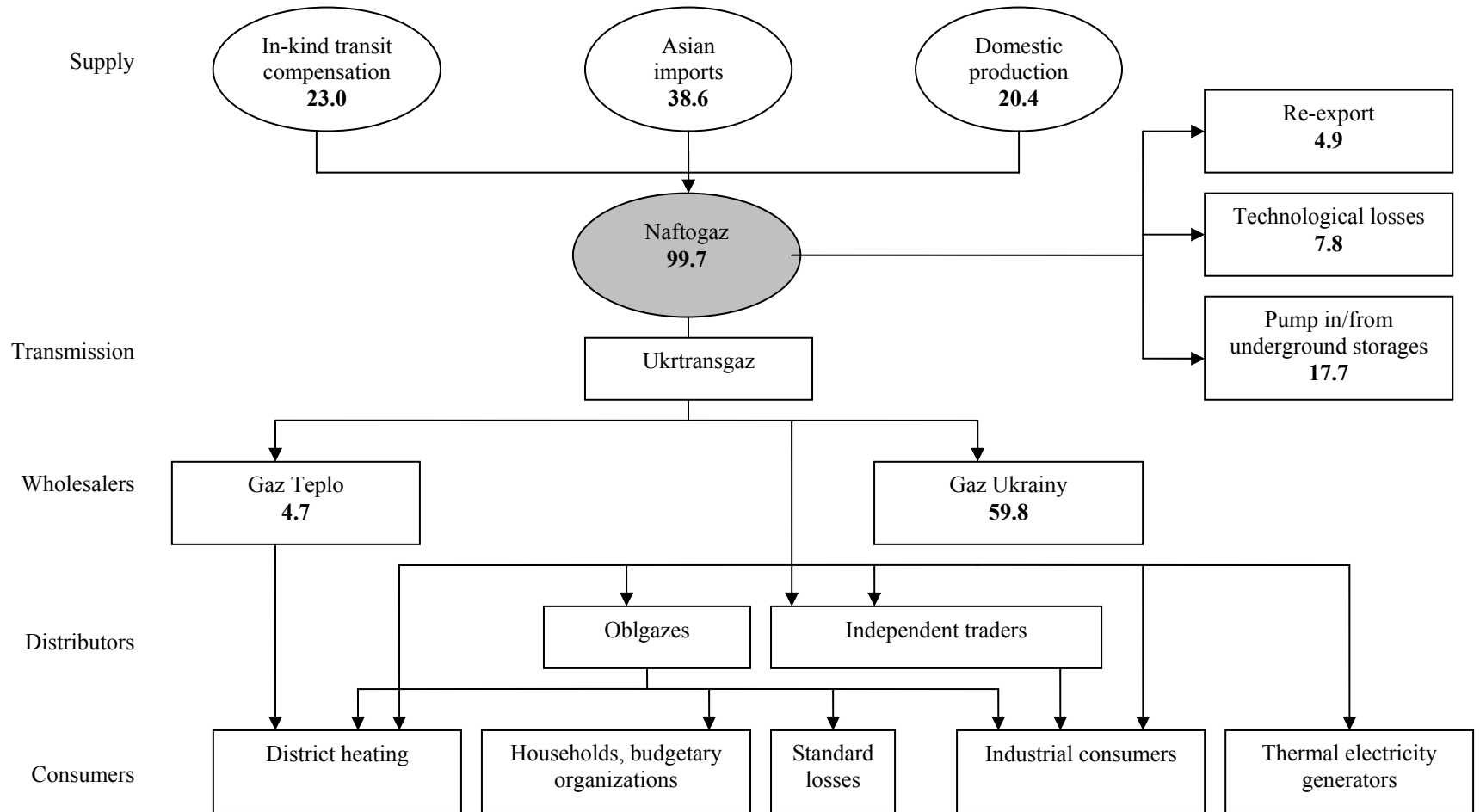
2.1. Gas market structure in 2005

Table 2. Gas market structure in 2005 and 2006

	2005	2006
Deposits exploration	State company national joint-stock company Nadra Ukrainy.	No change
Supply		
In-kind transit compensation	35% of gas balance, received from Gazprom as a payment for transportation services at about USD 50	No in-kind transit compensation
Asian gas	40% of gas balance (more than 90% of that coming from Turkmenistan and the rest from Uzbekistan and Kazakhstan) at about USD 65	Asian and Russian gas was mixed and sold by Rosukenergo at USD 95, 75% of total gas balance
Domestic production	25% of gas balance, Naftogaz subsidiaries: Ukgazvydobuvannya, Ukrnafta, and Chornomornaftogaz (94% of gas extraction) and private companies (6% of gas extraction).	25% of gas balance, 93% covered by Naftogaz subsidiaries and 7% by private companies
Underground storage facilities	Ukgazvydobuvannya, a subsidiary of Naftogaz, operates 13 Ukrainian underground storage facilities with the capacity of 32 bcm.	No change
Transmission	Ukrtransgaz, a subsidiary of Naftogaz	No change
Wholesalers	Gaz Ukrainy, a subsidiary of Naftogaz, was the main wholesaler to all consumer groups in 2001-2005.	Ukgazenergo, a joint venture of Naftogaz and Rosukrenergo, was created in February 2006. The company buys the whole gas imports from Rosukrenergo, and sells it to Naftogaz and industrial consumers.
	Gaz Teplo, a subsidiary of Naftogaz, was created in 2003. The company supplies gas to district heating companies.	Naftogaz sold gas in the internal market through Gaz Ukrainy and Gaz Teplo.
Distributors	'Oblgazes' (district gas distribution companies). They are about 60 in Ukraine, and their priority is to supply gas to households, budgetary organizations and heating companies/	No change
	Independent licensed suppliers are either industrial customers who supply gas for their own needs or intermediaries, which supply gas to industry. Their market share was about 10-15% in 2002.	No change
Re-export	Until 2005 Naftogaz re-exported gas to Central and Western European countries, and the profit gained was the main source to cover losses from non-payments by households, budgetary organizations and heating companies.	Starting from 2006 Naftogaz is disallowed to re-export gas due to agreement with Rosukrenergo. But, according to the Ministry of Fuel and Energy, in 2006 3 bcm of Ukrainian gas were exported to the Western Europe.

