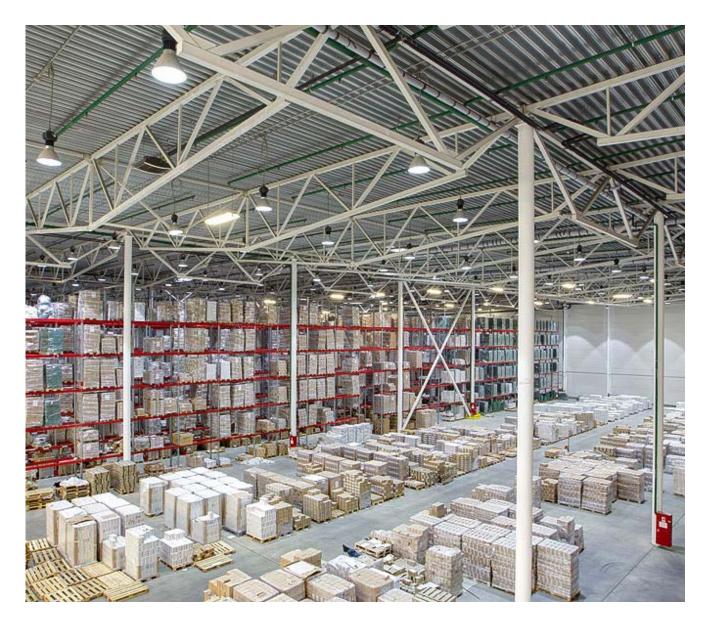
For 9 months of 2020, **592,000 sq m** of high-quality warehouse real estate were commissioned, which corresponds to the indicators of 2019 The total volume of transactions in the warehouse real estate market reached **985,000 sq m**, which is 14% less than in 2019



WAREHOUSE MARKET REPORT MOSCOW

Q3 2020





Konstantin Fomichenko Director, Industrial & Warehouses, Knight Frank

«We see more and more built-to-suit transactions, which indicates a shortage of vacant areas and an increasing customization of customer requests. Under such conditions, the degree of preparedness of the land plot of the logistics park for the start of construction plays an important role in making a decision»

Key points

- For 9 months of 2020, 592,000 sq m of high-quality warehouse real estate were commissioned, which corresponds to the indicators of 2019.
- According to the results of Q3 2020, the share of vacant area was 2.2%
- The total volume of transactions in the warehouse real estate market reached 985,000 sq m, which is 14% less than in 2019.
- The market of the Moscow region maintains a high level of the weighted average requested rental rate. According to the results of Q3 2020, it amounted to 4,000 rubles/sq m/year triple net.

Supply

For 9 months of 2020, 592,000 sq m of high-quality warehouse properties were commissioned in the warehouse real estate market of the Moscow region, which generally corresponds to the same indicator for Q3 2019, when the volume of commissioned area was 552,000 sq m. The total offer volume of high-quality warehouse real estate in the Moscow region reached 15,797,000 sq m.

In Q1–Q3 2020, there was an active commissioning of private warehouse

Market indicators

properties. According to the results of Q3, the share of properties built on private land plots under the general contracting scheme increased by 38 p.p compared to the final indicator in 2019 and amounted to 58%, which in absolute terms is 344,000 sq m. One of the largest properties of this type is the distribution center of the Globus food retailer with a total area of 60,000 sq m.

According to the results of nine months of 2020, 34% of the total volume of new

	Q3 2019	Q3 2020	Change
Total supply volume of quality warehouse space, thousand sq m	14,779	15,797	-
New delivery, thousand sq m	552	592	•
Lease and purchase transaction volume, thousand sq m including:	1,139	985	•
Lease and purchase in delivered facilities	936	533	-
construction of new facilities	203	452	-
Vacancy rate, %	2.8	2.2	•
Class A average weighted asking rent rate, RUB/sq m/year*	3,800	4,000	•
Operating expenses range, RUB/sq m/year, no VAT**	900–1,300	900–1,300	•
Average asking price range for purchasing completed Class A warehouse, RUB/sq m/year, no VAT	33,000–40,000	35,000–42,000	•

* Hereinafter, asking rent rate for a standard Class A dry warehouse with no VAT, operating expenses,

and utility charges.

