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RESEARCH DEMO VERSION

SANDWICH PANEL INDUSTRY IN RUSSIA

Results of 2018 and Trends for 2019
Development Prospects up to 2021

- Sandwich panel market overview
- Dynamics and forecast of sandwich panel consumption
- Analysis of sandwich panel consumption structure
- Dynamics and structure of sandwich panel prices
- Milestones and investment activity
- Rating of leading sandwich panel manufacturers

Агентство INFOLine занимается разработкой и реализацией информационных и аналитических продуктов, консультированием и поддержкой деловых форумов и мероприятий в сфере строительства и инвестиций, ритейла и потребительского рынка, топливно-энергетического комплекса, транспорта, машиностроения и др. На постоянной основе мы оказываем поддержку более 3000 компаний России и мира. В соответствии с правилами ассоциации ESOMAR все продукты агентства INFOLine сертифицируются по общеевропейским стандартам.

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Additional information about INFOLine

INFOLine has offered customized research and issued independent studies on the industry of steel construction (metal construction, sandwich panel) since 2007. Our regular customers are more than 100 construction and investment companies, as well as construction materials market players, among which the largest developers and construction companies (IKEA Mos, Adamant Holding, Glavstroy Corporation and LSR Group), leading manufacturers of building materials (Severstal, KNAUF, Eurocement, LAFARGE-HOLCIM, Electroshchit-Stroysistema) and financial companies (Sberbank, Alfa-Bank, VTB.RF).

To get additional information, please,
visit websites www.infoline.spb.ru and allinvest.ru
or contact us by phone (812) 322-6848 (ext. 142); (495) 772-7640 (ext. 142)
or send email on STR@allinvest.ru

About the Research

Objective: Comprehensive analysis of the current state of sandwich panel industry in Russia; formation of forecasts of industry development and overall demand for products in various segments of construction industry.

Research use: Benchmarking, analysis of competitors and partners, marketing and strategic planning, searching for customers and partners, preparation for negotiations.

Research time framework: Indicators of the industry since 2011, results of 2018-2019 (dynamics and volumes of construction industry and sandwich panel industry in Russia, operational and financial indicators of the largest companies), forecast up to 2021 (basic factors of the industry, volumes of sandwich panel production and consumption, price dynamics, import/export dynamics).

Research schedule: QIII 2019 (the previous version of Research "**Sandwich Panel Industry in Russia**" was published in QIII 2018).

Resources: 250 person/days (around $ 16 thsd).

Information sources:

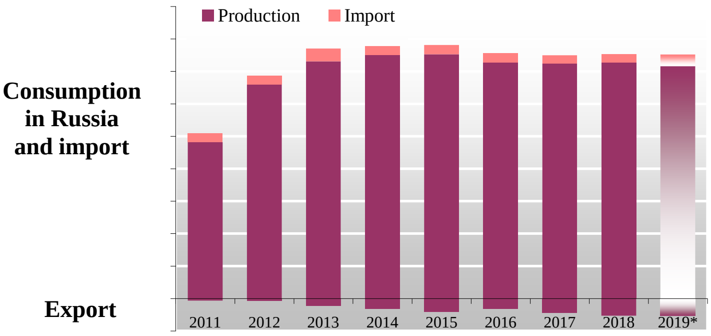
- expert surveys and questionnaire survey of more than 500 companies;
- own periodic assortment and price monitoring of the steel market;
- data of leading companies (materials from websites and press releases);
- periodic reviews of the construction industry **"Investment Projects in the Russian Industrial Construction"**, **"Investment Projects in the Housing of the Russian Federation"**, **"Investment Projects in the Commercial and Administrative construction of the Russian Federation"**, **"Investment Projects in the Transport Infrastructure of the Russian Federation"**;
- industry reviews of investment projects **"240 Major Investment Projects in the Russian Transport Infrastructure. Projects 2019-2021"**, **"470 Major Investment Projects in the Russian Industrial Construction. Projects 2019-2023"**, **"170 Major Investment Projects in the Russian Food Industry. Projects 2019-2022"**, **"200 Major Investment Projects for the Construction of Russian Agricultural Complexes. Projects of 2019-2022"**, **"350 Major Investment Projects in the Russian Construction Industry in 2018"**, **"Investment Activity in the Russian Construction Industry. Significant Investment Projects of 2018-2020"**, **"Largest Hypermarkets and Shopping Centers under Construction in Russia. Projects of 2018-2021"**;
- Research "**Construction Industry of Russia. Results of 2018 and Trends for 2019. Development Prospects up to 2021**";
- Data of the Federal State Statistics Service, Federal Agency for Construction and Housing and Public Utilities, Agency for Housing Mortgage Lending, Ministry of Economic Development of the Russian Federation, Ministry of Regional Development of the Russian Federation, Ministry of Construction of the Russian Federation, UN foreign trade database, Presidential Administration portal, data from the Housing and Utilities Reform Support Fund;
- Materials from more than 5,000 Russian media (federal and regional newspapers, news agencies and electronic media), as well as industry press.

