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AIR HUMIDIFIER & PURIFIER MARKET RUSSIA 2019

(ДЕМО-ВЕРСИЯ)*

***В ДЕМО-ВЕРСИИ СОХРАНЕНА СТРУКТУРА ПОЛНОЙ ВЕРСИИ ОТЧЕТА, ТАКЖЕ КАК И ЗАГОЛОВКИ ВСЕХ ГРАФИКОВ И ТАБЛИЦ. ЗАВОДЫ-ИЗГОТОВИТЕЛИ, БРЕНДЫ И ПОСТАВЩИКИ, УПОМЯНУТЫЕ В ОТЧЕТЕ, ТАКЖЕ СОХРАНЕНЫ. ВСЕ ОТСОРТИРОВАНО В АЛФАВИТНОМ ПОРЯДКЕ, ТЕКСТ ЗАМЕНЕН НА ██████████; ЧИСЛА – НА 0,1. С МЕТОДОЛОГИЕЙ ИССЛЕДОВАНИЯ МОЖНО ОЗНАКОМИТЬСЯ В ПЕРВОЙ ГЛАВЕ**

Multi-client research

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CONTENTS

1. INTRODUCTION.....	3
2. MARKET SIZE AND STRUCTURE	5
2.1. MARKET SEASONALITY	9
3. RUSSIAN MARKET OF HUMIDIFIERS AND PURIFIERS IN DYNAMICS	11
3.1. AIR HUMIDIFIERS.....	13
3.1.1. MARKET TREND BY BRANDS.....	13
3.1.2. MARKET STRUCTURE BY PRINCIPLES OF OPERATING	15
3.2. AIR PURIFIERS.....	17
3.2.1. MARKET TREND BY BRANDS.....	17
3.2.2. TOP MOST POPULAR MODELS IN 2019	19
3.3. AIR WASHERS	21
3.3.1. MARKET TREND BY BRANDS.....	21
3.3.2. TOP MOST POPULAR MODELS IN 2019	22
3.4. CLIMATIC COMPLEXES	24
3.4.1. MARKET TREND BY BRANDS.....	24
3.4.2. TOP MOST POPULAR MODELS IN 2019	25
4. LEADING SUPPLIERS.....	27

1. INTRODUCTION

The purpose of this study is to analyze the air humidifier and air cleaning plant market development. Below we provide the brief description of these devices to avoid misunderstanding in the terminology.

The report covers the following four segments:

- **AIR HUMIDIFIERS** are household devices intended to raise air humidity level in rooms, which can be divided into the following three categories:

Traditional air humidifiers are the devices that cool and humidify air by blowing it through a wet filter, i.e. by means of cold vapor.

Steam air humidifiers are the devices that humidify air by means of two electrodes submerged in water. Voltage applied to electrodes heats water that starts vaporing when boiling. Thus, unlike conventional air humidifiers these devices humidify air by means of hot steam.

Ultrasonic air humidifiers are based on the following method. The water filled in a tank is delivered to a plate vibrating with a high frequency, where it is splitted into smallest drops and jet out in a form of small cloud. Dry air supplied by a fan through this cloud of smallest drops is humidified and delivered into a room.

Atomizer humidifiers are the spray type devices, the principle of which is based on the spraying of tiny water parts in the air. Humidifiers of this type are most commonly used in the industry, though there are some domestic models.

- **AIR PURIFIERS (CLEANERS)** are household devices intended to clean air. The operating principle of these units is based on cleaning air by filtering air contaminants. Air purifiers are equipped with photocatalytic filters are able to clean air from contaminants at molecular level. A typical purifier consists of a fan and a set of filters installed in a single body.

The quality of air cleaning depends on the price of equipment. On the Russian market there are presented both low-priced domestic units which air cleaning quality is not very high and professional air purifiers equipped with a full set of filters and various cleaning levels. Therefore, in a number of cases to provide the adequate trends of the air purifiers market we divided it into two price segments: up to 35 USD and from 35 USD.

- **AIR WASHERS** are household devices combining the functions of air cleaning and humidifying. Air supplied by fans towards wet plate drums is humidified and delivered to rooms. At that heavy air particles settle down when going through the plates. In order to reduce the cost plate discs are sometimes replaced on a rotating spongy disc, diverting water from the sump and passing through the air while rotating, but the main principle remains the same.

- **CLIMATIC COMPLEXES** – air purifiers with a humidifier function. In most cases, hydration occurs by passage of air through the moisture filter. Climatic complexes have a set of replacement filters for removal most of contaminants and strong flavors from the cleaned air. The main differences between the devices of this class from air washes are the principle of



Picture 1. Air humidifier



Picture 2. Air purifier



Picture 3. Air washer

moistening (in the air washers it is realized with the use of plate discs) and the fact that the main function of climatic complexes is air purification, the humidification option in this case is of secondary importance. Most climatic complexes use expensive HEPA-filters or their analogs, which accordingly affects both the cost of the devices and their operating charges – all filters (in most systems there are several) should be regularly changed on new ones.



Picture 4. Climatic complex

PRICES

All the prices given in the report represent manufacturer's prices before customs clearance and VAT payment. The report prices are calculated in US Dollars. Below we provide the tables representing Rouble / USD / EUR exchange rates.

TABLE 1. Rouble exchange rates according to the Central Bank of Russian Federation

Currency	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
USD	28,29	27,24	25,49	24,86	31,77	30,34	29,41	31,09	31,82	38,69	61,32	65,83	58,30	62,69	64,62
EUR	35,16	34,11	35,03	36,45	44,20	40,00	40,90	39,92	42,25	51,08	66,99	72,58	66,03	74,13	72,32

Source: Central Bank of the Russian Federation

If desired, all turnover of companies can be translated into purchase prices. For this purpose, the goods must pass the customs clearance procedure: add 20% VAT and fee – Custom codes 8421392009 and 8479899708 – 0%, code 8509800000 – 5%. We should also add the cost of transportation and service fee of customs brokers – about 7-10%. On average, it increases the cost of humidifiers and air washers on 35-40%, cleaners and climatic complexes – on 30-35% if compared to contract prices.

2. MARKET SIZE AND STRUCTURE

Over the past [redacted] 0011 they exceeded the indicators of 0010, and as can be seen from DIAGRAMS 1, air humidifiers became the [redacted] 1,11 million units in sales volume and 11,1 million \$ in factory (contract) prices. Entire [redacted] as the period of a [redacted] air purifiers after the crisis of 0000 has not recovered in volume – sales [redacted] the overall dynamics is generally insignificant. High-priced air purifiers began to lose share in the [redacted] partially [redacted] began to squeeze expensive air purifiers out of the market and producers have adjusted to the [redacted] to another (climatic [redacted] t years.

TABLE 2. Air humidifier and purifier market dynamics by sales volume, number of units

Equipment type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Air washers	11 100	10 000	00 000	101 000	00 000	11 100	00 000	11 100	11 000	10 100
Climatic complexes	11 100	11 100	11 100	00 100	00 100	00 100	01 100	00 000	00 000	01 000
Humidifiers	010 000	111 000	101 000	110 000	101 000	111 000	100 000	001 000	1 001 000	1 010 000
Low-cost air purifiers	110 100	11 100	11 000	01 100	01 000	01 000	10 000	1 100	11 000	00 000
Purifiers from 35\$*	11 100	01 000	01 000	00 000	00 000	01 100	10 000	10 100	01 000	00 000
Total:	111 000	000 100	101 000	001 100	001 100	111 100	001 100	1 010 100	1 110 000	1 101 000

* factory (contract) prices before the payment of duties and VAT and excluding transportation costs for goods delivery.

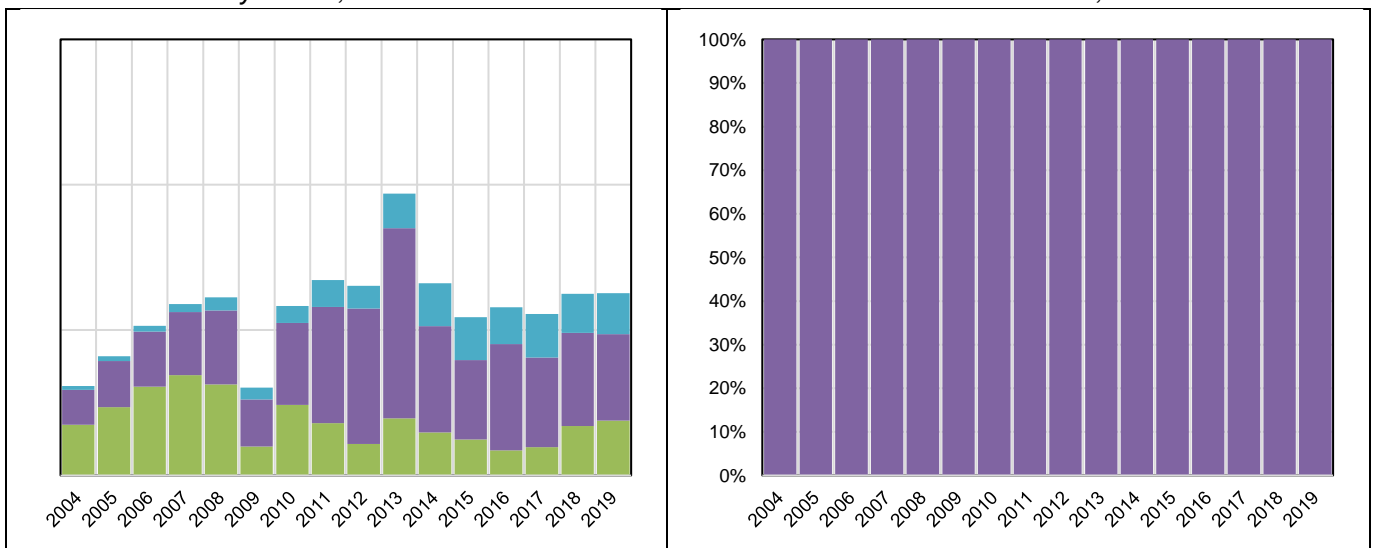
Source: Litvinchuk Marketing Co.

The dynamics are clearly shown in diagrams below:

DIAGRAMS 1. The Russian air humidifier and purifier market plant since 2004 by sales volume

Market dynamics, number of units

Market structure, %



Source: Litvinchuk Marketing Co.

As we can clearly see, the record sales in 0010 are [redacted]. The dynamics of supply [redacted] to real sales. So, [redacted] of 0010, we have [redacted] within the [redacted]:

the segment

against the background of a general decline in real incomes of the consumers, because humidifiers can hardly be classified as extra-necessary products. But their consumption is growing, which

on the durability of ultrasonic humidifiers, but according to observations, depending on the intensity of operation, their lifetime is from 0-1 to 1-0 years. Considering that in 0010 – 0010 the

- range of 01,100-00,100 units (an average of 01,000 per year) and we can assume that this market segment has stabilized.
- low-price air purifiers by one manufacturer, and the estimate of his unsold equipment is close to 10-00%. However, by any means, of course, not without loss for the rest of the industry. We expect that the market has
- the segment of high-quality air purifiers has 0011 and started to recover pretty fast. It was promoted by functionality segment that was previously almost absent.
- the segment of air washes at the evident. Annual sales are per year.

In money terms, the share of air humidifiers air washer – 11%, climatic complexes – 11%, air purifiers with a 1 (corresponding to retail prices starting from) – 11% and than 0%.

