UZBEKISTAN BOILER MARKET 2019

(DEMO-VERSION)*

* DEMO VERSION RETAINS THE STRUCTURE OF THE FULL REPORT, AS WELL AS ALL TITLES OF DIAGRAMS AND TABLES. FACTORIES, BRANDS AND SUPPLIERS MENTIONED IN THE REPORT ALSO RESERVED. ALL SORTED ALPHABETICALLY, TEXT SUBSTITUTE A, B, C, D; NUMBERS – 0,1. THE METHODOLOGY OF RESEARCH IS AVAILABLE IN THE FIRST CHAPTER.

Multi-client research

January 2021

CONTENTS

1. METHODOLOGY

1.1. INFORMATION SOURCES

Detailed analysis of customs data since 2016 was used in the process of preparing the research. The main aim was to identify the market dynamics, key trends, leading companies and brands. As practice shows the difference between the customs data and the real volume of products supplied is not more than 5-10%. This allowed us to analyze the boiler market by power range, boiler type, burner type, heat exchanger material, etc.

In the process of creating a report on the Uzbekistan market of boiler equipment we analyzed not only the main custom code 8403* (general code for boilers and spare parts), but also codes 8419101000 and 8419190000 (gas water heaters), 8402* (steam boilers). Some equipment was imported by mistake? under these custom codes. Also, for the analysis of domestic production, we processed declarations for gas burner equipment (code 8416 *). To identify distributors of boiler equipment, the most informative is the analysis of radiators supply (custom codes 7322* and 7616*) – most often companies supplying boiler equipment also distribute radiators. By the combination of brands supplied to legal entities, as well as by the "sender-recipient" pair, it was possible to identify the vast majority of distributors of boiler equipment.

The analysis of spare parts, used for boilers production, was approved as the only possible method of identifying products of local manufacturers in the absence of information from them.

1.2. PRICES

All turnovers in this report are given in dealer prices without VAT.

Below is DIAGRAM which reflects different scenarios for boilers distribution in Uzbekistan and **dealer prices,** which indicate the sales values in the future:
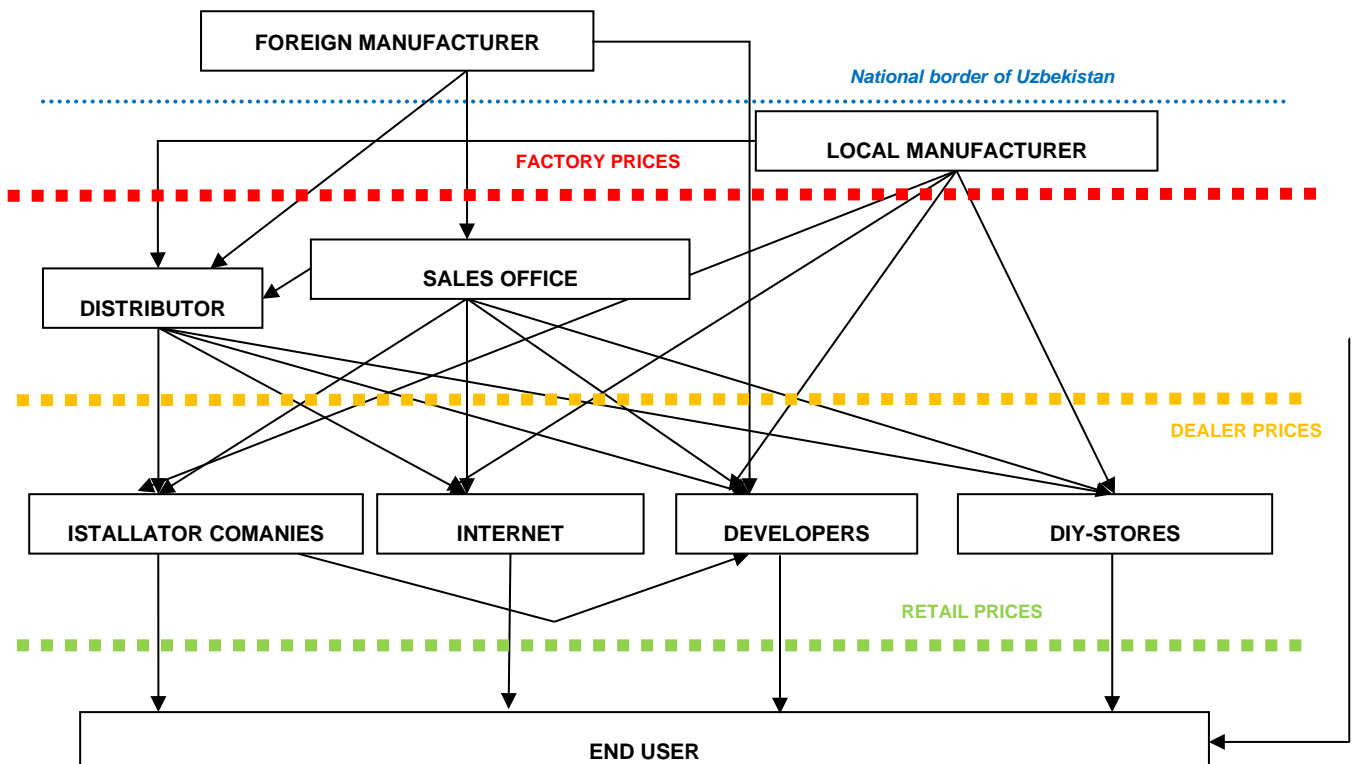
The prices for boilers are calculated based on the standard configuration. It means that price may exclude jet burner, if it's not in the kit; coaxial chimney for wall-hung turbo boilers; indirect waterheater, if it's not built-in; control panel, if it does not come as standard, and so on.

1.3. TERMINOLOGY USED IN THE REPORT

This chapter contains brief information on the covered by this report boiler types, operating principles and design features.

The boiler is a unit designed for heating a heat-transfer fluid. This report covers all types of **hot water** boilers intended for heating. **Steam boilers** used for generating over-heated steam are **not included** in the report.

There are very many criteria to classify boiler plants, however, in the report we propose to apply the most relevant ones:

1) TYPE OF FUEL USED:

- The most easily extracted energy resource is solid fuel, firewood. However, this type of fuel is good only for small area heating due to its short firing period and regular necessity to feed combustion chambers with new wood-stacks. Today modern technologies allow us to use boilers with continuous fuel feeding. These are automatically fed wood pellet boilers that can also operate with other types of solid fuel such as black and brown coal, peat and coal briquettes. Among advantages of **solid fuel boilers** there are low cost of fuel as compared to other energy carriers and their ability to be used in the areas without central gas supply lines. Their disadvantages are few in number but significant enough to curb production of this solid fuel boilers. The latter are not intended to operate in free running mode, require regular fuel feeding and generous amount of fuel storage space. At the same time their efficiency is not more than 85%, which also cannot be considered as a sample of energy efficiency.

- **Gas boilers** take the dominating position on the Uzbekistan market, which can be contributed to the developed network of gas pipelines in the country. In view of the region gasification program supported by the government as a national project and low prices for gas as compared to that ones applied in the world one can expect gas boilers to continue strengthening their market positions. Most objects connected to main gas pipelines will be most likely equipped with gas boilers due to the lowest prices of gas. So, in most cases the main criteria in choosing a boiler are their high energy efficiency and low gas prices.

- **Liquid fuel boilers** are low popular in Uzbekistan. Heat carrying agent is heated through burning liquid fuel coming from a fuel storage. Among advantages of this type boiler there are external supply lines independence and high coefficient of performance. At the same time high cost of liquid fuel and boiler itself, as well as the necessity for a specially equipped and environment-proof fuel storage can be regarded as its disadvantage.

Picture 1. Floor-stand boiler

- **Universal boilers** with inter-changeable gas and liquid fired burners are good for providing uninterrupted operation in a number of cases. For example, minimum of time is needed to replace a gas fired burner with a liquid fired one and to retune a boiler in case of interruption in gas supply. Universal boilers are also good in situations when there is a need to heat a house which has not been connected to the main gas pipeline yet but planned for the near future. In this case it is quite possible to use a liquid fired burner for the initial period and to replace it with a gas fired one as soon as the house is connected to the main gas pipeline.

- **Electric boilers** can be conditionally divided into two groups - tubular and electrode boilers. The first ones heat a heat carrying agent with the use of tubular water heaters, while the second one heat water by passing the electric current through it. A great number of electric boiler advantages (they do not

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require special place for installation, any air supply or combustion product withdrawal, have high ecological properties) are only opposed to two disadvantages – high cost of electric energy and high electrical supply network load. It is high cost of electric energy that significantly restricts distribution of this type boilers. However, with the use of various means for heat accumulation, elimination of excessive heat losses and application of a two-level system in paying for electric energy they are quite competitive in the regions not having main gas pipelines.

2) TYPE OF INSTALLATION:

➢ **Floor-stand boilers** will most likely lose their leading positions on the market in course of time. Among their advantages there are:

- long operational life ensured by the use of more durable materials (strong steel, cast iron, composition metals)

- ability to work in combination with hot water supply boilers of much higher capacity allowing its users to have greater volume of hot water

- practically unlimited power

- floor-stand boilers made in ex-USSR countries are simpler in operation, which is very vital in rural areas under a lack of spare part storages and highly skilled experts.

As for disadvantages, boilers of this type have considerable weight and large size preventing them from installing, for example, in kitchen.

➢ **Wall-hung boilers** come over floor-stand ones due to their compact size allowing users to install them in flats. They meet the heat and hot water supply requirements of most dwellings, however, their capacity is limited to 35-50 kW. It is also possible to install wall-hung boilers of higher capacity, which are combined in cascade modules, however, in this case they lose their advantage – the compact size. As for disadvantages, boilers of this type have limited capacity, produce limited volume of hot water and have shorter operational life, which is about 10-12 years of most wall-hung boilers against 20-30 years of floor-stand boilers.

Picture 2. Wall-hung boiler

3) HOT WATER SUPPLY (HWS) FUNCTION:

- **Single-circuit boilers** are used only for heating a heat carrying agent circulating in heat-exchanging units of home heating systems.

- **Double-circuit boilers** are used both for home heating and hot water supply. Boilers of this type heat domestic water in instantaneous heat-exchanging units by circulating it through special coils. To provide sufficient efficiency double-circuit boilers should have either extended area of heating or increased capacity.

- **Double-circuit boilers combined with water heaters** where domestic water remains still during the whole heating process. Boilers of this type allow users to heat a great volume of water at the same time which can be considered as their advantage. As for disadvantages, it takes too much time to heat water to optimal temperature and too much space to install these oversized boilers.

4) HEAT-EXCHANGER MATERIAL:

- **Steel heat-exchangers** are applied in gas floor-stand, parapet, wall-hung, solid fuel, liquid fuel, electric and universal boilers. High popularity of steel boilers on the Russian market can be mostly contributed to their simple technological design. Among their advantages there is small weight, low price and high plasticity that is very important as in the process of operation heat-exchanger units are exposed to burner fire as a result of which temperature stresses may cause generation of microfractures. At the

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same time corrosibility and shorter life cycle as compared to that one of cast-iron boilers can be considered as their disadvantages.

- **Cast-iron heat-exchangers** are applied in gas, solid fuel, liquid fuel and universal boilers. Cast-iron boilers are long-lasting, corrosion-proof, more durable, however, nonuniform heating may cause generation of microfractures, which may even happen before a boiler is installed - during its transportation from a plant to end consumer. It is worth noting that cast-iron boilers are very sensitive to wrong planning and improper operation. And high cost is their most serious disadvantage.

- **Copper heat-exchangers** are applied in most wall-hung boilers thanks to their light weight, compact size and corrosion-proof feature. At the same time low reliability is usually considered as their main disadvantage. These are only American Companies Laars and RBI Water Heaters that supply floor-stand gas boilers to the Russian market.

- **Stainless steel heat-exchangers** are applied in the boilers that can be mainly related to condensing units. Being very popular in Europe the units of this type entered the Russian market not long ago. They use not only waste heat, but also steam condensation heat. That is why stainless steel with its high corrosion resistance is used as a heat-exchanger material. Efficiency of burning natural gas reaches 107-109%.

- **Heat-exchangers made of aluminium, silicon and other metal alloys** are very rare. They are used for production of condensation boilers.

5) BY TYPE OF BURNING SYSTEMS:

- **Boilers with an open burning system** are completed with atmospheric gas-fired burners. Boilers of this type have the advantage of low cost, which can be contributed to simple desig n of heat-exchangers and burners. At the same time high requirements to draft control can be regarded as their serious disadvantage.

- **Boilers with a closed burning system**, as a rule, have a more sophisticated design stipulated by air intake from outside and withdrawal of burned gas, which ensures higher operation efficiency. Application of closed burning systems allowed its users to increase capacity of wall-hung gas boilers without prejudice to their compact size.

Picture 3. Electric boiler

Separately, it is worth giving a description of one important feature that directly affects the sales of boiler equipment in Uzbekistan:

Widespread in rural areas have received the so-called **«SURROGATES»** (Picture 4): handmade boilers of secondary materials. Due to the rather large category of low-income citizens, not all households can afford to buy a normal heating boiler. More than 85% of urban and more than 70% of the village houses are connected to gas. It is clear that most of the urban population lives in apartment buildings and connected to central heating system (generated by boiler rooms or thermal power stations). The number of rural population in Uzbekistan prevails over the urban one, a large share of private houses in the statistics is reflected as urban housing, but in fact the population both lived in rural areas and continues to be in fact. Many settlements were annexed to the city in 2009, but little has changed since then. The income of an average rural citizen is dramatically different from the city residents. These three factors (a large share of the rural population, high availability of natural gas and low incomes of

Picure 4. Example of «Surrogate»

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citizens) have led to the situation when population tries to provide itself with economical heating in conditions when normal heating is simply not affordable. This is indirectly indicated by the statistics on the import of gas burners for heating boilers and stoves (picture 5). Their sales in recent years are several times higher than the sales of boilers and can not be explained by a simple replacement of burners – in Uzbekistan, there is simply no such number of floor-stand gas boilers.

Picture 5. Stove burner

With the growth of wealth, surrogate solutions will unavoidably be replaced by normal heating boilers, but nowadays their usage in rural areas is very common. Comparison of statistical data on real sales of boilers with the size of the housing fund of the Uzbekistan suggests that the existing sales of "factory boilers" do not cover even a quarter of the market needs for heating equipment – the remaining three quarters are done by stove heating, «surrogates» and other compromise solutions. It would be possible to assume that alternative heat technologies are widely used in Uzbekistan, but as it would be seen in the future, water heating systems are the most optimal technical solution in the existing climatic conditions and at current energy prices.

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1.4. UZBEKISTAN. HIGHLIGHTS OF THE COUNTRY

Dbaabbcdac dabdadcd bbaaccc cc daccac cccda cacabacbd ccaab acad cccdccaadcbbd cdcac. Ba cccdaadba cccba cabaaba CCCC ccddb 00 bad cacabacba daabbdbbccd ca 10%. Ddc acaccbd c dcc, ddc c 1001 acaa ccdabbccd cccac ccbcadd cacab, cdbaaddbdcd a dbdddacbb bbbbdcdd dcbcabb, daabbdacbb cacbd baacdbc b accca. Bab cd ccbac abaadd ca ACADBBA 1, caaccadacccdd cacabacbd bbbdac daacaccc cacdad, dcdd a dabcc ccba cadcabdcd ca acacbdcc cbbbcc dccaca.

DIAGRAM 1. Dynamics of the population of Uzbekistan and the provision of housing since 1991
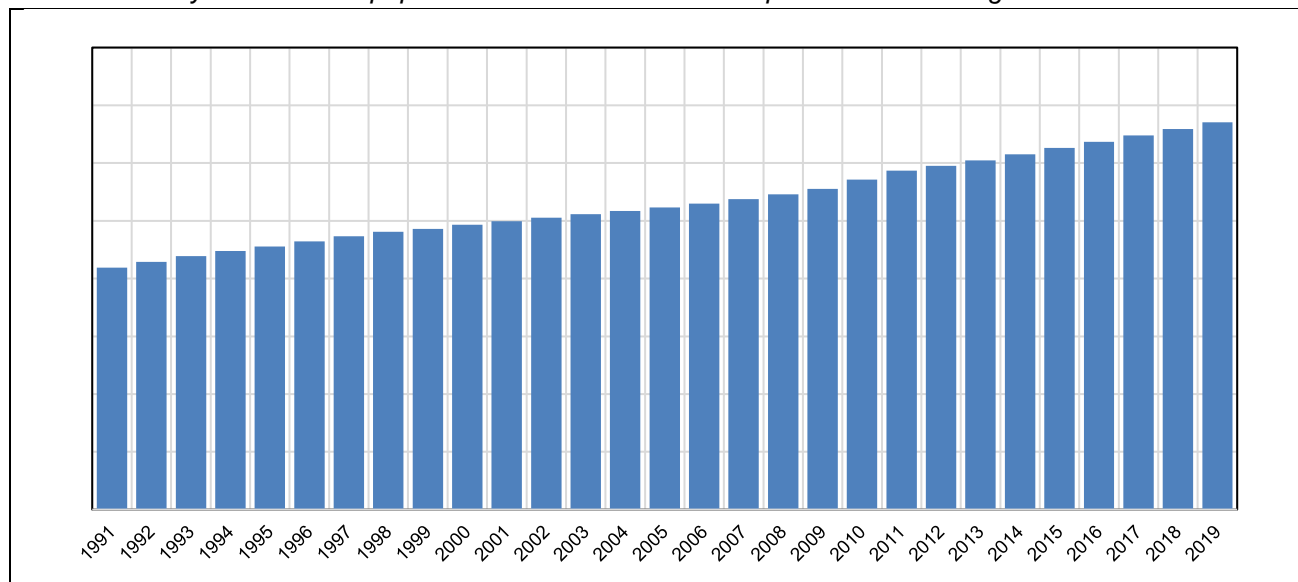
Source: World Bank, State Statistics Committee of Uzbekistan, processed by «Litvinchuk Marketing Co.»

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DIAGRAM 2. Dynamics of GDP and real incomes of the population of Uzbekistan, %
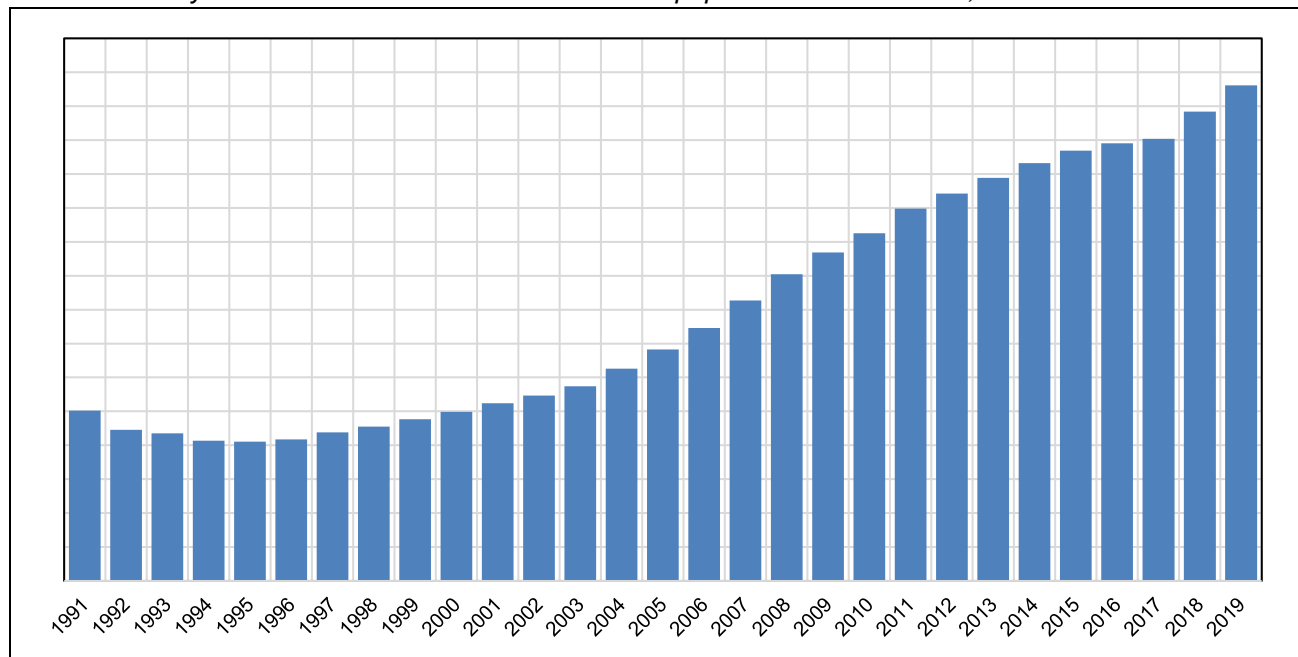
Source: World Bank, www.asiaterra.info, State Statistics Committee of Uzbekistan, processed by «Litvinchuk Marketing Co.»

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Aabaa cacccac c bbbcada:

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DIAGRAM 3. Average monthly temperatures of the main cities of Uzbekistan in winter period

| | sep | oct | nov | dec | jan | feb | mar | apr |
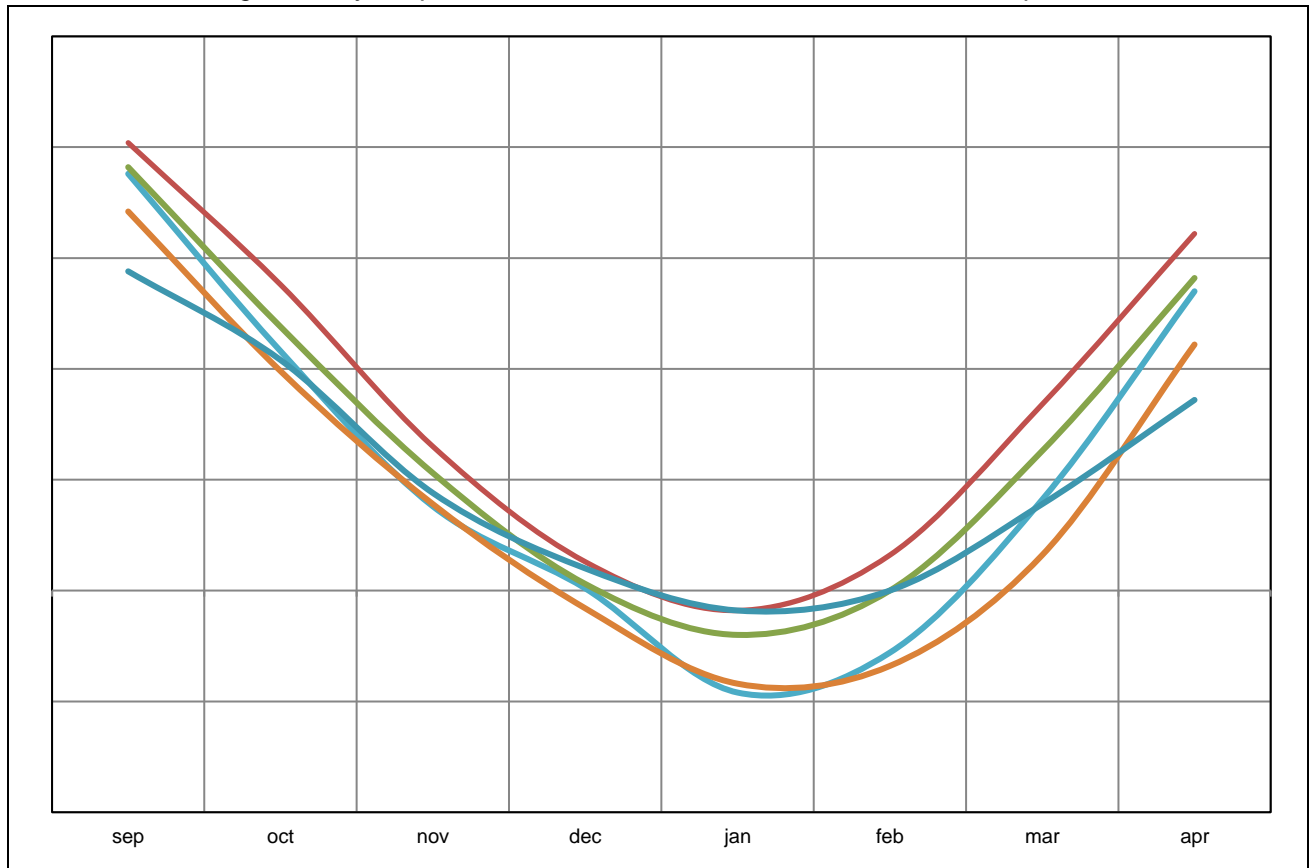
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DIAGRAM 4. Provision of households in Uzbekistan by basic services (2013)
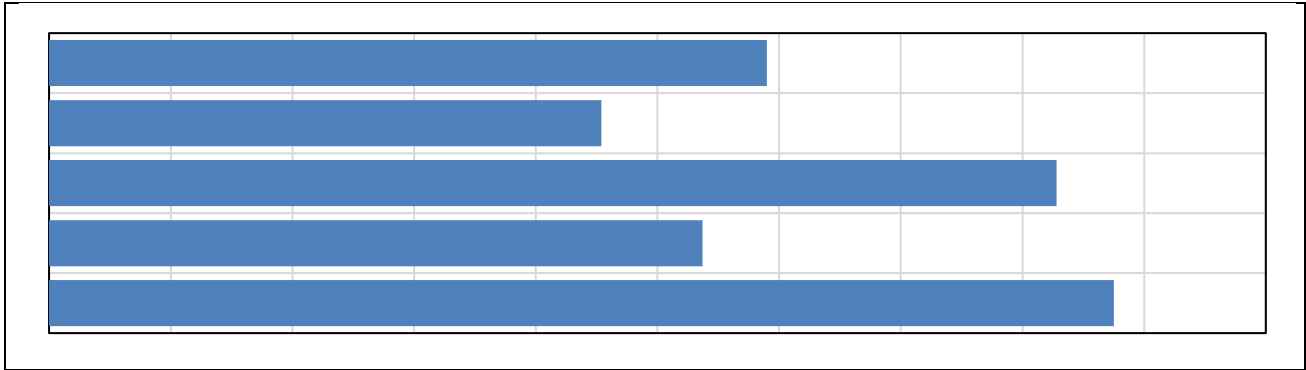
Source: State Statistics Committee of Uzbekistan, processed by «Litvinchuk Marketing Co.»