If you are not interested in ready-made research INFOLine, you can request a brief for the preparation of an individual Research **HERE**.

Section 1. Sandwich Panel Market Overview

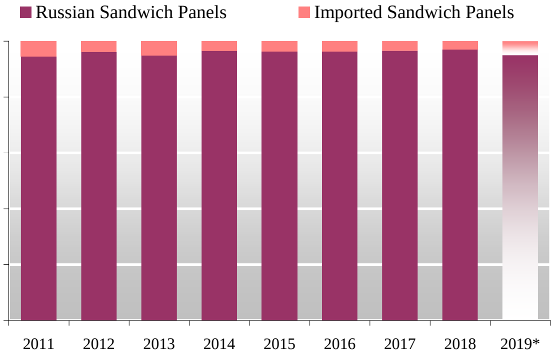
<…> In 2018, **the Russian sandwich panel market capacity** in physical terms amounted to about ***** mln sq.m** actually remaining at the level of 2016-2017, while the output increased by 1.5% to ***** mln sq.m** approaching the level of 2014. <…>

Figure 1. Capacity Dynamics of Sandwich Panel Market in Russia in 2011-2019, mln sq.m



Source: INFOLine information

Figure 2. Sandwich Panel Consumption Structure in Russia in 2011-2019, %

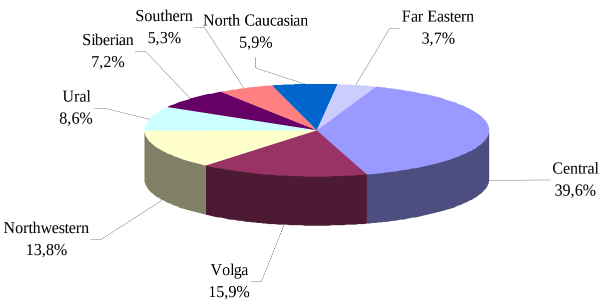


Source: INFOLine information

DEMO VERSION: The full text of the section contains analytical and statistical information on the dynamics of facilities for the production of sandwich panels, as well as the dynamics and structure of the production and consumption of sandwich panels in Russia by production regions and types

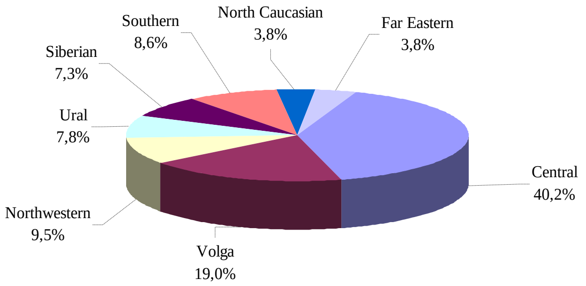
<…> In 2018, the structure of sandwich panel consumption by federal districts changed slightly. The share of the Volga Federal District increased by 3.1 pp from 15.9% in 2017 to 19% in 2018. There is also an increase in the share of the Southern Federal District by 3 pp in 2018. At the same time, this indicator decreased by 4 pp and 2 pp for the Northwestern Federal District and the North-Caucasian District, respectively. <…>

Figure 3. Structure of Sandwich Panel Consumption in Russia by Federal Districts in 2017, %



Source: INFOLine information

Figure 4. Structure of Sandwich Panel Consumption in Russia by Federal Districts in 2018, %