TABLE 3. Air humidifier and purifier market dynamics by sales value, mln. USD

Equipment type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Air washers	\$1,01	\$10,11	\$10,01	\$10,11	\$0,01	\$1,00	\$0,11	\$1,11	\$0,11	\$1,00
Climatic complexes	\$0,00	\$1,00	\$0,10	\$1,01	\$1,01	\$1,00	\$1,11	\$1,00	\$1,11	\$1,01
Humidifiers	\$10,11	\$10,01	\$11,01	\$11,00	\$10,01	\$0,01	\$11,11	\$10,10	\$11,00	\$00,10
Low-cost air purifiers	\$1,01	\$1,00	\$1,00	\$1,10	\$0,10	\$0,01	\$0,01	\$0,00	\$0,00	\$0,00
Purifiers from 35\$*	\$0,00	\$0,11	\$0,00	\$0,01	\$0,11	\$0,01	\$1,01	\$0,00	\$1,00	\$1,00
Total:	\$00,11	\$00,11	\$00,01	\$10,01	\$00,01	\$00,00	\$01,01	\$01,01	\$01,01	\$11,11

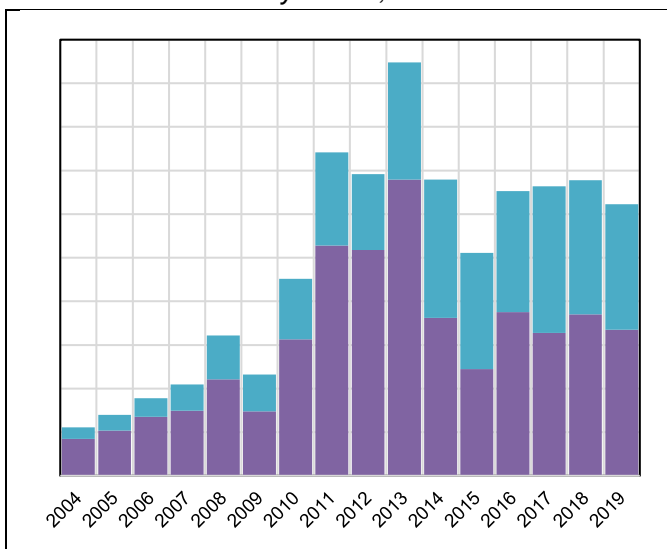
* factory (contract) prices before the payment of duties and VAT and excluding transportation costs for goods delivery.

Source: Litvinchuk Marketing Co.

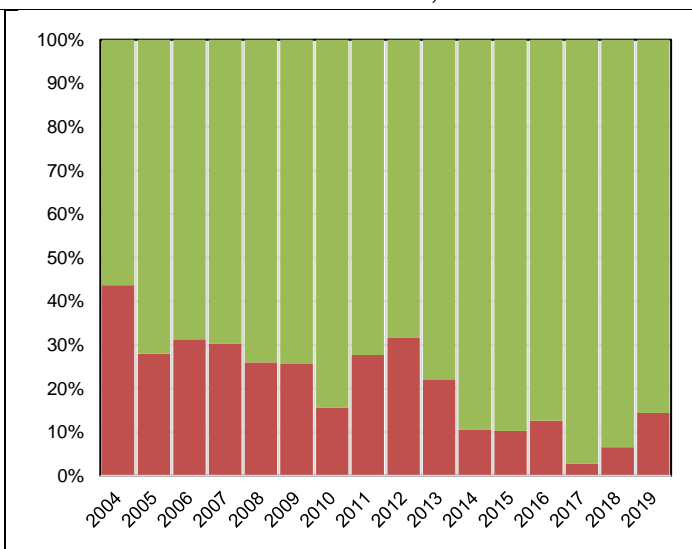
Diagrams shown below, illustrate the main trends:

DIAGRAMS 2. The Russian air humidifier and purifier market plant since 2004 by sales value

Market dynamics, mln.USD



Market structure, %



Source: Litvinchuk Marketing Co.

When the segments are [redacted] [redacted] early seen that the market [redacted], there comes a [redacted] of smooth [redacted].

Below is the dynamics of the change in the average weight of devices:

TABLE 4. Air humidifiers and purifiers average weight change in dynamics, kg.

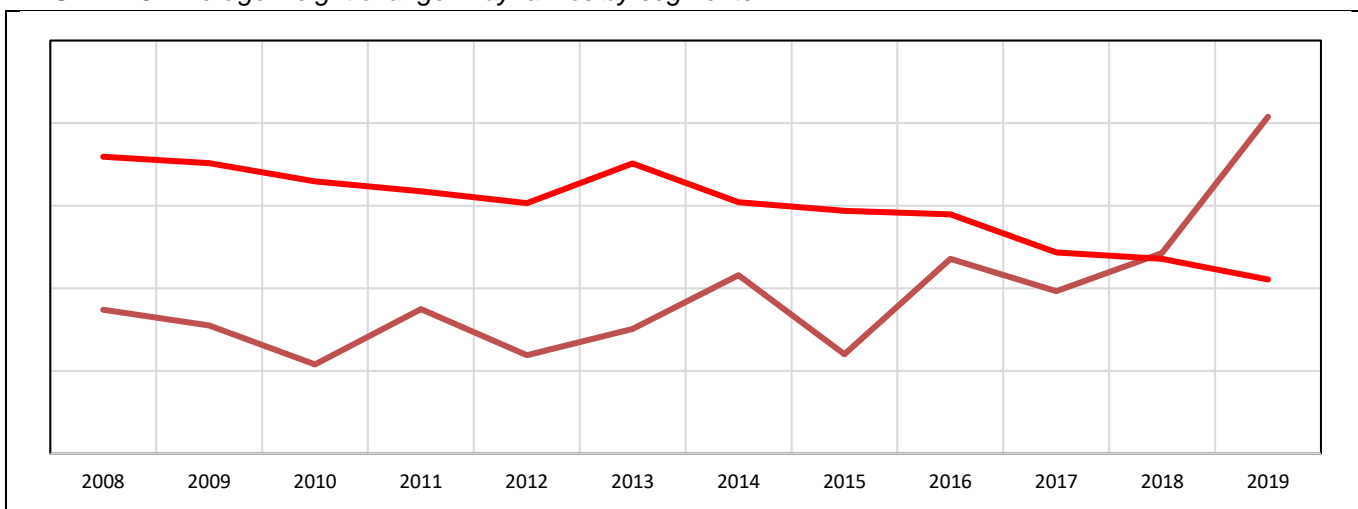
Equipment type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Mean value
Air washers	1,01	1,01	1,11	1,01	1,00	1,00	1,01	1,11	1,10	1,10	1,01
Climatic complexes	10,11	0,10	10,00	10,10	10,11	10,11	10,00	10,00	10,00	10,10	10,00
Humidifiers	0,11	0,10	0,10	0,01	0,00	0,00	0,00	1,10	1,01	1,10	0,00
Low-cost air purifiers	1,01	1,01	1,10	1,11	0,11	1,00	0,01	1,00	0,10	1,01	1,00
Purifiers from 35\$*	1,00	1,00	1,01	1,11	1,11	1,11	1,10	1,00	0,10	1,11	1,10
Mean value	0,00	0,10	0,00	0,11	0,01	0,01	0,00	0,11	0,01	0,11	0,11

* factory (contract) prices before the payment of duties and VAT and excluding transportation costs for goods delivery.

Source: Litvinchuk Marketing Co.

One can see that the [redacted] [redacted] development of devices.

DIAGRAM 3. Average weight change in dynamics by segments *



* The vertical axis represents the weight of devices in terms of kg

Source: Litvinchuk Marketing Co.

Unlike the mid- [redacted] any clear trends, the [redacted]

TABLE 5. Air humidifiers and purifiers average change in dynamics, USD

Equipment type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Mean value
Air washers	\$111	\$100	\$111	\$101	\$00	\$00	\$100	\$101	\$111	\$110	\$101
Climatic complexes	\$011	\$001	\$001	\$001	\$011	\$110	\$010	\$001	\$001	\$001	\$010
Humidifiers	\$00	\$00	\$01	\$01	\$01	\$11	\$10	\$11	\$11	\$10	\$00
Low-cost air purifiers	\$11	\$11	\$10	\$11	\$11	\$11	\$00	\$10	\$00	\$01	\$11
Purifiers from 35\$ + Climatic complexes	\$111	\$110	\$111	\$110	\$110	\$110	\$101	\$100	\$101	\$110	\$111
Purifiers from 35\$*	\$111	\$01	\$101	\$101	\$100	\$110	\$110	\$111	\$101	\$101	\$101
Mean value	\$11	\$11	\$00	\$11	\$00	\$01	\$00	\$01	\$01	\$00	\$01

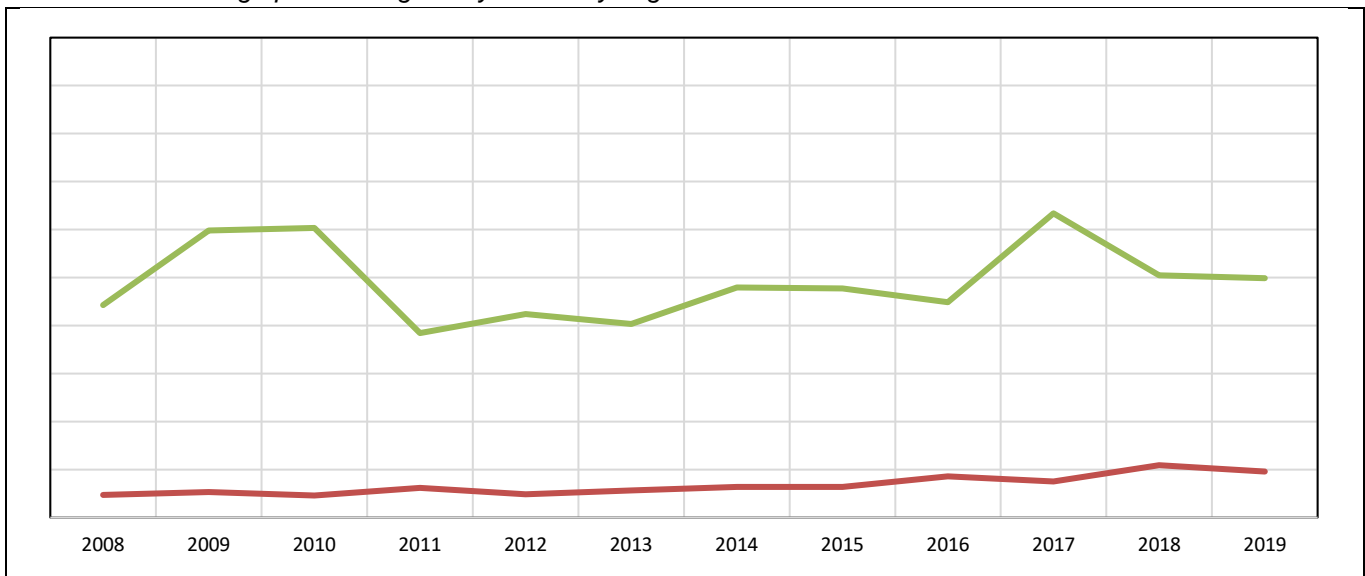
* factory (contract) prices before the payment of duties and VAT and excluding transportation costs for goods delivery.

Source: Litvinchuk Marketing Co.

If the average [redacted] dynamics of average price of [redacted] and air washers inside one brand.

The average cost of [redacted] cost. All this is clearly shown in the graph below:

DIAGRAM 4. Average price change in dynamics by segments *



* The vertical axis represents the purchasing price of devices in terms of USD

Source: Litvinchuk Marketing Co.