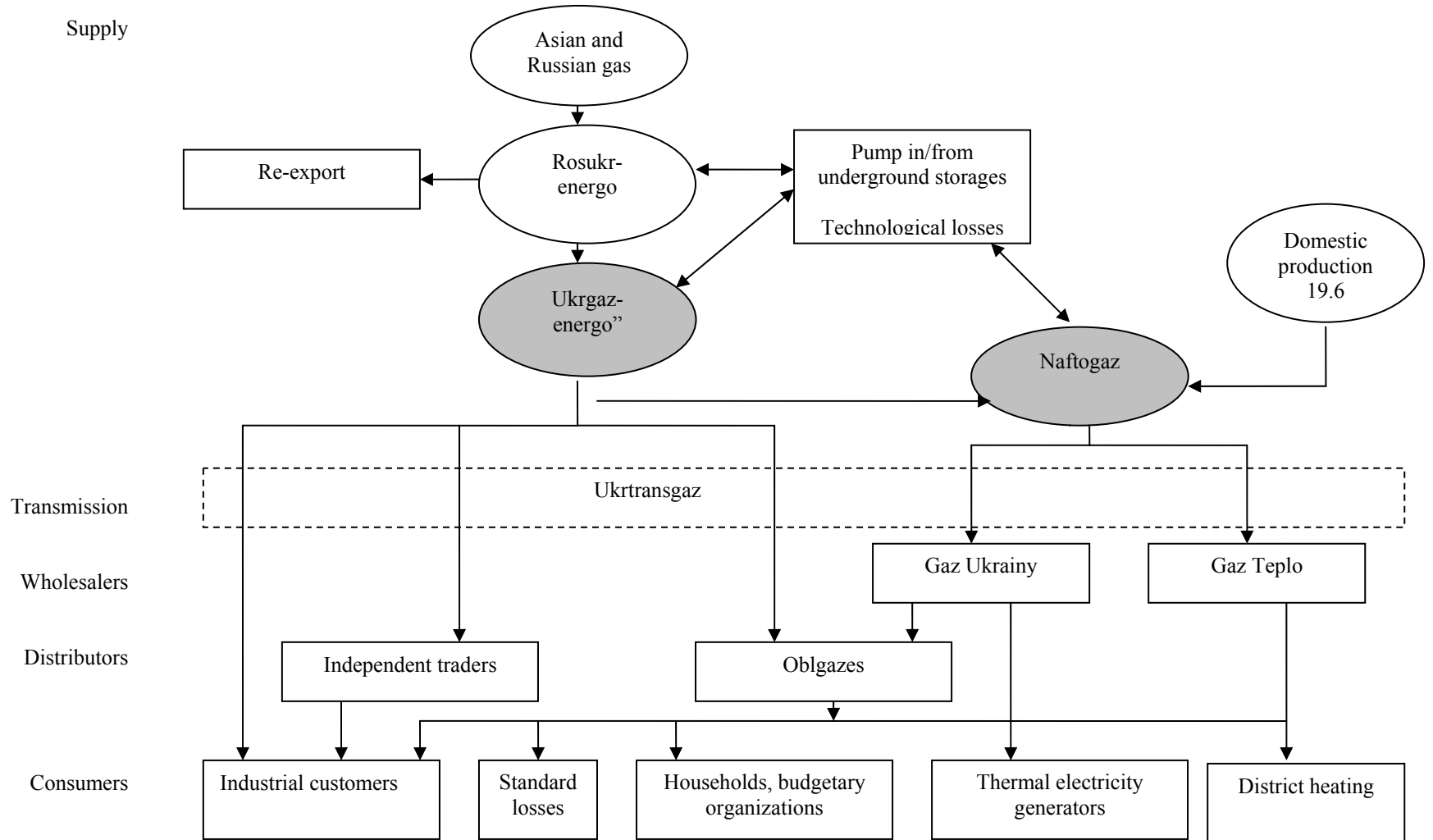
Source: compiled by CASE Ukraine

Figure 3. Market structure in 2005, bcm



Source: compiled by CASE Ukraine

Figure 4. Gas market structure after January 2006 Gas Agreement, bcm



Source: compiled by CASE Ukraine

2.2. Gas market structure in 2006

The events of the end of 2005 stipulated for the significant changes in market structure of gas supplies in Ukraine. In December 2005 Russia and Ukraine started very tough negotiations on gas supply and transit to EU countries. The gas issue was highly politicized through mass-media of both countries since the new agreement was developed in the context of “orange” revolution. Ukrainian authorities tended to demonstrate its independence, which strongly irritated the Russian counterparts. Rough declarations on both sides aggravated the talks. Gazprom increased the initial bid of USD 160 per 1,000 cubic meters to USD 230 and on January 1, 2006 reduced the pressure in pipeline system thus cutting off supplies for Ukraine. The escalated conflict was resolved within four days after European countries started to complain about undersupply of Russian gas.

On January 4, 2006 Russia and Ukraine reached an agreement to end the dispute. Parties agreed to deliver Russian and Turkmen gas to Ukraine via Russian-Swiss intermediary company Rosukrenergo at USD 95 per 1,000 cubic meters on the Ukrainian-Russian border and raise transit fee from USD 1.09 to USD 1.60 for transportation of 1,000 cubic meters per 100 km. Another important outcome of the Agreement was creation of Ukrainian-Russian company Ukgazenergo that would be the only gas distributor of imported gas at the Ukrainian territory.

Table 3. Sources of natural gas for Ukraine according to January 2006 Supply Agreement

Country Source	Amount, bcm/year	Acquired by	Price (USD per 1,000 m ³)
Turkmenistan	41	Gazexport, Naftogaz Ukrainy	65.0
Uzbekistan	7	Gazexport	65.0
Kazakhstan	8	Gazexport	65.0
Russia	17	Gazexport	230.0
Total / Weighted Average	73		103.4

Source: Energy Information Administration (USA), www.eia.doe.gov

Changes to gas market structure after January 2006 Gas Agreement (see Figure 4):