Source: INFOLine information

<…> The most likely scenario for sandwich panel market development in Russia provides for maintaining the production and consumption at **approximately *** mln sq.m** in 2019-2021. In general, according to INFOLine, the sandwich panel market is most likely to expect a moderate development scenario for the period until 2021. Thi scenario provides for stable sandwich panel consumption with support from the export component. At the same time, an important market trend is a sharp change in the structure of leading producers: e.g. a number of leading manufacturers who invested in production development in 2010-2015 left the market under pressure from an increasing debt burden in 2016-2019, and their capacities were transferred to the remaining market participants, often at a significantly reduced price. A vivid example is the auction sale as part of the bankruptcy procedure of the Lissant Ventilation Plant CJSC production complex in St. Petersburg in 2019. This asset was acquired by Doorhan, GK for RUB 334 mln at an initial price of RUB 522.8 mln. As a result, new large production clusters appear on the market that have successfully optimized their debt load and are able to pursue a flexible pricing policy. This certainly leads to a healthy market and creates prerequisites for the moderately optimistic scenario of the industry development. <…>

Section 2. Main Segments of Sandwich Panel Consumption

Sandwich panel consumption by key segments was estimated using average consumption factors and taking into account the features and application frequency of various design schemes in individual sub-segments (shopping centers, hypermarkets, logistics facilities and other facilities). The average sandwich panel consumption factor was calculated based on an analysis of a pool of more than 200 reference facilities and represents the ratio of the sandwich panel volume used (or the estimated area of walls and roof) to the total area of the facility built. The consumption factors obtained feature by a maximum error of 3-4% (approximately 10% for shopping centers and industrial facilities due to large differences in design and architectural solutions).

Table 1. Weighted Average Sandwich Panel Consumption Factors (Including Precast Panels)

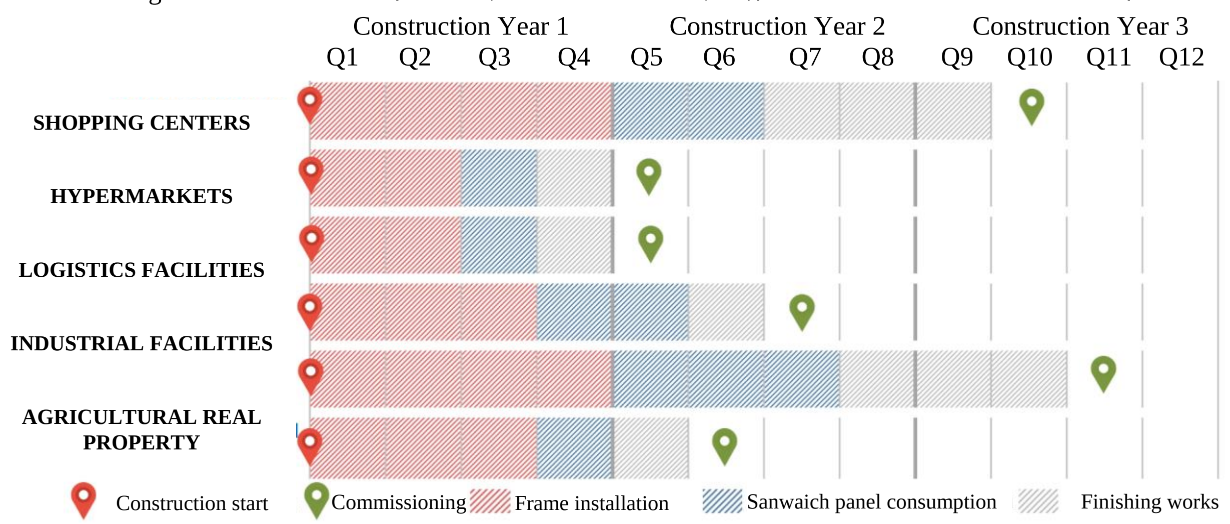
Subsegment		Sandwich panel consumption, sq.m per sq.m of the building	Accuracy, sq.m per sq.m / %	Share of facilities with sandwich panels,%
Shopping centers	<30 thousand sq.m	1.4	0.09 / 10%	100%
	>30 thousand sq.m	0.6		20% (100% taking into account special decorative panels and precast assembly)
Hypermarkets (freestanding)		1.36	0.05 / 3.5%	~ 100%
Logistic facilities		1.4	0.07 / 4.3%	~ 100%
Other commercial facilities		1.0	0.04 / 3.3%	40%
Industrial facilities		1.7	0.07 / 4.1%	~ 100%
Agricultural facilities		1.5	0.06 / 4.3%	100%