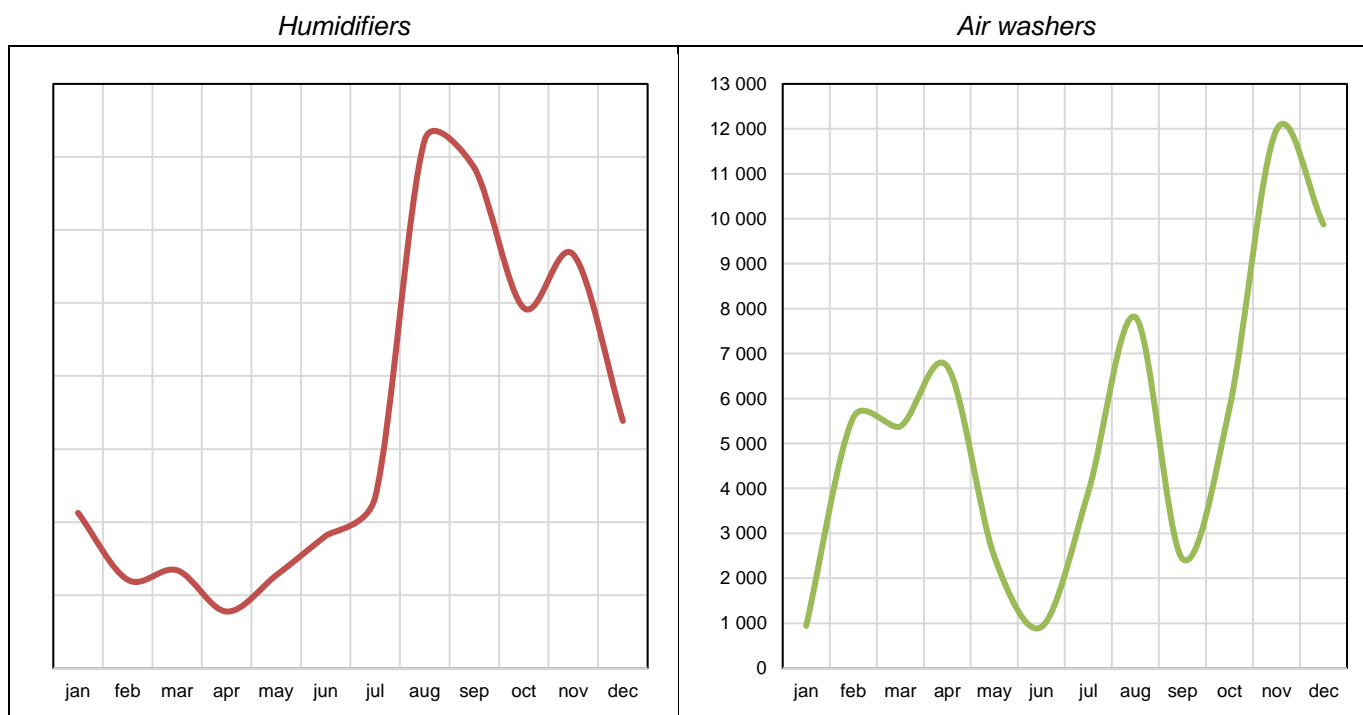
By results of [redacted] average cost of the humidifier / air purification device [redacted] which is mostly due to [redacted] to all others. In each other separately [redacted] average cost of equipment [redacted].

2.1. MARKET SEASONALITY

Below we provide the import figures for air humidifiers, air purifiers, air washers and climatic complexes. In view of the fact, that almost [redacted] et accounts for the products produced [redacted] producers of air humidifiers ([redacted]), air washers ([redacted]) and air purifiers ([redacted] brand) have entered [redacted] general [redacted] does not yet [redacted] on the market.

Since the seasonality of *air washers* and *air humidifiers* import is similar we will present their figures together:

DIAGRAMS 5.1. Air humidifiers and air washers seasonality of supplies, number of units per month*



* - vertical axis represents monthly amount of supplied products, units

Source: Litvinchuk Marketing Co.

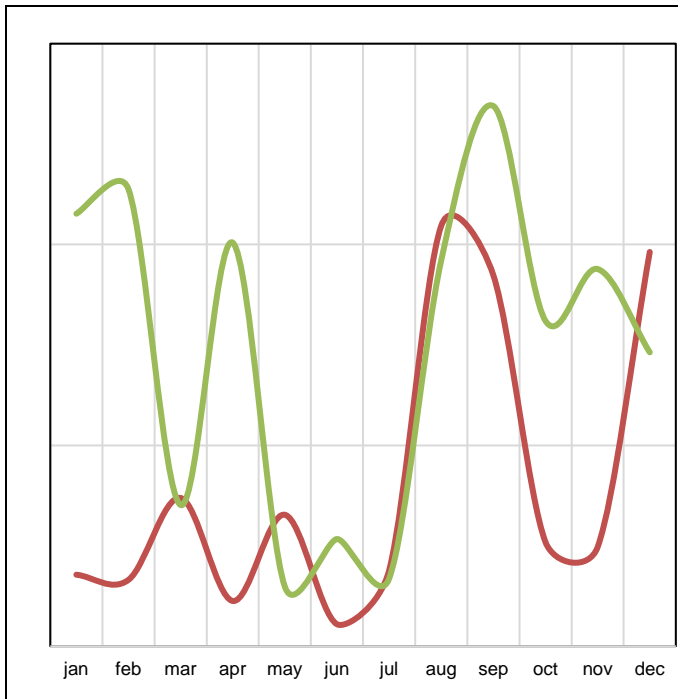
By quarters, air humidifiers and air washers supplies are distributed as follows: 00% account for I quarter, 11% for II quarter, 01% for III quarter and about 10% for IV quarter.

The equipment sales peak accounts [redacted]. First of all this [redacted] and air washers for making presents. [redacted] buy presents for [redacted] be considered as high season.

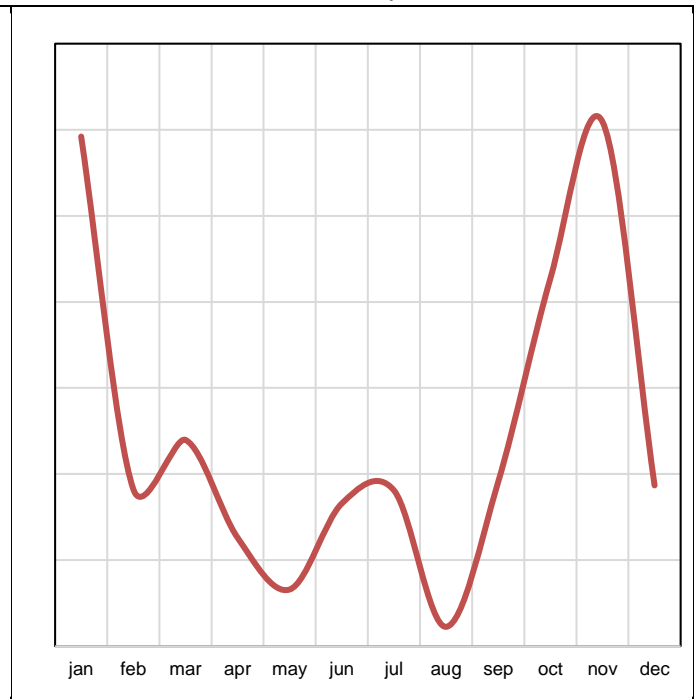
Diagrams showing *air purifiers and climatic complexes* import seasonality are given on the following page.

DIAGRAMS 5.2. Air purifiers and climatic complexes seasonality of supplies, number of units per month*

Purifiers



Climatic complexes



* - vertical axis represents monthly amount of supplied products, units

Source: Litvinchuk Marketing Co.

The air purifier [redacted] period consumes 11% of devices.

Sales of [redacted]. The important point is that [redacted].

Due to relatively low cost of equipment many importers used to buy a [redacted] and purifiers plants [redacted]. That is why at some moments the market appeared to have many unsold units. This [redacted] of final sales figure by both months and years.

3. RUSSIAN MARKET OF HUMIDIFIERS AND PURIFIERS IN DYNAMICS

Further, we will present the dynamics of the market by producers. For clarity and general understanding of the current situation on the market, we detailed the structure of deliveries of each brand, depending on the type of [REDACTED] of working with data, we created a separate file in the Excel format – in the tables above we limited ourselves to TOP-10 brands, but the application contains detailed information about all producers.

TABLE 6. Air humidifier and purifier (all segments) market dynamics by brands since 2012, number of pcs.

#	Brand	2012	2013	2014	2015	2016	2017	2018	Humidifiers	Purifiers	Climatic complexes	Air washers	Total 2019:
	AIC	10 111	10 111	01 111	00 011	1 010	10 001	0 101	11 001	10 111			01 100
	Armed	1 110	100	1 110	10 001	0 001	11 010	0 111	0 011				0 011
	Ballu	1 000	01 001	10 101	11 100	11 001	11 111	101 011	100 111	0 001			101 010
	Boneco Air-O-Swiss	10 001	11 001	00 110	01 010	10 100	10 000	01 111	01 101	001	1 000	11 011	11 101
	Bork	10 000	10 101	00 010	01 101	00 011	01 101	01 010	0 000	000	1 101	1 110	10 000
	Centek					10 010	10 011	01 000	1 101				1 101
	CS Medica							0 110	1 010				1 010
	Deerma								1 111				1 111
	Delta								1 010				1 010
	Dexp				1 010	11 111	01 100	10 000	11 111				11 111
	Dyson				110	0 110	0 111	1 000	0 100	0 100			10 110
	Electrolux	11 010	00 010	00 000	00 011	10 001	10 100	01 100	10 011			1 110	11 001
	Endever		0 010	0 010		0 010	1 000	1 110	1 111				1 111
	Energy	1 010	1 001	0 011		1 001	1 010	1 010	1 000				1 000
	First / Brayer							0 011	10 100				10 100
	Funai								1 110				1 110
	Galaxy	0 101		1 010	0 001	1 110	00 110	00 011	01 101				01 101
	Homeclub					0 010	1 001	00 100	0 010				0 010
	Hyundai			11			01 101	01 000	00 001				00 001
	Kuchenland								1 111				1 111
	Leben			0 101	1 110	0 100	1 010	1 011	0 101				0 101
	Leberg				1 100		1 010	01 100	10 110				10 110
	Leran	1 010		1 100	100	1 000	11 111	01 110	0 001				0 001
	Lumme	1 100					10 101	1 101	10 111				10 111
	Marta	10 101	10 101			1 110	10 001	0 000	11 000				11 000
	Neoclima	1 101	0 111	1 101	10 001	01 011	10 000	01 000	111 001				111 001
	Noname (YL-10)									01 000			01 000
	Orverk							011	0 101		100	100	0 001
	Panasonic	1 111	1 000	1 100	1 100	1 100	1 111	1 111			1 111		1 111
	Philips	1 101	00 100	11 011	01 010	10 110	11 010	10 011	11 010	110	0 010	1 101	10 001
	Polaris	10 111	10 000	110 000	110 100	10 101	111 000	111 100	111 111	0 111		000	101 010
	Proffi						1 111	10 011	11 100				11 100
	Redmond	0 111	0 010	01 100	01 010	00 000	00 010	11 110	11 110	1 001		1 110	00 010
	Royal Clima				10 010	01 110	01 111	00 101	11 001				11 001
	Sakura		0 011		0 011	1 001	1 000		1 011				1 011
	Scarlett	00 101	00 101	00 110	10 101	10 000	11 000	11 101	11 110				11 110
	Scoole					0 110	00 100	11 001	10 001				10 001
	Sharp	0 000	1 110	0 111	0 100	1 111	0 001	1 100			1 000		1 000
	Sinbo	00 011	0 111	1 011	1 010	0 011	1 110	00 011	0 001				0 001
	Soar								111 110				111 110
	Stadler Form	0 101	1 010	11 010	1 101	0 011	101	0 000	1 111	111		100	1 101
	Starwind				1 011		10 011	1 101	00 001				00 001
	Tefal	010	00		1 100	0 100	10 101	01 000	10 110	1 000			00 101
	Timberk	01 101	00 111	10 111	10 001	10 011	10 001	10 010	11 010	1 010		1 000	01 010
	Venta	01 101	10 100	00 110	10 001	00 110	11 100	10 001				00 000	00 000
	Vitek	11 110	00 011	01 111	11 011	00 001	11 011	10 011	01 111	0 011			00 110
	Winia	1 100	1 110	0 011	1 000	0 110	0 110	1 010				1 101	1 101
	Xiaomi						10	0 000	0 000	1 111			0 001
	Yamaguchi						110	1 000	1 010	110			1 100
	Zanussi				1 111	10 111	00 000	10 111	11 011				11 011

Source: Litvinchuk Marketing Co.