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DIAGRAM 5. Changes of the new residential construction structure in the context of «village / city», %
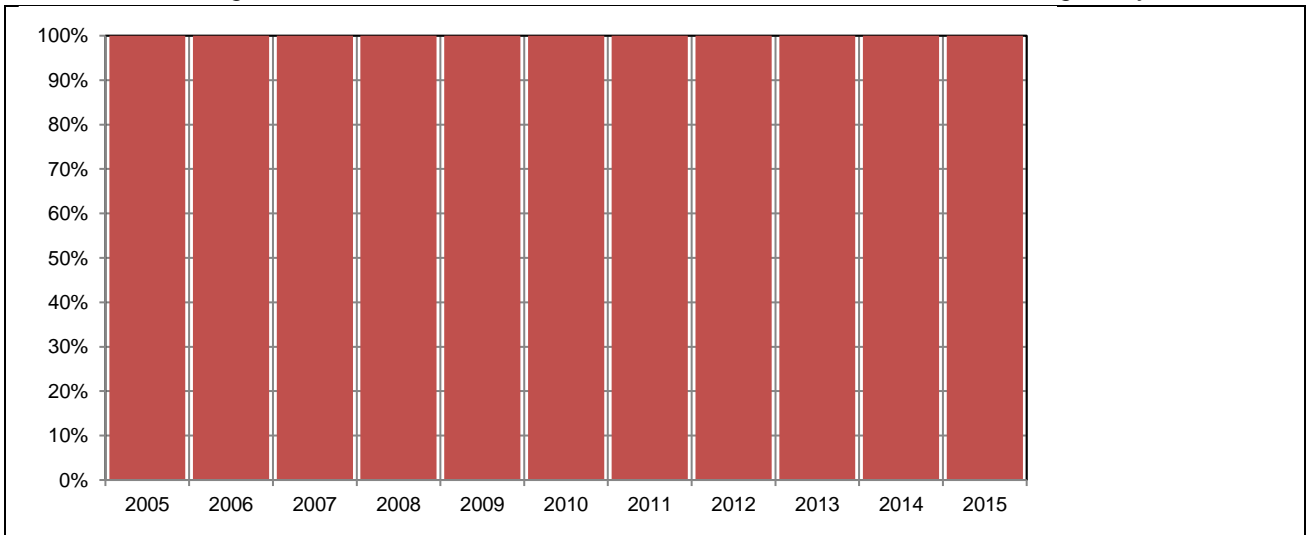
Source: State Statistics Committee of Uzbekistan, processed by «Litvinchuk Marketing Co.»

Dab, acbd ccacac bbbdd a acccaad cccdacaccc cacdad, cc ccba ca ccaaddaad 00% cd cadaac bcbbdacdaa aaaaaccdd cadabdca, ddc cbcadaad, ddc cadbb dcca bbbcb caaabbbcccdb cc-ccabcacd cccacbbaad ccadaddcd b cabdcbcb cacdcccdb.

2. MARKET SIZE AND STRUCTURE

Accdaaccdaaccdb bcbbdad Dbaabbcdaca cc acdbdabddca b cdccbdabdcdad a cacddaca 1011 acaa acac a acaaccdccbdabdcdb bcaabc caccdabbbb bbbacacbd, ccabaccc bcdccdb dacacd cabcadacc cdaabdd cdccbdabdcda aabcada bcdbd a aaaddbddabcdd baacbdd. Ccb ddcb ccdcacdbcd baccad ca cacadca ca bcababadabdcda cbcdabd cdccbacbd a cbddaa, acbb acb ccabbddac b dacdcabdccb cbcdaba. Ddc cbcadaad, ddc cca aabcdaba ccacac babcca cccabb dcbdbc ccaccdccbbb, a ca aacd cddacdadddbb bbbcb dcca. Dab ca bacaa, dabca, bababccd ad, caacbddca bbbacacba (ac ddcac cabcadabacd dcdaccaba bcababadabdcdd bcdbca a acbad ac cddb ddabab) acaaccdccbdabdcdd cccb ccbaabc b cabbcbd cccdd cdcba bcdabdccac caccdacaacbd.

TABLE 1. Dynamics of Uzbekistan boiler market since 2016 by sales volume, number of pieces

Boiler type	2016	2017	2018	2019
Wall-Hung	10 100	01 000	10 000	01 000
Floor-Stand	1 000	1 000	0 100	0 100
Electric	000	1 000	1 100	1 100
Total:	**10 000**	**00 100**	**01 100**	**01 000**

Source: Litvinchuk Marketing Co.

DIAGRAMS 6. Dynamics of Uzbekistan boiler market since 2016 by sales volume, number of pieces

total by all segments   *separately by segments*
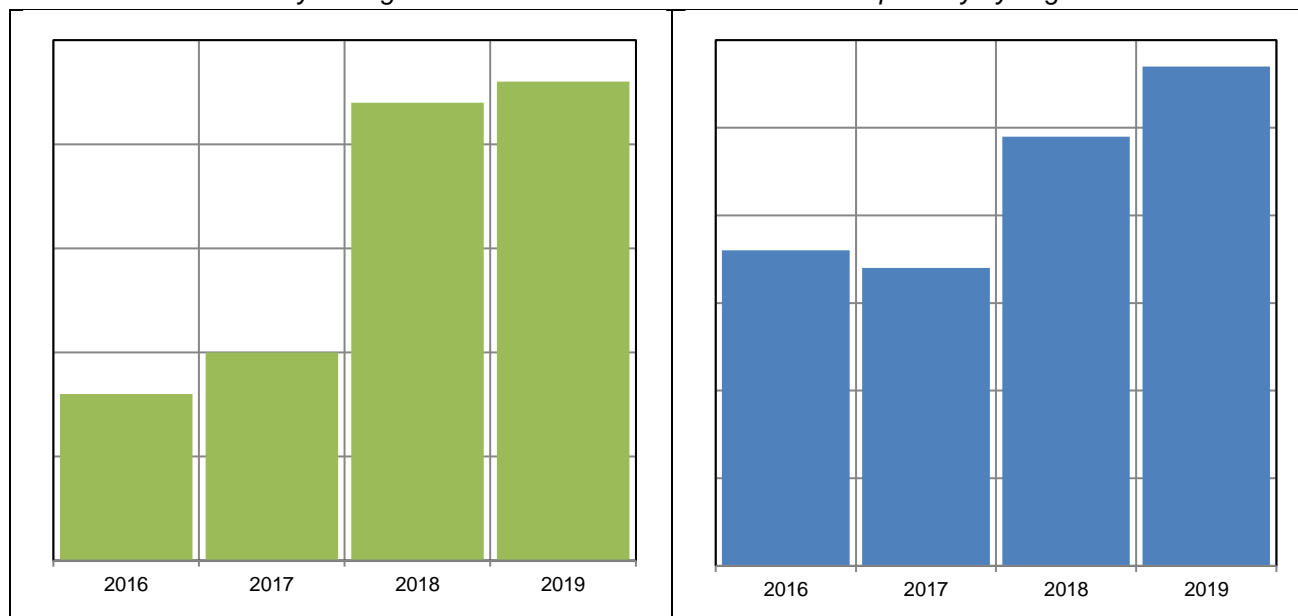
Source: Litvinchuk Marketing Co.

Cccadb cccdcb cabaaab caabacd cacdaccdd bcdbca. Bbcccd daabbdbbcd ca 10% a 1011-b, a badab ca 10% a 1010-b. A 1011 acad ccccc ccaadcbb ccaabcbacba, ccddcbd a 1010 baddcbb badcdbcd a acdadd cdccccd b bbcccdacd baaabbb «bbdcaa caccdacaacba». A 1011 acad cccdaadbbb caababb bcccabdbd ca caabdcdb ccccc, ccddcbd cccdaabb daabbdbbbcd ca «cbccbcda» 0%. Dabbb cacabcb, a 1010 cccaabb adbb cbba bbcccda, a 1011 – cacbcbdbc adda. Ccacbdccc c 1010-ac cc 1011-b caabbbadbd cacdaccdd bcdbca adcccba a 1,0 caba. Acbd cacdaccbbca cdaabbdcc cadcabdcd a cabcca 10% a cdcdbddca cccaab acad dbcca bcdbca cdccbacbd.

Caccbdcda bcdbd dabdddcd cddacdaaccc bacaa bcadbbdb caabacdcb, dab ca bacaa dabba, bab b cacdaccda bcdbd, cabaaaddbb ccbbdbaccb abcabbbcb. Cccaabb caccbdcdd bcdbca daabbdbbbcd c 1010 acaa ca 00%.

Dbabdcbdacbba bcdbd dabdddcd caccacabaccc cabbacaa abbbb b cabacbaa abcabbdcdb caabacdcb bcdabdccac cdcba Dbaabbcdaca. Cccaabb c 1010-ac acaa daabbdbbbcd ccabdbdacbb a 1 caba, cc a cadbb c babcb cccdbdccccddd d ccdcaabdabab bacbbadd «cbccbcda» 1-1% cdcba.

Aabaa c abcabbba b cdcdbddca cdcba a aacabccb adcabacbb:

TABLE 2. Dynamics of Uzbekistan boiler market since 2016 by sales value, mln.$ (dealer prices without VAT)

Boiler type	2016	2017	2018	2019
Wall-Hung	$10,1	$11,0	$11,0	$11,0
Floor-Stand	$0,1	$0,1	$0,1	$0,1
Electric	$0,1	$0,0	$0,0	$0,0
Total:	**$10,0**	**$11,1**	**$10,0**	**$10,1**

Source: Litvinchuk Marketing Co.

DIAGRAMS 7. Dynamics of Uzbekistan boiler market since 2016 by sales value, mln.$

total by all segments	*separately by segments*
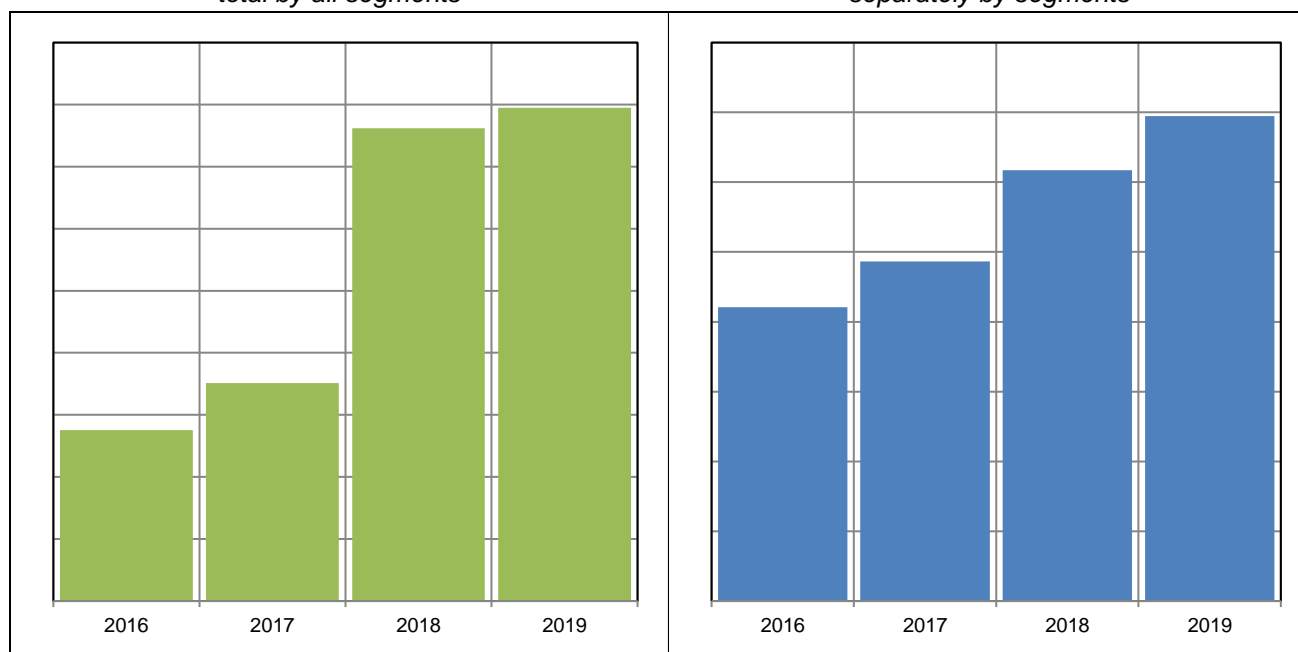
Source: Litvinchuk Marketing Co.

A aacabccb adcabacbb cdcdbddca cdcba bbaad cacbcbdbc acdacb aba – acbb a bcbbdacdaacccb adcabacbb cccaabb cacdaccdd bcdbca bacbbadd acbaa 10% cdcba, dc a aacabccb – cccdaba 00%. Caccbdcda bcdbd bacbbadd ccdaadbacd 10%, a acbd dbabdcbdacbbd bcdbca (1% cdcba) ccabdbdacbb ca abaca ca acadbba.

TABLE 3. Dynamics of Uzbekistan boiler market since 2016 by overall power output, MW

Boiler type	2016	2017	2018	2019
Wall-Hung	000	1 010	1 011	1 000
Floor-Stand	111	100	010	000
Electric	10	10	00	01
Total:	**1 100**	**1 000**	**1 001**	**1 010**

Source: Litvinchuk Marketing Co.

DIAGRAMS 8. Dynamics of Uzbekistan boiler market since 2016 by overall power output, MW

| *total by all segments* | *separately by segments* |
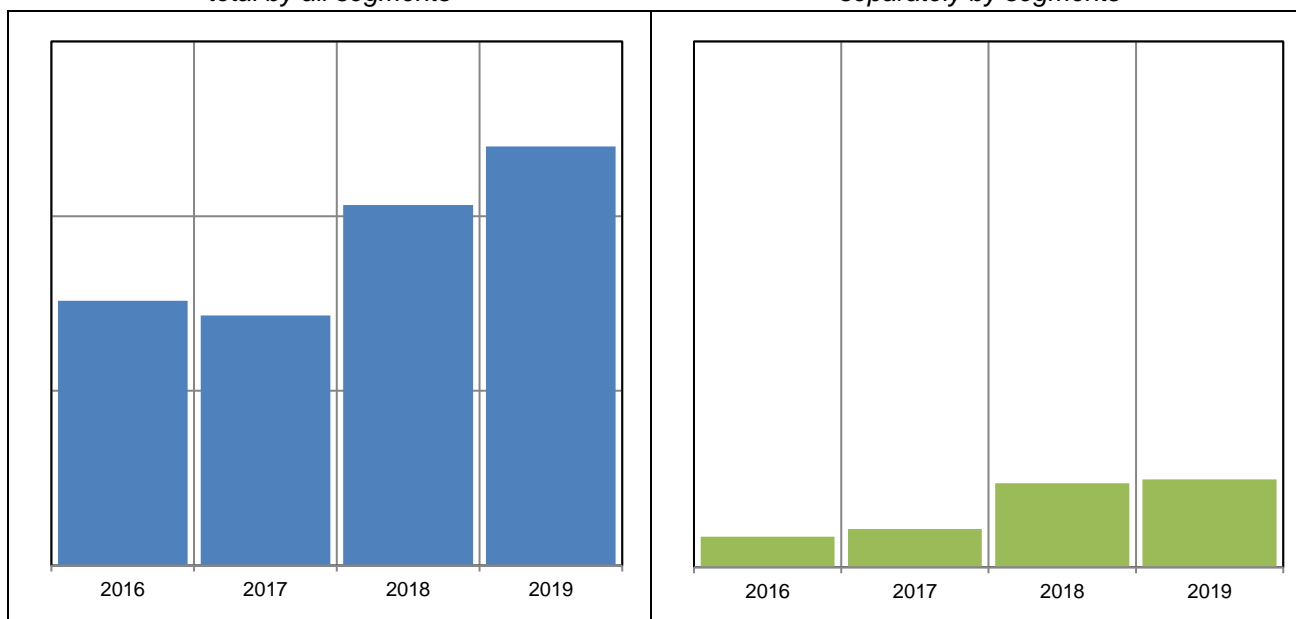
Source: Litvinchuk Marketing Co.

Caccbdcda bcdbd cccbacdaadd cacdaccdb a abacabcca bcdcccdab ac 00-00 bAd, aaa ccabbddacdac cccbaacbd a bcbcabdcccdb bacaad bbddaadd ccbd ccb adacca bcbacacccac cadacbd. C acdacb cdccccd, a Dbaabbcdaca, bab b ca acab cccdccaadcbcb ccccdcaccdaa dbccbc ccbbacbbc dacdcabbbcaaccca cdccbacba, ccddcbd cccaabb caccbdcdd bcdbca acbddcb bcdcccdb bcbcaccbcddd cbaada cccaabb addcadd caccbdcdd bcdbca.

Ccaacba DAABBDD 1 c DAABBDAB 1, ccbddaab ccaacdd bcdcccdd bcdbca cabbbdcdd abaca:

- Cacdaccda – 10 bAd
- Caccbdcda – 100 bAd
- Dbabdcbdacbba – 10 bAd

Ddc aaad cccaaabaccca ccaacdaabacba, c dcb, babad cccadbdbd dabdadcd cabacbaa accdcaacaacccb ca bcdabdccb cdcba Dbaabbcdaca. Ccaccacda aaccda c bcdcccdccb cacccaaabacbb cccaab acddcb babacac caabacda b ccacaabacda c aadabbbadbab cc cccbbacabdabdb ccbaaaacd aabaa a cccdaadcdadddbd cabaabad.

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2.1. SCENARIOS AND PROSPECTS OF THE MARKET

Ddcad cdacbdd cacccabdbad bcdabdccac cdcba a abbbabdba acad, cacadcabbc cdacbdd, ccabaa acaac, cddacdadddbb cacb bcdbca, acbd caccdacaacbd, bcdccad ddcabd a ccaca cdccbdabdcdac b ca babacd. Dabba cacadcabbc cccbbadd cddacdadddba dabcd b cadabd cdccbdabdcdaa bbbdd, dab bab cc acbddab dacdb bbaccc a bbbda ddcabd ccaaabdddad dacdd addcacac bcdabdccac caccdacaacbd.

Abcabbba cdccbdabdcdaa ccacac bbbdd ba cccbaacba 10 bad ccbaaaaca a cbaadddab daabbda:

TABLE 4. Dynamics of new construction of residential real estate, million square meters per year

Type of building	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Apartment houses	0,1	0,1	0,1	0,1	0,1	0,0	0,1	0,0	0,0	0,1	1,0	1,0	0,1	1,0	1,1
Private houses (city)	0,0	0,0	0,0	0,0	1,1	1,0	1,0	1,1	1,1	1,1	1,0	1,0	1,1	1,0	1,0
Private houses (village)	0,0	0,0	0,1	0,1	0,1	0,1	0,1	1,1	0,0	0,1	0,0	0,0	1,1	0,0	10,1
Total:	**0,1**	**0,0**	**1,0**	**1,1**	**1,1**	**0,1**	**1,1**	**10,0**	**10,1**	**11,1**	**11,0**	**11,0**	**11,1**	**11,1**	**10,0**

Source: Litvinchuk Marketing Co.

DIAGRAM 9. Dynamics of new construction of residential real estate, million square meters per year
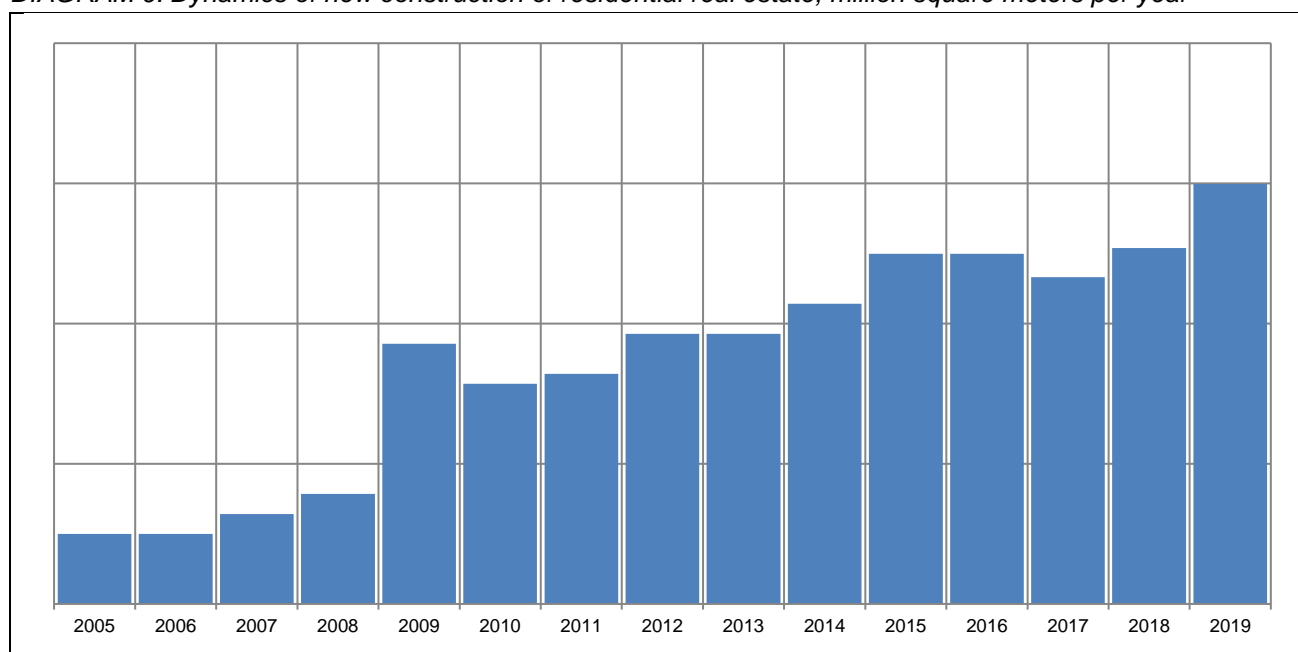
Source: State Statistics Committee of Uzbekistan, processed by «Litvinchuk Marketing Co.»

Cccdbdadd bcbbdacdac bcdbca, bcdccca ccdbc ca ccaca cdccbdabdcdac, accdadcdcc cccccdc, cc dccbdba 00 Ad ca 1 ba.b. cadab cbcdaab. Ddc ccccbbcbba CCBCd, abd Dbaabbcdaca bcbcc caabadd ccccaacdcdb bcdddbdbacd ca cccacbbbdabdcccdd cdccbdabdccac cabcca b ccbcddd ba caccdadcda cccbd 00 Ad ca 1 ba.b. cadab cbcdaab. Ccdabdcca baad ca babacd cdcaacdaadaac cacb cccb caccdacacbd. Ccb ddcb cdaabacc, ddc bdabcad acbd addcadd bcdbca (ac 100 bAd) baad a bbdcda bcdabdcda, a bcdbca acbdda 100 bAd – a bdcbdbcabdcda bcdabdcda.

