



REGIONAL
GAS COMPANY

Ukraine - non metered household consumption analysis

April 25, 2018



Household consumer consumption analysis

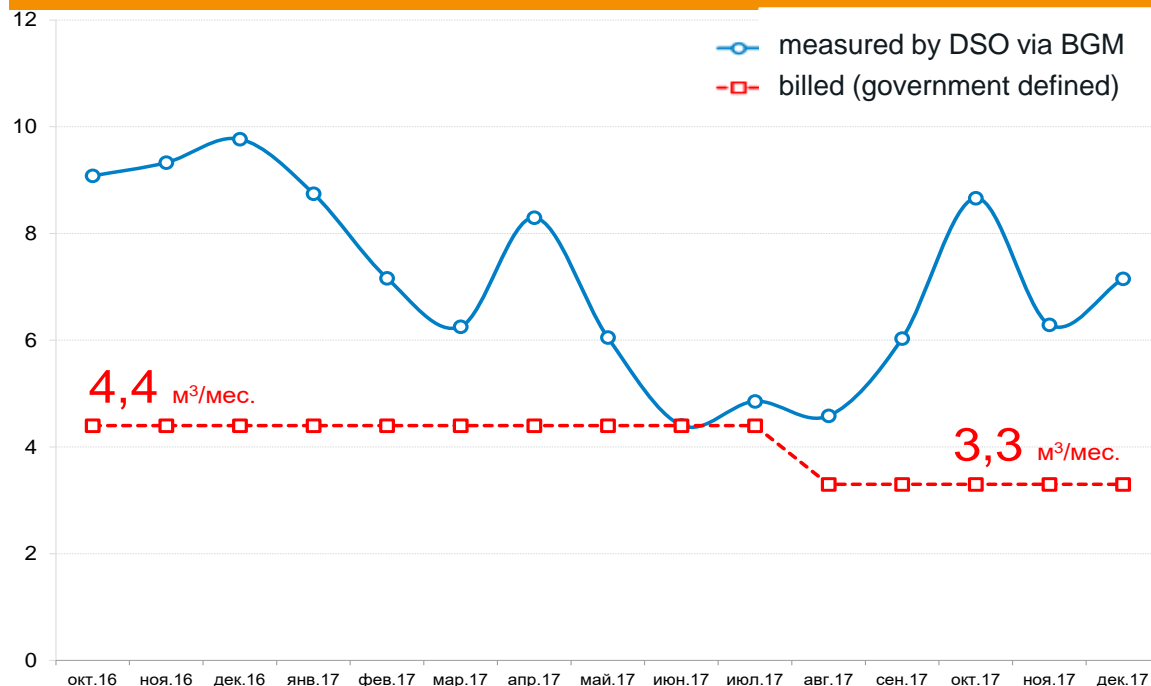
- for the analysis was used the data of the consumers who:
 - don't have installed individual gas meter and
 - are supplied with gas through so called «**Building Gas Meters**» (BGM)
- statistic is based on data **from October 2016 till December 2018**
- 3 major consumer categories were analyzed:
 - consumers with gas cooker and **with** centralized hot water supply
 - consumers with gas cooker and **without** centralized hot water supply
 - consumers with water gas heater
- analyzed in total:

# of BGM	# of consumers measured by BGM	# of analyzed DSOs using BGM	Total gas volume distributed via BGM
9 988	511 334	18	75,5 mln. m3

* Building Gas Meters (BGM) means that one gas meter is used for more then one consumer or for whole block of flats

Consumers with gas cooker and with centralized hot water supply

Consumption per 1 consumer (m³/month)