TABLE 6 (CONTINUED).

#	Brand	2012	2013	2014	2015	2016	2017	2018	Humidifiers	Purifiers	Climatic complexes	Air washers	Total 2019:
	Airfree			0 110			101	011		111			111
	Atmos	11 111	10 000	1 010	0 110	0 110	010	0 000		1 011			1 011
	Beaba					001	110	101	010				010
	Beurer	1 001	1 001	0 111	1 100	110	010	100	1 110	110		010	0 000
	Breeth						100	0 100	0 101				0 101
	Brune	1	11	110	100	000	100	100	000				000
	Carel								01				01
	Chicco		110	01	110	010		1	011				011
	Condair					0		1	10				10
	Crane				0 011	011	0 010		1 101	010			1 101
	Cuchen											111	111
	D&D						1 011	1 011	0 011				0 011
	Daikin	0 110	1 010	0 011	1 101	1 001	1 001	1 100		100	011		1 110
	Dantex	1 101	1 100	1 101	0 110	1 100	10 001		0 110				0 110
	Eden Home				1 000	0 100	1 001	1 011	0 010				0 010
	Ergopower	1 100	0 110	10 001	1 010	0 000	1 010	1 111		1 000			1 000
	Faura		10	0 110			1 110	110			101		101
	Fellowes	100	100	000	00	11	00	01		11			11
	Galatec							0 111	0 011				0 011
	Gorenje				000	100	111	101	1				1
	Hitachi	1		100	11	010	100	010			100		100
	Humipro+							100	010				010
	Ideal									11			11
	IQAir		101	101	001	101	010	110		1 110			1 110
	Irit	1 100	0 011	1 011			0 011	1 001	001				001
	Karcher									100			100
	Kenwell	1 101	0 100	1 001	110	000	10	110	11				11
	Kitfort								0 100				0 100
	LG		0 001	1 010	1 001	1 010	0 100	1 000		101	001	1 100	1 100
	Loriot						10	1 110	0 010				0 010
	Matryona								000				000
	Medisana	1 000	0 011	0 000	110	0 010	010	1 000	010				010
	Mesko								0 111				0 111
	Miniland	1 000	1 111	1 111	111	1 001	1 111	010	100				100
	Mitsubishi Electric				000	010	000	110		100			100
	Mystery	01 011	01 101	00 010	1 100	0 000	000	100	110				110
	National (used)			1		101	110	110		001			001
	Ramili					1 000							0 000
	Rovus									100			100
	Sencor		10	1 101	00		10	101	11				11
	Sendo							1 001	0 001		1 000		0 011
	Therapy Air	101	000	0 001	110	011	0 010	1 010		1 111			1 111
	VVINT								110				110
	Winix				10	001	101	1 101		11	10		10
	Others	000 000	001 010	111 101	11 010	11 110	10 110	01 001	1 111	111	010	11	1 010
	Total:	101 000	001 100	001 100	111 100	001 100	1 010 100	1 110 000	1 010 000	00 000	01 000	10 100	1 101 000

Source: Litvinchuk Marketing Co.

[REDACTED]
[REDACTED] ", which appeared on the [REDACTED]
[REDACTED] 00 can be named the following brands: [REDACTED]
[REDACTED] m this group
are strongly connected [REDACTED] .

3.1. AIR HUMIDIFIERS

3.1.1. MARKET TREND BY BRANDS

Below we provide the market dynamics for air humidifiers by brands over the past 10 years. The table also contains the data on the equipment fleet and the share of brands in this fleet.

TABLE 7. Leading brands of air humidifiers segment in last 10 years by sales volume, number of units

#	Brand	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Equipment fleet	Brand's share	
	AIC	1 110	01 110	00 000	10 010	10 110	10 000	1 101	1 011	1 000	11 001	110 100	0,0%	
	Armed		1 110	1 110		1 110	10 001	0 001	11 010	0 111	0 011	11 000	0,0%	
	Ballu	1 000	0 010	0 000	10 010	10 101	00 100	11 100	11 011	100 011	100 111	100 011	0,1%	
	Boneco AOS	11 000	00 111	10 011	11 111	00 100	11 100	01 000	01 011	11 000	01 101	001 001	1,1%	
	Bork	11 011	01 110	01 110	01 000	10 011	0 100	1 110	1 110	1 001	0 000	111 100	0,1%	
	Breeth								100	0 100	0 101	1 001	0,1%	
	Centek							10 010	10 011	01 000	1 101	11 101	0,0%	
	CS Medica									0 110	1 010	1 110	0,1%	
	D&D								1 011	1 011	0 011	10 101	0,1%	
	Dantex		1 100	1 011	1 110	1 011	0 110	1 100	0 101		0 110	10 011	0,1%	
	Deerma										1 111	1 111	0,1%	
	Delta										1 010	1 010	0,1%	
	Dexp						1 010	11 111	01 100	10 000	11 111	110 101	0,0%	
	Dyson						110	0 101	0 111	1 100	0 100	00 110	0,0%	
	Eden Home						1 000	0 100	1 001	1 011	0 010	10 011	0,0%	
	Electrolux	11 000	1 000	10 001	01 011	01 010	00 000	00 111	11 111	01 011	10 011	001 111	0,0%	
	Endever				0 010	0 010		0 010	1 000	1 110	1 111	01 110	0,1%	
	Energy	10 011	10 000	1 010	1 001	0 011		1 001	1 010	1 010	1 000	11 001	0,1%	
	First / Brayer										0 011	10 100	10 101	0,0%
	Funai										1 110	1 110	0,1%	
	Galatec									0 111	0 011	1 110	0,1%	
	Galaxy		100	0 101		1 010	0 001	1 110	00 110	00 011	01 101	10 100	1,1%	
	Homeclub							0 010	1 001	00 100	0 010	10 111	0,1%	
	Hyundai								01 101	01 000	00 001	01 111	1,1%	
	Kitfort										0 100	0 100	0,0%	
	Kuchenland										1 111	1 111	0,1%	
	Leben					0 101	1 010	0 100	1 010	1 011	0 101	00 101	0,1%	
	Leberg						0 010		1 100	00 000	10 110	10 001	0,0%	
	Leran			1 010		1 000	100	1 000	11 111	01 110	0 001	10 111	0,0%	
	Loriot								10	1 110	0 010	0 100	0,1%	
	Lumme	10 111		1 100					10 101	1 101	10 111	11 111	0,1%	
	Marta	0 100	0 110	0 111	0 111			1 110	10 001	0 000	11 000	10 111	1,0%	
	Mesko										0 111	0 111	0,0%	
	Neoclima		10 010	1 000	1 101	1 000	10 101	01 011	10 000	01 000	111 001	010 110	1,1%	
	Orverk									011	0 101	0 111	0,1%	
	Philips			1 010	1 100	11 110	10 110	1 001	10 110	10 100	11 010	10 100	1,0%	
	Polaris	10 111	10 011	10 111	10 110	110 001	110 100	10 101	110 010	110 011	111 111	1 001 110	11,0%	
	Proffi								1 111	10 011	11 100	00 110	0,1%	
	Redmond	11 011	0 011	1 011	0 011	00 111	01 100	00 001	01 000	11 000	11 110	111 011	0,0%	
	Royal Clima						0 111	01 110	01 111	01 101	11 001	110 100	0,0%	
	Sakura	0 001	1 111		0 011		0 011	1 001	1 000		1 011	00 100	0,1%	
	Scarlett	111	11 001	00 101	00 101	01 000	00 111	10 111	11 000	11 101	11 110	011 001	1,1%	
	Scoole							0 110	00 100	11 001	10 001	110 111	1,1%	
	Sinbo	0 000	10 110	00 011	0 111	1 011	1 010	0 011	1 110	00 011	0 001	01 101	1,0%	
	Soar										111 110	111 110	0,1%	
	Stadler Form	0 100	11 000	1 001	0 000	0 101	010	1 000	101	1 101	1 111	11 011	0,1%	
	Starwind						1 011		10 011	1 101	00 001	11 010	0,1%	
	Tefal	0 101	0 101	010	00		0 100	0 100	11 001	10 100	10 110	11 111	0,1%	
	Timberk	1 111	11 010	00 011	01 111	11 000	10 001	11 101	00 111	10 010	11 010	011 000	0,0%	
	Vitek	01 010	01 111	11 110	00 011	01 111	11 011	00 001	11 011	10 011	01 111	000 111	1,1%	
	Xiaomi										0 000	0 000	0,1%	
	Yamaguchi									1 010	1 010	1 100	0,1%	
	Zanussi						1 111	10 111	00 000	10 111	11 011	101 001	1,1%	

Source: Litvinchuk Marketing Co.

TABLE 7 (CONTINUED).

#	Brand	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Equipment fleet	Brand's share
	Beaba							001	110	101	010	1 110	0,0%
	Beurer	000	1 010	1 001	0 011	0 010		110	000	101	1 110	11 111	0,0%
	Brune		1	1	11	110	100	000	100	100	000	1 101	0,0%
	Carel										01	01	0,0%
	Chicco	011	101		110	01	110	010		1	011	0 100	0,0%
	Condair							0		1	10	11	0,0%
	Crane						0 011	011	0 010		1 101	1 111	0,1%
	Gorenje						000	100	111	101	1	1 011	0,0%
	Humipro+									100	010	010	0,0%
	Irit	1 111	0 100	1 100	0 011	1 011			0 011	1 001	001	01 110	0,0%
	Kenwell	0 011	010	1 101	0 100	1 001	110	000	10	110	11	11 111	0,0%
	Matryona										000	000	0,0%
	Medisana	0 011	1 010	1 000	0 011	0 000	010	0 010	100	1 000	010	00 111	0,0%
	Miniland	001	1 100	1 000	1 100	1 111	111	1 001	1 111	010	100	11 100	0,0%
	Mystery		1 001	01 011	01 101	00 010	1 100	0 000	000	100	110	01 011	1,0%
	Ramili							1 000			0 000	0 000	0,0%
	Sencor				10	1 101	00		10	101	11	1 101	0,0%
	Sendo									1 001	0 001	0 010	0,0%
	VVINT										110	110	0,0%
	Others	101 001	111 110	100 110	000 101	111 111	00 110	10 111	10 110	01 110	1 111	1 000 110	10,0%
	Total:	010 000	111 000	101 000	110 000	101 000	111 000	100 000	001 000	1 001 000	1 010 000	0 101 000	100%

Source: Litvinchuk Marketing Co.

The market of air humidifiers had [REDACTED] the segment has been growing dynamically (only [REDACTED] has increased [REDACTED]) and for [REDACTED] segment in the quantitative and monetary dimension. The main contribution in a significant [REDACTED] [REDACTED] and [REDACTED], grew up mainly due to an increase in supplies by small [REDACTED]. Record [REDACTED] 0nd place in 0010. Such distributors as " [REDACTED] at" [REDACTED] increased the volume of purchases.