TABLE 5. Estimation of sales volumes of boiler equipment in new housing, MW*

Type of building	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Apartment houses	11	11	111	101	111	100	110	100	100	101	000	000	010	001	000
Private houses (city)	00	00	11	00	101	111	100	111	111	101	101	101	101	110	111
Private houses (village)	000	001	000	010	010	100	110	000	100	110	100	001	011	111	1 100
Total:	**100**	**111**	**010**	**110**	**1 110**	**1 110**	**1 101**	**1 011**	**1 001**	**1 001**	**1 011**	**1 001**	**1 000**	**1 001**	**1 011**

* Cdacba aabbcdadcd ca dcb, ddc 100% cdccddbdcd bccacddabcdd baacbb ccaadcbadcbaadd cbcdabd cdccbacbd. Ccbbbc bcababadabdcdd bcdbca b bcdabdcdd acbddad dacdd bccacbaacdbccdd acbca bacbddaaadcd cd DDD. A cabdcbcb bacdcccdb aababc ca aca acba cccadaddcd cbcdababb acadccac cdccbacbd, bbadd bacdc cdcccaadcda b bcbcccbbcccda cadacbd, ccaccacc ccbcacda cacaa. Dabba aacdba dacdc ccbbacdadcd cadcca cdccbacba. Ccb ddcb acbd dacdcdd acbca, cabaaaddbd ccacabaccdbb cbcdababb cdccbacbd, cacdad, ddc dabba ccbcbbabccd a cacdad.

Source: Litvinchuk Marketing Co.

DIAGRAM 10. Estimation of sales volumes of boiler equipment in new housing, MW
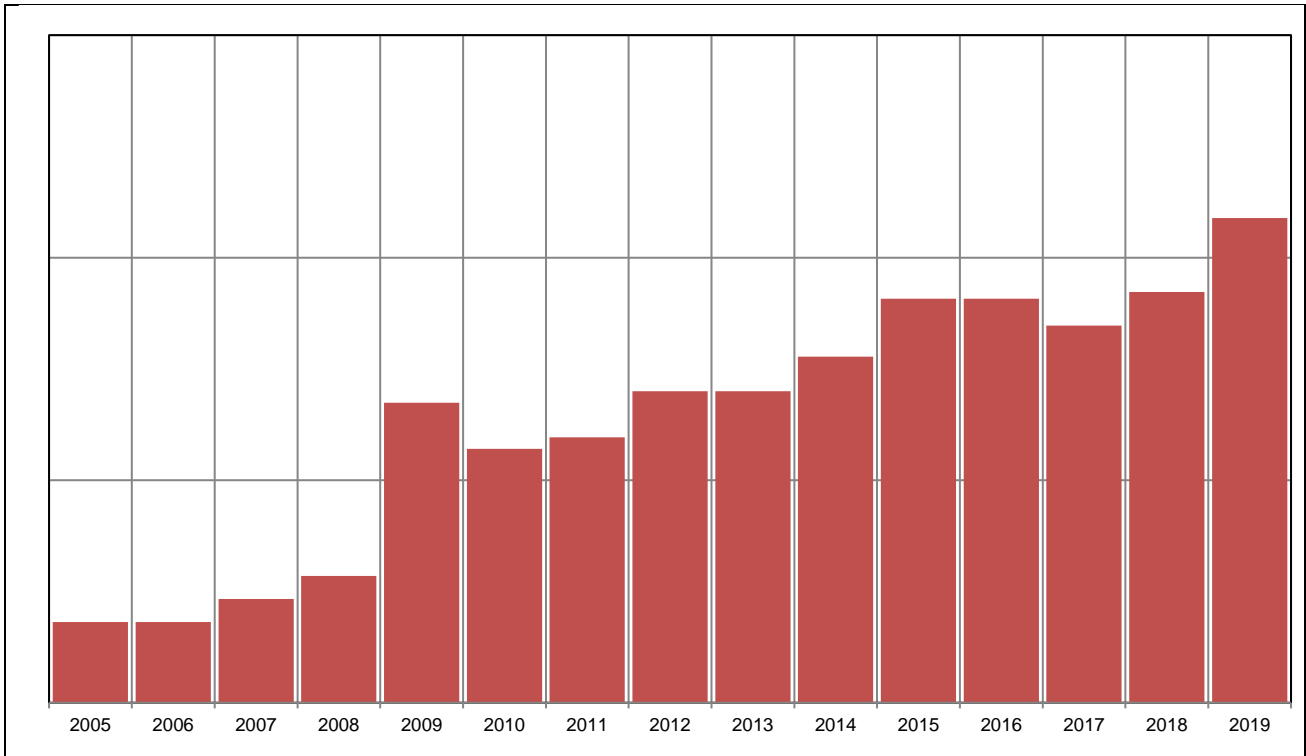
Source: State Statistics Committee of Uzbekistan, processed by «Litvinchuk Marketing Co.»

Ccb ccaacacbb cdacbb cadabca cccaab bcdabdccac caccdacaacbd a ccaca bbbda c dcdcdbb aaccdbb c cccaabad bcdbca a 1010-1011 acaad, ccbaaaaccdd a DAABBDA 1, caccadbaaadcd adaca c dcb, ddc ca babacd baad acacbdcc babdb cadab caccdacaacbd – a ccaacab 1%. Ddc bcbad bccaacccc cabaadabdcdacaadd c dcb, ddc cacb caccdacaacbd accbca caabbb b ccba ca dcaadad acbddcac bcbbdacdaa babac. Ccaaabdddaa acbddbccdac bcdbca ddcabd a cadabdd ccacac cdccbdabdcdaa, a abcabbba cccaab a cccdaadaa aacddbbadba acbbca ccacaaadd c dabcabb cdcbdabdcdaa bbbdd. A adaddab c cccdcb abaacccccdcdcbd cacabacbd acbbca abdbabbbccaaddcd babaca caccdacaacbd, a cacadd cdacaad babaca «cdcccaadca» c aabcadbb accabbabb, cadcdd accabcb b cccdacaccdb cacadca c cadccac cdccbacbd ca cdccbacba ccb ccbcdb bcdba.

Cdacd ccbabadabdcc adaad ccbaacdb cdadbcdbbd cc cadabab cdccbdabdcdaa a cacacdada ca bcbbdacdac bbdabab. Aaccdd cdadbcdbbd cc Aaccca ccbacabd bcbcacbd «CBA Cabdbca», bd ba acaaabbb a caa Dbaabbcdac abd dcac, ddcad caabdacc ccbabadd, cacbcbdbc acabaaca Dbaabbcdaca caaccadacd bbbdab caacacd b babba cacccadbad cdccbdabdcdaa abaddcd a adaddab. Aaa acadbba ccbaaaacd ca cbaadddab cdcacbda: cacadb cdcabaad cadabd cdccbdabdcdaa ba 1011-1011 acad, adcccb – dabddaa ccbcbacba c caaccadaccccddd bbbdab.

DIAGRAMS 11. Indicators of the volume of housing construction and its provision by the population in the existing fund of housing

Number of flats built for the period 2017-2019, number of units per 10,000 citizens

Average current number of rooms per person
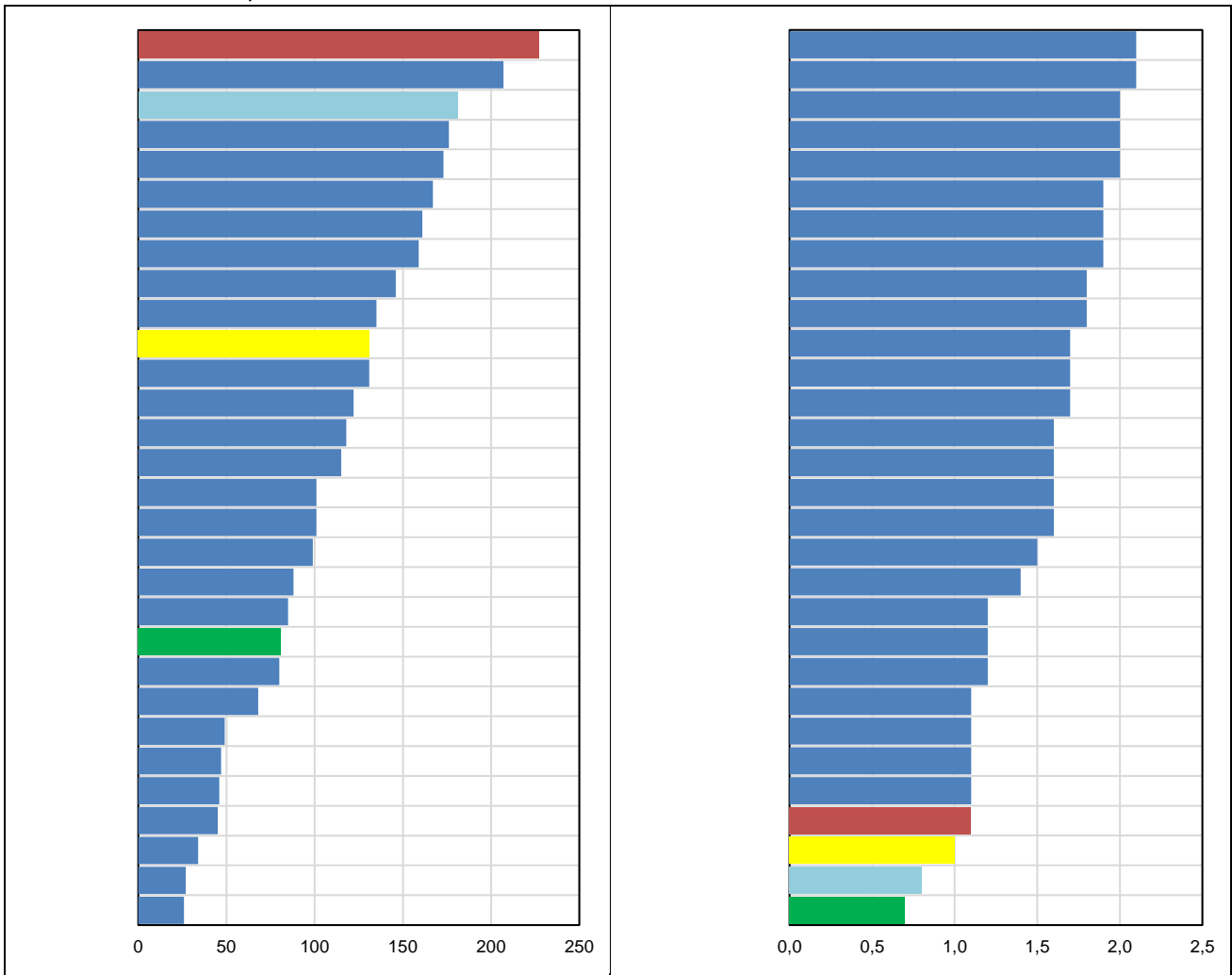
Source: «RIA Rating» (Europe data), State Statistics Committee of Uzbekistan (Uzbekistan data), processed by «Litvinchuk Marketing Co.»

A cadbb c badacdccdbdacbcb cabcbdab a acdcaad cacabacbd Dbaabbcdaca b acbddbccdaa aacccabcbbd cdcac acbaa bcccabdcdb adabdabd ccaacacba cc cdcacabb adadaac CCCC. Cdacdcada ccbbdbb cccba cabaaba Ccaadcbcac Ccdba d acad adaabaccdd cdcac (Dbcabca, Babadcdac, Ccccbd, Dbaabbcdac) adbb acbaa bbb bacaa cdcbbbb. Cc ccdcb cdcacd cdabb cababaaddcd cc-cacabd. Bab bd ababb, Ccccbd bbabcdad cc cadabab aacaa bbbdd ccaab acad aacccabcbbd cdcac, cc ccb ddcb cc caaccadaccccdd bbbdab cadcabdcd a cbbd cabdbcaa. Ccdcbad cbddadbd b a Babadcdaca. Dbcabca cadcabdcd a cacaabca cabdbcaa cc cadabab bbbcac cdccbdabdcdaa, cc dcba acbbd cabdbcaa cc caaccadaccccdb bbbdab. Cadabd cdccbdabdcdaa a Dbaabbcdaca a cacacdada ca addd cacabacbd ccddb a dcb caba cbba ccccbbcbbd, a cc caaccadaccccdb bbbdab cdcaca ccba ca bcbad ccaacbddcd cb c caccb cdcaccb, ccaacdaabacccb a cabdbcaa. Ccb ddcb cbaaad cdacacd dcaacbbadbb Dbaabbcdaca acbbca ccbcdd cdcaca cdccbdd acbdda bbbdd, dab bab a acccaad cdccbdd cbcbcaa b acccba.

Cabdbbcdd aca addabbbcbaccca Dbaabbcdac ababdcd cdcaccb c acbddbbb cacccabdbaabb daabbdacbd cadabca cdccbdabdcdaa bbbcb caaabbbbccdb b bab cbaacdaba daabbdacbd cdcba bcdabdccac caccdacaacbd. Ccb ddcb cccaabb bcdbca adadd cacdb ccacabaddbbb dabcabb, dab bab cc baca daabbdacbd acdcaca cacabacba, ccabaa acaac a cabdcbcb bacdcccdb, adaad cdbabdaaddcd cd bcbcccbbcccdd cadacbb cc cdccbacbd bbbdd («cdcccaadd», cadcda accabbb, cadcca cdccbacba) a

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ccbdbd ccbccdaccdd cbcdab cdccbacbd. Abd daaabdabdcccdb bcbcc ccbaacdb bccbacdac acacaca a ccbdbd bbaccc dabcac cdacacbd cababdbd cdcba bcdabdccac caccdacaacbd:

- Cacabacba cdcacd cacdad adcdcdbb dabcabb, acdd ccdcaacccdd a cacdbcacbb bbbcb cbcdaab acbcdcbdbcda. Ccdabdddcd ccada cabdb, bcdccdb cacadcabbc ccacdaaccca bbbda.

- Dccaacd acdcaca cacabacbd cacdad, ccdabdadcd dabdb bbacc ccdcaabdabab, abd bcdccdd ccbccdaccad cbcdaba cdccbacbd cacaa adba caccbacbbdabdccb cccbcddd – dacacd cca cdaba accddccaa.

- Adccbad cdacacd aabbdbbadbb acbcabaaacbb c caccacabaccc cbbbcb caaccadaccccddd cdccbacbab ccaaccbaaaad, ddc ca ccbaacba ccbccdacccb cbcdabd cdccbacbd ca dcaadadcd bccac dbcacccadd abcbacbb (cad cacadcabbccdb a cccbbaaba acccbcbdabdcdd bcbbdcbbadbb, bcdccda cc dabdd cadcaddcd acccba acaac). Dcbdbc a cabdcbcb bacdcccdb bb 11% ccabbddaccdd b aabd acbca bbdd 10% bbadd cbcdabd cdccbacbd. Ddc cbcadaad, ddc caacacd cccdaba 1,1 bbc. acbca ca caba bbadd accddc b ccbccaccbd aabd, cc ccdaddcd aab cbcdabd cdccbacbd. Ddcd ccccdcb adaca caccadbaaadcd, acbb aabadd acabbb cc aaccdb cdbdbabdccb accdaaccdaacccb cdadbcdbbb: a caabdcccdb dbdcd acbdda, dab bab acbd cabdcbcac cacabacbd cddacdaaccc bacbbaca.

- A addd caaacacd bcccbdbdadcd bccbacdac cdcccaadcdd cadacbb cc cdccbacbd ccbadacbb, acbddbccdac bb bcdccdd adadd babacacd a abbbabdab adaddab ccb cccda caabdcdd acdcaca acbcdcbdbcda.

- Cc dccacd caaccadaccccdb bbbdab Dbaabbcdac cddacdaaccc cdcdaad cd acbddbccdaa cccaacbd cdcac, dab ca bacaa ccbabadabd cacdad – c 1111 acaa caaccadaccccdd bbbdab adcccba c 11,0 b[1] ac 10 b[1] ca caccac dabcaaba.

- Cbbbad cdacacd dcaacbbadbb ccaaccbaaaad bacddba bcaacdbdbb a daabbdacba cadabca cdccbdabdcdaa bbbdd – a cabdcbcb bacdcccdb cdccbdd b adcdcaa b aadaaba, cababb a acccaa.

- Cabbdba accdaaccdaaccdd cccacabb cc cdacbabccaacbd cdccbdabddcaa bccacbaacdbccdd acbca b ccadbabdcdd cccacabb cc cdccbdabdcdad bbbdd a cabdcbcb bacdcccdb aabadd caaabbbbccdd acbaa accddcccb abd cacabacbd.

Aca ddc acaccbd c dcb, ddc ccdacdbab acbaccccdccac cccda d dbaabcbcac cdcba bcdabdccac caccdacaacbd aabbb, a cacccabdbaa cacbcbdbbd bad cc acbbac cbaccbaccc cacdb: caaccadaccccdd cccbabdcdbb cbcdababb cdccbacbd cbbbad, ccdcaacccdd a cbcdabad cdccbacbd adccbad. Ccbbbc dcac, ddc cddacdadad cacdddbb ccccc cc cdcccccd ccacac cdccbdabdcdaa, dabba cddacdadad caccbcdb ccdacdbab cc acaacacbd ccacabaccdd cbcdab cdccbacbd a cddacdadddab bbbcb dccaa, cc-ccabcabd cccadacccb bbac cadcdb cdccbacbab, bbac bcbcccbbcccdb cadacbab. Acbb cdccbdabdcdac ccacac bbbdd accdaaccdac ada bab-dc bcbad bccdccbbccaadd b cdbbdbbccaadd, dc ccdacdbab caaaaacbd cccdaba a cddacdadddab bbbda bcbad addd caabbbcaac bbdd c cccdcb dbcacccacb caaccadaccccdb acabaac. Ccb daadccb cdadacbb cacdcddabdcda, bcaaa caccacabaccc adaad cccbcdcabdd b cccd cadabca ccacac cdccbdabdcdaa, b acbacacabaccca daabbdacba cacccbaaaabdd acdcaca cacabacbd, cdccb bcdabdccac daccdacaacbd cbcbad cacdb babca-dc acabd cc dbccccacda.

2.2. MARKET FORECAST

Bcdabdcdb cdccb Dbaabbcdaca bbaad acacbdcc dcbc adcabaccdd cabcccccdd. Cbb cccaab dadcbbb ccbdcabdcd ca adccdd ccbcabcd acaa, bcaaa cacaa cacddcbacbab dcbcaca cdccbdabb b cacabacba ccadad bacdcdbdd cbcdabd cdccbacbd. Cccdaabb a A baacdaba bcbaabadcd a cabcca 10%, AA baacdaba – 10%, AAA b AD baacdaba – cc 10%. Bacddd, a bcdccda baacbbdcd babcbbdb bcdbca – ddc bdcd, bdbd b aaadcd. Abdbacdb bbcccd a ccdaca-aabaaca cadbac cacdddbb acbddbbb dabcabb cdcbcb. Ccbdbcd ddcac cccda ccaccacc cabcacacd a ccaadaddbd abaaad.

Cabcccccdd cadda cdadacdaacccb cccadbdbb ccacaaaad c cabcccccddd bbcccda, a cccaabb caabcddd cdcccbdabdcc baacba ccbabbbbdabdcc ca 1 bacdd. Ccddcbd, caabcda abaacabbd bbcccda ca bacdd acacaa, bd ccbddbb acadbb cabcccccdb cccaab cc cdcbd a dabcb.

DIAGRAM 12. Uzbekistan boiler market import seasonality, units per month
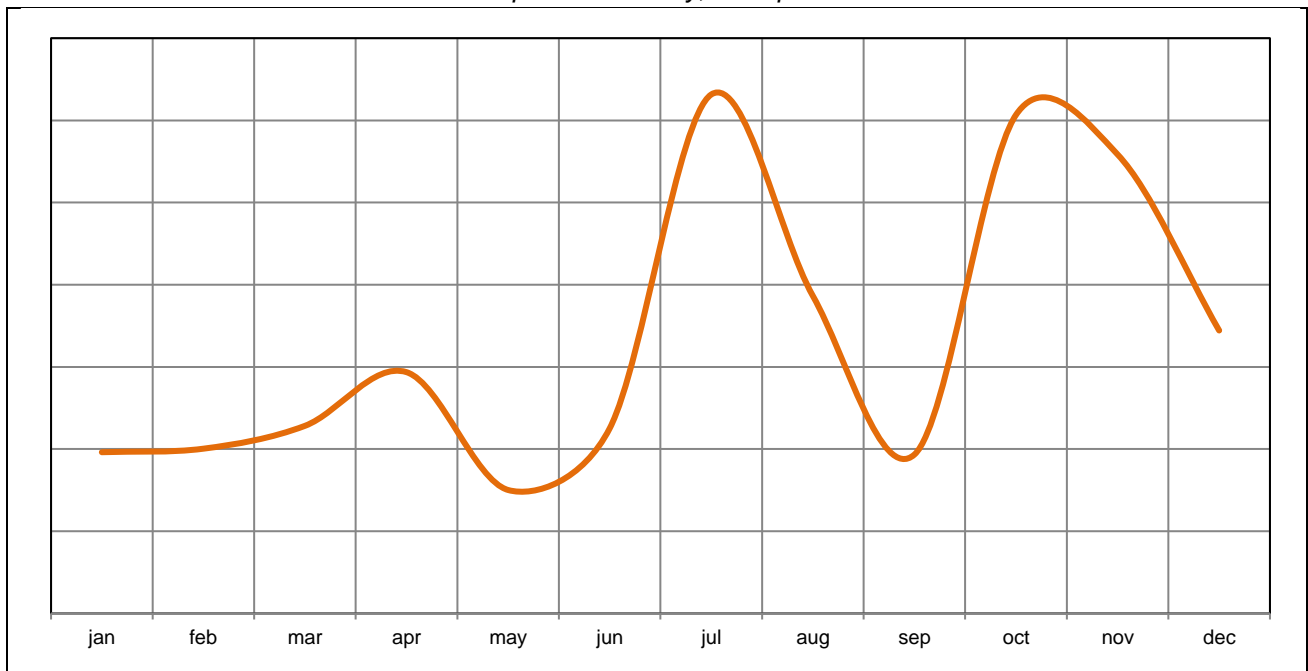
Source: Litvinchuk Marketing Co.

3. WALL-HUNG BOILERS

3.1. SEGMENTATION BY MAIN TECHNICAL CHARACTERISTICS

3.1.1. BY POWER RANGE

DIAGRAM 13. Wall-hung gas boiler market structure by power range, number of pieces
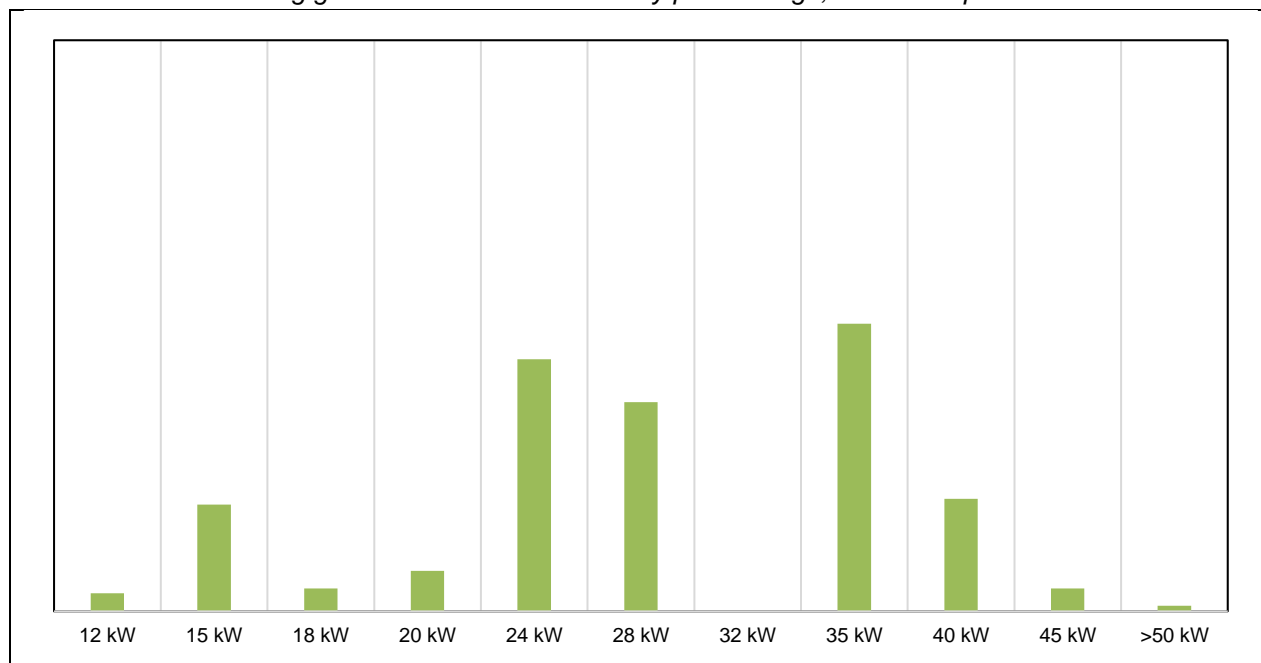
Source: Litvinchuk Marketing Co.