Difference by months

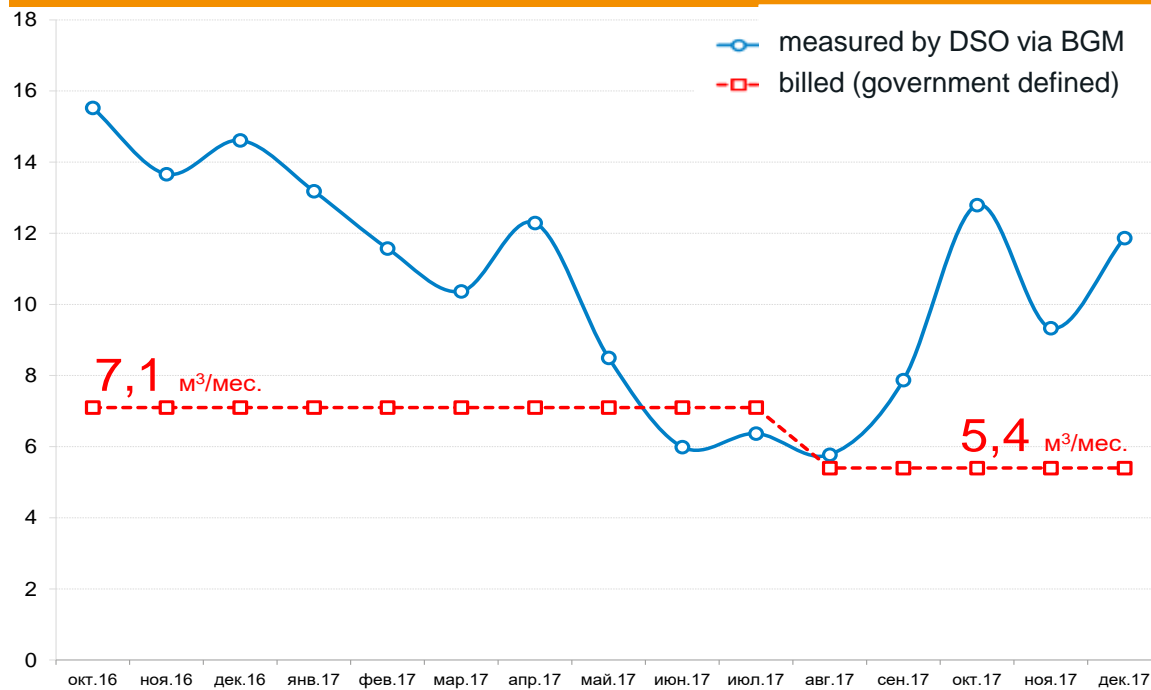
	Measured m3	Flat rate m3	Difference m3	Difference %
Oct 2016	9,08	4,40	+4,68	+106%
Nov 2016	9,33	4,40	+4,93	+112%
Dec 2016	9,77	4,40	+5,37	+122%
Jan 2017	8,75	4,40	+4,35	+99%
Feb 2017	7,16	4,40	+2,76	+63%
Mar 2017	6,25	4,40	+1,85	+42%
Apr 2017	8,30	4,40	+3,90	+89%
May 2017	6,05	4,40	+1,65	+38%
Jun 2017	4,41	4,40	+0,01	+0,2%
Jul 2017	4,86	4,40	+0,46	+10%
Aug 2017	4,58	3,30	+1,28	+39%
Sep 2017	6,03	3,30	+2,73	+83%
Oct 2017	8,66	3,30	+5,36	+162%
Nov 2017	6,29	3,30	+2,99	+91%
Dec 2017	7,15	3,30	+3,85	+117%
Average	7,11	4,03	+3,08	+76%

Based on consumption measured by DSO via BGM the real average monthly consumption per 1 non-metered consumer is almost for **3m³ higher** than allowed billed flat rate* defined by the government. This directly increases DSO gas losses that are not compensated in the tariff.

* allowed billed flat rate means the maximum gas volume defined by the government, which DSO is entitled to charge monthly per each person living in the consumer's flat

Consumers with gas cooker and without centralized hot water supply

Consumption per 1 consumer (m³/month)