** Hereinafter, operating expenses range for a standard Class A dry warehouse.

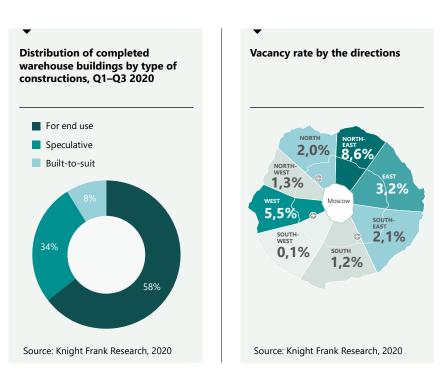
Source: Knight Frank Research, 2020

construction, or 203,000 sq m, accounted for properties sold for speculative lease on the open market. The share of speculative projects decreased by 12 p.p compared to the final indicator in 2019, when the share of speculative properties was 46%. The largest property was building 3.2 in the Sofyino logistics park with an area of over 49,000 sq m. It is also worth noting the commissioning of the 16th and 17th buildings of the Synkovo logistics park with a total area of just over 24,000 sq m.

The largest volume of new commissioned area is concentrated at a distance of 15-30 km from the Moscow Ring Road – 51% of the total commissioned area volume, which in absolute terms is 299,000 sq m. At a distance of 30-45 km from the Moscow Ring Road, 21%, or 122,000 sq m, were sold.

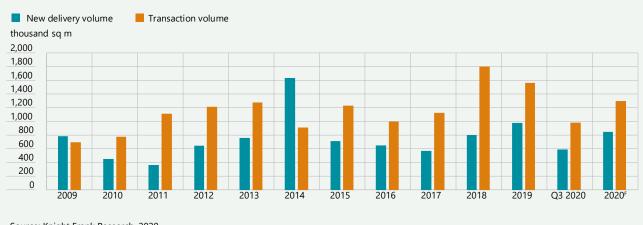
The total volume of warehouse real estate at a distance of up to 30 km from the Moscow Ring Road has reached 11,000,000 sq m, this concentration of properties is explained by the high demand from customers for such projects.

In Q3 2020, the trend towards a decrease in the share of vacant area in the Moscow region continued. At the end of nine months of 2020, it amounted to 2.2%, or 346,000 sq m. In addition to the high demand for warehouse space, the construction of private properties also contributes to a decrease in the share of vacant area. Knight Frank's company specialists expect a maintaining low level of vacant lots on the market, and by the end of 2020 the share of vacant lots will be 2.1-2.2%.



Quality warehouse stock distribution by distance from MKAD





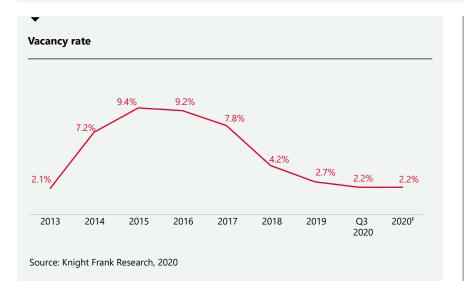
Dynamics of new delivery and transaction volume

Source: Knight Frank Research, 2020

Year	Quarter	Title	Developer	Total area, sq m
2020	Q1	Wildberries Distribution Centre, (phase II/ III)	A Plus Development/Wildberries	92,000
2020	Q3	Globus Distribution Centre	Globus	60,000
2020	Q2	Sofyino Logistics Park. building 3.2	Logopark Management	49,615
2020	Q3	Kolomenskiy factory	PNK Group	47,000
2020	Q1	Vernyy Distribution Centre	PLT	44,444
2020	Q1	Bikovo Logistics park, block R	Logopark Management	42,894
2020	Q2	Logistics Centre	Lizard	26,971
2020	Q3	Synkovo Industrial city	Stroitelniy Alyans	24,526