Source: INFOLine estimates

Differences in the development cycle of various facilities are also taken into account when calculating sandwich panel consumption. Construction periods vary significantly for different facilities, and the duration and intensity of building material consumption at different construction stages (including sandwich panels) varies accordingly. For the purposes of this study, the following unified parameters of the development cycle were adopted for each of the commercial construction subsegments considered:

- Shopping centers - construction cycle is within 2.5 years, sandwich panel consumption is mainly in the second year of construction.
- Hypermarkets and logistics facilities - construction cycle is within 1 year, sandwich panel consumption is in the second half of the construction cycle.
- Other commercial facilities - construction cycle is within 1.5 years, sandwich panel consumption is at the end of the first year of construction.
- Industrial facilities - construction cycle is within 3 years, sandwich panel consumption is mainly in the second year of construction.
- Agricultural objects - construction cycle is within 2 years, sandwich panel consumption is mainly in the second half of the first year and the beginning of the second year of construction.

Figure 5. Unified Development Cycle Structure in Key Segments of Sandwich Panel Consumption

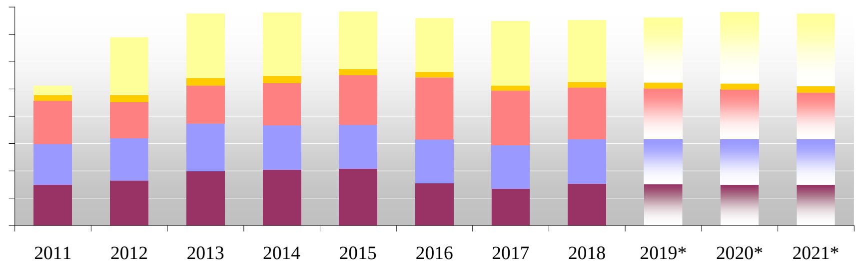


Source: INFOLine estimates

In 2018, the volume of sandwich panel consumption in commercial, industrial and agricultural construction amounted to a total of approximately ***% of the market capacity. The agricultural real estate segment still retains its leadership taken in 2016 against the background of reduced consumption in the construction of shopping centers and hypermarkets and active agricultural sector development. In the light of restructuring and extending the federal target program "*State Program for the Development of Agriculture and Regulation of Agricultural Products, Raw Materials and Food Markets*" designed to create favorable conditions for private investment (without any direct capital costs for the construction of large facilities that could become growth points of sandwich panel consumption), a gradual saturation with modern production complexes and a reduction in the volume of new construction and sandwich panel consumption are expected in agriculture.

Figure 6. Sandwich Panel Consumption Structure in 2018, %

Figure 7. Sandwich Panel Consumption by Key Segments in 2011-2018 and Forecast up to 2021, mln sq.m



Source: INFOLine estimates

DEMO VERSION: The full text of the section contains an overview of the key segments of the consumption of sandwich panels: commercial real estate construction, agricultural construction and industrial construction. For each of the segments, the volume of consumption of sandwich panels and a forecast of consumption up to 2021 was calculated.

In commercial construction, the key driver for 2019 remains the segment of logistics real estate. The growth in demand for modern-sized warehouses and distribution centers stimulates the development of large logistics parks; warehouse real estate developers are gradually creating logistics cluster networks. Against this background, in the construction segment of large freestanding hypermarkets where the market saturation point has already been reached, investment activity is gradually decreasing. Although it demonstrates some recovery growth relative to the lows of 2016-2017, the construction of modern shopping centers still has no significant prerequisites for active growth until 2021 and is likely to remain at the level of 2019 (approximately *** of new areas annually).

Sandwich panel consumption in the industrial construction turned out to be less susceptible to fluctuations, which was primarily due to the longer development cycle of investment projects and the smoothing out of the 2014-2017 investment pause effect (however, consumption in the industrial segment decreased by ***% in this period relative to the highs of 2013). In the future, a moderately positive trend is expected until 2021, and consumption in industrial construction will remain at the level of *** mln sq.m of sandwich panels per year.