Difference by months

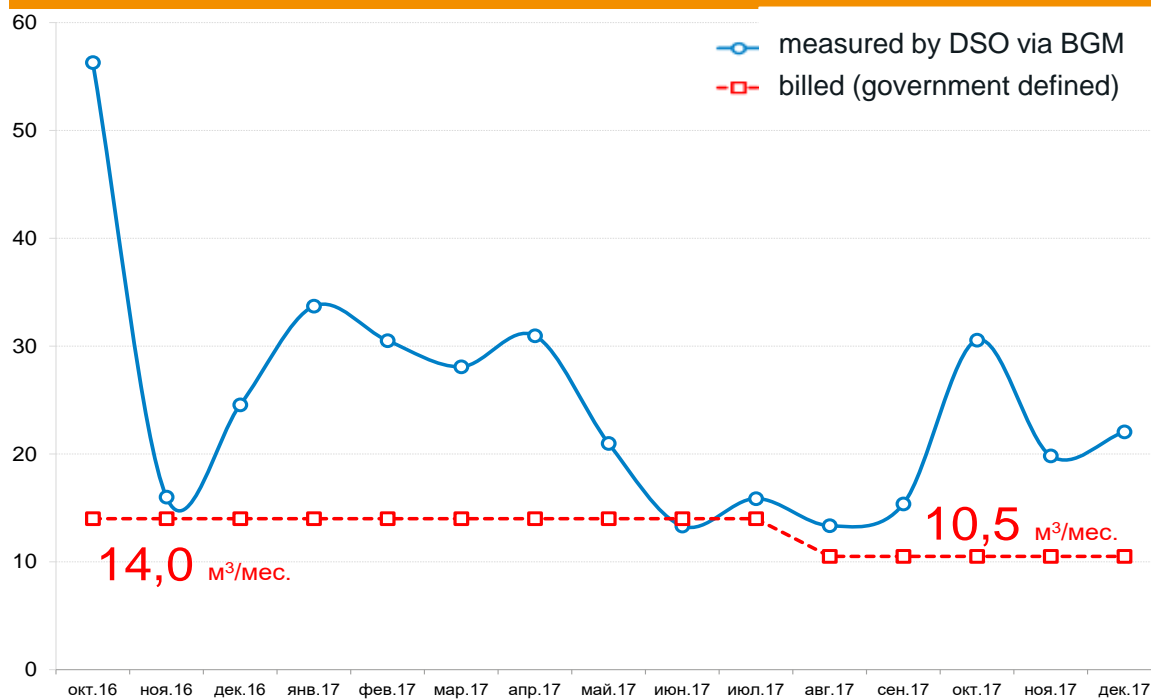
	Measured m3	Flat rate m3	Difference m3	Difference %
Oct 2016	15,52	7,10	+8,42	+119%
Nov 2016	13,66	7,10	+6,56	+92%
Dec 2016	14,61	7,10	+7,51	+106%
Jan 2017	13,18	7,10	+6,08	+86%
Feb 2017	11,57	7,10	+4,47	+63%
Mar 2017	10,37	7,10	+3,27	+46%
Apr 2017	12,29	7,10	+5,19	+73%
May 2017	8,50	7,10	+1,40	+20%
Jun 2017	5,99	7,10	-1,11	-15,6%
Jul 2017	6,37	7,10	-,73	-10%
Aug 2017	5,77	5,40	+,37	+7%
Sep 2017	7,87	5,40	+2,47	+46%
Oct 2017	12,79	5,40	+7,39	+137%
Nov 2017	9,33	5,40	+3,93	+73%
Dec 2017	11,87	5,40	+6,47	+120%
Average	10,65	6,53	+4,11	+63%

Based on consumption measured by DSO via BGM the real average monthly consumption per 1 non-metered consumer is almost for **4m³ higher** than allowed billed flat rate* defined by the government. This directly increases DSO gas losses that are not compensated in the tariff.

* allowed billed flat rate means the maximum gas volume defined by the government, which DSO is entitled to charge monthly per each person living in the consumer's flat

Consumers with gas water heater

Consumption per 1 consumer (m³/month)



Difference by months

	Measured m3	Flat rate m3	Difference m3	Difference %
Oct 2016	56,30	14,00	+42,30	+302%
Nov 2016	16,00	14,00	+2,00	+14%
Dec 2016	24,56	14,00	+10,56	+75%
Jan 2017	33,70	14,00	+19,70	+141%
Feb 2017	30,50	14,00	+16,50	+118%
Mar 2017	28,08	14,00	+14,08	+101%
Apr 2017	30,96	14,00	+16,96	+121%
May 2017	20,98	14,00	+6,98	+50%
Jun 2017	13,31	14,00	-,69	-4,9%
Jul 2017	15,86	14,00	+1,86	+13%
Aug 2017	13,35	10,50	+2,85	+27%
Sep 2017	15,36	10,50	+4,86	+46%
Oct 2017	30,56	10,50	+20,06	+191%
Nov 2017	19,82	10,50	+9,32	+89%
Dec 2017	22,04	10,50	+11,54	+110%
Average	24,76	12,83	+11,93	+93%

Based on consumption measured by DSO via BGM the real average monthly consumption per 1 non-metered consumer is almost for **11m³ higher** than allowed billed flat rate* defined by the government. This directly increases DSO gas losses that are not compensated in the tariff.