The largest properties delivered to the market of the Moscow region in Q1-Q3 2020

Source: Knight Frank Research, 2020



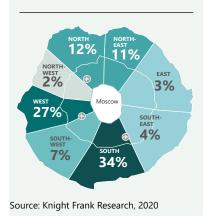
According to the results of Q3 2020, the northeastern direction of the Moscow region showed the largest offer of vacant area in absolute terms - just over 72,000 sq m, or 8.6% of the total offer in this direction. The volume of vacant warehouse blocks in the northeast increased by 1.5 times compared to the final indicator for the first half of 2020. A significant increase is due to the release of 55,000 sq m in the Kholmogory industrial park.

The smallest volume of offer of the vacant area in absolute terms is noted in the southwestern direction of the Moscow region. At the end of Q3 2020, less than 2,000 sq m of high-quality warehouse area is vacant here, or 0.1% of the total offer in this direction.

Demand

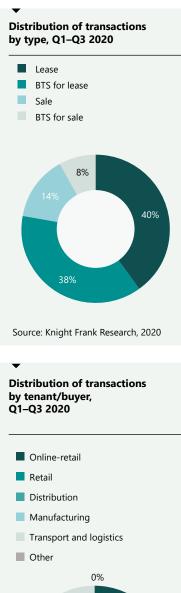
According to the results of Q3 2020, the total volume of transactions in the warehouse real estate market in the Moscow region amounted to 985,000 sq m, which is 14% lower than the same indicator in 2019, when the volume of demand was 1,139,000 sq m. It is worth noting that in Q3 2020, the largest transactions with warehouse real estate in the entire history of observation were concluded, for example, a lease concluded by VseInstrumenty.ru company under built-to-suit scheme of 182,000 sq m in PNK Park Domodedovo, a lease concluded by Ozon company under built-to-suit scheme of 154,029 sq m in the Orientir Zapad warehouse complex.

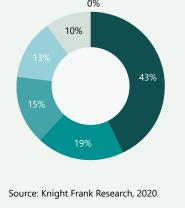




The largest number of transactions was concluded in the southern direction of the Moscow region - 34% of the total volume of transactions, or 328,000 sq m. In the western direction of the Moscow region, there was 27% of the total volume of transactions, or more than 255,000 sq m. At the same time, the share of transactions concluded in the northeastern direction of the Moscow region amounted to 11% of the total demand. The least activity is noted in the south-east, east and northwest directions: the share of transactions with warehouse real estate in these directions varies from 2 to 4%.

The most popular transactions type was speculative lease: it accounted for 40% of





the total volume of transactions, which in absolute terms is 394,000 sq m. The largest speculative transaction was the lease by Wildberries of 46,000 sq m in the Raven Russia Pushkino logistics park, which was concluded for a short



term. It should be noted that there is a decrease in the share of speculative lease transactions. At the end of 2019, the share of speculative lease transactions amounted to 75% of total demand.

At the same time, on the market there is an increase in transactions concluded under built-to-suit scheme, with subsequent leases. According to the results of Q1-Q3 2020, this type of transaction accounted for 38% of the total demand, which is 30 p.p more than the final indicator of 2019, when it accounted for 8% of the total acquisition. The largest transactions were concluded by online trade representatives. Thus, the VseInstrumenty.ru company rented 182,000 sq m in PNK Park Domodedovo. The decrease in the share of speculative leases and the increase in the share of built-to-suit scheme transactions are due to both the low share of vacant area on the warehouse real estate market in the Moscow region and the presence of special requirements for warehouse properties from companies representing the online trade and retail sectors, which most active in the market in 2020.

According to the results of nine months of 2020, the purchase of finished buildings accounted for 14% of the total volume of transactions, or 139,000 sq m.

According to the results of Q3 2020, the online trade sector became the leader in the volume of demand: it accounted for 43% of the total volume of transactions, which in absolute terms is more than 425,000 sq m. The main buyers of warehouse real estate in the Moscow region from this sector were such companies as VseInstrumenty.ru: according to the results of Q3 2020, this company concluded transactions for more than 206,000 sq m in total and Ozon: within 9 months the company made transactions for 163,000 sq m.