It should be noted that in addition to the key segments of sandwich panel consumption described above, there is also a niche for small-sized industrial and commercial buildings. This niche includes facilities with an area of less than *** thousand sq.m with a closed thermal circuit (hangars and warehouses, pavilions, garage-type structures, auxiliary production facilities, etc.). In some cases, such objects are not classified as capital structures, and in the vast majority are not taken into account by official statistics. Structural schemes in this segment are mainly used with a framework made of light steel thin-walled structures and sandwich panels as barrier structures. According to INFOLine, the total commissioning volume of such facilities as a result of new construction is *** mln sq.m per year (approximately *** thousand buildings), and the volume of sandwich panel consumption is estimated at about *** mln sq.m per year. <…>

Section 3. Sandwich Panel Import and Export Dynamics

<…> Depending on the situation on the construction market and the solvency of construction companies, the ratio of these imported sandwich panel categories changes affecting the structure of sandwich panel consumption in physical and monetary terms. As of 2019, the capacities of Russian manufacturers can fully satisfy the Russian construction market demand for sandwich panels. In 2017-2019 about ***% of the sandwich panel consumption volume in physical terms was supplied from other countries. <…>

Figure 8. Sandwich Panel Import and Export Dynamics in Russia in 2011-2019, thousand sq.m

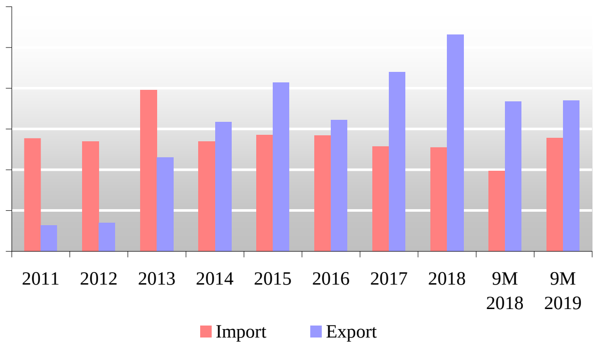
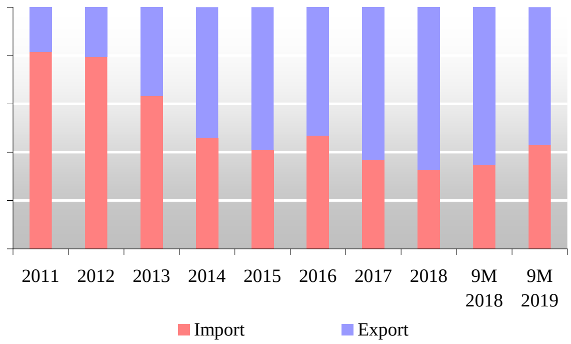


Figure 9. Import to Export Ratio in the Overall Sandwich Panel WTO Structure in 2011-2019, %

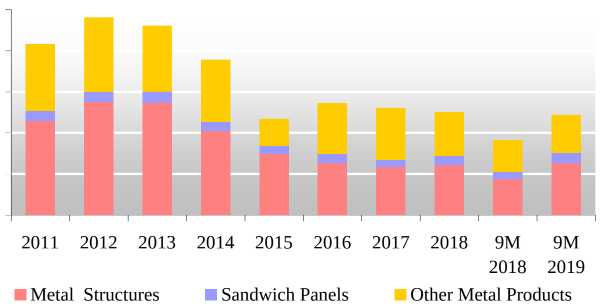


Source: INFOLine information according to the FCS data

DEMO VERSION: The full text of the section contains analytical and statistical information on the dynamics and structure of export and import of sandwich panels in Russia

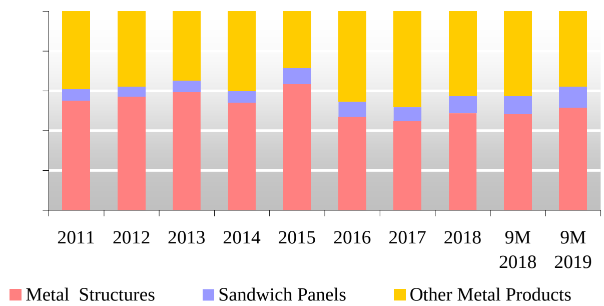
<…> According to the results of 9 months of 2019, approximately *** thousand tons of metal products for various purposes were imported into the territory of Russia, which is ***% higher than the same period in 2018. More than ***% (or *** thousand tons) of imported metal products are accounted for by building metal structures, ***% are from sandwich panels and ***% are from other metal products (doors, window systems, ventilation systems, structures for shipbuilding, etc.). <…>

Figure 10. Dynamics of Metal Product Import in Russia in 2011-2019 by types, thousand tons