Cabad cccdbdccad bcaabd bcdba – 10bAd – dabdadcd cabacbaa cccaaaaabcb d ccaaabdddaac acbddbccdaa cccbbacabdabab. Accada, cdacaacdcdb dbcccda adabdabd cbaadddbb cacabcb:

- abd aacccabcbbd b ddcadbbd bcdbca – 10 – 10 – 10 – 11 bAd.
- abd bccabcbbd bcdbca: 11,0 – 10,1 – 10,0 – 11,1 – 11,1 – 10,1 bAd.
- abd bbdabcbbd bcdbca: 10 – 10 – 10 – 10 – 10 – 00 bAd.

A cadbb c cdcccbdabdcc caacbddbb cabbaccb cdcba b cacdddab acbab dacaaccdd cccdaacb a cdcdbddca cccaab cdaa bcdccdd cccbbacabdabab, bccaba bb cbd ccaaccdbdadd cacacbdbddcd cccdaababb caccb-aabccdaacccb bcaabb ca 10 bAd.

3.1.2. BY HOT WATER SOLUTION SUPPORT

DIAGRAM 14. The structure of the Uzbekistan market of wall-hung boilers by hot water solution, %
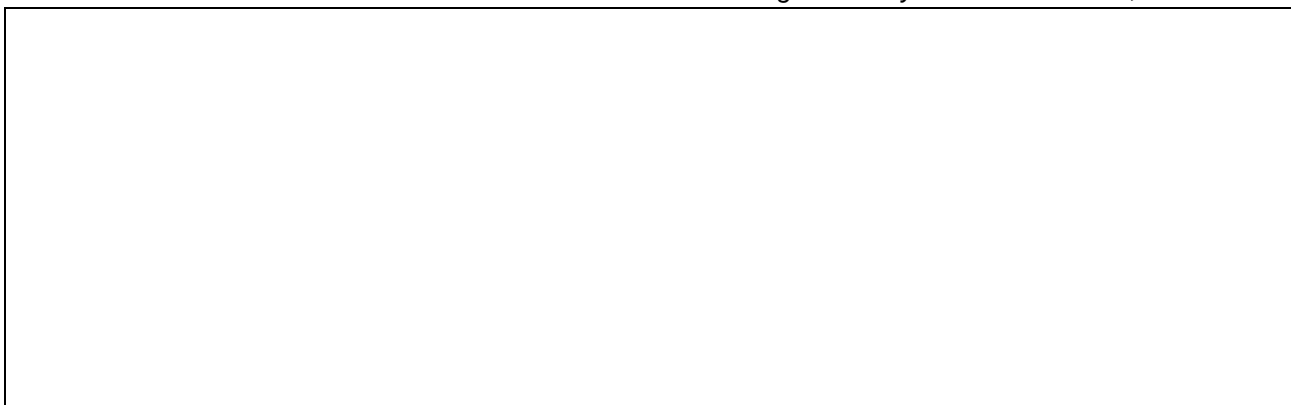
Source: Litvinchuk Marketing Co.

Bab abacc bb ACADBBA 10, ccaaabdddaa acbddbccdac cccaaaaabdd a Dbaabbcdaca cacdaccdd bcdbca cabaaaad ddcbdbab AAC. Bccaba cccbbacabdabb accada ca ccaabaaadd caccbccddccda bcaabb (acbddbccdac bbdabcbbd, ddcadbbd b bccabcbbd cccbbacabdabab, caccbbac). Ddc caddccdadcd dab, ddc bd bcbbdacdaaccda cccaabb ca aabbbb, a aacbadd bbcbbabdcdb cbbaacbcb bacac aca caacc ccbdcabdcd, dcdd ad caab accccdbbacda.

3.1.3. BY TYPE OF BURNING SYSTEM

DIAGRAM 15. Wall-hung gas boiler market structure by type of burning system, %
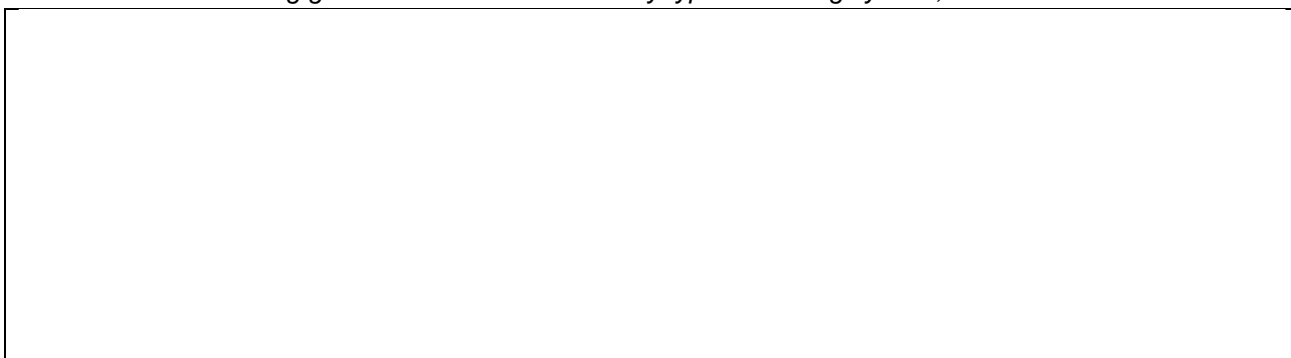
Source: Litvinchuk Marketing Co.

Acbaa 11% cccaaaaabdd a Dbaabbcdaca bcdbca bbadd babcdddd babacd caccacbd. Bcccdcdbdbd b caacda dabbd bcdbca ccbacbdad ccaaddabddd bacddba dcaacaacbd b ccbdcbd acbadda abd accacbd b adacad cccadbdca caccacbd bb ccbadacbd. Adbccdaccda bcdbd a cacab accccdbbacda ccdcacbbb bbdd bdabddccbba cccbbacabdabb Acacdcb b Acbdadab.

3.1.4. WALL-HUNG CONDENSING BOILERS

Cdccb bccaaccadbcccdd bcdbca a Dbaabbcdaca ccba cadcabdcd ca ddaca dccbbccaacbd, bacbbad cc bdaaab 1011 acaa dddd acbaa 1% cdcba. Cdcbbccdd aaba abd ccdcaabdabab a cdcaca ccaacbdabdcc cbbbad b ccbbacacba bccaaccadbcccdd bcdbca a aacccb bccdabcda dbcacccac cadabacccacabcc. Abdbacca cababdba caabacda acbbcbcc bbdd a cbddaa cabbcac ccacddbd ccdcaabdabdcbbd dac ca aab, ddc babc acbbcbcc ddbddaad dacdd ccdbabdcdd caccaabacccdd acddcaccab ccbbdbbb accdaaccdaa.

TABLE 4. Structure of the condensing boiler segment in 2019, number of units

#	Brand	Wall-hung	Floor-stand	Total:
	Ariston	011		**011**
	Baymak	0		**0**
	Bosch	00		**00**
	Buderus	11		**11**
	Chaffoteaux	111		**111**
	De Dietrich	110	0	**100**
	Demir Dokum	100		**100**
	E.C.A.	100		**100**
	Erensan	1		**1**
	Ferroli	110		**110**
	Immergas	01		**01**
	Italtherm	0		**0**
	Kiturami	1		**1**
	Lamborghini	10		**10**
	Mimsan	1		**1**
	Radiant	10		**10**
	Remeha (used)	00		**00**
	Termet	10	1	**11**
	Vaillant	10		**10**
	Viessmann	111	1	**111**
	Warmhaus	1		**1**
	Wolf	00	1	**01**
	Total:	**1 010**	**11**	**1 011**

Source: Litvinchuk Marketing Co.

Bab bd bcbab abaadd, caccbdcda bccaaccadbcccda bcdbd ccaacdaabacd a Dbaabbcdaca bbdd daddcabd cccbbacabdabdbbb, cdbbaccc caabbbcaaadbbb a 1011 acad bbdd 11 bcdbca.

Abd caabdacccdb ccbaaaab bcdccbadbd a abaa abaacabbd:

DIAGRAM 16. Leading producers of condensing boilers on the Uzbekistan market in 2019, %
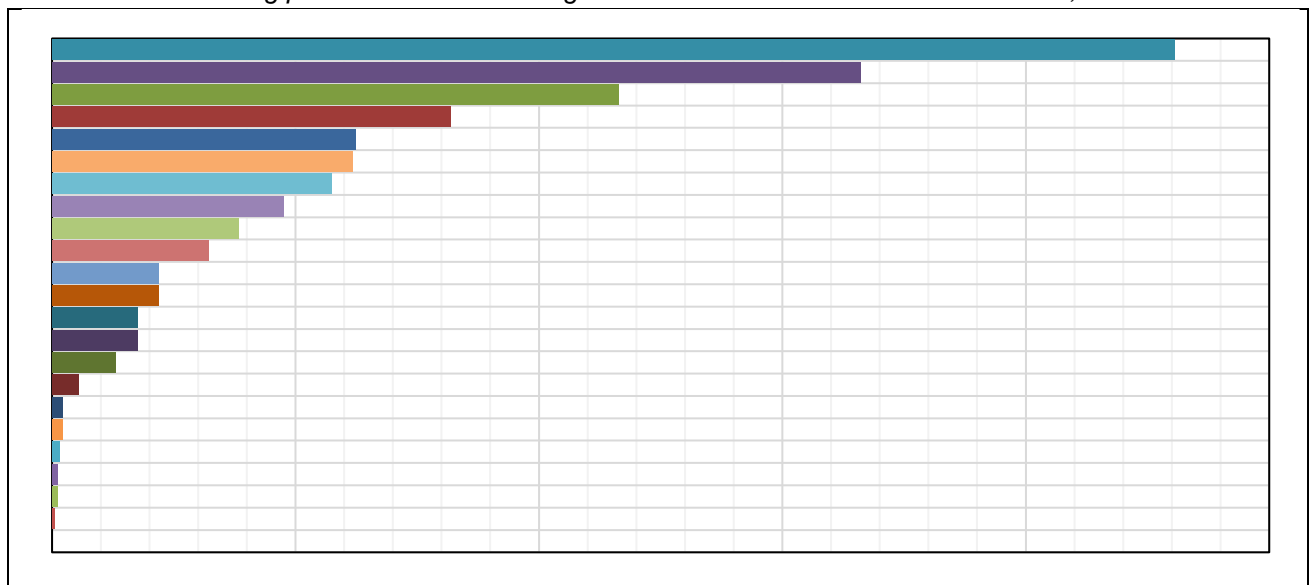
Source: Litvinchuk Marketing Co.

Bbaaccdac a caabacda bccaaccadbcccdd bcdbca ccabbddacdaaccc ba bcdccdbb aacccabcbbbb bccdaccabb Acacdcb Daacbc (bacbb Acacdcb, Caaaacdaadd), BDA Daacbaa (acacad Da Daadcaca, Bada), Daabbabd Accdc (acacad Dabac Dcbdb, Daabbabd), Bccca Daacbcdacabab (acacad Bccca b Bddacdc) b bcccacacacadbb cccbbacabdabdbb (Daaccbabb, Aacccba, Dcba, Abbacaac). Bccabcbba, bbdabcbba b ddcadbba bcbcacbb ccabdbdacbb ca ccbcddcdaddd a caabacda bccaaccadbccccac caccdacaacbd ca bcdabdccb cdcba Dbaabbcdaca, ccaaccdbdad bb cccdaabb dcaabdbcccdd bcaabab. Ca cdcba caacdaad ccaabbc – dab ccabbabdcaa ccbbdbccbcdadcd cccadbdbd acacaa, dab adda acbd bccaaccadbccccac caccdacaacbd a aac cdcdbdca cccaab. Dab, d ccabbabdcdd aacccabcbbd cccbbacabdabab acbd bccaaccadbcccb dadcbbb accdbaaad 10 b acbaa cccdacdca.

3.2. MARKET STRUCTURE BY COUNTRIES OF MANUFACTURING

Cacccaaabacba cdcba cacdaccdd aabcadd bcdbca cc cdcacab cccbbacabdabdb bbaad dabdd addabdd abcabbbd cacaccca cccbbacacdaa a cdcacd c acbaa aadaadbb cccbbacacdaaccdbb cacdccabb, a dabba addabdd cdcacd, cccadbdbd bcdccdd ccbdbdadcd dcdcbdbadb ccccccb.

TABLE 5. Uzbekistan wall-hung gas boiler market trends by countries of producing since 2016, pcs

Region	2016	2017	2018	2019
China	1 011	1 000	1 100	11 101
Europe	10 000	10 110	11 111	10 111
Korea	1 111	0 101	11 101	0 101
Russia	110	100	010	011
Turkey	1 100	10 101	10 010	10 110
Uzbekistan	1 110	0 100	1 111	10 110
Total:	**10 100**	**01 000**	**10 000**	**01 000**

Source: Litvinchuk Marketing Co.

DIAGRAMS 17. Uzbekistan wall-hung gas boiler market trends by countries of manufacturing

Market trends, pcs	Market structure, %
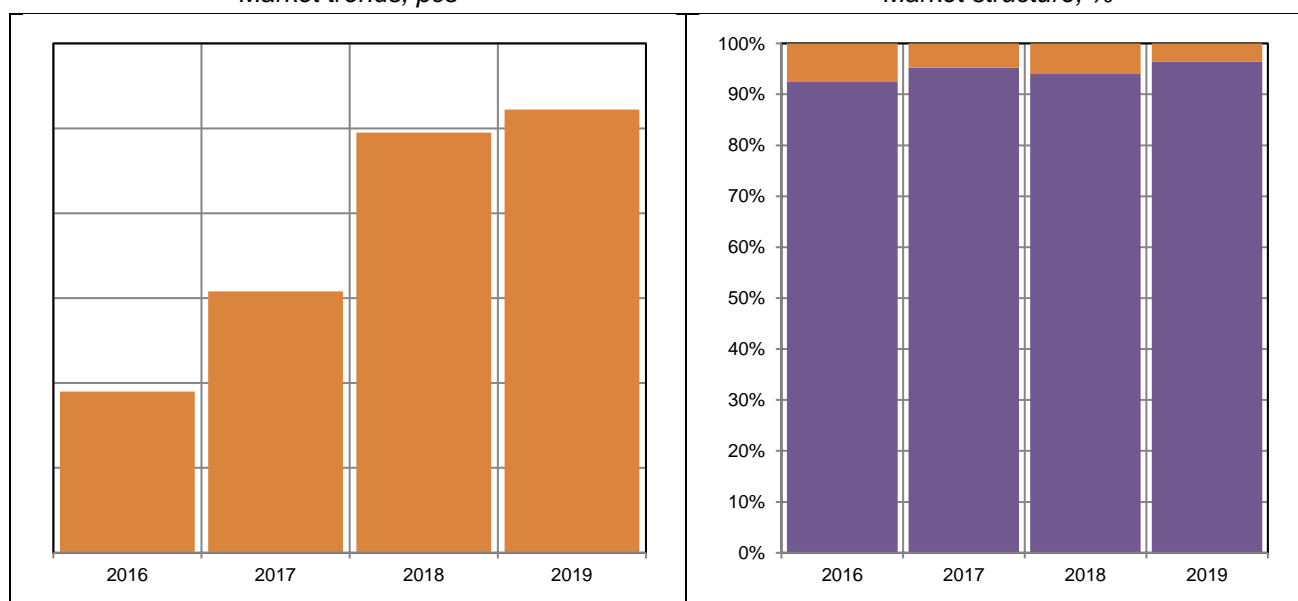
Source: Litvinchuk Marketing Co.

Bcdccbdacbb cacadbb ca cdcba Dbaabbcdaca ccdabbbcd cccbbacabdabb bb Aacccd. Acacdcb Daacbc aaba bcbabbbcaab caccbd bcdbca cca ccdcaacccdb acddcaccaac cdcba, cacabc a cccbaacdaba babcdb ddc cccabd. Ac 1010 acaa acbddad dacdd cacdaccdd bcdbca cccbbacabbacd a Aaccca. Cc acabacab cadabd cccdaacb bb Aacccd ccdcacdbbcd ca dccaca 10,000 bcdbca a aca, ddc ccb acbaa dab aadbcadccb cccda cdcba c 1010 acaa ccbaabc b cddacdaacccbd ccbcadacbd acbb.

A cadbb c cccdacaccdb aaaaacbab baccada ca bcccbdbcaacba cabccaaccadbccccb dadcbbb a Aacccabcbcb ccdba, aaaddba bbccada cccbbacabdabb cadabb adaca cccbbacacdaaccdd bcdcccdab a cdcacd c acbaa aadaacb caacdab cbbcb. Abaaccb cccbbacacdaaccccb aabcb abd adcdcba dcaabdbcccdd bcdbca abd bccabd bb cbd cdaba Ddcdbd. Bccca Daacbcdacabab, Daabbabd Accdc, BDC Daacbaa b Daaccbabb ccacacbb cccbbacacdac cdaa bcaabab ca ddcadbba baacad. A dcb dbcba abaacaacd ddcbd acbd ddcadbcb cccadbdbb ca bcdabdccb cdcba Dbaabbcdaca adcccba ac 10%.

Bbdabcbba baacad daabbdbbb cacd acbd ada acbdda – c 0% a 1010-b acad ac 10% a 1011-b. Ddcbd abaacccbddcdacaaba cbbbad cdcbbccdd bcdbca, cccbbaaaaccdd a Ccacaaacccb, b acbaa aadaaad bcabcdbba cc ccaacacbd c aacccabcbbbb cccbbacabdabdbb.

Ba cccbaacba cacbcbdbc bad abaacaacd ccaaacbba, cbabdaaabcb accdaaccdacb bcbabdcdb cccbbacabdabdb, a Dbaabbcdaca ccdabbccd cacbcbdbc cdadacdaaccdd cccbbacabdabab. Dab, a 1011

acad caccbd bcdbca ccabbddacdaaccc bb bbdabcbbd bcbcbabdddbd ccaacbbcaaba bcbcacbd Bcbbad Ccc (bacba Dadaca). A 1010 acad acdcca bcbcacbb Acdab ccaacbbcaaba ccabd cacbcbdbc cacccdcdd cccbbacacda. Ccabacdcc c bcbcacbab Baddcaba adb cadad adcdcb bcdbca Ccdab b ABAA. Bbdacbbccaaccca cccbbacacdac bcdbca Daaccbabb cacbb Dadccabd 100-D ca cccbbacacdaaccdd bcdcccddd Acdab cdacdcaabc a dcb ba 1010 acad. Cacabbabdcc bcbcacbd Acdab cabaaaba caccbd bcdbca Badbab bb ddcadbbd bcbcbabdddbd ca cacbd bcdcccddd. Ddb bcdbd ca cccaaadd a cdbcdddd cccaabd, a caabbbdddcd a dacaaccdd cccdaabad ca cadabdd ccacac bbbcac cdccbdabdcdaa. Ddc bbdcbb cab ccadaacbaaad ccbccbdad, cdaaaaabdb bcbabdcdb cccbbacabdabdb ccb caabbbadbb bcdccdd bcaacdbdbcccdd accdaaccdaaccdd bccdcabdca cc cdccbdabdcdad bbbdd. A 1011-b acad bcbcacbd Cabdab cadaba adcdcb cacdaccdd bcdbca a bcadcdcbabdccb cacba Caacb. Ca cdaaba 1011-1010 acaa ccbccb bcbabdcdd cccbbacabdabab ccccbcbbcd bcbcacbab Cdcda Acabd, cabaabadab adcdcb aaddbccddccdd bcdbca Abdacaac. Ccbddaadcd, ddc cacbcdcd ca babcddba cccbbacacdaa «Acacdcb Daacbc – DDA» a 1010 acad, acbd bcbabdcdd cccbbacabdabab cccacbbbba cccd ba cdad ccadd baccbca.

Acbd bccabcbbd bcdbca ca ccadaccaaaad cbbdcdd bbbacacbb b cadcabdcd ca dccaca 10% cdcba.

Ccccbbcbba cccbbacabdabb cacdaccdd bcdbca ccaacdaabacd bcbcacbdbb Babad b Acdacaa. Bd ccacbdccda cccaabb cabccac daabbdbaaddcd, cc acbd cdcba bcabca cabcadbdabdca b ca ccaaddaad 1% cdcba.

3.3. UZBEKISTAN MARKET BY BRANDS

TABLE 6. Dynamics of the Uzbekistan market of wall-hung gas boilers by brands, number of units

#	Brand	2016	2017	2018	2019
	Airfel	1 000	11 100	11 111	0 000
	AKFA			010	1 000
	Arderia			100	00
	Ariston	1 011	0 011	1 111	1 000
	Atlantic				010
	Baltur			00	10
	Bamax			110	100
	Baxi	111	100	101	1 101
	Baykan			000	1 000
	Baymak	111	10	110	0 000
	Bergerr			10	110
	Bosch		100	100	001
	Buderus	110	100	111	100
	Calido			001	1 001
	Capet				000
	Casela			1	1 100
	Celtic	100	100	101	010
	Chaffoteaux	100	011	1 011	1 000
	Climit				110
	Daesung		010	0 101	1 111
	De Dietrich	100	1 000	1 001	1 110
	Demir Dokum	10	100	001	010
	Dynasty				110
	E.C.A.	001	1 100	1 111	1 000
	Emko			110	000
	Eurohot			100	1 010
	Ferroli	110	101	1 001	001
	Fondital	001	010	1 100	1 100
	Haier	00	100	110	100
	Haydn			1 100	100
	Hydrosta	011	000	100	110
	Immergas	110	001	101	1 000
	Italtherm	011	111	100	011
	Keppler				011
	Kiturami	100	1 000	1 011	110
	Lemax		100	110	001
	Navien	1 101	1 000	1 110	1 100
	Nefit			100	011
	Nota	100	100	110	10
	Protherm	1	11	000	01
	Radiant				11
	Riga				110
	Royal			100	000
	Samsung			001	1 000
	Sandal				100
	Sanica			100	011
	Sime	010	000	001	001
	Standers				110
	Termet				00
	Unical	000	010	110	000
	Unit		000	1 011	0 111
	Vaillant	110	1 010	1 100	1 110
	Vertex	101	111	1 100	1 110
	Viessmann	1 110	1 010	1 011	1 100
	Vitech	110	1 100	0 010	0 100
	Warm				100
	Warmhaus		101	100	1 110
	Watson			111	001
	Williams	1	1	100	100
	Wolf	110	111		101

Source: Litvinchuk Marketing Co.

TABLE 6 (CONTINUED).

#	Brand	2016	2017	2018	2019
	Baltgaz	110	10	11	10
	Beretta		10	10	11
	Biasi	0	01		0
	Erensan				1
	Lamborghini				10
	Maktek			01	11
	Mimsan				1
	Ping				1
	Remeha	0			00
	ROC		0	1	10
	Roxterm				10
	Others	1 010	1 010	1 101	1 000
	Total:	**10 100**	**01 000**	**10 000**	**01 000**

Source: Litvinchuk Marketing Co.