- Starting from 2006 Ukraine no longer obtains Russian gas as in-kind transit fee. Russia supplies gas at USD 230 per 1,000 cubic meters and Turkmenistan at USD 60 per 1,000 cubic meters; Rosukrenergo sells gas to Ukraine at USD 95 per 1,000 cubic meters on Russia-Ukraine border.
- Naftogaz was disallowed to re-export Russian and Asian gas to European countries. Instead, Rosukrenergo obtained exclusive right to conduct re-exporting activities. That undermined substantially Naftogaz financial stability since cash generated from gas re-export allowed company to cover losses from gas deliveries to subsidized groups of customers (households, budgetary organizations and district heating companies).
- Ukgazenergo, a joint venture of Rosukrenergo and Naftogaz, was established in February 2006. According to the Agreement, the company buys the whole gas volume from Rosukrenergo (till 2006 it was Naftogaz monopoly), and sells it to Naftogaz and other consumers. In 2006 the company got 32 bcm quota for gas supplies in the internal market, occupying therefore the segment of industrial supplies. This step reduced gas volumes supplied by Gaz Ukrainy, a wholesaler, which is a subsidiary of Naftogaz (see Table 4). In 2005, 64% of Gaz Ukrainy revenues came from sales to industry and independent traders, 11% from households, 9% from district heating companies and 8% from power generating companies. In 2006 the share of industry and independent traders

in Gaz Ukrainy revenues dropped to 40%, which is due to the decrease of gas volumes supplied to industrial consumers, and the share of households and district heating companies grew to 19% and 15% respectively⁵.

In July 2006 Ukrgezenergo reinforced its presence with the appointment of the new government of Yanukovich. The new Head of NERC (A. Rogozin) with the first decree stated removal of all restrictions on gas volumes supplied by Ukrgezenergo. The newly-appointed Minister of Fuel and Energy (Y. Boyko) declared that Ukrgezenergo is planning to access gas extraction in Russia and gain shares in Ukrainian oblgazes. In case it comes in action, the company will in fact occupy monopolistic position in Ukrainian gas market.

Table 4. Gas Ukrainy sales volumes, 1999-2006, bcm

	1999	2000	2001	2002	2003	2004	2005	2006 8 months*
Total	47.0	39.0	43.9	44.4	56.6	56.2	59.8	27.4
Households	17.6	16.7	16.9	16.6	17.5	16.6	17.5	11.7
including commercial losses	1.7	1.5	1.9	1.5	1.6	0.8	0.5	0.1
Budget-financed institutions	1.0	1.0	0.9	0.9	1.0	1.0	1.1	0.7
District heating companies	11.4	8.7	8.8	9.3	9.9	7.9	7.5	5.1
Technological needs and losses of oblgazes	0.6	0.5	0.6	0.7	0.7	1.1	1.2	6.8
Industry	7.6	7.7	9.3	9.2	18.7	21.4	25.5	6.0
Power stations and CHPs (including Kyivenergo)	8.6	3.0	7.2	7.7	8.6	8.2	6.9	3.3
Export	0.1	1.3	0.0	0.0	0.0	0.0	0.0	-
Others	0.1	0.0	0.0	0.1	0.0	0.0	0.0	-

* in 2006 total was calculated less oblgazes losses, but including technological needs 0.7 bcm

Source: www.gasukraine.com.ua

2.3. Gas market structure in 2007

The new figures of the Minister of Fuel and Energy (Y. Boyko), the Head of the National Electricity Regulation Commission (NERC) (A. Rohozin) and the Head of Naftogaz (V. Sheludchenko) defined new priorities in gas sector, which influenced both external relation and domestic market of Ukraine.

An agreement on gas supplies to Ukraine in 2007 was signed on 25 October, 2006 in Moscow. But this was not an intergovernmental agreement, but a contract between Rosukrenergo Ukrgasenergo. The contract stipulated for the supply of 55 bcm at USD 130 per 1,000 cubic meters in 2007 in Ukraine. It is supposed that gas would come from Asian countries, i.e. about 7 bcm from Uzbekistan, 8.5 bcm from Kazakhstan and 42.5 bcm from Turkmenistan. The price for 2008-2009 will be negotiated further.

The Ukrainian officials claim the new agreement to be a victory, while Europe buys gas at USD 250 in average (see Table 5). Ukrainian domestic gas consumption accounts for about 75 bcm per year, with 20 bcm of domestic extraction; therefore, the imports will cover Ukrainian need for gas in 2007.

⁵ www.gasukraine.com.ua

Table 5. Gazprom natural gas prices for CIS countries and Europe in 2007

Country	Price per 1,000 cubic meters, USD
Belarus	100
Armenia	110
Ukraine	130
Moldova	160
Baltic States	220
Georgia	235
EU (average)	250

Note: average export price of Gazprom to CIS countries for January-November 2006 grew by 3.2 times and reached USD 166.5 per 1,000 cubic meters compared to the respective period of 2005 (USD 52.2 per 1,000 cubic meters). Average export price for January-November 2006 to all countries was at USD 235.2 per 1,000 cubic meters.

Source: www.gazprom.ru

Ukrgezenergo holds the dominant position in Ukrainian market. Since mid-2006 Ukrgezenergo occupied industrial segment. In order to get more independence and secure gas supplies, several large industrial enterprises obtained a license for gas supplies and were intended to buy gas directly from Ukrgezenergo or even Gazprom (for example, SCM holding company, the controlling shareholding of which is owned by Mr. Akhmetov), without intermediaries. However, there was no information that Mr. Akhmetov managed to obtain gas directly from Gazprom. In November 2006 the Antimonopoly Committee of Ukraine initiated an investigation and recognized Ukrgezenergo a monopolist; however, this status has not influenced the company's activity.

Changes in the gas market in 2007

Compared with 2006, imported sources of natural gas are a bit different – Ukraine does not obtain Russian gas any longer. In 2007 gas imports will come from Asian countries only.

The current gas market structure is quite opaque, and it causes many cases of embezzlement and funds misuse, especially with gas distribution companies (i.e. oblgazes). In order to handle with this, at the beginning of 2007 the government of Ukraine and Naftogaz introduced several initiatives, which helped them to get control over the cash flows.

Firstly, starting from 1 February, 2007 the government introduced 'clearing accounts' for the district heating companies. The money paid by the consumers for heating will be transferred directly to the 'clearing accounts' of gas supply companies, and the district heating companies would not be able to use it. This measure is forced by a severe debt of heat producers, accumulated in 2006 – about UAH 1.2 bln. The level of payment for gas (68.2% in 2006) by heating companies is the lowest compared to other consumer groups.