Source: INFOLine according to the FCS information, Comtrade

Figure 11. Structure of Metal Product Import in Russia in 2011-2019 by types, %



Source: INFOLine according to the FCS information, Comtrade

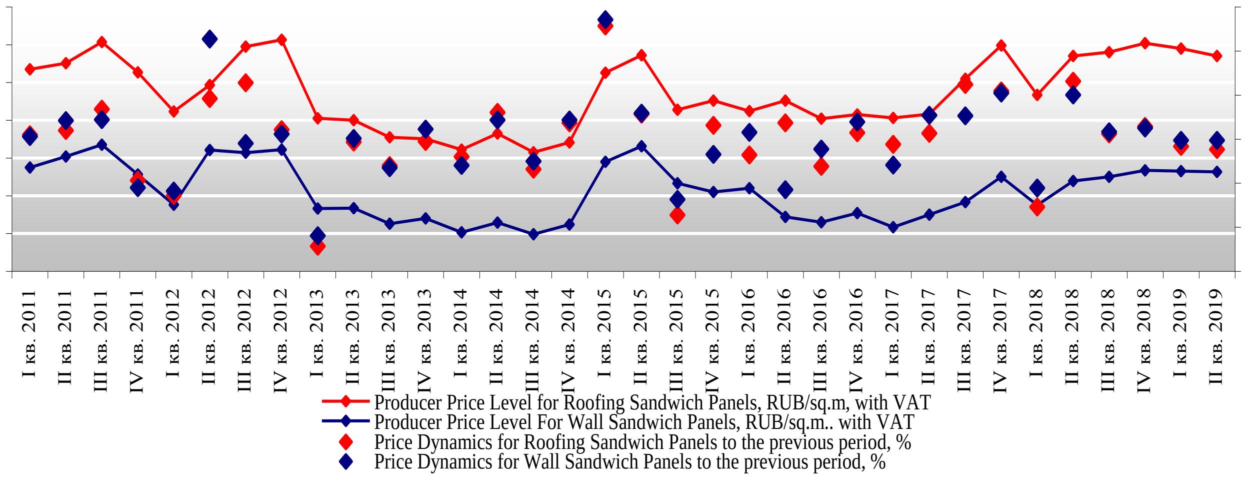
<…> According to INFOLine, the import volume of sandwich panels in physical terms in 2018 slightly decreased compared to 2017 and amounted to *** mln sq.m. Over 9 months of 2019, *** mln sq.m were imported, which actually exceeds the level of the whole of 2018 (in comparison with the same period in 2018, the increase in imported products amounted to more than ***% mainly due to large deliveries from Belarus). <…>

<…> According to INFOLine estimates, in the long term until 2021, the import volume of sandwich panels on the Russian market after local growth in 2019 should return to the levels of 2014-2015 (approximately *** mln sq.m per year). The reason for this should be the restart and restoration of production at large production sites in the Central Federal District, the Volga Federal District and the Northwestern Federal District, which in turn will lead to the restored saturation of the Russian market with domestic products and crowd out foreign supplies. <…>

Section 4. Dynamics and Structure of Sandwich Panel Prices

The price analysis given in this section is given based on the results of range and price monitoring conducted by INFOLine between 2008 and 2019. The main indicator is the price (all prices include VAT) for 100 mm thick sandwich panels and 150 mm thick roof panels (metal thickness is 0.5 mm) with mineral wool filler. <…>

Figure 12. Dynamics of Producer Prices for Sandwich Panels with Mineral Wool Insulation in Russia in 2011-H1 2019, RUB/sq.m with VAT

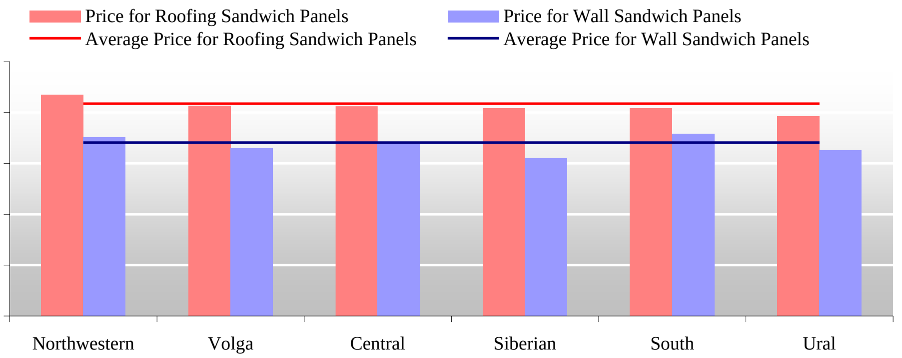


Source: INFOLine information

<…>According to the Russian sandwich panel market monitoring conducted by INFOLine, average prices for roofing sandwich panels are about RUB *** per sq.m in Q3 2019 returning to mid-2018 after a short-term increase to over RUB *** per sq.m at the end of 2018. The average price of wall sandwich panels remains close to maximum values and amounts to approximately RUB *** per sq.m (***% more than the level of Q3 2018). <…>