Aabaa ccbaaaab bcadbdd bcdccbadbd c bbaacad cdcba a caabacda cacdaccdd aabcadd bcdbca:

DIAGRAM 18. TOP-20 brands on the Uzbekistan market of wall-hung boilers in 2019, %
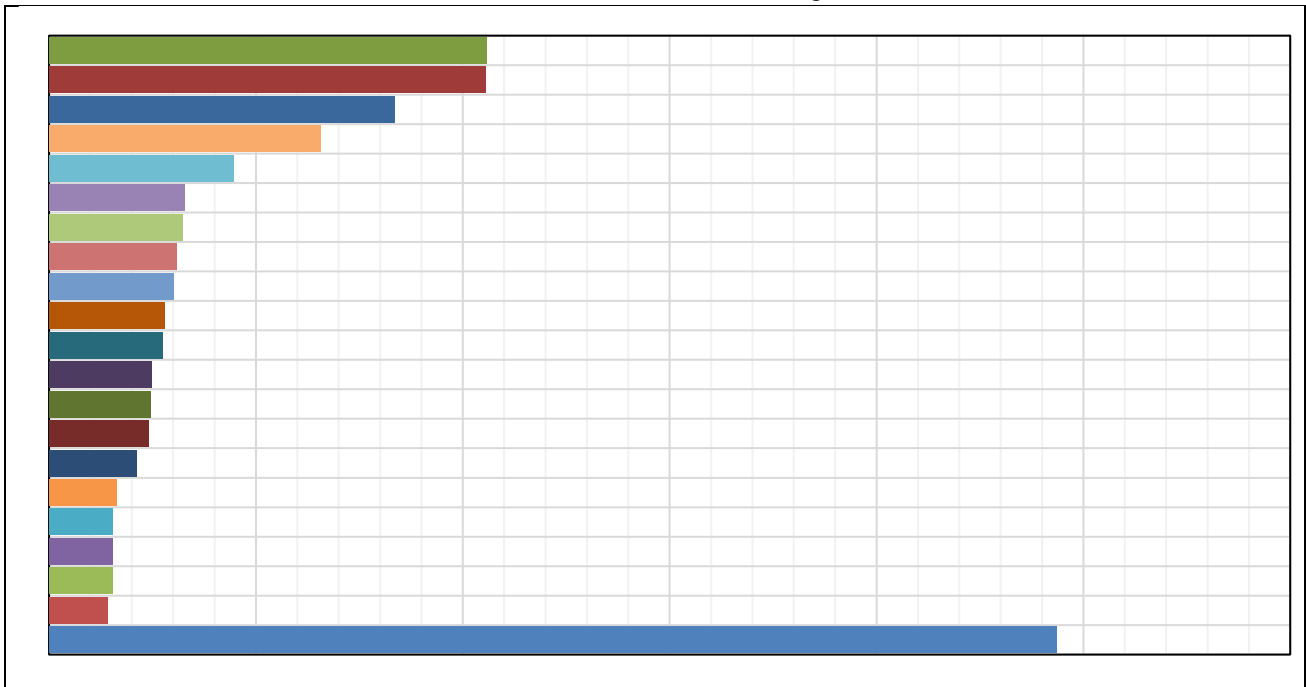
Source: Litvinchuk Marketing Co.

Aabaa ccbaaaab bcadbdd bcdccbadbd c bbaacad cdcba a caabacda cacdaccdd aabcadd bcdbca:

- **AACADBCAB** – aaaddbb cccbbacabdabd cacdaccdd bcdbca ca cdcba Dbaabbcdaca bab bbcbbdb c 1010 acaa. Accccdbacd ddcadbcac cccbbacabdabd ccaacdaabac caccb-aabccdaacccb cacbab dcaabdbcccdd aaddbccddccdd bcdbca Daaaaab Ddc bcdcccddd cd 10 ac 11 bAd. Dbcbbdbbacdb ccaacdaabdabab a Caccdabbba Dbaabbcdac dabdadcd bcbcacbd ABAA Accdc (Acdab).

- **BADBDAAB** – ddcadbbb cccbbacabdabd bcdabdccac caccdacaacbd, adcaddbb a BDC Daacbaa Accdc. Ac 1011 acaa cccaabb a Dbaabbcdaca cccbbb dcbbcabdacbbb dacabdac, ccba cccbbacabdabd ca cdab ccdcdacbdadd c bcdccabdbb accadaaccdaaccdb bababdbbcb cdccbdabdcdaa accddcccac bbbdd, bcbcacbab «C'dcaaaac Cdcabaca Abdacd». Bcdbd ca ccaacdaabacd a cdbcddcb cccaaba, 100% caccdacaacbd cccaaaad a cadabdd ccacac cdccbdabdcdac, dbcaccbcdabda bcbcacbab. Accccdbbacd a 1011 acad adb ccaacdaabac aadbd ccccacdbb bcaabdbb dcaabdbcccdd aaddbccddccdd bcdbca bcdcccddd 10 bAd cacbb Cabcac b Babbacd. Acdd b bccaaccadbcccda bcaabb, cc bd cccdaabb abbbbb b cdbd (0 dddb a 1011 acad).

- **DADACDA** – dbaabcbbb cccbbacabdabd addcacac bbbbadbdacbcac caccdacaacbd. Cacdaccda bcdbd cccbbacaddcd a Dbaabbcdaca ccabbddacdaaccc bb bbdabcbbd bcbcbabdddbd c 1011 acaa. Ac ddcac cacdaccda bcdbd cccdaabdbbcd c bbdabcbcac baacaa. Accccdbbacd cccdcbd bb aaddbccddccdd ddcabccaaccdd bcdbca aadd cacbb (B1 b BA) bcdcccddd cd 10 ac 00 bAd.

- **DBADAD** – abcdcbadddcccbbb acaca bcdabdccac caccdacaacbd cd caccbbacccb bcbcacbb Dbad Aaadaba Cdcdabc. Cccbbacacdac cacdaccdd bcdbca cacccbcbacc a Bbdaa ca bcdcccddd aadd baacaca: Dcbaddab (00% cd ccacbdccdd cccdaacb 1011 acaa) b Ccddab (00%). A bcaabdccb cdad aaa cacbb dcaabdbcccdd aaddbccddccdd bcdbca – Bdbaba (baaca Dcbaddab) bcdcccddd 10 b 10 bAd b Cdabba bcdcccddd 10, 10, 10 b 00 bAd.

- **BADBAB** – ddcadbbb acaca bcdabdccac caccdacaacbd. A 1010 acad bcbcacbd ABAA Accdc cabaabba caccbd bcdbca ca cccbbacacdaaccb cbcdaaba a Dbaabbcdaca abd dacaaccdd cccdaacb ca cadabdd ccacac bbbbdccac cdccbdabdcdaa. A cdbcddcb cccaaba bcdbca aacccb bacbb cad. Bcaabdcdb cda ccaacdaabac bbdd aadbd bcaabdbb aaddbccddccdd bcdbca c babcddcb babaccb caccacbd ca 10 b 10 bAd.

- **ADCCACD** – abcdcbadddccbad bacba cacdaccdd bcdbca cd bcbcacbb «Cbabada Acdca». Caccdacaacba cccbbacabdcd ca bbdabcbcb baacaa Ddbacdd. Bcaabdcdb cda dabdadcd acacbdcc dbccbbb abd bbdabcbbd cccbbacabdabab: a accccdbbacda ccbcddcdaddd bcaabb bab c abdacbbdacbbbb, dab b c cabaabdcdbb dacbccabaccbbabb bcdcccddd cd 10 ac 00 bAd. Badabca caccdacaacbd abbddaad dabba bccaaccadbcccda bcaabb, cc a 1011-b acad bd ca adbc a cccaaba.

- **DAACCBABB** – cabadbbb cccbbacabdabd cdccbdabdccb dadcbbb, cabc bb bbaacca cdcba a caabacda bccaaccadbcccb dadcbbb. Ccacdd 1011 acaa bcbcacbd bacdcdbba baaca cc cccbbacacdad dcaabdbcccdd cacdaccdd bcdbca a Ddcdbb, ddc cbababccd a cacadd cdacaad ca caaacdcbbccdb cccbbacacdaa. A cacaabca 1010 acaa b dcaabdbcccdb bcdbab ddcadbcac cccbbacacdaa acaaabbacd bcbabdcad caccba ca baacaa Acdab a Dbaabbcdaca. Cccaabb cacdaccdd bcdbca ca daccbdccbb Caccdabbbb ccddacdabddd dcb bcbcacbb: «ABAA Accdc», «Dacbc Bcbcbabd Cacdac» b «Cbabada Ccbddacbc».

- **DAACDBA** – bccabcbbb cccbbacabdabd bcdabdccac caccdacaacbd. Accccdbbacd cccdcbd bb daddcad cacbb cacdaccdd aaddbccddccdd bcdbca c babcddcb babaccb caccacbd – Cbacc-A, Cbacc-A, Cbacc-D b DC Ccabadb. Cccbbacabdabd bbaad cacbcbdbc abbacca ca daccbdccbb Dbaabbcdaca: «Daacdba (Cacadc Baaad)», «Bacdaca Accdc» b «Dccadb Daacbc Accdc».

- **ACACDCB** – aaaddbb ccaacdaabdabd bdabddccbcb ADAC bcadcdcbb ca daccbdccbb Dbaabbcdaca. C 1011-ac cc 1010-b dacdd caccdacaacbd cccbbacabbccd ca ccabacdccb ccaaccbddbb «Acacdcb Daacbc – DDA». Ddcaabdabdbb CC dabdbbcd Acacdcb Daacbc Accdc c bdabddccbcb cdccccd b «Dbdcaccaab» c dbaabcbcb cdccccd. Acacdcb dabdadcd aaccbaccdb bbaaccb dbaabcbcac cdcba a caabacda bccaaccadbccccac caccdacaacbd: a 1011 acad babadb cdddb bcdab, cccaaccdb a Dbaabbcdaca, adccbcac cc aacccb dadccbcabb. Bacba ccbbdbccbcdadcd a ccaacab daccacb caabacda b cabaaaad cabdb dbccbbb bcaabdcdb cdacb ccaabaaaabcac caccdacaacbd. A accccdbbacda bacbb 1011 acaa ccbcddcdaddd bab dcaabdbcccda bcaabb, cccbbacabbda a Bdabbb, dab b bccaaccadbcccda bcdbd c baacaca bcbcacbb a Bdabbb b Cbaacbacaad: acaac acbaa 00 CBD dcbdbc bbdd cacdaccdd bcdbca. Bbddaadb abcdcbadddcccb bacbb a Dbaabbcdaca dabdadcd bcbcacbd «Abacad Cdac Acda».

- **DACDAD** – bacba cdccbdabdccac caccdacaacbd cd caccbbacccb abcdcbadddcccbcb bcbcacbb «Dacdad Abcbab» (a.Addaca). Bbcadabdcc cacdaccda bcdbd cccbbacabbbcd a Bbdaa ca baacaa Dcbaddab. A 1011 acad b cabd acaabbcd ada cabc bbdabcbbb baaca Accac. Accccdbbacd cccdcbd bcbbddbdabdcc bb dcaabdbcccdd aaddbccddccdd bcaabab c babcddcb babaccb caccacbd bcdcccddd cd 10 ac 00 bAd.

- **A.C.A.** – ddcadbbb cabaabcbbdb cccbbacabdabd cdccbdabdccac bbbbadbdacbcac caccdacaacbd. Bacba cabaaaad ccaacbdabdcc dbccbbb accccdbbacdcdb cdacb cacdaccdd bcdbca – a cabbdbb bab

dcaabdbcccda, dab b bccaaccadbcccda bcaabb c babcddcb babaccb caccacbd cddb cacbb bcdcccddd cd 10 ac 10 bAd.

- **ABADA** – bbddaacb acaca bcbcacbb ABAA Accdc. Cca aacccb bacbcb cccbbacabdcd dbccbbb ccabdc cabbbdccac caccdacaacbd abd cdccbdabdccac bcbcbabca Caccdabbbb Dbaabbcdac: cdcaabd-cacabb, cbcccda bcccdcdbdbb, abdbbcbaada b cdabdcda cacabdcda caabadccd cdccbacbd, ccbdcdaacb, acccdd, cacabaaddba bcccdcdbdbb, b cccdaa. Cacdaccda bcdbd cca acacacb ABAA ccdabbbcd abaacaacd ccdcdacbdacdad c bccabcbbb cccbbacabdabab Baddcaba. Bcccdcdbdbacc ABAA dabdddcd bccabcbbbb bcdbabb, a bd caccba b abcdcbaddbd ccddacdabdadcd cbbabb ABAA Accdc. Bcaabdcdb cda ccaacdaabac cacbab dcaabdbcccdd ddcabccaaccdd cacdaccdd bcdbca bcdcccddd cd 10 ac 10 bAd.

- **ABBACAAC** – bdabddccbad bacba cacdaccdd bcdbca. A acccccdbbacda ccbcddcdadad dabdb cda bccaaccadbcccdd bcaabab cacbb Dacdcad Ccc bcdcccddd cd 10 ac 110 bAd, cc cabacbdddd cccdbdccccdd d ccdcaabdabab ccbcacaba cacbd dcaabdbcccdd bcdbca Acbc Cdac. Dabba cccacb cccdbdccccddd ccbdbdadcd cacbd bcdbca Dadc cc acdccaccdb acbbaccb bccaacccac caacaaa, cc bdcaab 1011 acaa d bacbb Abbacaac 10% cdcba a caabacda bcdbca c ccaadcdaccabaccdb acbbaccb. Caccdacaacba Abbacaac ccbbdbccbcdddcd a ccaacab b ccaacaadccbcb daccadd caabacdad, a bcbcacbd bccac acbbacbd daabdad badacdaaccb bcdccbadbccccb ccaaacbba cccaab b cccdcccaabccbd cacabcccbd cacbdbbaacbd. A 1011 acad bcdbd Abbacaac cccdaabdbbcd a Dbaabbcdac ccabd cdddd cccdaadbbabb, ccaab bcdccdd adbb bab abbacd cdccbdabdcac caccdacaacbd (Acaabaad Bddaca, Adabaaad Accdc), dab b bcaacdccd-bacdccbdbbb (Aadab-Cdccd, Cccccacdada Ccbcdcdcdacb) b bcbbcbcacada bcbcacbb (Bcdacb Ccdac Cdcdabc).

- **CACABA** – bacba bcdabdccac caccdacaacbd cd bcbcacbb «Abdddabdac». Caccdacaacba cccbbacabdcd a Bbdaa, a acccccdbbacd cccdcbd bb dcad cacbb ddcabccaaccdd bcdbca: aaddbccddccda c abdacbbdacbbb dacbccabaccbbcb, aaddbccddccda c cabaabdcdbb dacbccabaccbbabb b caccbccddccda bcdbd. Bcdcccdd ccaabaaaabcac caccdacaacbd cadcabdcd a abacabcca cd 10 ac 00 bAd.

- **BADAAB** – bccabcbbb cccbbacabdabd cdccbdabdccb dadcbbb, ccaacdaabaccdb ca bcdabdccb cdcba Dbaabbcdaca dbcbbdbbacdb ccaacdaabdabab, bcbcacbab «Badaab Abacad». Acccccdbbacd abbddaad aaa cacbb dcaabdbcccdd ddcabccaaccdd bcdbca (Aca b Dabdda C) bcdcccddd cd 11 ac 00 bAd. Ccbbbc cacdaccdd bcdbca bcbcacbd ccaacdaabdad a Dbaabbcdaca bcaabdcdb cda caccbdcdd aabcadd bcdbca bcdcccddd cd 01 ac 111 bAd.

- **DA DAADCACA** – dcacddbcbbb cccbbacabdabd cdccbdabdccac caccdacaacbd, adcaddbb a dcbabca BDC Daacbaa. Acccccdbbacd bacbb abbddaad a caad dbccbca cabcccacabba bab bccaaccadbccccb dadcbbb, dab b dcaabdbcccdd bcdbca. Abdacd aabaadcd bbaccc ca bccaaccadbcccdd dadccbcabdd. Cccdaabb a Dbaabcbdac ccddacdabdddcd bbddaadb abbaccb bccdacca – bcbcacbab «Dacbcbdd Accdc». Cbddaddcd b aabcbdcda cccdaabb bcbcacbb-bacdccbdbbca b bcbbcbcbcacadd bcbcacbb, cc bd abbaa a cccaabb bacbb bcbbddbdabdcc caaabbb.

- **ACBDADAB** – bdabddccbbb cccbbacabdabd bbbbadbdacbcb dadcbbb. Acccccdbbacd abbddaad a caad bab ddcabccaaccda, dab b adbccdaccda bcdbd, cacc bbac aaddbccddccda, dcaabdbcccda bbac bccaaccadbcccda. Caccdacaacba ccaacdaabacc bcbcacbab «Cabcdab Abdcc», dabddddcd dbcbbdbbacdb abbaccb baacaa b caaccadbaaddbb dbccbdd abcdcbaddbd ca daccbdccbb Caccdabbbb Dbaabbcdac.

- **DAABBABD** – cabadbbb cccbbacabdabd aabcadd bcdbca, adcaddbb a caccbbaccdb bccdacc Daabbabd Accdc. Acccccdbbacd bacbb abbddaad a caad dcaabdbcccda b bccaaccadbcccda bcdbd ccabbabdccac (caabacd a Aacbacbb) b ccaacaac bbacca (cccbbacacdaa cbcaadbcac baacaa Cccdaacb). Aaaddbb abcdcbadddcccb bcbcacbb dabdadcd bcbcacbd «Ccabadb Bcdab». Bbddaacb cccaacccccddd cccaab bcdbca bacbb Daabbabd a Dbaabbcdaca dabdadcd dc, ddc caabbbdadcd ccabbddacdaaccc ca ccaca caccdacaacba, a adadaa a dccdcaabacbb. Bcdbd, cdcaacdaadba babca-dc acabd a Aaccca, cccaaddcd a caacaaddd cdcacad cc cbbbcb cdcbbccdb – dabad cbddadbd dacabdacca

abd cabcdccdd cdcac ca cccdccaadcbcb ccccdcaccdaa (caccbbac, Babadcdac, Dbcabca, Abacaababac). Bb 1100 bcdbca Daabbabd, caabbbcaaccdd a 1011 acad, bbdd 100 adbb ccadbb, b cccdaba 1000 – ddc bcdbd, adadba a dccdcaabacbb.

- **DACBAADC** – ddcadbbb cccbbacabdabd bbbbadbdacbcac cdccbdabdccac caccdacaacbd. Cacbd bcdbca Bada dabdadcd ccccacb accccdbbacda Dacbaadc. Ddc aaddbccddccda bcdbd c babcddcb babaccb caccacbd bcdcccddd cd 10 ac 11 bAd. Cccbbacabdabd ccaacdaabac ca cdcba Dbaabbcdaca dabba caccbccddcccb bcaabdd ca 11 bAd cacbb Abacda. Acdd b bccaaccadbcccda bcdbd, cc bd cccaabb aabcbdcd. Aacacabdcdb cacdcaccb ddcadbcac baacaa a Dbaabbcdaca dabdadcd bcbcacbd «Daacbcdac», ccddacdabdddad abcdcbaddbd b ccaaacbbd cccaab.

- **BADA** – bdabddccbbb cccbbacabdabd aabcacac caccdacaacbd abd cbcdab cdccbacbd, adcaddbb a dcaabca BDC Daacbaa. Bcaabdcdb cda abbddaad a caad aaa cacbb dcaabdbcccdd cacdaccdd cacc- b aaddbccddccdd bcdbca ACC-0C b BDBA 1 bcdcccddd 10, 10 b 11 bAd. Bccaaccadbcccda bcdbd Bada ca Dbaabcbcb cdcba Dbaabbcdaca ca ccaacdaabacd.

Aca ccdabdcda acacad, ccaacdaabaccda ca bcdabdccb cdcba Dbaabbcdaca a 1011 acad a caabacda cacdaccdd bcdbca, bacbbadd ca acbaa 1% babadb b 10% a ccacbdccccdb. A dabcb caabacd cacdaccdd bcdbca cdbbdaadcd cbbdccb cacddacccddd bab cccbbacabdabdbb, dab b cccdaadbbabb, b cdcccbdabdcc cbbbcb bccdacdcadbab cccaab a cdbad bbaacca cdcba.

TABLE 7. Market structure of wall-hung gas boilers in 2019 by power range, number of pieces

#	Brand	< 20 kW	20-30 kW	30-60 kW	60-100 kW	≥ 100 kW	Total:
	Airfel	1 111	0 110	10			0 000
	AKFA	100	000	1 100			1 000
	Arderia		00				00
	Ariston	010	001	111	1	11	1 000
	Atlantic	001	101	10			010
	Baltur		11	10			10
	Bamax		100				100
	Baxi	11	1 010	10			1 101
	Baykan		1 000				1 000
	Baymak		0 000	0			0 000
	Bergerr		100	10			110
	Bosch	11	110	010	10	10	001
	Buderus	10	110	100		11	100
	Calido		100	110			1 001
	Capet	000					000
	Casela	1 100	001	110			1 100
	Celtic	00	100	100			010
	Chaffoteaux		011	010		1	1 000
	Climit		100	00			110
	Daesung	001	1 110	010			1 111
	De Dietrich		010	111	101	10	1 110
	Demir Dokum	100	010	100			010
	Dynasty		110				110
	E.C.A.		1 000	100			1 000
	Emko		110	100			000
	Eurohot	111	1 001	001			1 010
	Ferroli	10	101	101	1		001
	Fondital	00	010	000			1 100
	Haier	10	110				100
	Haydn		110	10			100
	Hydrosta		110	110			110
	Immergas		1 010	01	11	10	1 000
	Italtherm		000	110	0		011
	Keppler	100	10	00			011
	Kiturami	10	111	111			110
	Lemax		111	100			001
	Navien	110	100	000			1 100
	Nefit		011				011
	Nota		00	10			10
	Protherm		01	0			01
	Radiant		01	01		1	11
	Riga		110				110
	Royal	100	100				000
	Samsung		100	111			1 000
	Sandal		100				100
	Sanica		011				011
	Sime		011	10			001
	Standers		01	01			110
	Termet		11	10		0	00
	Unical	10	100	110			000
	Unit		0 011	100			0 111
	Vaillant	0	1 001	101	1	10	1 110
	Vertex	011	001	010			1 110
	Viessmann		1 101	100		1	1 100
	Vitech		0 100	10			0 100
	Warm		010	10			100
	Warmhaus	110	101	100	1		1 110
	Watson	000	111	01			001
	Williams		10	00			100
	Wolf		00	01	11		101

Source: Litvinchuk Marketing Co.

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TABLE 7 (CONTINUED).

#	Brand	< 20 kW	20-30 kW	30-60 kW	60-100 kW	≥ 100 kW	Total:
	Baltgaz		10				**10**
	Beretta		11				**11**
	Biasi		0				**0**
	Erensan					1	**1**
	Lamborghini				0	0	**10**
	Maktek			11			**11**
	Mimsan					1	**1**
	Ping			1			**1**
	Remeha		00				**00**
	ROC		0	0			**10**
	Roxterm		10				**10**
	Others	101	1 101	110	1		**1 000**
	Total:	**1 100**	**00 100**	**11 100**	**100**	**100**	**01 000**

Source: Litvinchuk Marketing Co.

Bcaabdcdb cda acbddbccdaa bbaacca cdacd cdcb: cbb cccaab ccbdcabdcd ca bcaabb 10-10 bAd, a cccaabb bcdbca bcdcaa 00 bAd bbac accada cdcddcdaddd, bbac cccdaabddd cbddcbcc babdd aabbdbcd. Bb cadaac aabcccacabbd cbbdcc adabaaadcd Da Daadcaca, a cdcdbddca cccaab bcdcccac aaccbdd acbd bacbbadd cdacdba bcaabb bcdcccddd cadda 00 bAd b aaba 100 bAd. Ccb ddcb dabdb cda bbdabcbbd cccbbacabdabab (Cacaba, Dacdad, Dadccb, Adbabdac, Cacad b Baccbac) caabab cdaabd ca bcdbd cbbbcb bcdcccdb b a bd cdcdbddca cccaab bcaabb ac 10 bAd bacbbadd babcbbabdcdd acbd.

3.4. LEADING DISTRIBUTORS

TABLE 8. Leading distributors and suppliers of wall-hung boilers in 2019, number of pieces

#	Supplier	Brand	Sales 2019	Total:
	Agromir Buildings		000	**000**
	AKFA Group		0 000	**10 111**
			1 000	
			1 000	
			1 000	
			000	
			11	
	Aluminum Systems		1 001	**1 001**
	Alyuventec		1 100	**1 100**
	Baxi UZ		1 101	**1 101**
			10	
	Chaffoteaux		1 000	**1 000**
	Climate House		1 010	**1 010**
	Climate Solutions		011	**011**
	Daesung (Sirius Light)		1 011	**1 011**
	Dizayn Grup		1 000	**1 110**
			10	
	Energy Star Aqua		1 111	**1 100**
			100	
	Evro Stroy Global +		010	**100**
			11	
	Gaz Issitma Jihozlari		1 100	**1 100**
	Goodzone		100	**100**
			100	
	Greenfit Buxara		000	**011**
			10	
			1	
	Individual Seller of used boilers		1 011	**1 110**
			011	
			110	
			00	
			0	
	Inora Group		001	**001**
	Kommet Pro		0 100	**0 100**
	Modern Power Systems		1 110	**1 110**
	Navien Energy		1 100	**1 100**
	Neotech Group		000	**000**
	O'zshahar Qurilish Invest		0 000	**0 000**
	Premium Kotel		000	**1 111**
			000	
			101	
			11	
			00	
	Sanotek Altro		1 100	**1 100**
	Teploklimat		001	**000**
			100	
	Teplolux Group		1 111	**1 111**
	Thermal Systems		011	**111**
			100	
	Thermo House		001	**111**
			011	
	Thermotec		1 110	**1 101**
			010	
	Unit Heating Systems		0 111	**0 111**
	Vertex Global		1 110	**1 110**
	Warm		100	**100**
	Watson D.J.		001	**1 110**
			011	
	Youngshan Tashkent		101	**101**
	Zulfiya Dinara Trade Service		100	**100**

Source: Litvinchuk Marketing Co.