Secondly, the scheme of cash flows between wholesalers, distribution and supply companies, and final consumers has changed significantly. According to the new payment procedure⁶ final consumers will pay for gas directly to Naftogaz and Ukrgezenergo, which in turn will pay to oblgazes (local distributors) for the delivery to final consumers. This alters the current scheme, when consumers had to conclude different agreements with wholesalers for gas and with oblgazes for the delivery (gas distribution). The new mechanism would not allow the final consumers to balance between a wholesaler and a distribution company without paying for the gas consumed.

⁶ Cabinet of Ministers' Decree No. 31 as of 16 January, 2007

In addition, Gaz Ukrainy initiated a review of agreements, concluded with oblgazes , which failed to fulfil investment obligations and have a considerable amount of debt for gas⁷. Before 2007, in order to raise the level of payment, the company cut off gas supplies to oblgazes . But in 2007 Gaz Ukrainy created a company Ukgazmerezha with an intention to take gas distribution networks from non-payers (oblgazes) and hand them in the newly created company's ownership. Besides, the State Prosecutors' Office revealed facts of embezzlement with oblgazes in Lviv, Ivano-Frankivsk, Chernivtsi, Volyn and Zakarpattya region. These distributors are the first candidates, from which Gaz Ukrainy may take away gas networks (for detailed list of debtors, see Appendixes 5 and 6).

3. Ownership structure.

Ownership structure in gas sector remains ambiguous.

3.1. Extraction companies

Gas extraction is carried out by state and private companies. About 95% of domestic gas is extracted by state companies incorporated in Naftogaz structure.

Private companies operate mostly as joint ventures or under joint activity agreements with state extracting companies. More than a half of them are controlled by Ukrainian parliamentarians. A number of cases on unaccounted gas extraction by private companies are being under juridical procedure in Ukrainian courts. They are suited for exploitation of suspended wells or wells that were recognized as unproductive.

3.2. Distribution companies

Regulated tariff gas suppliers

Regulated tariff suppliers are state companies Gaz Ukrainy and Ukrtransgaz, incorporated in Naftogaz, and oblgazes .

Ownership structure in oblgazes is ambiguous due to chaotic market development and unregulated legislation. Therefore, there are often cases when the owner who holds controlling shareholding does not exercise operational control (see Appendix 7).

The issue of oblgazes acquisition is subject to speculations. Many owners of oblgazes and investment companies initiate the discussions on the growth or decrease of oblgazes market value, because they want to sell or buy the distribution companies at best prices. In order to see the real value of the companies, it is necessary to make a stock count of oblgazes assets and define which of the distribution networks are in state property, and which of them were newly built and are considered as oblgazes assets.

Non-regulated tariff gas suppliers

As of July 2006, there were about 400 licensed non-regulated tariff suppliers in Ukraine. They are state companies, large industrial companies and intermediaries. Large industrial companies buy gas for their own needs. Intermediaries, which are usually private companies or joint ventures, pay to oblgazes for pipelines and deliver gas to industrial segment.

⁷ Regional distribution companies use distribution networks on the base of agreements, signed with Gaz Ukrainy

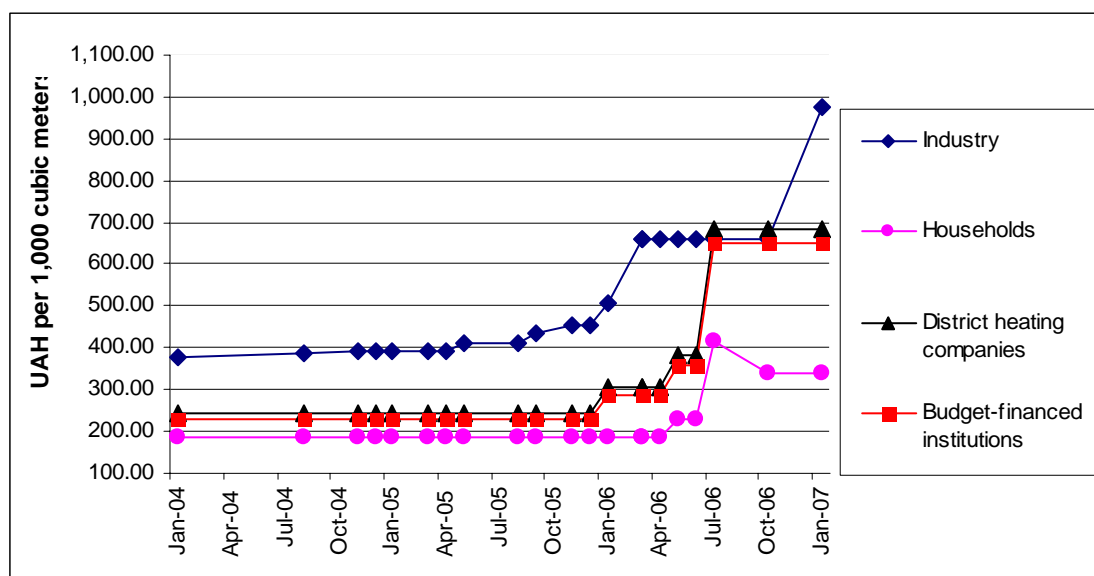
4. Tariffs

Consumer tariffs

Gas tariffs for all consumer groups, as well as fees for transmission, distribution and storage are set by National Electricity Regulation Commission (NERC) according to the methodology, elaborated in 1999.

There is differentiation in gas price depending on a consumer group. Until 2006 industrial enterprises used to be charged twice as much as all other consumers (see Figure 5). The disparity in tariffs was meant as a social protection step for households and budget-financed organizations. As a result, it caused a complicated system of cross-subsidies to appear, when industry covers a part of gas expenses of other consumer groups.