DEMO VERSION: The full text of the section contains an analysis of the prices dynamics for sandwich panel with segmentation by region and manufacturer, as well as a forecast of prices until 2021

Figure 13. Comparison of Average Prices for Sandwich Panels with Mineral Wool Insulation by Manufacturing Region for Q3 2019, RUB/sq.m with VAT



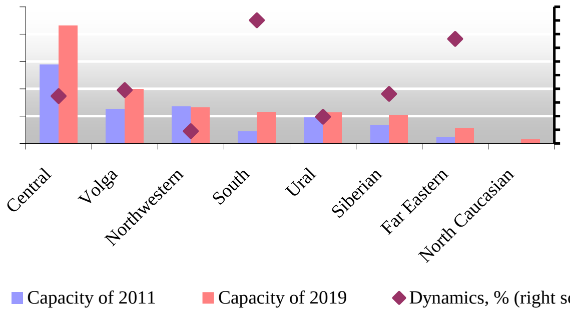
Source: INFOLine information

<…>As of 2019, sandwich panel manufacturers were actually caught in a price vise and extremely limited in their pricing policy. Effective cost and risk management, as well as the ability to form a stable portfolio of orders, keeping a balance of favorable price offers, product quality and own costs, comes to the fore. According to INFOLine estimates, in the long term until 2021 a significant reduction in sandwich panel prices is not expected (the potential for lowering prices on the current market conditions for most manufacturers is almost exhausted). In accordance with the most probable scenario, in the future until 2021 the average market prices in Russia will fluctuate in the range of RUB ***per sq.m for roofing sandwich panels and in the range of about RUB *** per sq.m for wall sandwich panels. <…>

Section 5. Milestones and Investment Activity on the Sandwich Panel Market

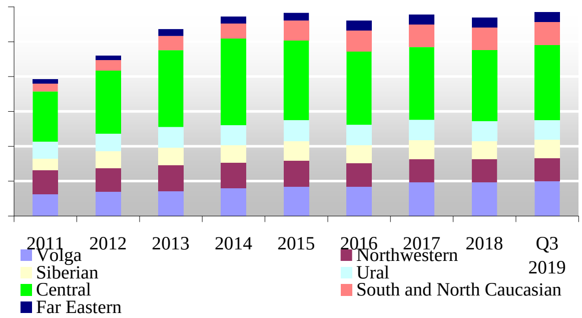
<…> As of October 2019, a significant surplus of sandwich panel production facilities remains in Russia: the actual load of Russian manufacturers does not exceed *****%** on average at a nominal total capacity of about *** mln sq.m per year. For details on the loading of production capacities of key manufacturers refer to Section 9.3 Rating of Leading Sandwich Panel Manufacturers in Russia in terms of Production Capacity. <…>

Figure 14. Commissioning Dynamics of Sandwich Panel Production Capacities in Russia by Federal District in 2011-2019 (including restarts), mln sq.m per year



Source: INFOLine information

Figure 15. Dynamics of Sandwich Panel Production Capacities in Russia by Federal Districts in 2011-2019 cumulatively, mln sq.m per year



Source: INFOLine information

DEMO VERSION: The full text of the section contains an overview of investment activity and key events in the sandwich panel market: mergers, acquisitions, and redistribution of capacities, as well as regulatory developments