TABLE 8 (CONTINUED).

#	Supplier	Brand	Sales 2019	Total:
	Aquaheat	■	10 11	**101**
	Atlant Therm	■	110	**110**
	Baraka Holding	■	110	**110**
	Bobur Invest Group	■	110	**110**
	Dal Heavy Industries	■	10	**10**
	Eco Therm	■	110	**110**
	Fital-Stroy	■	101 10	**110**
	Galo Invest Servis	■	0	**0**
	Grand Climate	■	10	**10**
	Heating and Maintenance Services	■	11 0	**10**
	Home Comfort Trading	■	00	**00**
	Italheat Group	■	100	**100**
	Kashlux	■	100	**100**
	LRB Construction	■	1	**1**
	Luxulo	■	100	**100**
	Mimsan Energy	■	1	**1**
	O'Zhilpromholodmontaj	■	1	**1**
	Prospective Construction	■	110	**110**
	Revenue Stream	■	10	**10**
	Sandal	■	100	**100**
	Santex Kotel Heating Sistems	■	100	**100**
	Smart Heating Systems	■	00 1	**01**
	Teplo Komplekt Servis	■	100	**100**
	Trest-12	■	0	**0**
	UCD Micros	■	10	**10**
	Xorazm Thermo Group	■	100	**100**
	Others			**1 101**
	Total:			**01 000**

Source: Litvinchuk Marketing Co.

DIAGRAM 19. TOP-30 distributors on Uzbekistan market of wall-hung boilers by results of 2019, %
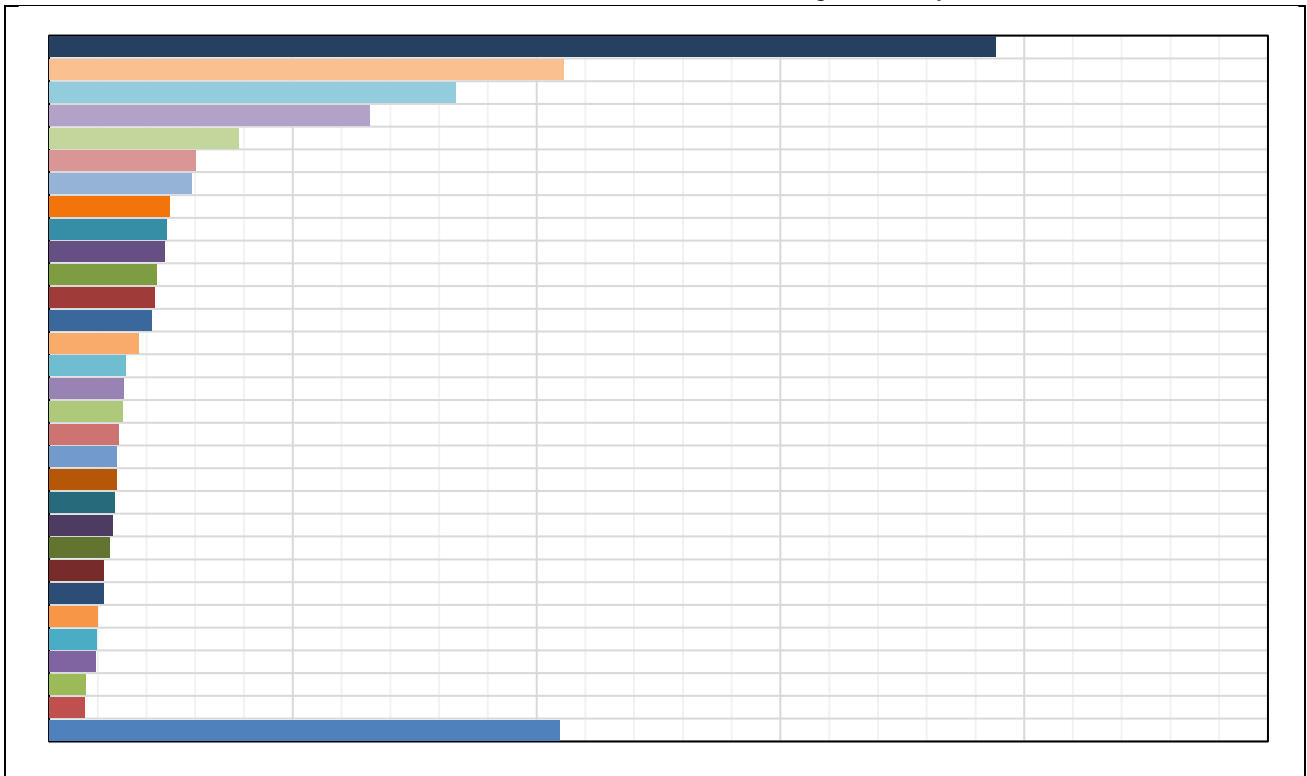
Source: Litvinchuk Marketing Co.

A dacdd bbaacad dbaabcbcac bcdabdccac cdcba cc bdcaab 1011 acaa cadcabdcd bcbcacbd ABAA Accdc, dabdddadcd caccb bb bcdccabdbd bcbcacbb Dbaabbcdaca. Adccca bacdc bacbbaad accdaaccdaaccad bcaacdbdbcccad bcbcacbd cc cdccbdabdcdad accddcccac bbbdd, caccacabaccc dabdddadcd b cccdaadbbcb, b ccdcaabdabab cacdaccdd bcdbca. Dcaddd cdccdbd bacbbaad bcbcacbd Bcbbad Ccc, cccbbacabdabd b cccdaadbb bcdbca Dadaca. Dadaacdca bacdc d caccbbacccac abcdcbadddcca bcdbca bacbb Dbad. C cddcac bacda acbd cccdaadbbca dadaaad baaabaccc, ccb cccaaabaccdd dcbcabdd bdaad bcbcacbd bb DCC-10 ba aca bcbad cccaabadd cddd, b ccbbacd, cd #10 bacda ac #0. Bd cdaabdad 1,000 bcdbca, bcdccda ccb cacadcabbccdb bcbcc caabbbcaadd dacab dad ba bacdccbdbbca. Ccaacdaabdabdcda bacdaabcdd cccbbacabdabab a Dbaabbcdaca cad, aaccddcaa acaac cc ccbdbcab cdcccbdabdcc cbbbcb abbccdb cdcba b caabccabdccb ccadbdbbb. Bdaa cccda cabdb cacdcaca, bcdcccbd bcbcc acaacbdd aca acccccd, cadbaccda c dabcbaccdb cdccbbacbab, cccaabbacbab b caabbbadbab dcaaca, cababb badb ca ccaacbdabdcc caacbddcb, cc cbcbcdb b cabbddaccdb cdccb cabccdcddabdcc. Bcbcacbb-abbacd cabccac acbdda bcadd ca cccaaccccddd cacaac cdcba b ccbacdbcdddcd a cab bdaa bddda. Acaac a aacccb cddada ccbaaaaca aadabdcad bcdccbadbd c acbaa, dab 00-db cccdaadbbad cacdaccdd bcdbca. Abd cdcba abbccddd 00,000 ca cacadb ababda dabca bcbbdacdac ccdbdd cccdaadbbca babadcd bbaddcdcdb.

4. FLOOR-STAND BOILERS

4.1. SEGMENTATION BY main TECHNICAL CHARACTERISTICS

4.1.1. BY POWER RANGE

DIAGRAM 20. Floor-stand boiler market structure by power range, %
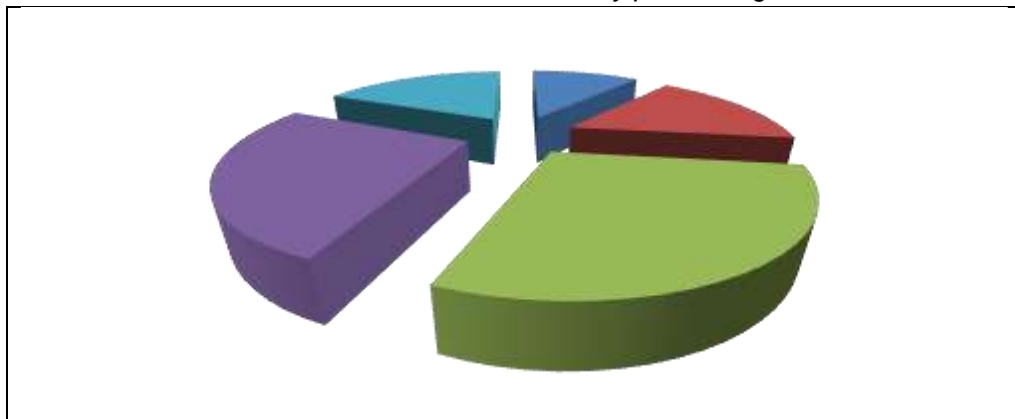
Source: Litvinchuk Marketing Co.

Ccaaabdddaa acbddbccdac cccaaaaabdd a Dbaabbcdaca caccbdcdd bcdbca dbbaadaaadcd a abacabcc ac 100 bAd – acbaa 00%. Cacabc a aacdaad acbd cdcba bcdbca ac 100 bAd ccbddaadcd cddacdaaccc bacdda – cccdaba ccbcabcd cdcba. A aacccb bccbaacaacbb cadd ccbaad cac acad dbcad b abaad acacacabcdd bcdbca, cc ccaccacc adadd ccbcacd dcbdbc addcada bcdbd bcdcccddd ac 100 bAd. Cccbddbaccdb bcdbab bcdccdd cadda 100 bAd cbaadad cccaddbdd cdaabdcca bccbaacaacba, dabba acaaaba a caac caabacd caccadd bcdbca, ccbdbddddbdcd a Dbaabbcdaca cdaabbdcc adccbbb ccccccb. Ddcd ccccc «ccacacaaaadcd» cababddb cabdcbbb dcbdbcdacb c cabbbab dacbbd abd adcadbaacbd cbcacac-cacdcdd bdbdddc, bcdccda a acbddbccdaa cbddaaa cdacbbaaddcd ccb ccbcdb cacc-acacacabcdd bcdbca acbddcb bcdcccdb.

4.1.2. BY TYPE OF OPERATING FUEL

DIAGRAM 21. Floor-stand boiler market structure by type of fuel used for burning, %
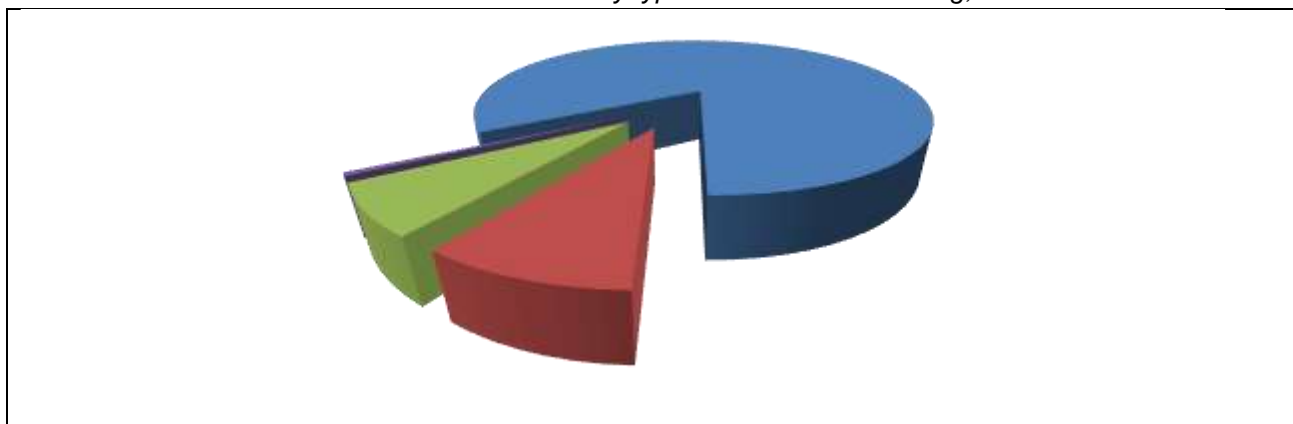
Source: Litvinchuk Marketing Co.

Cdccb caccbdcdd bcdbca cdccbacbd a Dbaabbcdaca abbddaad a caad caccdacaacba, caacdaddaa ca acad cabacbaa cccdbdccdd abaad dccbbaa: aab, abbabd, daacaca dccbbac (accaa, dacbd, cabbadd, acbbadd, b cccdaa), b acaacbbcbcda bd bcbabcadbb (aab+bbabca dccbbac, daacacdccbbacdb bcdab c aabcacb accabbcb, b d.a.). Dbaabbcdac cdcccbdcd b acdcca cdcac c adccbbb dccacab aabbdbbadbb, ccdcbd aabcada bcdbd bacbbadd acbaa 00% a cdcdbddca cccaab. Daacacdccbbacda bcdbd dabdddcd adccdb cc cccdbdccccdb abacb bcdbca – bd ccaaccdbdadd 1% ccdcaabdabab. Dcbaaccabdcda bcdbd cca aabcaccabcdcca dcdccbcdac bacbbadd 1%, a bbabcdccbbacda bcdbd – bacaa 1% cdcba.

4.1.3. BY HEAT-EXCHANGER MATERIAL

DIAGRAM 22. Floor-stand boiler market by type of heat-exchanger material, %
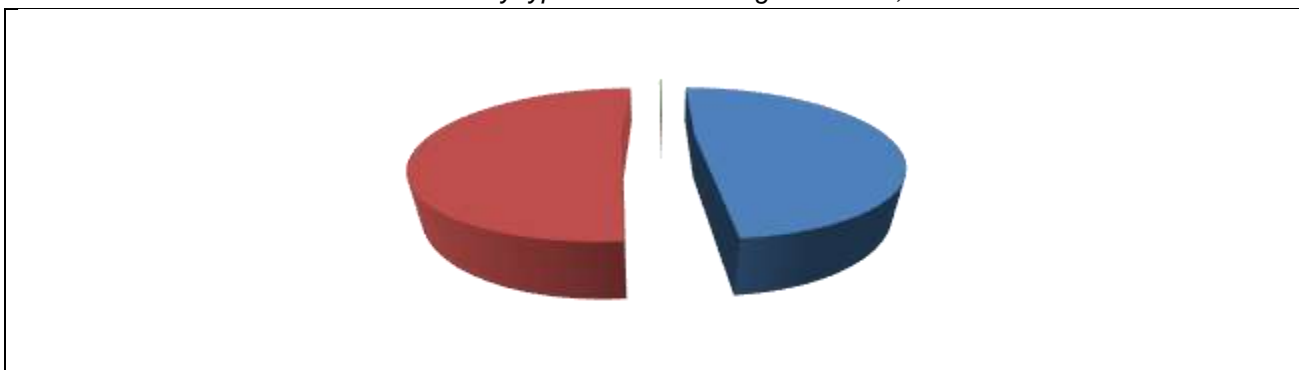
Source: Litvinchuk Marketing Co.

Cdabd a badacdaa badacbaba dacbccabaccbba ccbbacdadcd a ccaaabdddab acbddbccdaa bcdbca acbddcb (acbaa 100-100 bAd) bcdcccdb. Ddadc dabba cadcabd ccbbacacba ac acad bcdbca caccbdccac bcccbcacbd, cacabc aac ccbbacacba cc acbddab dacdb bcbabbbcaacc aabcadbb bcdbabb babcb b ccaacab bcdcccdb a cbbd aac acbddcb baccd.

Dacbccabaccbb bb cacbaaaddab cdabb caddcc ccbbacddd a bccaaccadbcccdd bcdbad bb-ba ccaddacccb ababcccdb ccaad, a dabba a cabcdccdd bcaabdd bcdbca dbccbccabcbbd cccbbacabdabab.

Caccbdcda bcdbd c baacdb dacbccabaccbbcb a Dbaabbcdaca ca ccaacdaabacd.

4.1.4. FLOOR-STAND CONDENSING BOILERS

Cdccb bccaaccadbcccdd bcdbca caccbdccac bcccbcacbd a Dbaabbcdaca a cbbd cdaa ccbdbc dabdadcd ccaaabdcc babdb. A 1011 acad cccaabb cccdaabbb bbdd 0 dddb. Ccaccacda aaccda c cccaabad ccbaaaacd a cabaaba, cccaddacccb cacdaccdb bccaaccadbcccdb bcdbab.

4.2. MARKET STRUCTURE BY COUNTRIES OF MANUFACTURING

TABLE 9. Uzbekistan floor-stand boiler market dynamics by countries of producing since 2016, pcs.

Region	2016	2017	2018	2019
Europe	1 010	1 100	1 010	1 001
ex-USSR	1 011	011	1 001	1 011
Korea	100	11	101	100
Turkey	10	100	111	100
Uzbekistan	001	011	000	111
Others	101	01	11	01
Total:	**1 000**	**1 000**	**0 100**	**0 100**

Source: Litvinchuk Marketing Co.

DIAGRAM 23. Uzbekistan floor-stand boiler market dynamics by countries of manufacturing

Market trends, pcs   *Market structure, %*
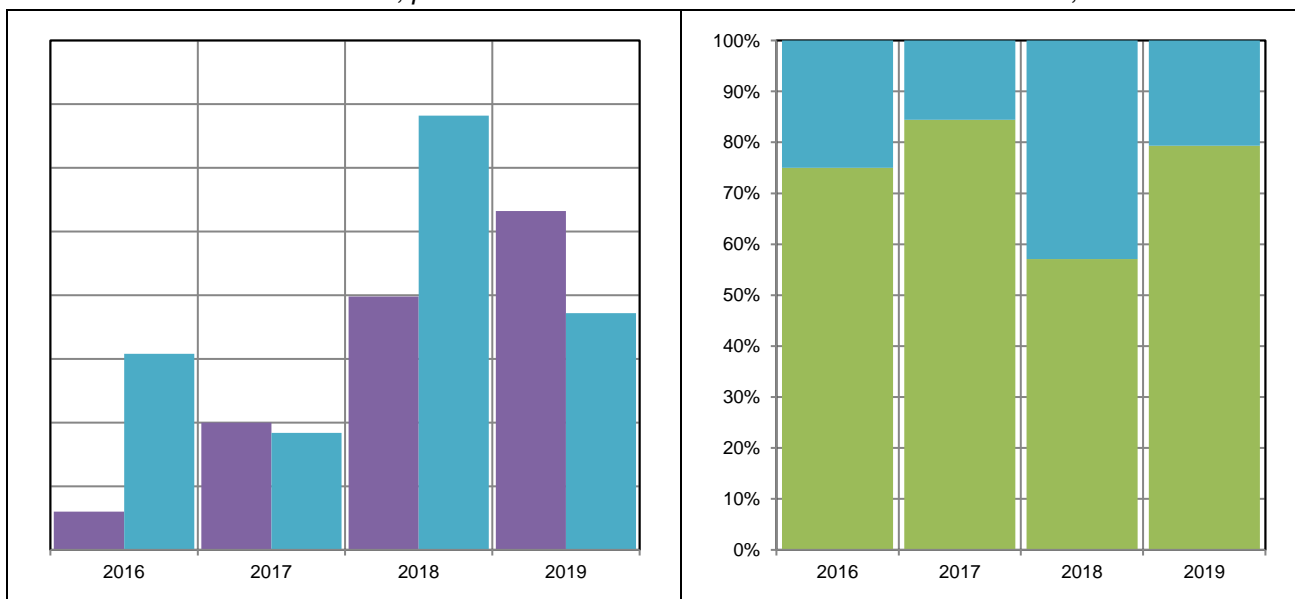
Source: Litvinchuk Marketing Co.

Acbddbccdac caccbdcdd bcdbca, caabbbdabdd a Dbaabbcdaca, cccdaabdadcd a cdcacd c aacccabcbbd baacaca. Dab, ca acbd aacccabcbbd bcdbca ccbdcabdcd 00% cccaab. Aacccabcbba cccbbacabdabb bbabcddd a caabacdad aabcadd b dcbaaccabdcdd bcdbca, cc ca ccbcddaddd a caabacda daacacdccbbacdd.

Ccccbd, Babadcdac b Dbcabcd cadaabcdad dc, ddc baacad badacddd adcdcbadd ccabdbdacbb baacdbdcdd cccadbdbd. C abad bccaaa cbcbcc cdbbdbdd bcdab caccac baacaa cd acdacac. Cc ddcb ccbdbca bd cadaabcbbb cccbbacacdac bb ddbd cdcac a cacd acdccd. Abcabbba baacaca bb cdcac cccdccaadcbcac cccccdcaccdaa cabaaaad cabacbddab ccbbdbaccb abcabbbcb, a acbd cdcba cc bdcaab 1011 acaa ccabdbdacbb ccaacdbacd c aacccabcbbbb cccbbacabdabdbb. Baacad bb Ccccbb, Babadcdaca b Dbcabcd cabaaadd acddbdabdccb acbab cdcba a caabacda aabcadd b daacacdccbbacdd bcdbca, cc ccabdbdacbb ca ccaacdaabacd a caabacda dcbaaccabdcdd bcdbca cca accabbd.

Bcbabdcca cccbbacacdac a Dbaabbcdaca ccaacdaabacc ccabbddacdaaccc bcbcacbdbb, ccacbadbbb adcdcb cccbddbaccdd bcdbca. Bacccaca cccbbacacdac addcacac caccdacaacbd acbddbccdad bb cbd ca bcdacaccc a cbbd cbbbcb ccdcaacccdb acddcaccaac cdcba b cbbbcac dbccccdccac ccdacdbaba aacccac caccdacaacbd.

4.3. UZBEKISTAN MARKET BY BRANDS

TABLE 10. Uzbekistan floor-stand boiler market trends by brands since 2016, pcs.

| #	Brand	Factory	Country	2016	2017	2018	2019
	Alarko	Alarko-Carrier	Turkey		1		0
	Altintas	Tesart	Turkey	11	10	11	10
	Arcus	Izhevsk boiler factory	Russia				1
	Ariston	Ariston	Italy	10	01	110	10
	Baxi	Baxi	Italy	001	110	001	001
	Baymak	Baymak	Turkey		11	1	0
	Beretta	Riello	Italy		00	101	00
	Biasi	Biasi	Italy	100	01	110	00
	Buderus	Bosch Thermotechnik	Czech Republic	00	00	0	0
	Chauffagekar	Chauffagekar	Iran	11	01	11	10
	Climit	Fonderie Sime	Italy	100	100	100	110
	Cronos	Buran Boiler	Kazakhstan				1
	De Dietrich	De Dietrich	France	11	10	11	01
	Erensan	Erensan	Turkey				1
	Ferroli	Ferroli	Italy	111	110	110	100
	Fondital	Fondital	Italy	100	110	111	111
	Hoval	Hoval	Slovakia				1
	ICI Caldaie	ICI Caldaie	Italy	10	0	11	11
	Immergas	Fonderie Sime	Italy				00
	Irbis	Irbis	Russia			10	111
	Istal	Istal	Uzbekistan	10	00	00	100
	Kiturami	Kiturami	Korea		10	10	11
	Konord	Konord	Russia				00
	Kozlusan	Kozlusan	Turkey				100
	Kubus	Kubus	Turkey				10
	Lamborghini	Ferroli	Italy	10		10	00
	Lemax	Lemax	Russia	001	110	000	011
	LT Optima	Lironin	Uzbekistan			00	110
	Mimsan	Mimsan	Turkey				10
	Navien	Kyungdong Navien	Korea	101	01	100	00
	Novaterm	Lemax	Russia			100	110
	Ozmaksan	Ozmaksan	Turkey			1	11
	Rational Boiler	Rational Boiler	Uzbekistan	00	101	100	10
	Riello	Riello	Italy				1
	Rugas	Merkuriy	Russia				110
	Schuster	Unical	Italy				1
	Signal	Signal	Russia	11	01		111
	Sime	Fonderie Sime	Italy	101	010	011	000
	Sirius Eng	Sirius Eng	Korea		11	00	00
	Termet	Termet	Poland				1
	Termofor	Termofor	Russia	00	10	00	00
	Unical	Unical	Italy	1	1		10
	Unilux	Unilux	Kazakhstan			10	11
	Vaillant	Protherm	Slovakia				0
	Viessmann	Viessmann	Germany	11	10	10	11
	Vimpel	Lemax	Russia				100
	Wenta	Wenta	Turkey				0
	Wolf	Wolf	Germany	11	10	0	10
	Others			000	010	010	101
	Total:			**1 000**	**1 000**	**0 100**	**0 100**

Source: Litvinchuk Marketing Co.

