

# How has Ukraine benefited from the changes in its relationships with Gazprom?

The Stockholm arbitration and gas imports from the EU are not solely about "contracts" and "figures", they also mean welfare of each and every Ukrainian family. Let us show, based on data, the impact of an overhaul in relationships with Gazprom on Ukraine's economy and national wealth.

## 1) What is the total financial effect from the changes to relationships with Gazprom?

**\$ 115.6 bln** - which is equivalent to the 3/4 of the result of the entire Ukrainian economy within one year\*  
 This value includes:  
 \$ 109.7 bln - the result obtained due to the Stockholm arbitration and gas imports from the EU (as of the end of 2019)  
 \$ 5.9 bln - Present Value of the minimal guaranteed value of the new transit contract between Naftogaz and Gazprom (discounted as of the end of 2019)

\* - 75% of nominal GDP for 2019

## 2) What Ukraine might have lost in 2014-2019 had the relationships in question not been changed?

**\$ 81.8 bln** - which is equivalent to almost a half (47%) of State's revenues or 1/4 of cash income of each Ukrainian family  
 Should the interest rates not be considered (i.e. had we immediately paid the bills sent by Gazprom), we would have to deduct \$ 27.9 billion (accrued interest) from the sum of \$ 109.7 billion, which would amount to \$ 56.7 billion.

The State would have been compelled to cover these expenses by means of:

- Lower salaries  
 - Lower pensions  
 - Higher taxes

It means lower cash income of each Ukrainian household

This amount is also bigger than the double amount of the total expenses of the State Budget on defense, education, healthcare and environmental protection in 2014-2019

## 3) The gas sales contract of 2009 did not entail truly market European pricing principles. What are irreversible losses due to it?

**\$ 28.9 bln** - difference between the actual cost of Russian gas and the cost of gas based on alternative energy sources ("indifference price")

Had this contract been founded on the real European pricing model (based on the prices of alternative energy sources, or "indifference price"), we would not have sustained these losses.

Had this pricing principle been applied, Ukraine's economy would grow every year bigger by 2.9% than it has been in 2009-2015.