As we can [REDACTED], most of the [REDACTED] belong to the category of [REDACTED] producer, which has [REDACTED] is [REDACTED] group Plaston AG).

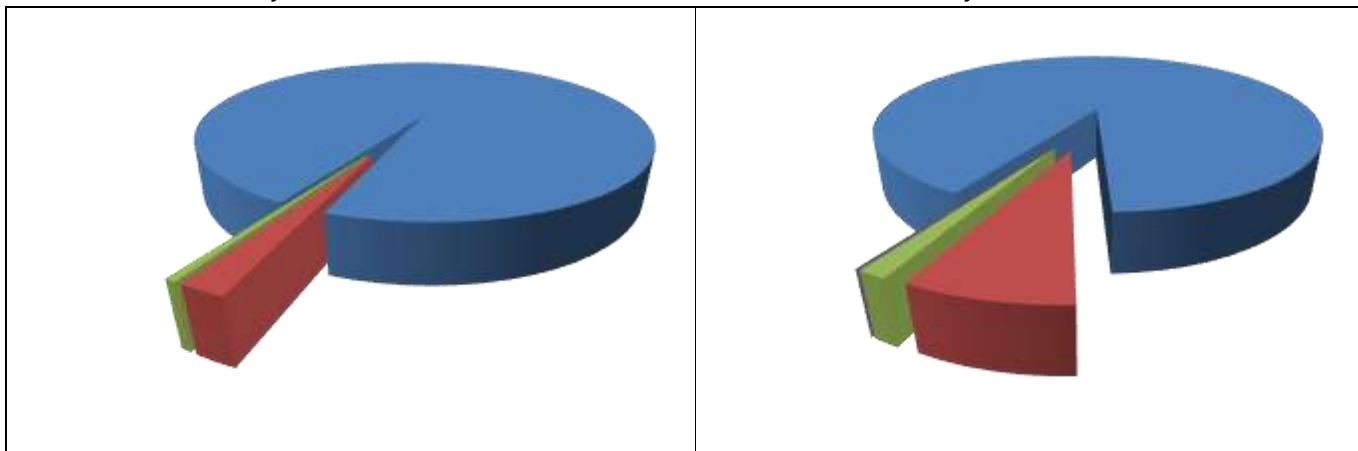
3.1.2. MARKET STRUCTURE BY PRINCIPLES OF OPERATING

The following table shows the proportion of humidifiers depending on the operating principle.

DIAGRAMS 6. Air humidifier market structure by operating principle in 2019, %

By sales volume

By sales value



Source: Litvinchuk Marketing Co.

As a result of [redacted] years ago, were superseded from the [redacted].

TABLE 8. Market structure by type of humidifiers in 2019, pcs.

#	Brand	ultrasonic	trdiational	steam	adiabatic	Total:
	AIC	10 101	1 100			11 001
	Armed	0 011				0 011
	Ballu	100 111				100 111
	Boneco Air-o-Swiss	11 000		0 001		01 101
	Dexp	11 111				11 111
	Dyson	0 100				0 100
	Electrolux	10 011				10 011
	Energy	1 000				1 000
	First / Brayer	10 100				10 100
	Galaxy	01 101				01 101
	Homeclub	0 010				0 010
	Hyundai	00 001				00 001
	Leben	0 101				0 101
	Leberg	10 110				10 110
	Leran	0 001				0 001
	Lumme	10 111				10 111
	Marta	11 000				11 000
	Neoclima	111 001				111 001
	Philips		11 010			11 010
	Polaris	111 111				111 111
	Proffi	11 100				11 100
	Redmond	11 110				11 110
	Royal Clima	11 001				11 001
	Scarlett	11 110				11 110
	Scoole	10 001				10 001
	Sinbo	0 001				0 001
	Soar	111 110				111 110
	Starwind	00 001				00 001
	Tefal	10 110				10 110
	Timberk	11 010				11 010
	Vitek	01 111				01 111
	Zanussi	11 011				11 011

Source: Litvinchuk Marketing Co.

TABLE 8 (CONTINUED).

#	Brand	ultrasonic	trdiational	steam	adiabatic	Total:
	Beaba	010				010
	Beurer	1 110				1 110
	Bork	0 000				0 000
	Breeth	000	1 001			0 101
	Brune		000			000
	Carel				01	01
	Centek	1 101				1 101
	Chicco			011		011
	Condair			01	0	10
	Crane	1 101				1 101
	CS Medica	1 010				1 010
	D&D	0 011				0 011
	Dantex	0 110				0 110
	Deerma	1 111				1 111
	Delta	1 010				1 010
	Eden Home	0 010				0 010
	Endever	1 111				1 111
	Funai	1 110				1 110
	Galatec	0 011				0 011
	Gorenje	1				1
	Humipro+	010				010
	Kenwell		11			11
	Kitfort	0 100				0 100
	Kuchenland	1 111				1 111
	Loriot	0 010				0 010
	Luazon	001				001
	Matryona	000				000
	Medisana	010				010
	Mesko	0 111				0 111
	Miniland	100				100
	Mystery	110				110
	Orverk		0 101			0 101
	Ramili	0 000				0 000
	Sakura	1 011				1 011
	Sencor	11				11
	Sendo	0 001				0 001
	Stadler Form	1 001	0 111			1 111
	VVINT		110			110
	Xiaomi	00	0 000			0 000
	Yamaguchi	1 010				1 010
	Others	1 111	11	1	0	1 111
	Total:	1 010 010	00 100	0 100	10	1 010 000

Source: Litvinchuk Marketing Co.

One can see that in [REDACTED] is presented mainly by [REDACTED]. Steam humidifier segment is provided exclusively by [REDACTED].

An extremely narrow segment [REDACTED] air humidifiers is provided by only two [REDACTED] manufacturers – [REDACTED].

3.2. AIR PURIFIERS

3.2.1. MARKET TREND BY BRANDS

Below we provide the market dynamics for air purifiers by brands over the past 10 years. The table also contains the data on the equipment fleet and the share of brands in this fleet.

TABLE 9. Leading brands of air purifiers segment in last 10 years by sales volume, number of units

#	Brand	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Equipment fleet	Brand's share
	AIC	0 011	0 111	11 001	00 100	1 010	1 010	0 101	1 110	1 001	10 111	01 010	11,1%
	Airfree					0 110			101	011	111	1 010	0,1%
	Atmos	11 010	0 101	11 110	0 010	1 000	0 110	000	010	0 000	1 011	10 110	0,0%
	Ballu	1 010	0 011	1 100	0 100	1 110	1 110	1 010		1 100	0 001	10 110	1,1%
	Beurer				100					10	110	100	0,1%
	Boneco Air-O-Swiss	0 001	0 010	0 110	1 011			00	1 011	111	001	10 100	1,0%
	Bork	0 010	01	1 000	1 001	1 001	1 000	1 101	1 001	0 111	000	00 001	1,0%
	Crane						100				010	110	0,1%
	Daikin	1 001	0 101	000	0 011	010	000	010	011	110	100	10 101	1,0%
	Dyson							1		0 101	0 100	1 010	0,1%
	Ergopower										1 000	1 000	0,1%
	Fellowes			100	100	000	00	11	00	01	11	1 011	0,1%
	Ideal										11	11	0,0%
	IQAir				101	101	001	101	010	110	1 110	0 101	0,1%
	Karcher										100	100	0,0%
	LG				00	1 100			101	10	101	1 000	0,1%
	Mitsubishi Electric						000	010	000	110	100	1 101	0,0%
	National (used)					1		101	110	101	001	111	0,1%
	Noname (YL-10)										01 000	01 000	0,0%
	Philips			1 001	1 010	0 000	110	010	1 000	000	110	11 010	1,1%
	Polaris	1 111	0 101		1 001	0 111			1 001	0 111	0 111	01 101	0,0%
	Redmond		0 100	1 000	1 001	101	110	101	1 100	1 001	1 001	10 111	0,0%
	Rovus										100	100	0,0%
	Stadler Form	110	0 100			000	00	010	10	010	111	1 011	0,0%
	Tefal						1 110		101	1 110	1 000	11 010	0,0%
	Therapy Air	0 000	001	101	000	0 001	110	011	0 010	1 010	1 111	11 100	1,1%
	Timberk		0 000	1 111	1 111	0 111		1 100	0 100		1 010	01 111	0,0%
	Vitek									0 100	0 011	1 111	0,1%
	Winix							01	100	10	11	001	0,0%
	Xiaomi								10	0 000	1 111	0 111	0,0%
	Yamaguchi								110	110	110	1 110	0,0%
	Others	100 011	01 000	11 111	10 101	00 101	00 101	0 000	0 111	1 111	111	011 110	10,0%
	Total:	111 000	101 000	110 000	111 000	11 000	11 000	00 000	01 000	11 000	00 000	010 000	100%

Source: Litvinchuk Marketing Co.

As we can see, [redacted] market of air [redacted] to quantitative decrease. [redacted] that some of [redacted] on other related segments ([redacted], air washes). A [redacted] to the [redacted] in sales is made by budget [redacted], which by today [redacted] left the market – having doubtful [redacted] [redacted] eventually discredited [redacted], and [redacted] today [redacted] better [redacted].

For a long time, leading [redacted], the sale structure was changed by [redacted]. They introduced two models of air purifiers-ionizators [redacted]

[redacted] the ranking was occupied by purifiers of [redacted] brand, which retail price does not exceed [redacted]\$. Note that these purifiers are not available for sale, so the concept of retail prices is hardly [redacted] sales value, on the contrary, [redacted] are not so [redacted].

By results of [REDACTED]
[REDACTED] – there were no supplies of Ballu cleaners at all, Tion significantly reduced
supplies. Sounds interesting that [REDACTED]
[REDACTED]
[REDACTED] specialized producers ([REDACTED]), to
manufacturers of a wide range of [REDACTED]
[REDACTED]
[REDACTED]

3.2.2. TOP MOST POPULAR MODELS IN 2019

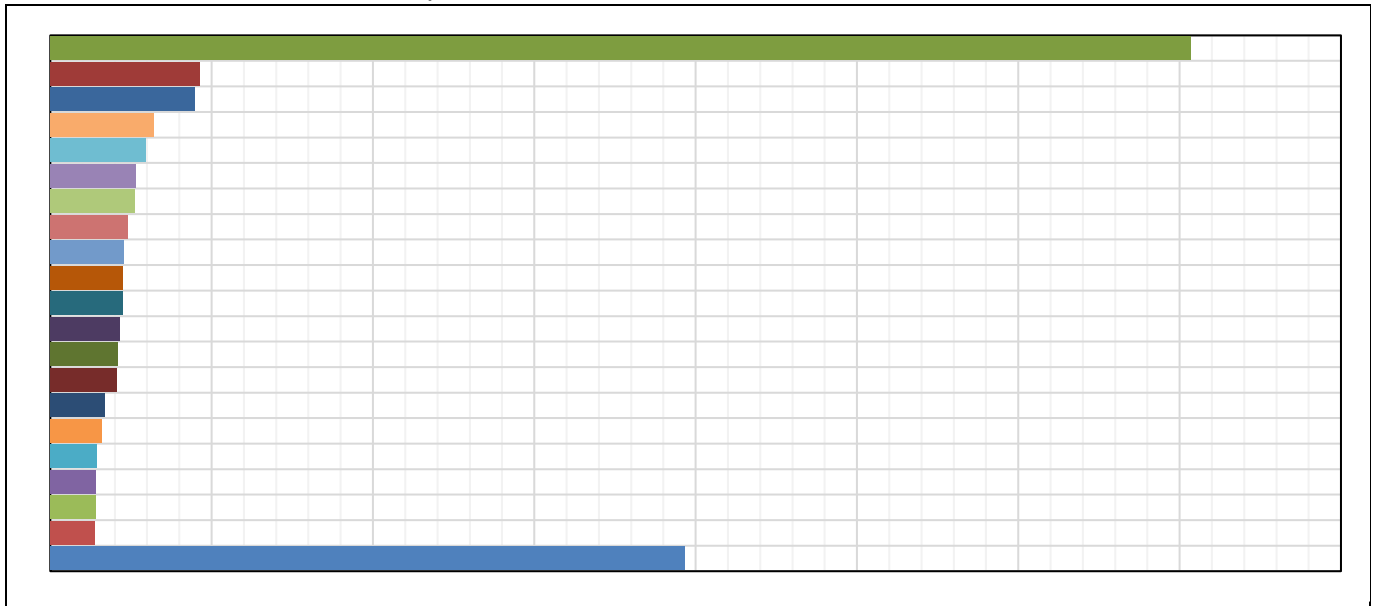
Next, we will give the model and series analysis of air purifiers. To the turnover calculated at the contract prices, we added columns with retail prices of models and corresponding retail turnovers. It helps with understanding of margin levels for certain categories of goods, and in general for the market.