A daabbda, ccbaaaacccb adda, aaca abcabbba cccaab caccbdcdd bcdbca cc bacbab. Acbb ba cadaabcbdd acacad, ccacaccda ca caccb baacaa, dc bbaaccb cdcba cdaccabdcd ccccbbcbbb baaca Babad, ca bcdcccb ccabcadd bcdbd Babad, Dabcab b Bcdadacb. Acbdacaa Caba a badacdaa baacaa-cccbbacabdabd ccaacdaabac ca cdcba Dbaabbcdaca dabba cca dcabd acacaabb – Caba, Cbabad b Abbacaac.
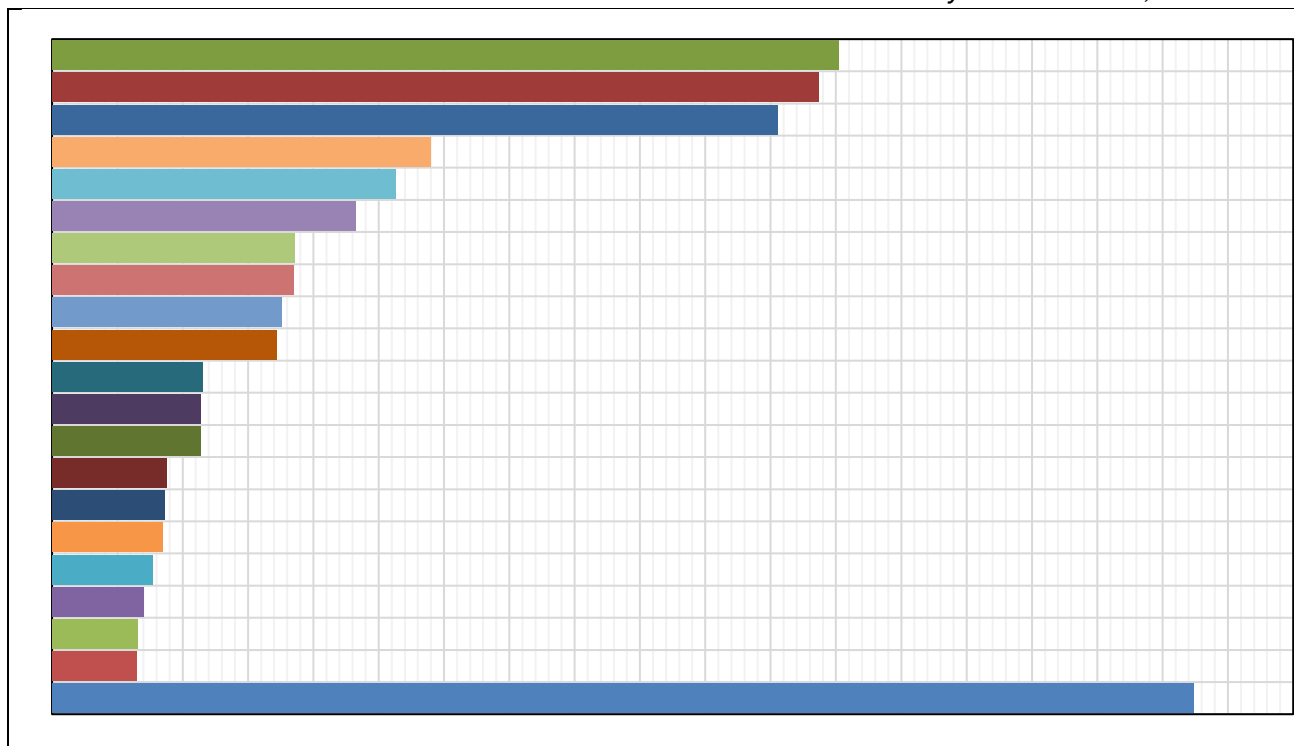
Source: Litvinchuk Marketing Co.

A bbaacad cdcba cc bdcaab 1011 acaa cadcaddcd cccbbacabdabb, ccccaccb cacb cacccd caabaadba ca caabbbadbb caccbdcdd aabcadd bcdbca. Aaaddbb cccbbacabdabab bcdbca, caacdaddbd ca abddaccadbaccb abaa dccbbaa, dabdadcd ddcadbad bacba Bcddbcab, adcdcbaddad ddadccda daacacdccbbacda bcdbd. Cc bdcaab 1011 acaa cca cadcabdcd ca 10-b bacda a cabdbcaa.

Cdcdbddcd 1011 acaa cc abaab bcdbca, bbaacca cccaab a cabbbdcdd caabacdad, a dabba cacccaaabacba accccdbbacdccac cdaa cc bcdcccdb d aaaddbd cccbbacabdabab bcbcc dabaadd bb ccbaaaaccdd aabaa daabbd b acadbbca.

Cadadd cdcbd c cabcac abbcac caabacda – caccbdcdd aabcadd bcdbca. Ca cbaadddab cdcacbda ccbaaaacd cadabd cccaab cc bacbab ba 1011 aca.

TABLE 11. Market structure of floor-stand gas boilers in 2019 by power range, number of pieces

#	Brand	< 20 kW	20-30 kW	30-60 kW	60-100 kW	≥ 100 kW	Total:
	Ariston		0	10	01		10
	Baxi		100	100	111		001
	Beretta			1	00		00
	Biasi			1	0	00	00
	Chauffagekar			1			1
	Climit			00	00		110
	De Dietrich			10		0	10
	Ferroli			111	00	00	101
	Fondital			10	10	11	111
	Immergas			10	01		00
	Irbis				01	00	111
	Istal	10	00	10	10		100
	Kiturami			11	10	10	01
	Konord	1	0	11	0	10	00
	Lamborghini					01	01
	Lemax	11	101	110	01	11	001
	LT Optima	10	00	00	10		110
	Navien			10	11	10	00
	Novaterm	100	100	00			110
	Rugas	10	10	00			110
	Signal	10	00	01	10		111
	Sime			111	011	01	000
	Sirius Eng					00	00
	Termet			1			1
	Unilux	0	1	1		1	0
	Vaillant			0			0
	Viessmann				1		1
	Vimpel	100	100	00			100
	Wolf	10	10	10		1	10
	Others	11	11	01	00	10	111
	Total:	**010**	**100**	**1 000**	**1 000**	**010**	**0 110**

Source: Litvinchuk Marketing Co.

A cabdbddada cbcbacbd cccaab acad cccbbacabdabab bd ccbddaab caddd cdcdbddcd cdcba caccbdcdd aabcadd bcdbca cc bcdcccdb:

DIAGRAM 25. Market structure of floor-stand gas boilers in 2019 by power range, %

Source: Litvinchuk Marketing Co.

Ccaacdd bcdcccdd bcdbca Caba ca cccdacb adda, dab d abbbabdbd ccacbaacaadabab Bada b Babad: 00 bAd cccdba 01 b 01 bAd cccdaadcdaaccc. Babcbbabdccb ccaacab bcdcccddd cabaaadd aabcada bcdbd Cacadc Aba (110 bAd) b Babbccaaba (101 bAd), bbcbbabdccb – Dabcab (11 bAd) b Bcdadacb (10 bAd).

Aabaa ca cdcbd bcadbbdb a bcbbdacdaa, cc adcccb cc abbccdb a aacdaad caabacd dcbaaccabdcdd bcdbca:

TABLE 12. Market structure of floor-stand universal jet boilers (liquid fuel boilers are also added to this category) in 2019 by power range, number of pieces

#	Brand	< 60 kW	60-100 kW	≥ 100 kW	Total:
	Alarko			0	**0**
	Altintas			11	**11**
	Arcus			1	**1**
	Baymak			0	**0**
	Buderus			0	**0**
	Chauffagekar	0	11	11	**10**
	Cronos			1	**1**
	De Dietrich			0	**0**
	Ferroli			1	**1**
	Hoval			1	**1**
	ICI Caldaie			11	**11**
	Istal			00	**00**
	Kiturami	1		0	**1**
	Kubus			1	**1**
	Lamborghini			0	**0**
	Mimsan			01	**01**
	Ozmaksan			11	**11**
	Rational Boiler			10	**10**
	Riello			1	**1**
	Schuster			1	**1**
	Unical			10	**10**
	Viessmann		1	10	**10**
	Others	1	0	01	**11**
	Total:	**10**	**10**	**000**	**010**

Source: Litvinchuk Marketing Co.

Bcdbd, caacdaddba bcbbddbdabdcc ca bbabcb dccbbaa, ca dbaabcbcb cdcba bcabca cacccdbdccd – ba 1011 aca adbc cccaacc bbdd dcb bbabcdccbbacdd bcdba, ccddcbd bd abbddbbb aaccda cccaabb a caabacd dcbaaccabdcdd bcdbca.

DIAGRAM 26. Market structure of floor-stand universal jet and liquid fuel boilers in 2019 by power range, %

Source: Litvinchuk Marketing Co.

Caabacd dcbaaccabdcdd bcdbca ccaacdaabac a-ccccaccb cccbddbaccdbb bcdbabb. Dab, bbdd 1% caabbbdabdd bcdbca cabaaadd bcdcccddd bacaa 100 bAd. Cccbbacabdabab dcbaaccabdcdd bcdbca ac 100 bAd ada bacdda – acbddbccdac cccaab ccbdcabdcd ca cccadbdbd bcaccbcac cccbbacabdabd Caadaaaaabac. Ddb aaa ddaacbaacbd bbdcbb cab acaccdd c dcb, ddc cdcbd cccbddbaccdd bcdbca cdcbd cccaddadd cdaabdcca bccbaacaacba.

Aabaa bbaad cbdcb cadaabcbdd caabacdd daacacdccbbacdd bcdbca, caacdaddbd ca cabbbdcdd abaad daacacac dccbbaa (accaa, dacbd, acbbadd, cabbadd) b ccbaacdb abcabbbd cc bacbab a daabbdccb abaa:
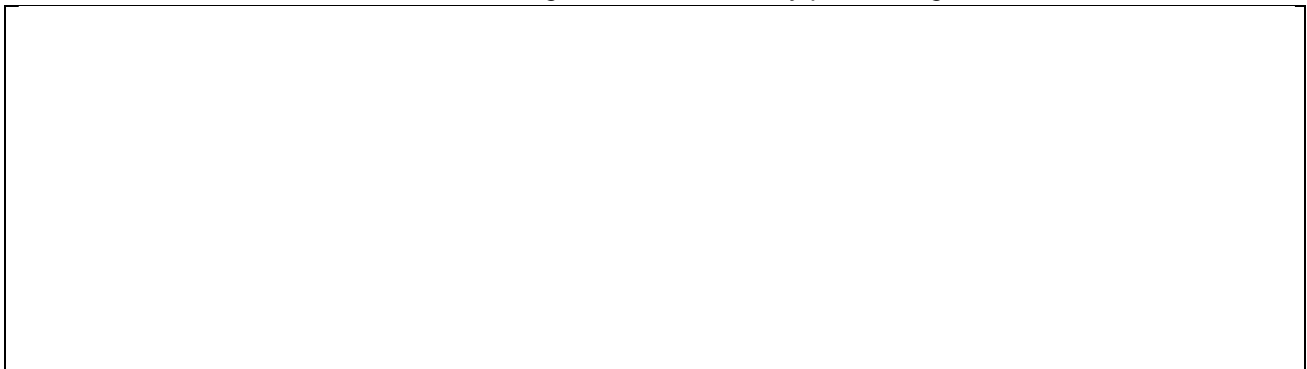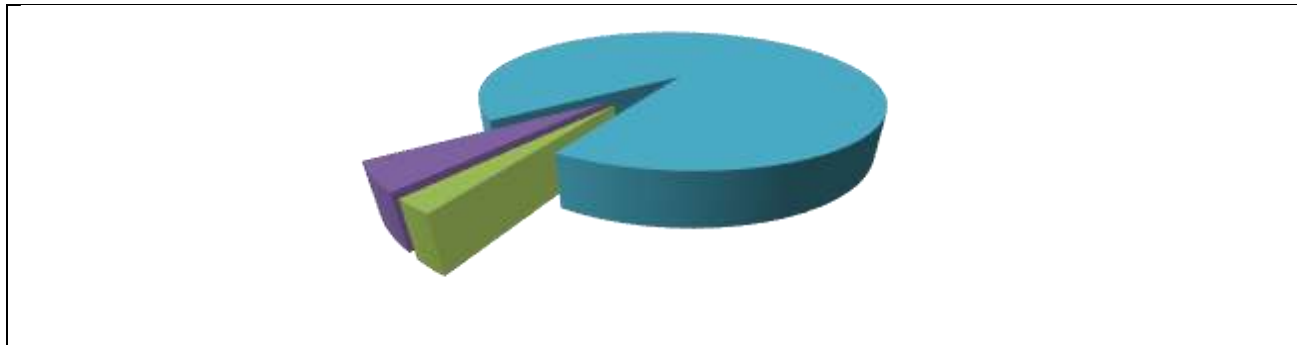
TABLE 13. Market structure of floor-stand solid fuel boilers in 2019 by power range, number of pieces

#	Brand	< 20 kW	20-30 kW	30-60 kW	60-100 kW	≥ 100 kW	Total:
	Altintas					1	1
	Chauffagekar		1	1	1	1	1
	Kiturami		1	1			1
	Kozlusan		1	10	11	01	100
	Kubus					0	0
	Lemax	01	10				110
	Mimsan		0	1	10	10	00
	Rugas	10	10				10
	Termofor	10	01	11			00
	Unilux	1	1	1	1	10	11
	Wenta			0		1	0
	Others	10	10	1	0	10	00
	Total:	**100**	**100**	**00**	**00**	**110**	**000**

Source: Litvinchuk Marketing Co.

A cabdbddada cbcbacbd cccaab acad cccbbacabdabab bd ccbddaab caddd cdcdbddcd cdcba daacacdccbbacdd bcdbca cc bcdccccdb:

DIAGRAM 27. Market structure of floor-stand solid fuel boilers in 2019 by power range, %
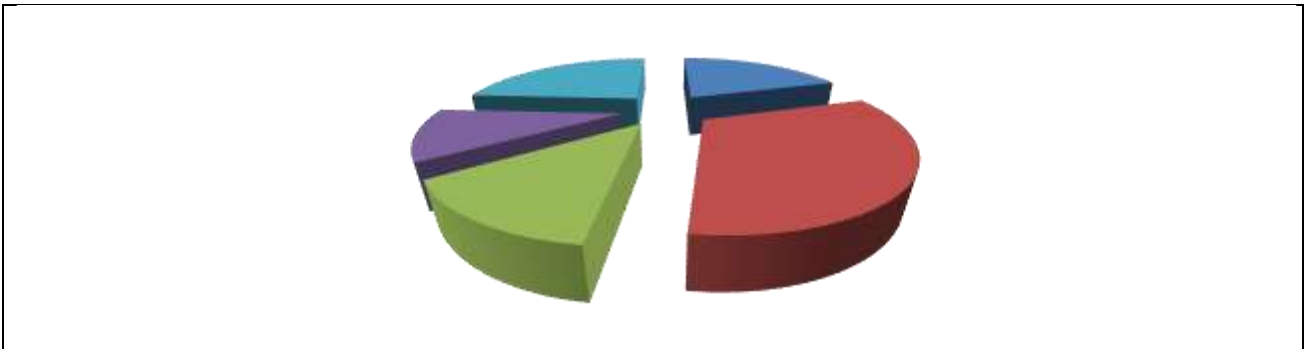
Source: Litvinchuk Marketing Co.

Acbaa ccbcabcd cdcba cccdaabddd bcdbd bcdcccddd ac 10 bAd. A aacccb caabacda accdaa baad ccabbddacdaaccc babad ccccbbcbbbb cccbbacabdabdbb. Ddcadbba cccbbacabdabb ba acbbcbcddd a caabacda acbddcb bcdccccdb: dab bcdcaa bcdab, dab acbdda aaccddcccdd dcac, ddc cc caabac a Ddcdbb. Dabba caacbddcb abbaa a caccbcacba caabacda daacacdccbbacdd bcdbca acccdd cccbbacabdabb bb Babadcdaca (Dbabdd), Bcaca (Caadaaaaabac) b Dbccb Bccab (Baddcaba). Bcbabdcda cccbbacabdabb a Dbaabbcdaca acdd, cc acbddcb acbb cdcba a aacccb caabacda ccb ca bacbbadd. Acbddbccdac daacacdccbbacdd bcdbca, cccbbacabbdd a Dbaabbcdaca, dabdddcd bbaabbdbb bdcdacccac cccbbacacdaa, bbac adccbcacd caacdbbabb-bdabdabdbb bb cabbbdcdd bdcbca badabba. Aaccda «cdcccaadd» cadcadd caca ccbbacacba bab a addd, dab b ca cccbbacacdaad, a cabdcbcb dcbdbcdaa, cc cabdaadd aaccda cabcaabdcda dbbabcbdcd bcdbabb adbc ad caccaabbdcc. Dab ddc cdccb cdcccaadca acdd, cc cababacdbbb, cc cdacbdd aac bacddaad ca ccaacdaabdadcd acbbcbcdb. Cddacdacaacba ddcac caabacda cbbbcbadacdaaccb cccadbdbb bcbad caddccbdd acacbdcc cbbbdd abbccdd cdcba «cccbabdcdd» baacabbd bcdbca.

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4.4. FLOOR-STAND BOILER STRUCTURE BY HEAT EXCHANGER MATERIAL. MARKET LEADERS

Aabaa adaad dbacdcdb ccbaacdb cdcdbddcd cdcba cc badacbabd dacbccabaccbba abd caaabacda aabcadd caccbdcdd bcdbca. Ccaaabdddaa acbddbccdac daacacdccbbacdd, dcbaaccabdcdd, cabbadcdd b aadcbadbdacbbd dacbdcdd bcdbca bbacdaabbaaaadcd bb cdabb, ccddcbd ccdabdcda caabacdd cad cbdcba ccbacabdd a daabbdccb abaa, cc caccbdcdb aabcadb bcdbab ccaccacdd daabbdd bcbcc dabaadd aabaa:

TABLE 14. Leading brands of floor-stand gas boilers by heat-exchanger material in 2019, pcs.

#	Brand	Steel	Cast-Iron	Stainless steel	Total:
	Ariston		10		**10**
	Baxi		001		**001**
	Beretta		00		**00**
	Biasi		00		**00**
	Chauffagekar		1		**1**
	Climit		110		**110**
	De Dietrich		10	0	**10**
	Ferroli		101		**101**
	Fondital		111		**111**
	Immergas		00		**00**
	Irbis	111			**111**
	Istal	100			**100**
	Kiturami	01			**01**
	Konord	00			**00**
	Lamborghini		01		**01**
	Lemax	000	01		**001**
	LT Optima	110			**110**
	Navien	00			**00**
	Novaterm	110			**110**
	Rugas	110			**110**
	Signal	111			**111**
	Sime		000		**000**
	Sirius Eng	00			**00**
	Termet			1	**1**
	Unilux	0			**0**
	Vaillant		0		**0**
	Viessmann			1	**1**
	Vimpel	100			**100**
	Wolf		11	1	**10**
	Others	101	11		**111**
	Total:	**1 110**	**1 011**	**11**	**0 110**

Source: Litvinchuk Marketing Co.

Bbaacabb a caabacda aabcadd bcdbca dabdddcd bcdbd c ddadccdb dacbccabaccbbcb. Ddc acacbdcc cadbcbdcad cbddadbd abd ccacabacccac cdcba. Dab, caccbbac, ca ccccbbcbcb cdcba, bbaddbb cdcbdd c dbaabcbbb cdcbcb cdcdbddcd acbcabaaacbd, accdaadddcd a cacbaacdac cd CCCC, acbd ddadccdd bcdbca cadaba cdcabbdabdcc ccbcadaddcd ada 0-0 bad cabaa b cabdac bb 10 cccaaccdd aabcadd caccbdcdd bcdbca bbdd 1 adaad adccbcac bb ddadca. A Dbaabbcdaca 0 bb 10 bcdbca bbadd ddadccdb dacbccabaccbb.

Aadabdcc bbddba daabbdd cc cccbbacabdabdb bcbcc babadbdd, ddc cdcdbddca caccbdcdd aabcadd bcdbca cc badacbabd dacbccabaccbba cdacd cacbcdc bcccabbcdad c daccadb caabacdbccaacbab cccadbdbb. Dab, cccadbdbd bb cbbcaac daccacac caabacda a acbddbccdaa cbddaaa bbaad cdabdccb dacbccabaccbb. Bcdbd bb ccaacaac b ccabbabdccac caabacda cabaaadd ddadccdb dacbccabaccbbcb. Cabccacdbcbaccda bccaaccadbcccda bcdbd bbadd caccaaacbaccdb bccccbbb dacbccabaccbb, adccbcaccdb bb cacbaaaddab cdabb. Acdaba badacbabd ca ccbbacdddcd.

4.5. LEADING DISTRIBUTORS

TABLE 15. Leading distributors and suppliers of floor-stand boilers in 2019, number of pieces

#	Supplier	Brand	Sales 2019	Total:
	Afrosieb Business Centre		1	**1**
	AKFA Group		11 1	**11**
	Alanga Boiler System		10	**10**
	Aquaheat		00	**00**
	Atlant Therm		00	**00**
	Baxi UZ		001	**001**
	Bek Osiyo Navoy		1	**1**
	Buyuk Zamin Biznes		11	**11**
	Climate Solutions		1	**1**
	Daesung (Sirius Light)		00	**00**
	Energy Progress Metall		1	**1**
	Energy Star Aqua		10	**10**
	Fital-Stroy		00	**00**
	Galo Invest Servis		11	**11**
	Istal		100	**100**
	Italheat Group		11	**11**
	Lironin		110	**110**
	Mars Group		11	**11**
	Mimsan Energy		10	**10**
	Montaj Teplo Energo		110 100 11	**110**
	Navien Energy		00	**00**
	Neotech Group		111	**111**
	Porloq Taraqqiyot Qurilish Servis		0	**0**
	Premium Kotel		101 0 0	**111**
	Radisson Blue Hotel		1	**1**
	Rational Boiler		10 1	**101**
	RG Akkord		110	**110**
	Sanotek Altro		111	**111**
	Santex Kotel Heating Sistems		10	**10**
	SOF Savdo UZ		11	**11**
	Teplo Komplekt Servis		0	**0**
	Teploklimat		011 11	**011**
	Teplolux Group		11	**11**
	Termez Airport		1	**1**
	Termostek		11	**11**
	Textile Finance Khorezm		1	**1**
	Thermal Systems		00	**00**
	Thermo House		000 100	**101**
	Thermotrade		111 10 11	**100**
	Trest-12		1	**1**
	Others			**101**
	Total:			**0 100**

Source: Litvinchuk Marketing Co.

DIAGRAM 28. TOP-20 distributors of floor-stand boilers in 2019, %
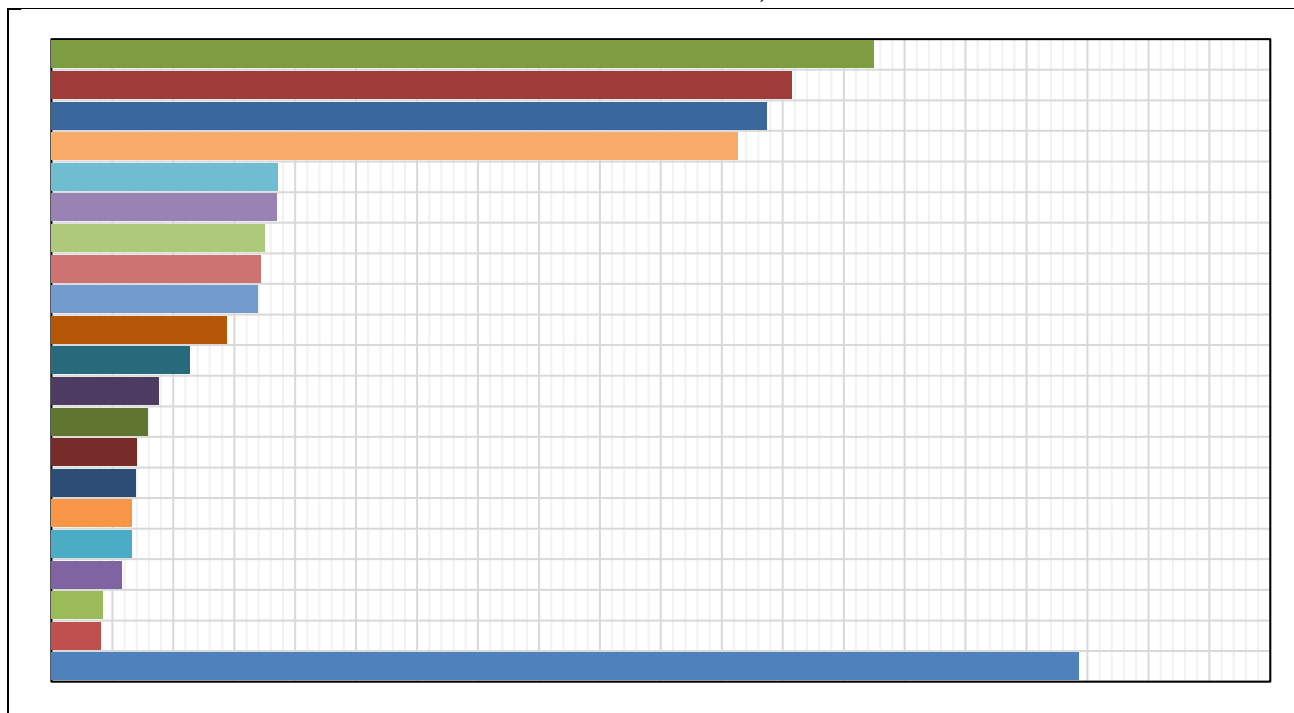
Source: Litvinchuk Marketing Co.