The Row/Formula	Apr-Dec2014	2015	2016	2017	2018	2019	Jan2020	2020-2024
<b>A. How bigger would the amount have been that Naftogaz would had to pay Gazprom compared to the revenues from gas transit, if Naftogaz complied with the demands set by Gazprom (from April 2014)</b>								
Transit volumes <sup>1</sup> , in billions cubic meters	[13]-[20] [24]	38,7	57,8	74,0	84,8	79,9	82,3	-
The average transit tariff, in USD per thousand cubic meters for 100 km	[2]	3,27	2,88	2,51	2,61	2,77	2,85	-
Presumption for transit as of 01/04/2014, in billions of USD	[8]	1,25						
Payments for transit, in billions of USD	[4]	0,89	1,45	2,11	2,50	2,48	2,72	0,25
Volume of gas imported from the Russian Federation, in billions cubic meters	[5]-[13] [24]	13,2	15,4	8,2	8,7	7,0	7,3	-
The average price for Russian gas, in USD per thousands cubic meters	[6]	1,491	356	189	229	296	321	-
Payment for gas, supplied by Gazprom in November-December 2013 <sup>2</sup> , in billions of USD	[7]	1,49						
Payment for gas, supplied by Gazprom in February-March 2014 <sup>3</sup> , in billions of USD	[8]	0,89						
Payments for Russian gas excluding the take-or-pay clause, in billions of USD	[9]-[10] [7]-[8]	8,77	5,48	1,54	1,99	2,08	2,35	0
Payment according to the take-or-pay clause for 2012 based on the actual invoice issued by Gazprom <sup>4</sup> , in billions of USD	[10]	7,99						
Payment according to the take-or-pay clause for 2013 based on the actual invoice issued by Gazprom <sup>4</sup> , in billions of USD	[11]	11,39						
Minimal volumes of gas supply according to the take-or-pay clause, in billions cubic meters	[12]	41,6	41,6	41,6	41,6	41,6	41,6	0
Take-or-pay shortfall, in billions cubic meters	[13]-[12] [27]	22,3	26,2	33,4	32,9	34,6	34,3	0
Payment according to the take-or-pay clause for 2014-2019 (the payment made in January of the year following the delivery year), in billions of USD	[14]-[13] [46]		9,41	9,34	6,32	7,53	10,26	10,99
Payment for Russian gas according to the take-or-pay clause, in billions of USD	[15]-[10] [10]-[11] [14]	28,15	14,89	10,88	8,31	9,60	12,61	10,99
Payment for European gas in January 2020, in billions of USD	[14] [27]							0,07
Difference between payments for transit and payments for gas excluding the take-or-pay obligation, in billions of USD	[17]-[4] [9] [14]	-8,47	-4,03	0,56	0,51	0,41	0,37	0,19
Difference between payments for transit and payments for gas including the take-or-pay obligation, in billions of USD	[18]-[4] [15] [14]	-27,85	-13,44	-8,78	-5,81	-7,12	-9,89	-10,80
Difference between payments for transit and payments for gas including the take-or-pay obligation, in billions of USD (cumulative total)	[19]- [31] 8	-27,85	-41,29	-50,06	-55,88	-63,00	-72,89	-83,69
<b>B. How smaller is the amount that Naftogaz actually paid for the imported gas in comparison with transit revenues (from April 2014)</b>								
Actual transit volumes, in billions cubic meters	[20]	43,6	67,1	82,2	93,5	86,8	89,6	-
The average transit tariff, in USD per thousand cubic meters for 100 km	[21]	2,79	2,71	2,50	2,61	2,70	2,62	-
Payments for transit, in billions of USD	[22]	0,25	1,63	2,29	2,77	2,67	2,70	0,24
The volume of gas imported from the Russian Federation, in billions cubic meters	[23]	8,3	6,1	0,0	0,0	0,0	0,0	-
The average actual price for Russian gas (including the temporary price of the "winter package"), in USD per thousands cubic meters	[24]	276	273	-	-	-	-	-
Actual payments for Russian gas (including payments based on "winter package"), in billions of USD	[25]	4,41	1,35	0	0	0	0	0
Volumes of gas imported from the EU, in billions cubic meters	[26]	4,9	9,2	8,2	8,7	7,0	7,3	0,3
Average price for gas from the EU, in USD per thousands cubic meters	[27]	356	280	201	230	304	191	230
Payments for gas imported from the EU, in billions of USD	[28]-[26] [27]	1,73	2,59	1,64	2,00	2,13	1,40	0,07
Gazprom's payment under the 2018 Final Award on Transit contract, in billions of USD	[28]							2,92
Difference between payments for transit and payments for gas, in billions of USD	[30] [24] [28]-[29]	-5,90	-2,30	0,65	0,77	0,54	4,22	0,17
Difference between payments for transit and payments for gas based, in billions of USD (cumulative total)	[31]- [33] 0	-5,90	-8,20	-7,55	-6,77	-6,24	-2,02	-1,85
<b>C. Amount saved by Naftogaz due to the changes in relationships with Gazprom and securing reverse gas flows from the EU</b>								
The difference between scenarios B and A, in billions of USD	[32]-[30] [34]	21,95	11,14	9,43	6,59	7,66	14,11	10,97
The difference between scenarios B and A based, in billions of USD (cumulative total)	[33]- [33] 2	21,95	33,09	42,52	49,10	56,76	70,87	81,84
Delay interest rate according to the contract with Gazprom, % per day	[34]	0,03%	0,03%	0,03%	0,03%	0,03%	0,03%	0,03%