Figure 5. Gas prices for different consumer groups, 2004-2007*



* - gas price for households, district heating companies and budget-financed institutions includes VAT, transportation and supply fee; gas price for industry includes only VAT

Source: www.gasukraine.com.ua

Table 6. Gas tariffs increase for different consumer groups, 2003-2006 (according to Gaz Ukrainy)*

	2003	Jan-04	Dec-05	Jan-06	Mar-06	May-06	Jul-06	Oct-06	Jan-07
Industry	331.80	378.00	455.04	506.52	657.60	657.60	657.60	657.60	974.00
Households	185.00	185.00	185.00	185.00	185.00	231.00	414.00	339.00**	339.00**
District heating companies	241.50	241.50	241.50	304.50	304.50	383.40	686.00	686.00	686.00
Budget-financed institutions	231.00	231.00	231.00	288.00	288.00	360.00	648.00	648.00	648.00

* - gas price for households, district heating companies and public institutions includes VAT, transportation and supply fee; gas price for industry includes only VAT

** basic price, with yearly consumption less than 2,500 cubic meters (for details, see Appendix 8).

Source: www.gasukraine.com.ua

Transportation and supply tariffs

Table 7. Transportation tariffs, 2000-2007 (with VAT)

Tariffs	2000	2001	2002	2003	Jan-04	May-04	Jun-06	Jan-07
General tariff	42.0	52.5	52.5	52.5	52.5	57.0	84.0	110.4
Transmission tariff	24.7	29.1	29.1	29.1	29.1	29.1	45.7	no data
Distribution tariff	17.3	23.4	23.4	23.4	23.4	27.9	38.3	no data
Transportation tariff for consumers, connected directly with transmission networks	no data	no data	no data	no data	no data	46.3	68.2	no data

Source: www.nerc.gov.ua

Table 8. Supply tariffs, 2000-2006 (with VAT)

	2000	Feb-2001	2002	2003	May-04	Nov-05	Jun-06
Average supply tariff for regulated tariff suppliers	5.5	10.0	10.0	10.0	15.84	17.40	24.6

Note: Supply tariff for 2006 includes a special surcharge at UAH 6.03 per 1,000 cubic meters for installation of gas metres for households.

Source: www.nerc.gov.ua

4.1. Households, budget-financed institutions and district heating companies

In 1999-2006 gas tariffs for households, budget-financed institutions and district heating companies remained stable: UAH 185 per 1,000 cubic meters (USD 36) for households, UAH 231 per 1,000 cubic meters (USD 46) for public institutions and UAH 241.5 (USD 48) for district heating companies. These rates were much below the costs-coverage level.

According to Ukrainian legislation⁸, households and district heating companies are supplied with gas, extracted in Ukraine. The measure was aimed at the reduction of gas price for these groups, because the cost of domestically extracted gas is lower than the one of imported natural gas. Thus, in 2006 Ukraine imported gas at UAH 480 (USD 95), and, by different sources, the cost of domestically extracted gas was UAH 105-155 including VAT (without transportation costs)⁹.

Table 9. Structure of household tariff for natural gas as of October, 2006

Price component	UAH
Cost	140.0
VAT (20%)	28.0
Transmission fee	38.3
Distribution fee	45.7
Supply fee	24.6
Cost for the reconstruction of the gas transmission and distribution system and extraction increase	62.4
Total:	339.0

Source: Ministry of Fuel and Energy of Ukraine, www.mpe.energy.gov.ua

Low costs-coverage level forced NERC to raise tariffs in 2006. Since 1 May, 2006 gas tariffs were increased by 25% for households, heat producing companies and public institutions, since 1 July 2006 – by 85% for households, by 78% for heat supplying companies and by 80% for budget-financed institutions.

The latest change in gas tariffs for households took place in December 2006, when the tariffs were differentiated according to the gas volumes consumed. The basis gas price for households was set at UAH 339 per 1,000 cubic meters (for details, see Appendix 8). In Table 9 you can see a breakdown of the price, presented by the Ministry of Fuel and Energy as of October 2006.

⁸ Cabinet of Ministers' Decree "On Supplying Consumers with Natural Gas", No. 1729 as of 27 December, 2001

⁹ Business, No. 39/25.09.2006, pp.9-10

The Cabinet of Ministers approved minimum rates of households supply with solid fuel (coal) and liquefied gas¹⁰, and marginal prices for the fuel (see Appendix 3).

4.2. Industry

Industry gas prices remained unchanged since September 2000 till 2003 at USD 62 (including VAT). For comparison, in 1995-1998, when there were many companies, which imported gas to Ukraine, price to industrial consumers amounted to USD 80.

Unlike tariffs for other consumers, gas price for industry has been constantly growing for about 5% every half a year since 2004. But the drastic price increase (by 30%) took place in January 2006, along with the increase in the imported gas price (from USD 60 to USD 95). The reason is that according to Ukrainian legislation¹¹, industry is supplied with imported gas.

In 2006 wholesale suppliers, i.e. Ukgazenergo and Gaz Ukrainy was selling gas to industrial enterprises for about USD 130 (UAH 655 and UAH 657 respectively) per 1,000 cubic meters including a special surcharge and VAT (without transportation fees).

In 2007, after the new contract with Russia stated the new price of USD 130 per 1,000 cubic meters at Ukrainian-Russian border, the final price for industrial consumers grew by 32% up to about USD 190 (including VAT, a special surcharge and transportation fees, see Table 10). In 4Q 2006 there were many appeals of chemical enterprises to the government with requests to mitigate the increase by releasing the enterprises from VAT or setting indicative price at about USD 110. But the only thing the Cabinet of Ministers did was the reduction of a 'special surcharge' from 2% to 0.01% on 13 December, 2006¹². It decreased the final price for chemical enterprises by only 1.5% compared to other industries (see Table 11).

Table 10. Final price composition for industrial consumers (except chemical industry), January 2007

Price components	Connected with distribution networks of obligates, UAH per 1,000 cubic meters	Connected with transmission network, UAH per 1,000 cubic meters
Gas price at border (without VAT and surcharges)	708.00	708.00
'Special surcharge' (2%)	14.16	14.16
Gas price including VAT	849.60	849.60
Transportation tariff (with VAT)	110.40	89.64
Final price for consumers	974.16	953.40

Source: TEK Daily Monitoring, Monday, 29 January 2007

Table 11. Final price composition for chemical industry consumers, January 2007

Price components	Connected to distribution networks of obligates, UAH per 1,000 cubic meters	Connected to transmission network, UAH per 1,000 cubic meters
Gas price at border (without VAT and surcharges)	708.00	708.00
'Special surcharge' (0.01%)	0.07	0.07
Gas price including VAT	849.60	849.60
Transportation tariff (with VAT)	110.40	89.64
Final price for consumers	960.07	939.31