TABLE 10. Air purifiers model ranking by results of 2019

#	Brand	Model	Number of pcs.	Retail price, RUB	Turnover in retail prices, mln.RUB (VAT included)	Turnover in factory prices, \$ (VAT excluded)
	AIC		0 010	0 000 P	00,10	\$110 001
	AIC		1 000	0 100 P	1,11	\$11 010
	AIC		1 100	0 100 P	10,01	\$10 111
	AIC		010	10 010 P	11,11	\$10 100
	AIC		010	1 010 P	0,00	\$10 011
	AIC		000	0 000 P	0,00	\$10 011
	AIC		100	0 110 P	1,10	\$1 100
	AIC		110	10 100 P	1,01	\$11 110
	AIC		100	00 000 P	1,01	\$11 011
	AIC		100	10 100 P	1,01	\$00 101
	AIC		000	0 100 P	0,01	\$11 000
	AIC		000	00 000 P	1,10	\$00 110
	Airfree		111	11 110 P	0,01	\$11 000
	Airfree		111	10 100 P	1,00	\$0 000
	Atmos		000	1 000 P	0,00	1 010
	Atmos		010	1 100 P	1,11	\$1 011
	Atmos		010	0 000 P	0,10	\$0 001
	Atmos		100	10 110 P	0,01	\$1 010
	Atmos		101	1 010 P	0,01	\$0 010
	Ballu		0 001	0 100 P	00,01	\$110 101
	Boneco		001	10 000 P	0,11	\$10 010
	Bork		000	01 000 P	00,10	\$100 111
	Crane		010	1 110 P	1,10	\$11 010
	Daikin		100	01 000 P	10,11	\$110 111
	Dyson		0 000	01 000 P	11,11	\$111 000
	Dyson		1 100	10 000 P	00,01	\$110 100
	Ergopower		1 000	0 100 P	0,10	\$10 011
	IQAir		000	100 000 P	111,01	\$111 011
	LG		110	11 000 P	1,00	\$10 001
	ME		100	01 000 P	10,10	\$100 100
	Philips		110	01 000 P	11,10	\$00 111
	Polaris		1 100	0 000 P	10,10	\$10 110
	Polaris		010	1 110 P	1,01	\$0 000
	Polaris		101	10 000 P	1,01	\$10 110
	Redmond		1 111	10 100 P	10,01	\$100 011
	Redmond		110	11 000 P	1,00	\$10 001
	Stadler Form		000	11 000 P	1,11	\$10 100
	Tefal		1 111	11 000 P	00,01	\$110 111
	Tefal		1 111	11 100 P	00,01	\$111 110
	Tefal		1 101	10 000 P	01,00	\$110 001
	Therapy Air		1 111	10 000 P	01,01	\$010 100
	Timberk		1 111	0 100 P	0,00	\$01 000
	Timberk		010	0 100 P	1,10	\$10 110
	Vitek		1 011	1 100 P	1,01	\$01 100
	Vitek		1 000	1 000 P	1,00	\$00 111
	Xiaomi		0 101	1 000 P	01,11	\$010 101
	Xiaomi		1 110	10 000 P	01,00	\$011 101
	Xiaomi		100	0 011 P	1,00	\$0 011
	Yamaguchi		110	11 100 P	10,01	\$01 000
	YL-10		01 000	1 100 P	10,01	\$101 101
	Others		0 010	00 110 P	10,01	\$100 000
	Total:		00 000	10 010 P	100,00	\$1 100 000

Source: Litvinchuk Marketing Co.

DIAGRAM 7. TOP-20 models of air purifiers in 2019



Source: Litvinchuk Marketing Co.

[redacted]
[redacted] The Federal network of food discounters " [redacted] " has set a kind of " [redacted] ", putting [redacted] air purifiers on the [redacted] of an error in the evaluation of demand and with the [redacted]
[redacted] e decision to put air cleaners on retail at a price lower than the [redacted] price. Since it was impossible to sell [redacted]

[redacted] of [redacted], more likely even for the next [redacted] of years.

If measured in money, the following models of [redacted] purifiers with [redacted] gap become market leaders: [redacted] [redacted]), [redacted] [redacted] (omi). In general, the segment of [redacted] is quite different – there is a device for every taste and purse on sale. The [redacted] for the most popular models [redacted] from [redacted] than [redacted].

3.3. AIR WASHERS

3.3.1. MARKET TREND BY BRANDS

Below we provide the market dynamics for air washers by brands over the past 10 years. The table also contains the data on the equipment fleet and the share of brands in this fleet.

TABLE 11. Leading brands of air washers segment in last 10 years by sales volume, number of units

#	Brand	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Equipment fleet	Brand's share
	Beurer				1 110	1 111	1 100	110	10	11	010	1 000	0,0%
	Boneco Air-O-Swiss	01 000	11 011	01 101	00 011	10 110	0 001	10 100	11 010	10 110	11 011	110 011	01,1%
	Bork	0 111	0 100	10 000	11 111	10 111	1 000	10 010	10 001	10 011	1 110	00 111	10,1%
	Cuchen										111	111	0,0%
	Electrolux	1 010	0 110	1 011	11 001	0 001	1 111	10 110	0 011	0 101	1 110	11 111	1,0%
	LG	010	1		0 001	1 100	100	1 010	0 010	1 000	1 100	11 111	1,1%
	Orverk										100	100	0,1%
	Philips			1 000	0 011	0 000	1 000	1 001	0 110	0 101	1 101	01 010	0,0%
	Polaris						101		111	100	000	0 101	0,0%
	Redmond									0 011	1 110	0 000	0,1%
	Stadler Form		001		1 010	0 001	100	011	100	000	100	0 110	1,1%
	Timberk			0 011	0 101	1 111	101	0 001			1 000	11 010	1,1%
	Venta	01 011	01 101	01 101	10 100	00 110	10 001	00 110	11 100	10 001	00 000	011 000	01,0%
	Winia		0 000	1 100	0 010	0 011	1 000	0 110	0 110	1 010	1 101	01 011	0,1%
	Others	0 010	11 110	11 100	1 011	0 001	1 010	1 101	1 100	0 100	11	11 101	1,1%
	Total:	11 100	10 000	00 000	101 000	00 000	11 100	00 000	11 100	11 000	10 100	011 100	100%

Source: Litvinchuk Marketing Co.

Up to 0011 air [redacted] use stock of unsold facilities that was [redacted] earlier in 0010 by the three market leaders – « [redacted] », « [redacted] » [redacted] 10 years. Unlike other [redacted], air washers have a quite high market concentration in the [redacted] ([redacted], [redacted], [redacted]) [redacted] for [redacted] 01% of sales.

3.3.2. TOP MOST POPULAR MODELS IN 2019

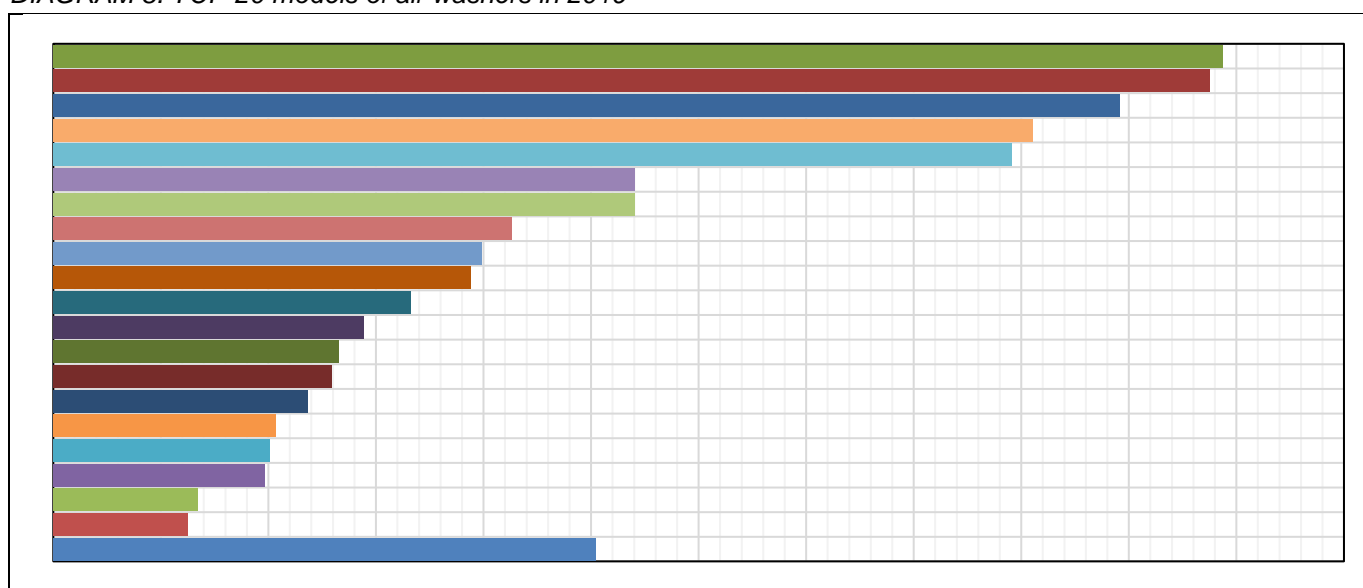
Next, we will give the model and series analysis of air washers. To the turnover calculated at the contract prices, we added columns with retail prices of models and corresponding retail turnovers. It helps with understanding of margin levels for certain categories of goods, and in general for the market.