Number of days from the date of the emergence of the difference <sup>5</sup> by the end of 2019, in billions of USD	[35]	2,100	1,735	1,369	1,004	639	274	0
Present value of the difference between scenarios at the end of 2019 <sup>6</sup> , in billions of USD	[36]-[32] [32]- [35] [34] [35]	35,78	16,94	13,30	8,57	9,13	15,03	10,97
Present value of the difference between scenarios at the end of 2019 <sup>6</sup> , in billions of USD (cumulative total)	[37]-[36] 2	35,78	52,71	66,01	74,59	83,71	98,74	109,71
The difference between scenarios B and A (excluding the take-or-pay obligation), in billions of USD	[38]-[30] [37]	2,57	1,73	0,09	0,27	0,13	3,85	-0,02
The difference between scenarios B and A (excluding the take-or-pay obligation), in billions of USD (cumulative total)	[39]- [39] 0	2,57	4,30	4,39	4,66	4,79	8,64	8,62
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>The increase in the sum of take-or-pay obligation based on actual invoices issued by Gazprom, in billions of USD taking into account the terms of "winter packages"</p> </div> <div style="width: 45%;"> <p>The price for imported gas, USD per thousands cubic</p> </div> </div>								
<b>D. The minimum guaranteed value of new transit contract</b>								
The expected revenues from the new transit contract with Gazprom, in billions of USD	[40]							7,15
Discount rate, % p.a. in USD	[41]							9%
Present Value of the minimum guaranteed value of the transit contract as of the end of 2019 <sup>7</sup> , in billions of USD	[42]							5,94
Total nominal financial effect for 2014-2024 excluding interest, in billions of USD	[43]-[43] [40]							88,99
Amount of the total financial effect discounted as of the end of 2019, in billions of USD	[44]-[43] [42]							115,65
<b>E. The price for imported gas based on different approaches</b>								
The original price according to the contract with Gazprom, in USD per thousands cubic meters	[45]	233	339	409	524	497	488	344
The actual price for gas supplied by Gazprom (including discounts and temporary prices of the "winter package"), in USD per thousands cubic meters	[46]	233	257	309	424	397	273	273
The price claimed by Gazprom, in USD per thousands cubic meters	[47]	233	257	309	424	397	307	344
The revised price according to the arbitral tribunal decision, in USD per thousands cubic meters	[48]	233	257	309	424	397	338	269
The price according to the "netback" principle, in USD per thousands cubic meters	[49]	151	159	232	238	260	261	188
The price according to the "indifference price" (Groningen model), in USD per thousands cubic meters	[50]	121	126	146	143	137	118	98
The volume of gas imported from the Russian Federation, in billions cubic meters	[51]	26,8	36,5	40,0	24,9	12,9	14,4	6,1
The difference between the price claimed by Gazprom and the revised price, in billions of USD (excluding interest)	[52]=[51]x [47]-[48]	0,0	0,0	0,0	0,0	0,0	0,8	0,5
<b>F. Irreversible losses due to the failure to use European principles in defining the gas pricing model in the gas supply contract</b>								
The difference between the cost of gas based on the "netback" principle and the revised price, in billions of USD	[53]=[51]x [49]-[48]	-2,2	-3,5	-3,1	-4,6	-1,8	-1,1	-0,5
The difference between the cost of gas based on the "indifference price" and the revised price, in billions of USD	[54]=[51]x [50]-[48]	-3,0	-4,8	-6,5	-7,0	-3,4	-3,2	-1,1
<p>Footnotes:</p> <p><sup>1</sup> - the volume of gas transit according to the scenario A is lower than actual volumes, since Naftogaz would have bought gas from Gazprom and not from EU. This, in turn, would have led to a lower demand for gas in the EU, and accordingly, to the lower volume of gas transit through Ukraine.</p> <p><sup>2</sup> - including interest accrued on overdue payments as of April 2014.</p> <p><sup>3</sup> - the calculations include the volume of gas imported from the Russian Federation in January-March 2014 (6,05 billions cubic meters) at a price of 268,5 USD per thousands cubic meters</p> <p><sup>4</sup> - Since the payment based on the take-or-pay provision according to the scenario A would be made at the beginning of each year, it was agreed for the purpose of discounting that the effective moment of the difference was the beginning of the second quarter of each year.</p> <p><sup>5</sup> - Amount of revenues for 2020-2024 was discounted as of the end of 2019. The minimum guaranteed value of the new transit contract is almost equal to the minimum guaranteed amount of revenue under this agreement, because the marginal costs for Transmission System Operator compared to zero transit scenario is immaterial: total volume of fuel gas consumed when gas transit volumes are 38,48 billions cubic meters p.a. is almost equal to the volume of fuel gas consumption under zero transit scenario.</p>								