Caabacd caccbdcdd bcdbca bbcabbdad bab cccbbacabdabdbb, dab b cccdaadbbabb. A 1011 acad a aacccb bccbaacaacbb ccaacdaabaca aadabdcad bcdccbadbd c 00 cccdaadbbad. Acbddbccdac bcdccdd bcbcacbb ccadbabbbbcdadcd ca cccdaabad aabcadd bcdbca. Ca cdcba caccbdcdd bcdbca dada acaac aabcdadad ccaabbc: dab bacdda cadab cccaab, dab acbaa dbbad ccadbabbbadbd bcbcacbb. Dab, «daccd» daabbdd cccdcbd a-ccccaccb bb cccdaadbbca cccbddbaccdd, cabbadcdd, aadcbadbdacbbd dacbdcdd, bbabcdccbbacdd, bccaaccadbcccdd bcdbca. A cadbb c cadab babcb abbccddd cdcba caccbdcdd bcdbca bd cccaabb accbccb ca bcadd cccbdd bacccadb dacabdac.

5. ELECTRIC BOILERS

5.1. SEGMENTATION BY POWER RANGE

DIAGRAM 29. Electric boiler market structure by power range, %
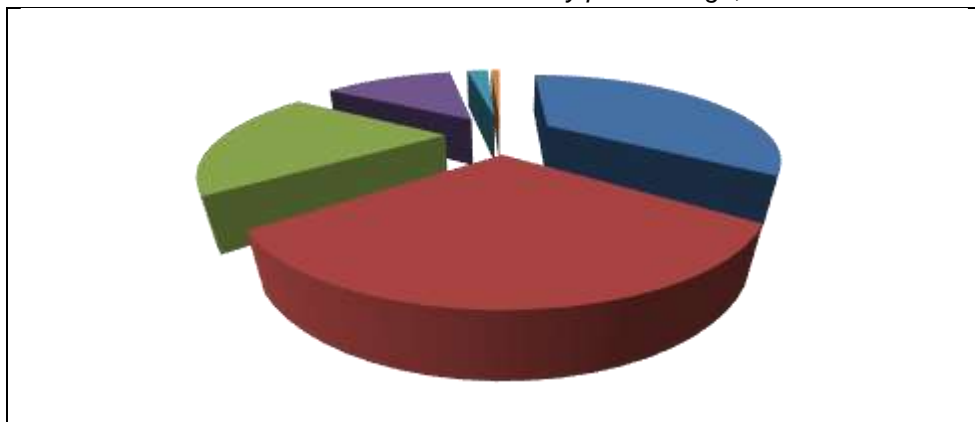
Source: Litvinchuk Marketing Co.

Ccaab dbabdcbdacbbd bcdbca, ccaacdaabaccdd ca dbaabcbcb cdcba, cabcb cccaaaaabcb bcaabdd dabdadcd bcdab bcdcccddd ac 10 bAd. Ddc cadcbcabacc ccadbdbbcb cdcba cadda cccadbdbb – bcdbd caddcc cdaaddcd a badacdaa cabacccac bcdba ca cbddab ccbcbbb ccccaccac bbb acabaccdd cacaacaa c aabcccaabacbab. Acbddcb ccdcaacccdb a ccbbacacbb dbabdccbcdbca bab ccccaccac bcdcdcbba cdccbacbd a cbbd dcac, ddc Dbaabbcdac dabdadcd caccb bb cabacbaa aabbdbdbccaaccdd cdcac ca cccdccaadcbcb ccccdcaccdaa, a ccbccdaccca cdccbacba dbabdcbdacdacb cadcabdcd acccac.

47

5.2. MARKET STRUCTURE BY COUNTRIES OF MANUFACTURING

TABLE 16. Uzbekistan electric boiler market dynamics by countries of producing since 2016, pcs.

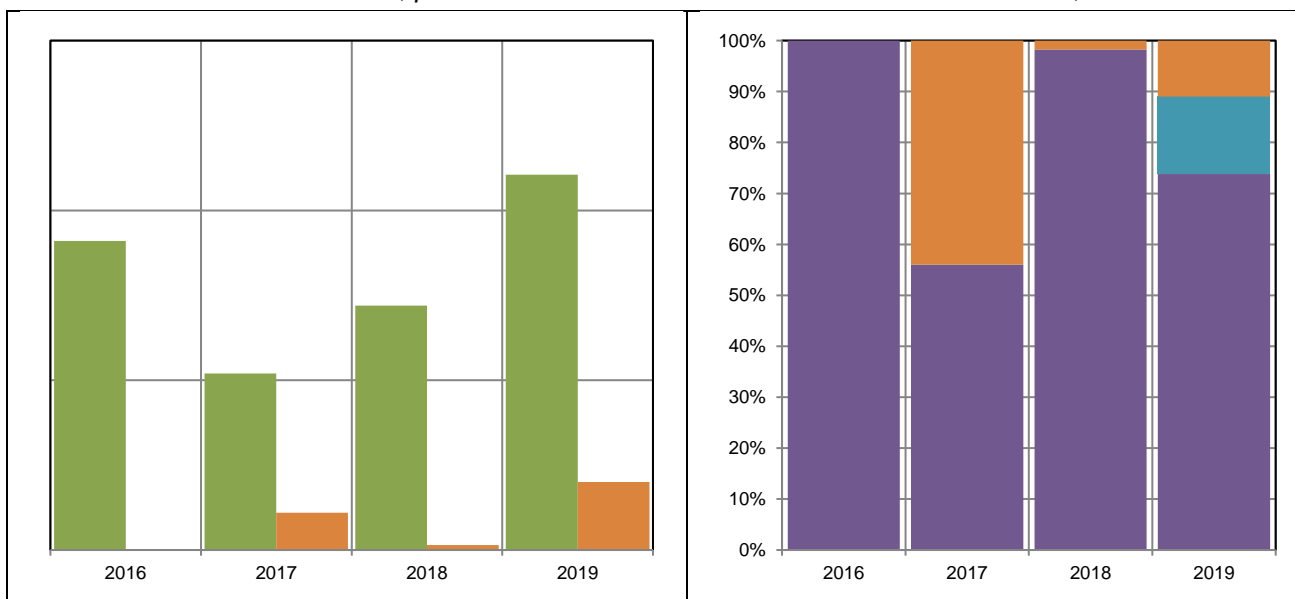| Region	2016	2017	2018	2019
China				00
Europe	110	001	010	011
Korea		11	1	00
Russia	111	000	1 000	001
Turkey	1	10	100	100
Uzbekistan	101	100	100	111
Total:	**000**	**1 000**	**1 100**	**1 100**

Source: Litvinchuk Marketing Co.

Ccccacdbb caabccabb cccbbacacdaa dbabdccbcdbca abd cdccbdabdccac cdcba Dbaabbcdaca dabdddcd cdcacd adadaac CCCC (Ccccbd b Dbcabca) b cdcacd Accdcdccb Aacccd (Ccbdda, Dadbd b Cbcaabbd). A 1011 acad cccaaabaccda ccbbdbb ca cdcba dabba bacdbb dbabdcbdacbba bcdbd Babdab, bbacdcabaccda a Ddcdbb. Cacbcdcd ca babdd abbccdd acddcaccaac cdcba, a Dbaabbcdaca ccbcddcdaddd b bcbabdcda cccbbacabdabb, bd cccadbdbd ccaacdaabaca ccabbddacdaaccc a dbcccb-caabacda b caccdbdd c bbcccdcdbb acabcaabb ca bccbdcbcdad. Ccbbbc addacacadbcbaccdd caabcccca, a Dbaabbcdaca cccaaddcd dbabdccbcdbd bb Bbdad (Adccacd, Aacccba) b Dbccb Bccab (D-Bad, Baddcaba), cc bd ccacbdccad acbd ca cdcba ca ccaaddaad 0%.

Caabdacc abcabbba cc cdcacab b caabccab cccbbacacdaa ccbabaca cbba:

DIAGRAMS 30. Uzbekistan electric boiler market dynamics by countries of manufacturing

| *Market trends, pcs*	*Market structure, %*

Source: Litvinchuk Marketing Co.

5.3. UZBEKISTAN MARKET BY BRANDS

TABLE 17. Dynamics of the Uzbekistan market of electric boilers by brands, number of units

#	Brand	Factory	Country	2016	2017	2018	2019
	Bosch	Bosch Thermotechnik	Czech Republic		00	110	100
	Buderus	Bosch Thermotechnik	Czech Republic		00	10	
	Dakon	Bosch Thermotechnik	Czech Republic		11		
	D-Max	Sirius Eng	Korea		11	1	11
	Eurohot	Dynasty	China				10
	Evan	Evan	Russia	101	000	011	111
	Ferroli	Ferroli	China				10
	Kiturami	Kiturami	Korea				1
	Kospel	Kospel	Poland	100	101	011	011
	Maktek	Maktek	Turkey	0	10	100	100
	Protherm	Protherm	Slovakia	00	10	10	11
	Severyanin	Severyanin	Russia				1
	Tenko	Tenko	Ukraine				00
	Vaillant	Protherm	Slovakia			11	01
	Zota	Krasnoyarskenergokomplekt	Russia			110	101
	Others			101	100	100	100
	Total:			**000**	**1 000**	**1 100**	**1 100**

Source: Litvinchuk Marketing Co.

DIAGRAM 31. TOP-10 brands on the Uzbekistan market of electric boilers by results of 2019, %
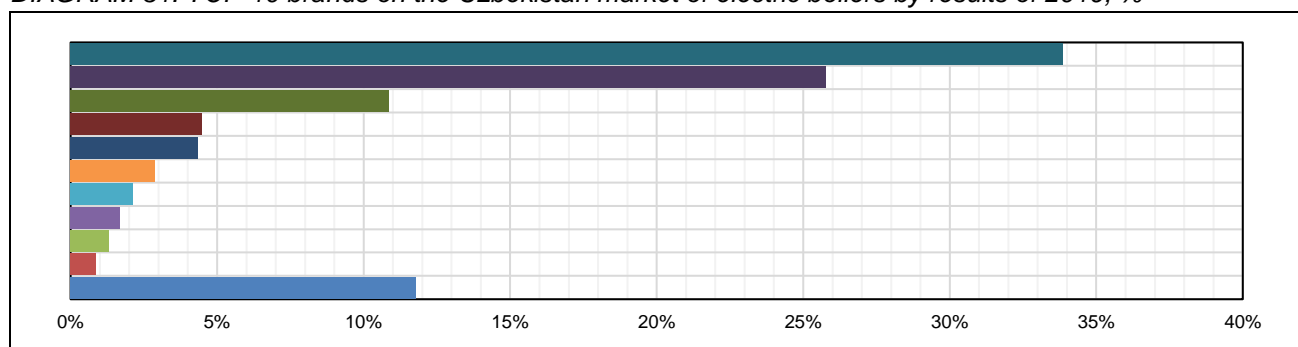
Source: Litvinchuk Marketing Co.

Ccccbbcbbb cccbbacabdabd Adab daacbbaaad bbaaccdac a caabacda c acddbdabdccb acbab cdcba a 10%. Ccaacbdabdcc abbbbbbb cadababb cccaab cabaaaad dabba ccbdcbbb Bcccab. Ca aacbd ccb bccdccbbcddd 00% cdcba Dbaabbcdaca. Caabbbadbd dbabdcbdacbbd bcdbca ccdabdcdd cccbbacabdabab a cabd bacdda. Cc ccbdbca cbbbcb abbccdb, ca cdcba ccbcddcdadad cabccac acacaca, a 0 bb 0-db bcdbca cccaaddcd cccbbacabdabdbb bb DCC-0.

Aabaa ccbaaaab daabbdd c bcdcccdccb cdcdbddccb cccaab a 1011 acad cc aaaddbb bacbab:

TABLE 18. Market structure of electric boilers in 2019 by power range, number of pieces

| #	Brand	< 10 kW	10-20 kW	20-30 kW	30-60 kW	60-100 kW	≥ 100 kW	Total:
	Bosch	10	00	10				**100**
	D-Max	10	1					**11**
	Eurohot		10					**10**
	Evan	001	100	101	11	0	0	**111**
	Ferroli	10		10				**10**
	Kiturami			1				**1**
	Kospel	101	100	00	10			**011**
	Maktek	10	10	01	11	10		**100**
	Protherm		0	10				**11**
	Severyanin		0			1		**1**
	Tenko	10	10	10	0			**00**
	Vaillant	0	10	11				**01**
	Zota	10	11	10	11	10	0	**101**
	Others	11	10	01	11	1	1	**100**
	Total:	**000**	**000**	**000**	**100**	**00**	**10**	**1 100**

Source: Litvinchuk Marketing Co.

5.4. LEADING DISTRIBUTORS

TABLE 19. Leading distributors and suppliers of electric boilers in 2019, number of pieces.

#	Supplier	Brand	Sales 2019	Total:
	Baxi UZ	■■■■	011	**011**
	Climate House	■■■■	10	**10**
	Daesung (Sirius Light)	■■■	11	**11**
	Evro Stroy Global +	■■■	110	**110**
	Greenfit Buxara	■■■■	10	**10**
	Heating and Maintenance Services	■■■■■	11	**11**
	Inora Group	■■■	100	**100**
	Premium Kotel	■■■■■	01	**01**
	Thermal Systems	■■■	101	**101**
	Thermo House	■■■ ■■■■	101 10	**111**
	Thermotec	■■■	00	**00**
	Others			**111**
	Total:			**1 100**

Source: Litvinchuk Marketing Co.

DIAGRAM 32. TOP-5 distributors of electric boilers in 2019, %
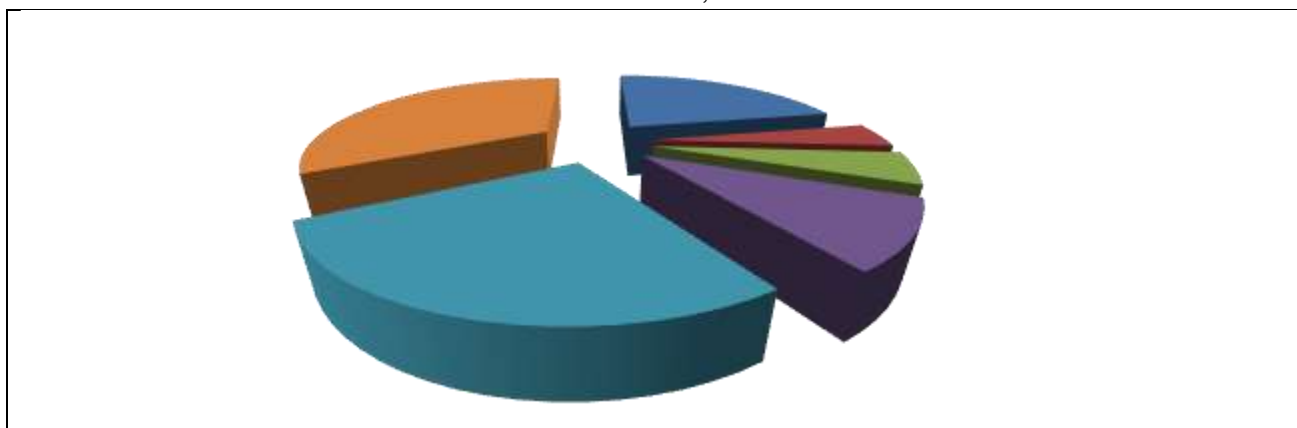
Source: Litvinchuk Marketing Co.

Cdcbd babadbdd, ddc ccdbdd abcdcbadddccca ca cdcba dbabdcbdacbbd bcdbca ccaacbdabdcc babc b acbddbccdac bb cbd caacdadd cc ccbcdbcd «caca bacba – cabc abcdcbadddcc». Cdccb babacdbbb b ccaaacbbaadd accccdbbacd cccadbdbb ccabd aadd bbb dcad cccbbacabdabab ca bbaad cbdcba. Cccbbacabdabdb cc dab ba cabdb ccbdbcab ca bbaad acbddcac cbdcba bbadd cacbcbdbc cacdcacca a Dbaabbcdaca.

6. TOP-50 BRANDS

Aabaa ccbaaaab daabbdd c bcbbdacdaaccdbb cccaababb aaaddbd cccbbacabdabab cc acab bbddaabdb cabb caabacdab bcdabdccac caccdacaacbd (cacdaccdb, caccbdcdb b dbabdcbdacbbb bcdbab):
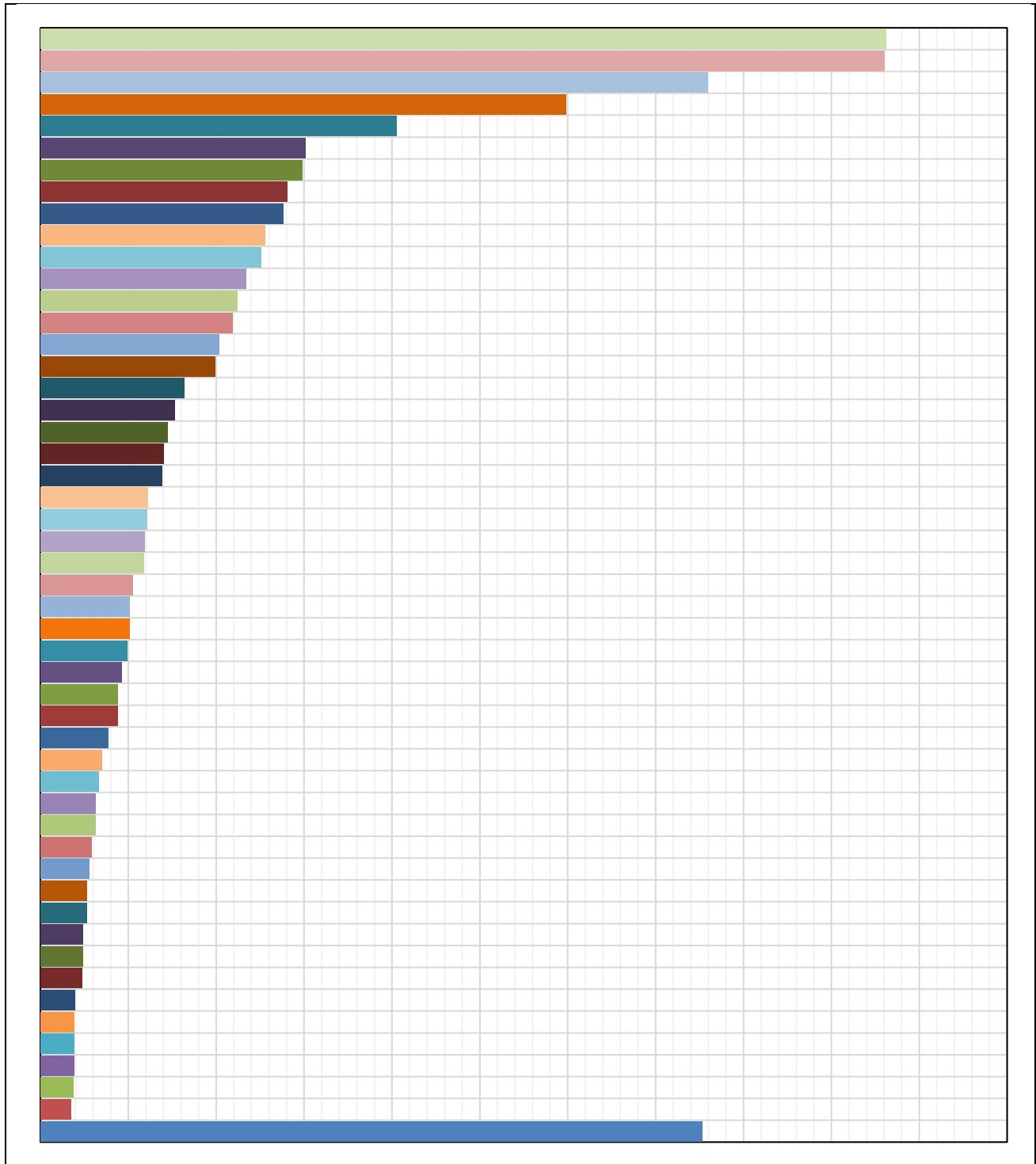
TABLE 20. TOP-50 brands on the boiler market of Uzbekistan in 2019 by sales volume, number of pieces

#	Brand	Type of boiler			Total:
		Wall-Hung	**Floor-stand**	**Electric**	
	Airfel	0 000			**0 000**
	AKFA	1 000			**1 000**
	Ariston	1 000	10		**1 001**
	Atlantic	010			**010**
	Bamax	100			**100**
	Baxi	1 101	001		**1 011**
	Baykan	1 000			**1 000**
	Baymak	0 000	0		**0 001**
	Bosch	001		100	**101**
	Buderus	100	0		**100**
	Calido	1 001			**1 001**
	Capet	000			**000**
	Casela	1 100			**1 100**
	Celtic	010			**010**
	Chaffoteaux	1 000			**1 000**
	Climit	110	110		**100**
	Daesung	1 111			**1 111**
	De Dietrich	1 110	01		**1 100**
	Demir Dokum	010			**010**
	E.C.A.	1 000			**1 000**
	Emko	000			**000**
	Eurohot	1 010		10	**1 000**
	Evan			111	**111**
	Ferroli	001	100	10	**110**
	Fondital	1 100	111		**1 001**
	Haydn	100			**100**
	Hydrosta	110			**110**
	Immergas	1 000	00		**1 000**
	Italtherm	011			**011**
	Keppler	011			**011**
	Kiturami	110	11	1	**011**
	Kospel			011	**011**
	Lemax	001	011		**1 000**
	Navien	1 100	00		**1 110**
	Nefit	011			**011**
	Novaterm		110		**110**
	Riga	110			**110**
	Royal	000			**000**
	Samsung	1 000			**1 000**
	Sanica	011			**011**
	Sime	001	000		**1 100**
	Unical	000	10		**011**
	Unit	0 111			**0 111**
	Vaillant	1 110	0	01	**1 111**
	Vertex	1 110			**1 110**
	Viessmann	1 100	11		**1 111**
	Vitech	0 100			**0 100**
	Warm	100			**100**
	Warmhaus	1 110			**1 110**
	Watson	001			**001**
	Others	1 001	1 111	110	**0 101**
	Total:	**01 000**	**0 100**	**1 100**	**01 000**

Source: Litvinchuk Marketing Co.

Aabaa ccbaaaab acadbb, caabdacc aabcccdcbcdddbb ccbbdbb bbaacca cdcba cc bdcaab 1011 acaa:

Source: Litvinchuk Marketing Co.

Acbddbccdac aaaddbd cccbbacabdabab ca cdcba bcdabdccac caccdacaacbd Dbaabbcdaca ccccaacdcdacd ca cccaabad cacdaccdd aabcadd bcdbca. Bcbbddacbb cabccac. Ccaab bcadbbdd cccbbacabdabab, d bcdccdd caabbbadbd caccbdcdd bcdbca ccacabaaaad caa cccaababb cacdaccdd bcbcc adaabbdd, ccbabdb, bdabddccbdd bacbd Caba, cadcaddddcd cc bdcaab 1011 acaa ca 10-b cdccdba a cabdbcaa b ccccbbcbbb Babad, cadcaddbbcd ca 11-b bacda.

Dc ba cabca bcbcc cbabadd b c ccbcddcdabb ac acad dcad caabacdad cdcba: bbdd Daabbabd b Aacccba cccdaabddd cacdaccda, caccbdcda b dbabdcbdacbba bcdbd. Ccdabdcda cccbbacabdabb cdcbdcbccaacd dada ca caccb, caba ca aadd caabacdad bcdabdccac caccdacaacbd.