The second place in the structure of demand was taken by the retail trade sector, the volume of transactions in which according to the results of Q3 2020 amounted to 187,000 sq m, or 19% of the total acquisition. The share of transactions concluded by retailers decreased by 7 p.p compared to the final indicator in 2019, when it reached 26%.

15%, or just over 151,000 sq m, accounted for distribution companies. The largest transaction in this sector was the purchase by Orion company of the building under built-to-suit scheme of 34,000 sq m in PNK Park Pushkino.

Year	Quarter	Tenant / buyer	Type of company	Property / location	Total area, sq m	Type of transaction
2020	Q3	VseInstrumenty.ru	Online-retail	PNK Park Domodedovo	182,000	BTS lease
2020	Q3	Ozon	Online-retail	Orientir-Zapad	154,029	BTS lease
2020	Q2	X5 Retail Group	Retail	Novaya Riga Logistics park	89,384	BTS lease
2020	Q3	Wildberries	Online-retail	Pushkino Logistics park	46,000	Lease
2020	Q3	IDS Borjomi Russia	Manufacturing	PNK Park Severnoe Sheremetyevo	45,020	Sale
2020	Q2	X5 Retail Group	Retail	Orientir Sever-4	43,080	BTS lease
2020	Q2	Marvel Logistics	Transport & logistics	PNK Park Valischevo	40,578	BTS sale

The largest transactions signed in the warehouse property market of the Moscow region in Q1–Q3 2020

Source: Knight Frank Research, 2020

Commercial terms

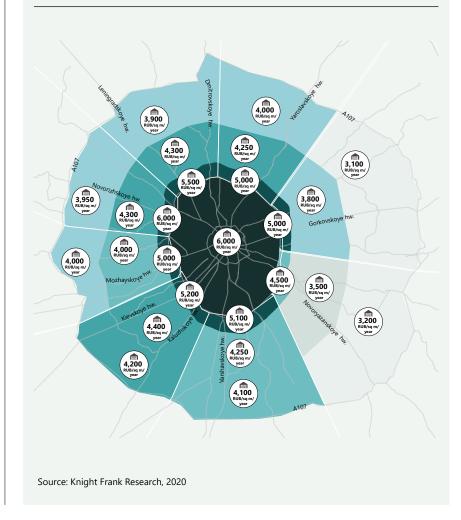
According to the results of Q3 2020, the weighted average requested rental rate in the warehouse real estate market of the Moscow region amounted to 4,000 rubles/sq m/year triple net.

In the south-west of the Moscow region, the highest level of the weighted average requested rental rate remained, which is 4,605 rubles/sq m/year triple net. The high level of the weighted average requested rental rate is due to the fact that in the southwest direction the main volume of vacant area offer is shaped by lots with a rental rate of 5,000– 6,000 rubles/sq m/year triple net in properties located near the Moscow Ring Road.

The lowest level of the requested rental rate is observed in the eastern direction of the Moscow region - 3,200 rubles/sq m/year triple net. The rental rate in the east decreased by 6% compared to the final indicator in 2019, when it reached 3,400 rubles/sq m/year triple net.

A notable change in the weighted average requested rental rate occurred in the southeast direction. According to the results of Q3, the rental rate in the southeast amounted to 3,400 rubles/ sq m/year triple net, having decreased by 6% compared to the same indicator in the first half of 2020, when it reached 3,600 rubles/sq m/year triple net.

Average weighted asking rental rates in directions of the Moscow region, RUB/sq m/year triple net



The decrease in the rate is due to the exit from the market of high-quality warehouse area with the requested rental rate of 3,500-4,100 rubles/sq m/year triple net.

According to the results of nine months of 2020, the level of operating expenses was in the range of 900-1,300 rubles/ sq m/year excluding VAT.