Source: TEK Daily Monitoring, Monday, 29 January 2007

¹⁰ Cabinet of Ministers' Decree No. 227 as of 14 February, 2007

¹¹ Cabinet of Ministers' Decree "On Supplying Consumers with natural Gas", No. 1729 as of 27 December, 2001

¹² A 'special surcharge' was introduced in 2005 and the funds collected are supposed to be used for the reconstruction of the gas transmission and distribution networks

5. Key problems of Ukrainian gas market

1. Gas market of Ukraine is highly monopolized in all areas:
 - a) Ukrainian natural gas supplies are not diversified. In 2006-2007 there were two major sources of natural gas: domestic extraction (covers about 25% of total needs) and Asian gas, with an insignificant amount of Russian gas in 2006
 - b) Asian gas is supplied to Ukraine by the only intermediary, a Russian-Swiss company Rosukrenergo.
 - c) The internal market of Ukraine is built up according to the model of a “single buyer”. In 1998-2005 it was Naftogaz, a state company, which imported natural gas to Ukraine; in the beginning of 2006, this role was handed to Ukgazenergo (created in February 2006), a subsidiary of Naftogaz and Rosukrenergo.

Currently Ukrainian officials are negotiating a possibility of gas extraction on the territory of Russian Federation and Turkmenistan. However, it seems to be a long run perspective taking into account the intention of Russian Federation to preserve a dominant position on CIS and European countries' market.

2. Ownership structure in Ukrainian gas sector is very opaque, which is a consequence of chaotic market development and unregulated legislation. It is particularly controversial with oblgazes, or in other words gas distribution companies. Lack of transparency among these companies serves as a fertile soil for corruption and causes many cases of funds misuse, non-payments and embezzlement.
3. The problem of non-payments for the gas consumed is very keen among district heating companies, budget-financed institutions and households. The level of payment to Gaz Ukrainy, the company that supplies gas to these consumer groups, was 81.5% in 2006 (which is less than 94.3% in 2005). More than half of the total debt is owed by district heating companies (55%) and households (32%).
4. Despite the gas tariffs increase in 2006, they are still below cost coverage level for district heating companies and households. The government is planning to raise tariffs in 2007 by 15-20%. This would help to eliminate cross-subsidies (when industrial consumers cover the gas costs of other consumer groups).
5. There is a strong necessity to introduce a comprehensive system of gas accounting. In 2006 only 43% of households were equipped with gas meters. The installation of gas accounting equipment would allow saving of up to 4.5 bmc per year.
6. Investments in modernization of transmission and distribution pipelines are low, as well as in exploration and drilling.

Appendix 1. Domestic natural gas extraction, 2005-2006

	2005	2006	Change	
			mln cubic meters	%
Total, including:	19,615.8	19,740.5	124.8	0.6
Naftogaz subsidiaries	18,304.2	18,367.3	63.1	0.3
Ukrgezvydobuvannya	14,630.2	14,667.9	37.7	0.3
Ukrnafta	2,420.1	2,422.5	2.4	0.1
Chornomornaftogaz	1,253.9	1,276.9	23.0	1.8
Other companies	1,311.6	1,373.2	61.7	4.7
Nadra Ukrainy	462.6	495.8	33.2	7.2
Naftogazvudobuvannya	285.2	365.8	80.6	28.3
Poltavs'ka gasonaftova kompaniya	308.8	251.9	-56.8	-18.4
Cub-Gaz	35.1	63.3	28.2	80.3
Dniprogazresurs	61.7	54.9	-6.8	-11.1
Plast	61.1	53.2	-7.8	-12.8
Mariinske	32.5	34.5	2.0	6.1
Delta	30.2	22.0	-8.2	-27.2
Tysagaz	14.8	12.2	-2.6	-17.4
Ukrnadraserice	6.9	11.7	4.8	69.0
Oberon-Vugillya	4.4	4.1	-0.3	-6.7
Region	5.6	2.0	-3.6	-64.8
Europa Nafta i Gas Ukraina	2.7	1.8	-0.9	-32.0

Source: Interfax Ukraine, Ministry of Fuel and Energy of Ukraine

Appendix 2. Russian gas transit through the territory of Ukraine, 1997-1H 2006

		1997	1998	1999	2000	2001	2002		2003	2004	2005	2006	
							1H	2H				1H	2H
Gas transit	bcm	131.8	138.2	131.6	119.9	122.8	119.4		123.2	132.4	130.7		
Transit fee	USD per 1,000 cm per 100 km	1.75	1.09	1.09	1.09	1.09	1.09	1.46	1.09	1.09	1.09	1.6	
Gas price	USD per 1,000 cm	80	50	50	50	50	50	67	50	50	50	95	
Gas volumes obtained	bcm	29.2	21.5	26.6	18.6	22.2	25.7		26.0	29.2	23.0	-	-
Cost of transit services	USD	2,435	1,585	1,596	1,468	1,418	1,597		1,456	1,569	1,536	-	-
Gas imported from Turkmenistan	bcm	-	-	-	-	30.0	32.0		30.7	29.5	32.2	-	-

Source: The Consequences of Gas Price Growth for the Ukrainian Economy, UCEPS, Kyiv, 2006

Appendix 3. Marginal prices for solid fuel and liquefied gas for households in 2007

Region	Marginal price	
	Solid fuel, UAH per ton	Liquefied gas, UAH per cylinder
Crimea	600	105
Region:		
Vinnitska	630	85
Volynska	493	80
Dnipropetrovska	529	91
Donetska	514	79
Zhytomyrska	572	76
Zakarpatska	572	80
Zaporizka	510	86
Ivano-Frankivska	566	77
Kyivska	616	77
Kirovogradska	620	78
Luganska	558	98
Lvivska	485	79
Mykolaiivska	507	78
Odeska	560	98
Poltavska	568	78
Rivnenska	504	84
Sumska	540	87
Ternopil'ska	495	82
Kharkovska	600	85
Khersonska	637	91
Khmelnitska	546	84
Cherkaska	616	90
Chernovytska	564	80
Chernigivska	534	74
Kyiv City	627	77
Sevastopol City	600	91

Source: TEK Daily Monitoring

Appendix 4. Natural gas extraction from underground storages in 2006

Month	Natural gas extraction		Mln cubic meters, 2005
	Mln cubic meters	% of 2005	
Jan	3,651.3	-	-
Feb	2,478.7	-	-
March	1,731.8	-	-
Apr	637.7	-	-
May	0.2	-	-
June	0.0	-	-
July	0.0	-	-
Aug	0.0	-	-
Sept	0.2	-	-
Oct	578.0	-	-
Nov	2,925.9	-	-
Dec	3,022.8	-	-
Total	15,026.6	86.9	17,300.0