TABLE 12. Air washers model ranking by results of 2019

#	Brand	Model	Number of pcs.	Retail price, RUB	Turnover in retail prices, mln.RUB (VAT included)	Turnover in factory prices, \$ (VAT excluded)
	Beurer		010	11 000 P	1,11	\$00 000
	Boneco		1 110	11 000 P	01,00	\$101 010
	Boneco		1 100	00 000 P	101,00	\$111 001
	Boneco		1 011	11 000 P	11,00	\$110 010
	Boneco		011	00 000 P	11,11	\$01 110
	Boneco		011	01 000 P	0,11	\$11 000
	Bork		0 001	01 000 P	00,10	\$010 010
	Bork		0 001	00 000 P	11,00	\$001 010
	Cuchen		111	01 000 P	0,01	\$10 010
	Electrolux		1 110	11 000 P	00,11	\$101 001
	LG		1 100	11 000 P	10,01	\$101 110
	Orverk		100	00 000 P	11,00	\$00 110
	Philips		1 111	00 000 P	00,01	\$100 011
	Philips		011	00 000 P	1,11	\$11 011
	Polaris		000	1 100 P	0,10	\$01 111
	Redmond		1 110	10 110 P	11,00	\$00 001
	Stadler Form		111	01 000 P	11,10	\$11 010
	Stadler Form		101	00 000 P	0,01	\$11 111
	Timberk		1 000	0 100 P	11,00	\$10 111
	Venta		1 110	11 000 P	01,01	\$111 101
	Venta		1 010	01 010 P	101,01	\$001 010
	Venta		0 110	01 100 P	10,01	\$111 100
	Venta		0 000	01 000 P	10,00	\$010 101
	Venta		1 011	00 100 P	10,10	\$011 001
	Venta		111	00 100 P	01,01	\$110 111
	Venta		010	100 000 P	01,10	\$111 111
	Venta		100	00 000 P	0,00	\$11 110
	Venta		10	000 100 P	1,01	\$10 000
	Venta		00	01 100 P	1,10	\$10 110
	Winia		0 011	01 000 P	10,10	\$100 001
	Winia		1 000	10 000 P	01,10	\$011 110
	Winia		1 000	11 000 P	00,10	\$111 111
	Others		11	10 000 P	0,10	\$10 001
	Total:		10 100	01 000 P	1 011,10	\$1 000 000

Source: Litvinchuk Marketing Co.

DIAGRAM 8. TOP-20 models of air washers in 2019



Source: Litvinchuk Marketing Co.

Rotating [redacted] each other, the [redacted] are mostly the models of [redacted] in the segment of air washers, positions of the leaders are [redacted].

3.4. CLIMATIC COMPLEXES

3.4.1. MARKET TREND BY BRANDS

Below we provide the market dynamics for climatic complexes by brands over the past 10 years. The table also contains the data on the equipment fleet and the share of brands in this fleet.

TABLE 13. Leading brands of climatic complexes segment in last 10 years by sales volume, number of units

#	Brand	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Equipment fleet	Brand's share
	Boneco Air-O-Swiss	1 111	010	011	110	000	010	101	1 111	1 110	1 000	10 100	1,0%
	Bork				1 001	1 111	0 100	0 011	1 011	0 001	1 101	11 010	00,0%
	Daikin	1 001	0 101	1 110	0 011	0 001	000	001	000	100	011	10 000	0,1%
	Faura						011		110	110	101	0 011	0,0%
	Hitachi			1		100	11	010	100	010	100	0 000	0,1%
	LG						001		101	011	001	011	0,1%
	Orverk										100	100	0,0%
	Panasonic	111	0 101	1 111	1 000	1 111	1 100	1 100	1 111	1 111	1 111	10 110	10,0%
	Philips			1 010	1 101	0 101	0 111	1 010	1 110	1 000	0 010	11 111	1,1%
	Sendo										1 000	1 000	0,0%
	Sharp	1 101	1 100	0 000	1 110	0 111	0 100	1 111	0 001	1 100	1 000	11 111	00,0%
	Winix									00	10	10	0,0%
	Others	1 001	1 100	0 011	0 011	1 000	0 001	1 011	0 001	110	010	01 111	10,1%
	Total:	11 100	11 100	11 100	00 100	00 100	00 100	01 100	00 000	00 000	01 000	001 100	100%

Source: Litvinchuk Marketing Co.

Climatic [redacted] are [redacted] in terms of the [redacted] of producers. In 0010, there were only 10 brands, but just four [redacted] [redacted] historically [redacted] [redacted] China, today they are still [redacted] the market leaders and [redacted] than [redacted] of [redacted] in the [redacted].

3.4.2. TOP MOST POPULAR MODELS IN 2019

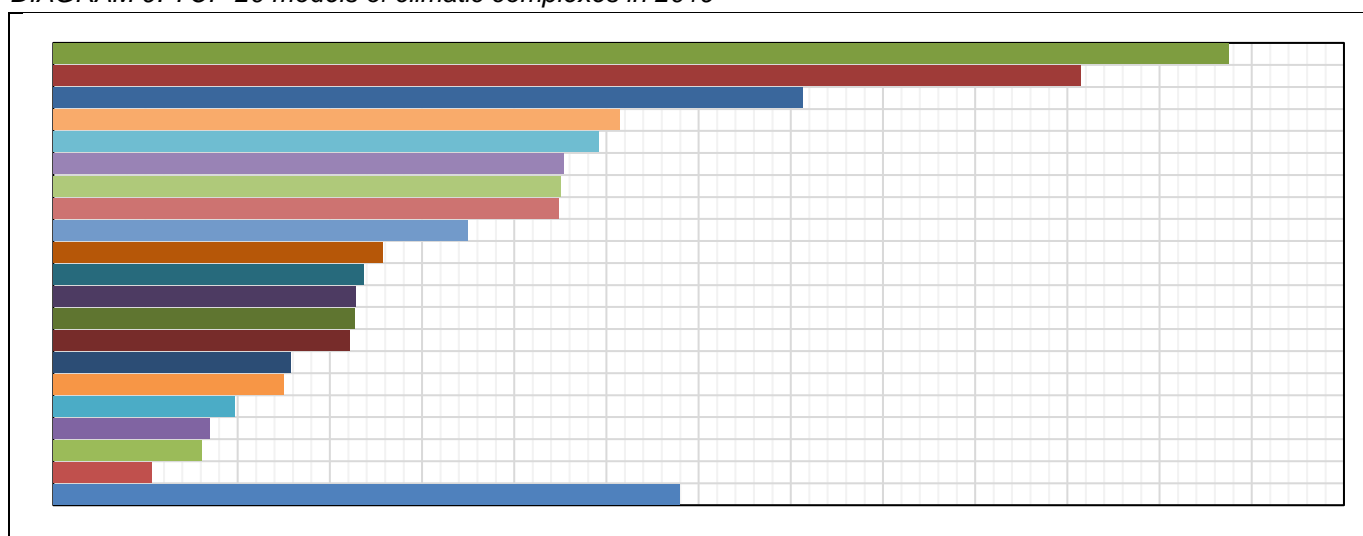
Next, we will give the model and series analysis of climatic complexes. To the turnover calculated at the contract prices, we added columns with retail prices of models and corresponding retail turnovers. It helps with understanding of margin levels for certain categories of goods, and in general for the market.

TABLE 14. Climatic complexes model ranking by results of 2019

#	Brand	Model	Number of pcs.	Retail price, RUB	Turnover in retail prices, mln.RUB (VAT included)	Turnover in factory prices, \$ (VAT excluded)
	Boneco	H000	0 100	00 000 P	100,01	\$110 000
	Boneco	H110	1 110	10 000 P	00,10	\$101 010
	Bork	A100	0 100	10 000 P	111,01	\$000 000
	Bork	A100	1 110	10 000 P	00,11	\$010 100
	Bork	A001	1 101	10 000 P	01,01	\$000 010
	Daikin	MCK01JVM-K	011	10 000 P	11,01	\$010 001
	Faura	NFC 010 AQUA	101	11 000 P	0,11	\$11 110
	Hitachi	EP-A1000	100	00 000 P	1,10	\$01 010
	Hitachi	EP-L110E	110	10 000 P	0,00	\$11 010
	Hitachi	EP-A0000	101	11 000 P	1,10	\$11 011
	Hitachi	EP-A0000	101	11 000 P	1,00	\$00 011
	Hitachi	EP-M00E	10	11 000 P	0,11	\$0 100
	LG	LSA10A	001	11 000 P	10,11	\$100 101
	Orverk	Air-Max	100	00 000 P	0,00	\$10 110
	Panasonic	F-VXR10R	0 001	00 100 P	00,01	\$100 101
	Panasonic	F-VXK00R	010	10 000 P	11,00	\$011 001
	Panasonic	F-VXL10	100	00 000 P	01,11	\$111 100
	Panasonic	F-VXK00R	010	11 000 P	10,11	\$111 010
	Panasonic	F-VK111R	000	11 100 P	10,00	\$10 010
	Panasonic	F-VXM10R	00	11 000 P	1,11	\$11 111
	Panasonic	F-VXM01R	01	00 000 P	1,01	\$0 000
	Philips	AC0001	011	00 000 P	01,01	\$111 001
	Philips	AC0101	000	11 000 P	00,00	\$110 001
	Philips	AC1010	000	10 000 P	1,00	\$01 100
	Philips	AC0100	100	11 000 P	1,01	\$01 111
	Sendo	Air 00	1 000	01 000 P	00,10	\$110 111
	Sharp	KCD11	1 110	00 100 P	01,01	\$001 011
	Sharp	KCD11	1 010	11 110 P	00,10	\$111 000
	Sharp	KCG11	1 000	01 000 P	01,00	\$110 110
	Sharp	KCD11	000	01 000 P	00,00	\$101 010
	Sharp	KCG11	110	00 000 P	01,00	\$101 000
	Sharp	KCG11	110	01 000 P	11,01	\$10 011
	Winix	AEA110	10	11 000 P	0,10	\$0 001
	Others		010	0 110 P	0,11	\$00 000
	Total:		01 000	00 100 P	1 101,10	\$1 010 000

Source: Litvinchuk Marketing Co.

DIAGRAM 9. TOP-20 models of climatic complexes in 2019



Source: Litvinchuk Marketing Co.

Producers of climatic complexes more [REDACTED]
[REDACTED] by results of 0010 [REDACTED]
[REDACTED] producers ([REDACTED],
[REDACTED], [REDACTED]), as well as [REDACTED] producer [REDACTED].

4. LEADING SUPPLIERS

Below is the table for top suppliers on the Russian market of air humidifiers and purifiers, since often their activity is the key to the success and popularity of the brand.

TABLE 15. Leading suppliers on the Russian market of air humidifiers and purifiers by results of 2019

#	Supplier	Brand	Total volume, units.					Turnover, USD					№
			Humidifiers	Purifiers	Climatic complexes	Air washers	Total:	Humidifiers	Purifiers	Humidifiers	Air washers	Total:	
	Aerinkom		11 001	10 111			01 100	\$001 101	\$110 100			\$111 011	
	Alyance		111 001		101		111 010	\$1 101 000		\$11 110		\$1 101 101	
	Bork		0 000	000	1 101	1 110	10 000	\$010 010	\$100 111	\$1 011 101	\$111 100	\$0 100 000	
	Breez		11 001				10 101	\$011 100				\$111 011	
	DNS Retail		1 110					\$00 110					
	DNS Retail		11 111	0 000			11 011	\$100 010		\$110 110		\$1 100 100	
	Galaktika		01 101				01 101	\$100 111				\$100 111	
	Golder Electronics		01 111	0 011			00 110	\$101 110	\$11 010			\$101 001	
	Grandtorg		11 100				11 100	\$001 111				\$001 111	
	Grantel		10 100				10 001	\$000 011				\$011 110	
	Grantel		11					\$0 100					
	Merlion		00 001				01 101	\$010 000				\$011 010	
	Merlion		0 001					\$01 101					
	Merlion		1 110	110		010		\$11 000	\$10 000		\$00 000		
	Multymarta		11 000				11 101	\$111 000				\$110 000	
	Multymarta		10 111					\$11 001					
	Optim		10 110				01 011	\$000 111				\$1 000 111	
	Philips		11 010	110	0 010	1 101	10 001	\$000 111	\$00 111	\$000 100	\$011 000	\$1 011 111	
	Polaris		111 111	0 111		000	101 010	\$1 101 010	\$101 111		\$01 111	\$1 001 100	
	Rusklimat		100 111	0 001			010 000	\$1 100 100	\$110 101			\$0 001 111	
	Rusklimat		10 011			1 110		\$1 101 101			\$101 001		
	Rusklimat		01 101	001	1 000	11 011		\$000 010	\$00 110	\$011 011	\$1 100 011		
	Rusklimat		11 011					\$110 010					
	S-Holding		11 110				111 010	\$101 011				\$1 111 101	
	S-Holding		00 001					\$111 010					
	S-Holding		11 010	1 010		1 000		\$001 111	\$10 111		\$10 111		
	S-Holding		10 001					\$111 001					
	SEB-Vostok		10 110	1 000			00 101	\$100 000	\$100 011			\$1 111 101	
	Svetofor (Krasnoyarsk)		111 110				011 110	\$1 001 110				\$1 100 111	
	Svetofor (Krasnoyarsk)			01 000					\$101 101				
	Technopoisk		11 110	1 001		1 110	00 010	\$101 101	\$111 011		\$00 001	\$100 110	
	Venta-Trade					00 000	01 100				\$0 100 010	\$0 000 111	
	Venta-Trade		1 101	010				\$00 101	\$11 010				

Source: Litvinchuk Marketing Co.