* allowed billed flat rate means the maximum gas volume defined by the government, which DSO is entitled to charge monthly per each person living in the consumer's flat

Approved consumption limit comparison

Consumer category (m ³ /month ^{**})	Ukraine			Allowed billed flat rate*						
	Allowed billed flat rate *			Moldova	Belarus	Russia - Ukrainian border regions				
	till Mar 2014	from Apr 2014	currently			Bryansk	Voronezh	Rostov	Belgorod	Kursk
with centralized hot water supply	9,8	6	3,3	10	8	11,6	12	13	15	10
without centralized hot water supply	18,3	9	5,4	20	13	16,7	15,4	21	15	11,5
water gas heater	23,6	18	10,5	38	23	27,6	24,7	29	37	27,5

* allowed billed flat rate means the maximum gas volume defined by the government, which DSO is entitled to charge monthly per each person living in the consumer's flat

** all figures in m³/month

Gas consumption allowed billed flat rates* defined by the government are currently at least twice lower in Ukraine than in comparable geographic areas around. Please note that:

- in comparable geographic areas are closed to the figures valid in Ukraine till March 2014
- and incurred gas losses are not compensated in the Ukrainian DSO tariffs





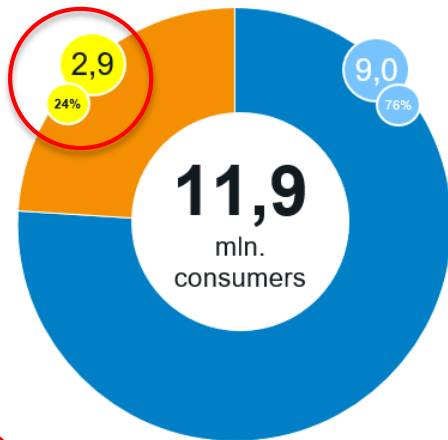
REGIONAL
GAS COMPANY

BackUp Slides

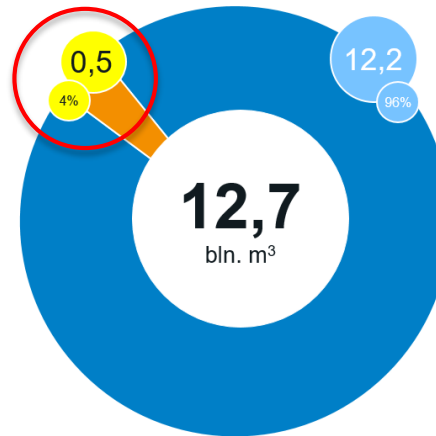


Household consumers key figures

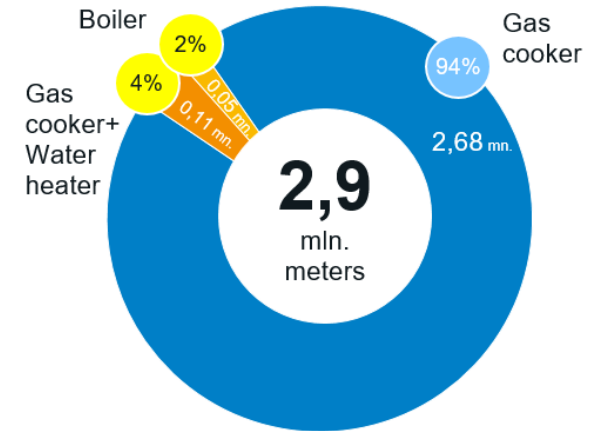
Consumer structure



Consumption structure

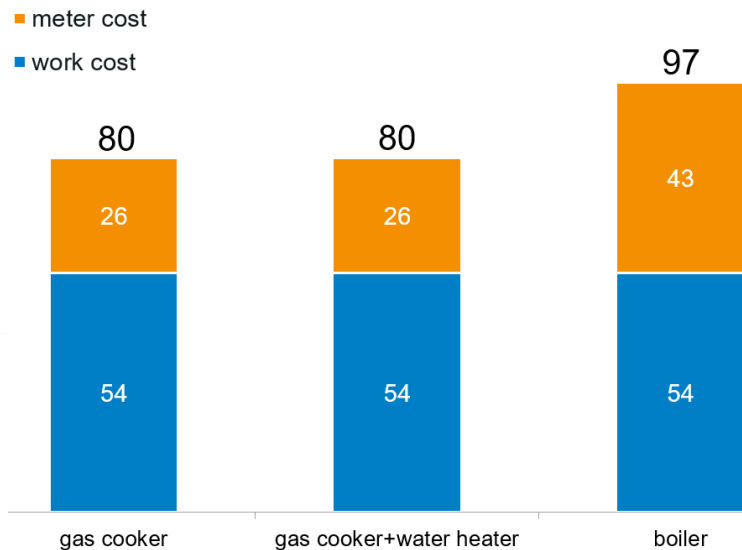


Non metered consumers



 non metered consumers (without individual gas meters)

Meter installation cost



Meter installation x gas cost comparison