Table 2. Sandwich Panel Production Facilities Restarted in 2017-2019

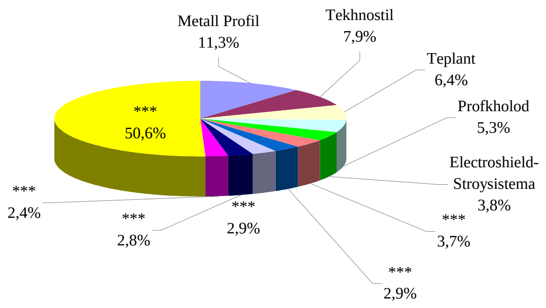
Former owner	New owner	Region	Launch year	Insulation type	Equipment brand	Sandwich panel production capacity, thousand sq.m per year
Samara Electroshield - Stroyindustriya Plant PJSC	***	Samara Region	2017	***	***	***
Stalpanel LLC	***	Moscow Region	2017	***	***	***
Ruukki-Rus LLC	***	Kaluga Region	2018	***	***	***
Stalinvest CJSC	***	Tula Region	2018	***	***	***
Stimet Voronezh LLC	***	Lipetsk Region	2018	***	***	***
Stimet Voronezh LLC	***	Lipetsk Region	2018	***	***	***
ZSBK Armaks LLC	***	Voronezh Region	2018	***	***	***
Metall-Don LLC	***	Rostov Region	2019	***	***	***
Germes Construction Company LLC (LUXPAN)	***	Tula Region	2019	***	***	***
DNStroy LLC (TK Materials LLC)	***	Samara Region	2019	***	***	***
Teplant OJSC	***	Samara and Ivanovo Regions	2019	***	***	***
Lissant Ventilation Plant CJSC	***	St. Petersburg	2019	***	***	***

Source: INFOLine information

Section 6. Sandwich Panel Manufacturer Rating

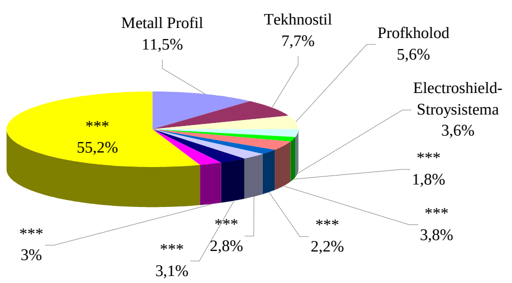
<…>

Figure 16. Sandwich Panel Production Structure in Russia by Manufacturer in 2017, %



Source: FSSS information

Figure 17. Sandwich Panel Production Structure in Russia by Manufacturer in 2018, %



Source: FSSS information

DEMO VERSION. * The full text of the section contains an analysis of the dynamics of production of sandwich panels by the companies in Russia and a rating by production indicators, financial indicators activities and capacities

Table 3. TOP-25 Rating of Leading Sandwich Panel Manufacturers in Russia according to the Results of 2018 with Preliminary Results of H1 2019

Name	District	Region	Capacity as of Q3 2019, thousand sq.m	Insulation	Volume of sandwich panel production, thousand sq.m [1]				Rating position			Change of 18/17
					2016	2017	2018	H1 2019	2016	2017	2018	
Metall Profil, GK	Central, Ural, Siberian	Vladimir, Sverdlovsk, Novosibirsk Regions	***	***	***	***	***	***	1	1	1	→
Tehnostil, GK	Central	Tula, Samara Regions	***	***	***	***	***	***	2	2	2	→
Profkholod LLC	Central	Moscow, Tula Regions	***	***	***	***	***	***	3	4	3	↑1
Rospromstroy LLC (Mayak, GK)	Volga	Samara Region	***	***	***	***	***	***	7/8	7/8	4	↑3
Electroshield-Stroysistema LLC (Stroysistema, GK)	Volga	Samara Region	***	***	***	***	***	***	-	5	5	→
TOP 25 Total (rounded)			***	-	***	***	***	***	-	-		
Companies that dropped out of the rating and left the sandwich panel market as of Q4 2019												
***	***	***	***	***	***	***	***	***	4	3	-	↓↓
***	***	***	***	***	***	***	***	***	-	6	-	↓↓
***	***	***	***	***	***	***	***	***	4	14-17	-	↓↓
***	***	***	***	***	***	***	***	***	19-21	25-27	-	↓↓
Total Production in Russia (rounded)					***	***	***	***				

Source: corporate data, estimates of INFOLine experts

<…>

[1] Italics in this table indicate the values obtained according to INFOLine estimates based on the analysis of financial highlights, volumes and dynamics of transportation of metal structures by rail, and analysis of the metal structure production volume and dynamics in Russia as a whole, as well as in regions and federal districts for the period from 2008 to 2018. The data given in square brackets means sandwich panel production by the previous owners of the relevant production site.

List of tables and figures

Tables

Graphs and figures