TABLE 15 (CONTINUED 1).

#	Supplier	Brand	Total volume, units.					Turnover, USD					# by turnover
			Humidifiers	Purifiers	Climatic complexes	Air washers	Total:	Humidifiers	Purifiers	Humidifiers	Air washers	Total:	
	Absolut Buryatiya		0 101				0 101	\$10 011				\$10 011	
	Aero-Trade		0 100				0 100	\$10 001				\$10 001	
	Armed		0 011				0 011	\$110 110				\$110 110	
	Belaya Gvardiya		0 110 00				0 110	\$00 010 \$0 111				\$101 101	
	CS Medica		1 010				1 010	\$11 100				\$11 100	
	Delta		1 010				1 010	\$11 111				\$11 111	
	Dihaus		1 111 0 100	000			1 111	\$111 001 \$110 011	\$00 000			\$011 010	
	Domotechnika		0 011				0 011	\$11 110				\$11 110	
	Domus&Dekus		0 011				0 011	\$01 101				\$01 101	
	Dyson		0 100	0 100			10 110	\$1 111 010	\$101 101			\$0 111 011	
	Ekoinnovatsii		0 101 010	1 110			0 101	\$00 100 \$001 001	\$111 111			\$1 111 000	
	Gala-Center		0 101				0 101	\$01 000				\$01 000	
	Kromax Group		1 111				1 111	\$11 100				\$11 100	
	K-Trade		0 010				0 010	\$00 101				\$00 101	
	Kuchenland Home Rus		1 111				1 111	\$01 001				\$01 001	
	Larina		1 101				1 101	\$00 010				\$00 010	
	Lenta		0 010				0 010	\$01 101				\$01 101	
	LG Electronics Rus			101	001	1 100	1 100		\$11 011	\$100 101	\$101 110	\$001 001	
	Nord		0 010				0 010	\$11 001				\$11 001	
	Panasonic Rus				1 111		1 111			\$1 000 111		\$1 000 111	
	RBT		0 001				0 001	\$111 101				\$111 101	
	Resale Invest		0 101 0 001		100 1 000	100	0 111	\$101 110 \$01 110		\$10 110 \$110 111	\$00 110	\$000 110	
	Sakura Electronics Group		1 011				1 011	\$10 111				\$10 111	
	Sharp Electronics Russia				1 000		1 000			\$111 101		\$111 101	
	Skrap		1 000 000				0 100	\$11 011 \$1 000				\$10 011	
	Stadler Form		1 111	111		100	1 101	\$011 111	\$11 111		\$01 111	\$101 110	
	TsFO Group		0 000				0 000	\$11 100				\$11 100	
	Yamaguchi		1 010	110			1 100	\$11 111	\$01 000			\$00 111	

Source: Litvinchuk Marketing Co.

TABLE 15 (CONTINUED 2).

#	Supplier	Brand	Total volume, units.					Turnover, USD					# by turnover
			Humidifiers	Purifiers	Climatic complexes	Air washers	Total:	Humidifiers	Purifiers	Humidifiers	Air washers	Total:	
	Abondance		010				010	\$1 100				\$1 100	
	Artsana Rus		011				011	\$1 010				\$1 010	
	ASS-Alyance		100				100	\$10 000				\$10 000	
	Atmosfera			1 011			1 011		\$10 100			\$10 100	
	Condair Russia		10				10	\$00 110				\$00 110	
	Daichi			100			100		\$110 111			\$110 111	
	EDM		100				100	\$00 111				\$00 111	
	Ekokomp Kaliningrad		00 1	00			00	\$0 101 \$010	\$1 101			\$0 011	
	Electromir		110				110	\$0 000				\$0 000	
	Fellowes			11			11		\$1 000			\$1 000	
	Flora Grow		010				010	\$1 111				\$1 111	
	Grosmar				100		100			\$101 000		\$101 000	
	Kaizer + Kraft			11			11		\$0 100			\$0 100	
	Karcher			100			100		\$10 100			\$10 100	
	Koreal		110	11	10		010	\$0 010	\$101	\$0 001		\$1 110	
	Lamobile		110	10			000	\$11 000	\$0 001			\$10 010	
	M Sota			010			010		\$11 001			\$11 001	
	Maltytrade			111			111		\$10 101			\$10 101	
	Marvel Dustribution			0			0		\$111			\$111	
	Medisana Rus		010				010	\$10 001				\$10 001	
	Mitsubishi Electric Rus			100			100		\$100 100			\$100 100	
	Mobilidi			10			10		\$1 110			\$1 110	
	Nebesnaya Mechanika		110				110	\$01 011				\$01 011	
	PROT			1 000			1 000		\$10 011			\$10 011	
	Robototechnika					111	111			\$10 010		\$10 010	
	Sima-Land		001				001	\$1 000				\$1 000	
	Soliton		11				11	\$011				\$011	
	Studio Moderna			100			100		\$0 110			\$0 110	
	United Elements		1		011		000	\$1 100		\$010 001		\$011 010	
	Zepter International			1 111			1 111		\$001 100			\$001 100	
	Others		0 011	110	010	11	1 000	\$00 000	\$10 010	\$00 001	\$10 001	\$110 001	
	Total:		1 010 000	00 000	01 000	10 100	1 101 000	\$00 100 000	\$1 100 000	\$1 010 000	\$1 000 000	\$11 110 000	

Source: Litvinchuk Marketing Co.

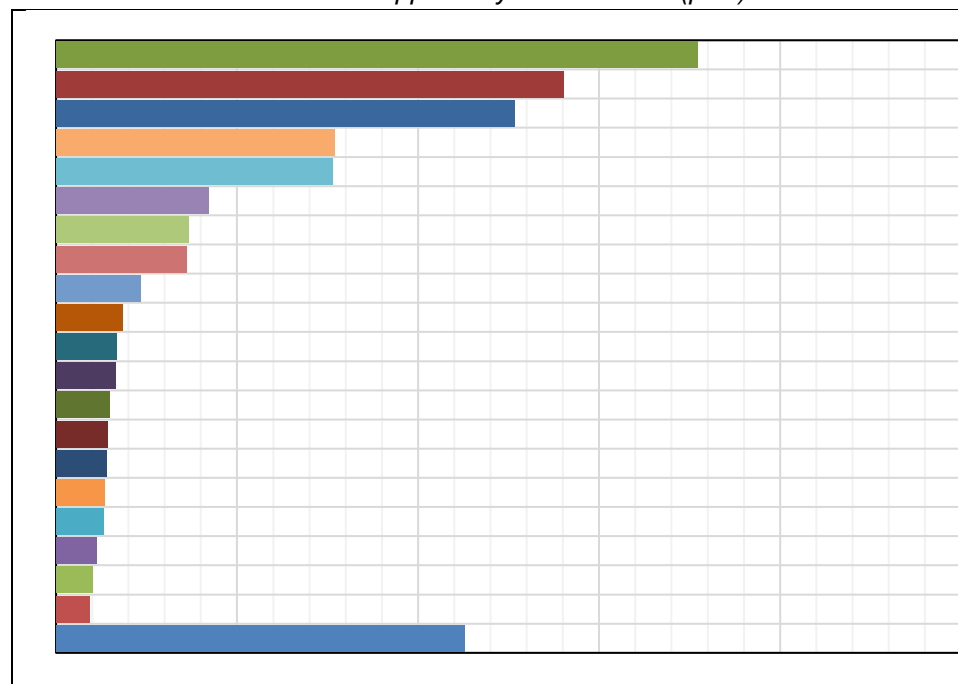
The TABLE is sorted by quantitative indicators. To compare the place occupied by the company in market volume and market value, there is a right column that reflects the place in the ranking by the total turnover.

The leading positions in the market of air humidifiers and purifiers are held by companies that in most cases can be attributed to [redacted] of [redacted] categories: [redacted] distributors [redacted] or [redacted] of small household appliances and electronics [redacted]. When measured in money terms, their [redacted] are often [redacted] by [redacted] and suppliers of other [redacted], sometimes by highly [redacted] manufacturers of air humidifiers and purifiers. This [redacted] small – no more than 1%.

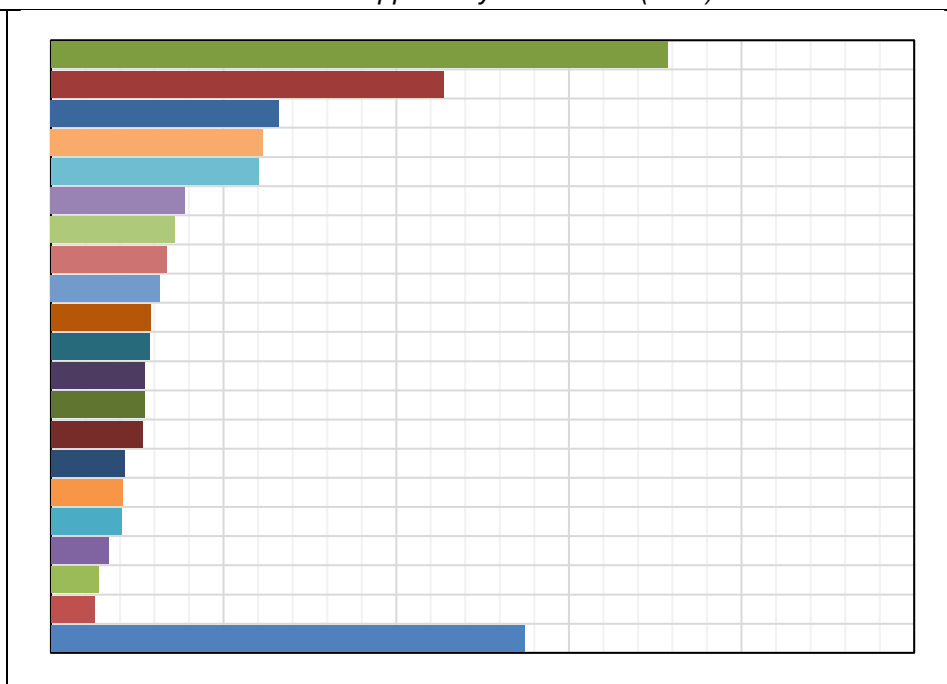
It should also be added, that air [redacted], small and large household appliances markets, etc. [redacted]

DIAGRAMS 10. Leading suppliers on Russian humidifier and purifier market in 2019

TOP-20 suppliers by sales volume (pcs.)



TOP-20 suppliers by sales value (USD)



Source: Litvinchuk Marketing Co.