Source: www.gazukraine.com.ua

Appendix 5. Oblgazes with the worst fulfillment of obligations on the investment in distribution networks, 9 months 2006

Company	Obligations, mln UAH	Actual investment, mln UAH	Level of fulfillment, %
Zhytomyrgaz	3.2	0.2	6.0
Chernigivgaz	2.9	0.2	6.0
Uman-Gazovik	0.8	0.1	7.0
Gadyachgaz	0.2	0.0	8.0
Melitopolgaz	0.6	0.1	8.0
Mykolaivgaz	1.9	0.3	16.0
Chernovtsygaz	2.0	0.3	17.0
Lubnygaz	0.3	0.1	18.0
Cherkasygaz	3.3	0.6	19.0
Sevastopilgaz	0.5	0.1	20.0
Volyngaz	1.9	0.5	29.0
Zaporizhgaz	3.8	1.1	29.0
Sumygas	2.6	1.0	39.0
Kremenchuggaz	0.5	0.2	40.0
Krymgaz	3.3	1.4	41.0
Kirovogradgaz	2.0	0.9	45.0
Dnipropetrovskgaz	5.5	2.6	47.0
Lvivgaz	6.2	3.0	49.0
Poltavagaz	0.6	0.3	50.0
Kyivoblgaz	4.7	2.4	52.0
Luganskgaz	4.9	2.7	55.0

Source: www.gazukraine.com.ua

Appendix 6. Gas distribution companies with the highest debt for gas to Gaz Ukrainy in 2006

Company	Debt, mln UAH	Level of payment, %
Zakarpagaz	57.1	55.0
Cherkassygaz	48.9	65.0
Lvivgaz	71.4	72.0
Ivano-Frankivskgaz	37.6	76.0
Kharkivgaz	25.5	76.0
Korostyshevgaz	1.0	77.0
Volyngaz	17.0	78.0
Luganskgaz	55.5	79.0
Chernigivgaz	24.7	79.0
Ternopilgaz	18.8	82.0
Zhytomyrgaz	21.3	84.0
Kyivgaz	14.3	85.0
Lubnygaz	4.8	86.0
Melitopolgaz	3.0	86.0
Odessagaz	46.6	86.0

Source: Gaz Ukrainy, www.gazukraine.com.ua

Appendix 7. Ownership structure of gas distribution companies ('oblgazes') as of August 2006

No.	Company	% state-owned (NJSC "Naftogaz")	% privately owned, owners	Operational control
	State control shareholding and state operated			
1	OJSC "Dnipropetrovskgaz"	50.99%	n/d	NJSC "Naftogaz"
2	OJSC "Kremenetsgaz"	50%	n/d	NJSC "Naftogaz"
3	OJSC "Poltavagaz"	50% + 1 share	20.24% - CJSC "Poltavapropangaz" 14.83% - "Plasma Enterprises Limited"	NJSC "Naftogaz"
4	OJSC "Sumygaz"	50.80%	48% - CJSC "TekhNova"	NJSC "Naftogaz"
	State control shareholding and privately operated			
5	OJSC "Cherkasygaz"	50%	37% - CJSC "Ukrغازtrans-Service" and CJSC "Stockholder"	B. Gubsky
6	OJSC "Ivano-Frankivskgaz"	50% + 1 share	40.75% - LC "Continium Trust Company"	I. Eremeev
7	OJSC "Kremenchuggaz"	51%	24.99% - JSCB "Transbank" 16.34% - JV LLC "Sodruzhestvo"	Concern "Sodruzhestvo"
8	OJSC "Mykolaivgaz"	50% + 1 share	26% - LLC "Gaztek"	LLC "Gaztek" I.Surkis-V.Medvedchuk
	State control shareholding no data on management			
9	SE "Sevastopolgaz"	50% + 1 share	n/d	n/d
10	SE "Tysmennytsyagaz"	50% + 1 share	n/d	n/d
11	OJSC "Berezhanygaz"	50% + 1 share	n/d	n/d
12	OJSC "Kirovogradgaz"	50% + 1 share	n/d	n/d
13	OJSC "Lubnygaz"	50% + 1 share	n/d	n/d
14	OJSC "Luganskgaz"	50% + 1 share	n/d	n/d
15	OJSC "Melitopolgaz"	50% + 1 share	n/d	n/d
16	OJSC "Terebovlyagaz"	50% + 1 share	n/d	n/d
17	OJSC "Zaporizhgaz"	50% + 1 share	n/d	n/d
	State block shareholding and privately operated			
18	OJSC "Chernigivgaz"	38.25%	13.1% - LLC "Sodruzhestvo"	Concern "Sodruzhestvo"
19	OJSC "Chernivtsigaz"	38.25%	52.4% - LLC "Continium Trust Company"	I. Eremeev
20	OJSC "Donetskoblغاز"	38.28%	17.5% - LLC "Kemot"	SCM
21	OJSC "Khmelnyskgaz "	25.99%	60% - LLC "Gastek" (through "Mizhregionalny Fondovy Soyuz" – 36.48%, directly – 14.82%).	LLC "Gaztek" I.Surkis-V.Medvedchuk
22	OJSC "Krymgaz"	48.9%	No data	SC "Chornomornasftogaz" I. Franchuk