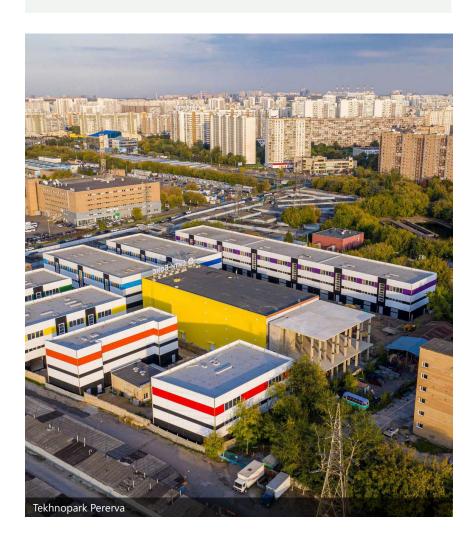
Forecast

According to forecasts of Knight Frank analysts, by the end of 2020 the total volume of commissioned warehouse real estate on the Moscow region market will amount to 800,000-850,000 sq m.

The warehouse real estate market is showed a recovery in business activity, a decrease in which was noted in Q1 amid quarantine measures. Thus, by the end of 2020, the total demand for highquality warehouse facilities may reach 1,200,000-1,300,000 sq m. No drastic changes are expected in the demand structure.

In the absence of critical external factors and maintaining macroeconomic stability by the end of 2020, the vacancy rate will only continue to decline to 2.1-2.2%.

The weighted average requested rental rate for class A warehouses according to the results of 2020 will remain at the current level and amount to 4,000 rubles/ sq m/year triple net. The warehouse real estate market is currently one of the most stable market sectors, where rental rates, due to the low volume of new construction and low vacancy area share, have high growth potential. But the current macroeconomic uncertainty will hold back significant increase in rates. Dynamics of average asking Class A rental rates, RUB/sq m/year triple net 4,700 4 500 4,300 4 000 3,900 4 000 <u>4,000</u> 3,700 3,650 2018 2013 2014 2015 2016 2017 2019 Q3 2020F 2020 Source: Knight Frank Research, 2020



Largest properties scheduled for delivery by the end of 2020

Title	Developer	Total area, sq m
Vnukovo II Logistics Complex	Logistics Partners	64,500
Orientir Sever-4	Orientir	60,000
Salaryevo warehouse complex	DDT Logistic	23,149
Tekhnopark Pererva	KR Properties	19,340

CONSULTING & RESEARCH DEPARTMENT

Knight Frank Russia & CIS has the local expertise and global experience.

WE WORK IN ALL REGIONS AND ALL SEGMENTS



Other reports in Research section on the website

SERVICES

CONSULTING

- Best use
- Project's concept development /reconception
- Audit and optimization of Project
- Marketing opinion / Market research
- Project's business plan
- Analysis of the project's economic feasibility / Financial analysis
- Architectural concept development
- Hotels / SPA / public spaces operator search
- Survey of potential tenants

REAL ESTATE VALUATION

- Commercial and Residential real estate
- Federal and International valuations standards
- Valuation for managerial decisions
- Valuation for loan financing
- Valuation for purchase and sale
- Valuation for financial statements



To learn more about our services or ask questions please contact us

+7 (495) 023-08-12 kf@kf.expert

Or make request on our website.

CONSULTING & RESEARCH

Olga Shirokova Director, Russia & CIS OShirokova@kf.expert



© Knight Frank LLP 2020 – This overview is published for general information only. Although high standards have been used in the preparation of the information, analysis, view and projections presented in this report, no legal responsibility can be accepted by Knight Frank Research or Knight Frank for any loss or damage resultant from the contents of this document. As a general report, this material does not necessarily represent the view of Knight Frank in relation to particular properties or projects.

Reproduction of this report in whole or in part is allowed with proper reference to Knight $\ensuremath{\mathsf{Frank}}$

INDUSTRIAL

Konstantin Fomichenko

Director, Industrial & Warehouses Knight Frank Konstantin.Fomichenko@ru.knightfrank.com