No.	Company	% state-owned (NJSC "Naftogaz")	% privately owned, owners	Operational control
23	OJSC "Lvivgaz"	27.55%	25% - WOG 24.99% - LLC "Continium Trust Company" 22.54% - CJSC CB "NRB-Ukraine"	I. Eremeev
24	OJSC "Rivnegaz"	32.60%	21.41%- LLC "Continium Trust Company"	I. Eremeev
25	OJSC "Zhytomyrgaz "	31.7%.	35.11% - LLC "Gastek" 24.3% - OJSC "Khmelnyskghaz"	LLC "Gaztek" I.Surkis-V.Medvedchuk
	State block shareholding no data on management			
26	OJSC "Borschivgaz"	29%	n/d	n/d
27	OJSC "Buchachgaz"	28.90%	n/d	n/d
28	OJSC "Chortkivgaz"	27%	n/d	n/d
29	OJSC "Gusyatyngaz"	32%	n/d	n/d
30	OJSC "Kyivoblghaz"	33%	n/d	n/d
31	OJSC "Shepetivkaghaz"	26%	n/d	n/d
32	OJSC "Ternopilgaz"	25.70%	n/d	n/d
33	OJSC "Ternoplimiskgaz"	30%	n/d	n/d
34	OJSC "Vinnytsyaghaz"	47%	n/d	n/d
35	OJSC "Zalishchykghaz"	26%	n/d	n/d
36	OJSC "Zbarazhghaz"	32%	n/d	n/d
37	OJSC "Zborivgaz"	36%	n/d	n/d
38	OJSC "Monastyrskghaz"	31%	n/d	n/d
39	OJSC "Pidvolochyskghaz"	37%	n/d	n/d
40	SE "Umangaz"	40%	n/d	n/d
	Private control shareholding and privately controlled			
41	OJSC "Dniprogaz"	n/d	76-80% "Rukom" and "Gaseks"	"Renova" V.Vekselberg
42	OJSC "Donetskmiskgaz"	n/d	76-80% "Rukom" and "Gaseks"	"Renova" V.Vekselberg
43	OJSC "Gadyachgaz"	n/d	n/d	Concern "Sodruzhestvo"
44	OJSC "Kharkivgaz"	17.70%	57.7% - OJSC "Megabank" 20% - "Fineko" 10% - "Strilets+" 9.74% - OJSC "Megabank"	OJSC "Megabank"
45	OJSC "Kharkivmiskgaz"	9.90%	76-80% - "Rukom" and "Gaseks"	"Renova" V.Vekselberg
46	OJSC "Khersongaz"	20.38%	28.26% - JSCB "Transbank" 14.49% - JSCB "Sodruzhestvo" 6.14% - LLC "Sodruzhestvo"	Concern "Sodruzhestvo"
47	OJSC "Kryvorizhghaz"	n/d	76-80%- "Rukom" and "Gaseks"	"Renova" V.Vekselberg

No.	Company	% state-owned (NJSC "Naftogaz")	% privately owned, owners	Operational control
48	OJSC "Volyngaz"	23.42%	55.8% - LLC "Continium Trust Company"	I. Ereemeev
49	OJSC "Zakarpagaz"	6.34%	60.03% - - LLC "Continium Trust Company"	I. Ereemeev
	No data on:			
50	OJSC "Korostyshivgaz"	n/d	n/d	n/d
51	OJSC "Kozovagaz"	n/d	n/d	n/d
52	OJSC "Kyivpropangaz"	n/d	n/d	n/d
53	OJSC "Lanivtsigaz"	n/d	n/d	n/d
54	OJSC "Makiivkagaz"	n/d	n/d	n/d
55	OJSC "Mariupolgaz"	n/d	n/d	n/d
56	OJSC "Odesagaz"	n/d	n/d	n/d
57	OJSC "Pidgaytsigaz"	n/d	n/d	n/d
58	OJSC "Shumskgaz"	n/d	n/d	n/d
59	OJSC "Zakarpagaz"	n/d	n/d	n/d
60	SE "Kyevo-Svyatoshynskgaz"	n/d	n/d	n/d
61	SE "Melitopolgaz"	n/d	n/d	n/d

Source: compiled by CASE Ukraine

Appendix 8. Gas tariffs for households, 1999-2007

№		Registered in the Ministry of Justice	Cancelled by		Current tariff, per 1,000 cubic meters, incl. VAT	Previous tariff	Increase, %	Effective date
1.	NERC Decree N 310 as of 10.03.99 "On Retail Prices on Natural Gas, Which is Used by Households for Domestic Needs"	10 March 1999 N 153/3446	NERC Decree N 400 (z0412-06) as of 30.03.2006	Gas price for households with gas meters	UAH 175	n/d	n/d	1 April, 1999
				Gas price for households without gas meters	UAH 190	n/d	n/d	
2.	NERC Decree №400 as of 30.03.2006 "On Retail Prices on Natural Gas, Which is Used by Households for Domestic Needs"	11 April 2006 N 412/12286	NERC Decree N 739 (z0720-06) as of 08.06.2006	Gas price for households with gas meters	UAH 220	UAH 175	25%	1 May, 2006
				Gas price for households without gas meters	UAH 240	UAH 190	25%	
3.	NERC Decree N 739 as of 08.06.2006 "On Retail Prices on Natural Gas, Which is Used by Households for Domestic Needs"	16 June 2006 N 720/12594	NERC Decree N 1345 as of 19.10.2006	Gas price for households with gas meters	UAH 407	UAH 220	85%	1 July, 2006
				Gas price for households without gas meters	UAH 444	UAH 240	85%	
4.	NERC Decree N 1345 19.10.2006 "On Retail Prices on Natural Gas, Which is Used by Households for Domestic Needs"	20 October 2006 N 1129/13003	NERC Decree N 1672 as of 19.12.2006	1. Price for natural gas that is used by households for cooking and water heating, but is not used for heating an apartment:				
				with gas meters	UAH 315			
				without gas meters	UAH 345			
				2. Price for natural gas that is used by households for cooking and heating:				
				with gas meters	UAH 407			
				without gas meters	UAH 444			

№		Registered in the Ministry of Justice	Cancelled by		Current tariff, per 1,000 cubic meters, incl. VAT	Previous tariff	Increase, %	Effective date
5.	NERC Decree N 1672 as of 19.12.2006 "On Retail Prices on Natural Gas, Which is Used by Households for Domestic Needs"	20 December 2006 N 1330/13204						1 January, 2007
				< 2500 cubic meters per year:				
				with gas meters	UAH 315			
				without gas meters	UAH 345			
				< 6000 cubic meters per year:				
				with gas meters	UAH 478			
				without gas meters	UAH 526			
				<12000 cubic meters per year:				
				with gas meters	UAH 980			
				without gas meters	UAH 1078			
				> 12000 cubic meters per year:				
				with gas meters	UAH 1173			
				without gas meters	UAH 1290			
				3. Price for natural gas that is used for heating an apartment in the houses, which are separated from the centralized heating system:				
				with gas meters	UAH 686			
				without gas meters	UAH 754			

Source: Ukrainian legislation

