

RESIDENTIAL MARKETS IN EUROPE

Growing Appetite For The Asset Class

Generali Real Estate

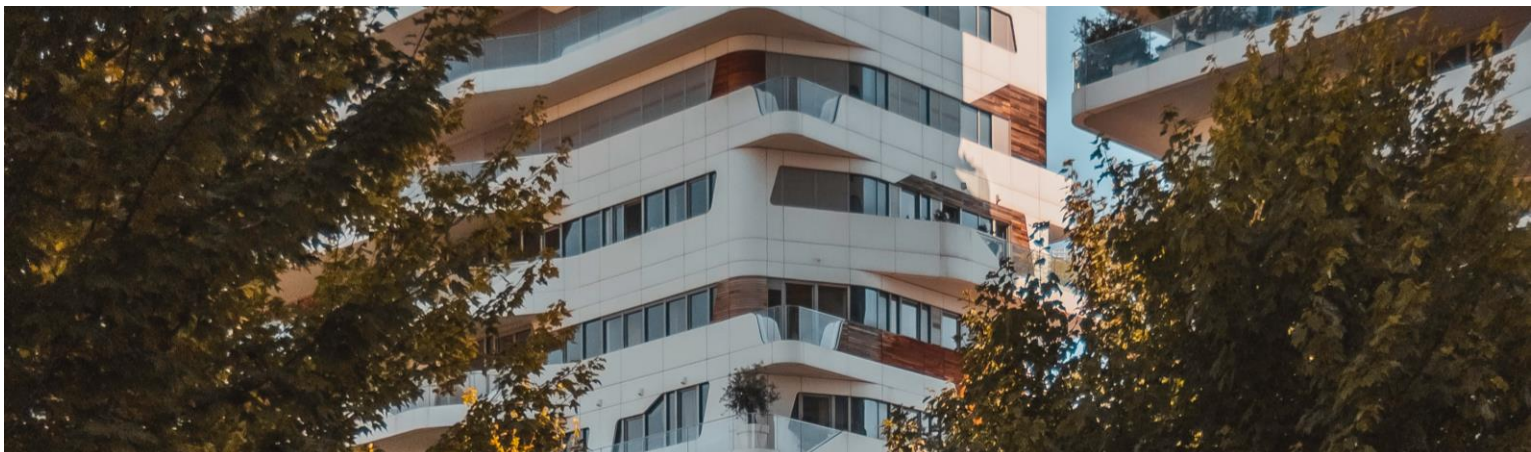
June, 2021

Is work from home the new normal ?

Residential real estate is by far the most widespread destination of use in the global real estate universe and still very fragmented as less than 10% is owned by institutional investors. For a long time, however, the asset class has attracted limited capital as investors preferred a dominant allocation in commercial real estate. Historical data (share of own ownership by institutional investors), complexity and wide variety of legislative and fiscal environments at national and local level (often tenant friendly) partly explain this under-representation in institutional portfolios. From an operational stand-point residential is characterized by greater complexity of the investment approach (analysis and understanding of the dynamics of multiple micro markets) and a wide set of recurring asset management activities. The recent success of the residential asset class can be summarized as follow:

- In Europe, residential real estate has long been penalized by significantly lower yields than commercial real estate. The steady decline in offices and urban logistics yields in recent years has certainly contributed to the renewed interest in the residential sector
- Amid lingering coronavirus threat, we expect the housing sector to play an even more important role over the next few years as people are spending relevant time at home and will continue to benefit from generous public subsidies that are eventually sustaining the rent paying capacity of private individuals
- Looking further ahead into long term, we anticipate rental demand to remain strong as cities polarization and urbanization dynamic should foster new lifestyle trends such as ESG awareness or community living. Urbanization trend is confirmed as a long term secular factor

In such environment Generali Real Estate (“GRE”) can couple a top down approach coming from Business Intelligence and Analytics with an on the ground/ bottom up approach granted by more than 400 professionals located in 9 offices and able to manage the entire real estate value chain. The combination of those approaches supports the decision making process that is able to exploit all available data and eventually results on a cutting edge competitive advantage for investment underwriting and asset management processes.



Short-term and Covid related trends

Since the onset of the Covid-19 outbreak, most markets and sectors have faced challenging times and have to adapt themselves in order to fight against the virus and to try preserving their activities. Amid lockdowns and several restricted measures put in place in order to contain the pandemic since February 2020, the real estate market has also been hit especially from the user/ tenants side. In this scenario, the residential destination of use is definitively the one having registered the higher usage/ occupancy ever (with households spending more time at home) and better financial resiliency (also helped by the type of basic need there are serving).

As of today, the following trends for the residential sector have been observed:

Economic situation: The Covid-19 is spread globally and turned itself from a health emergency into an economic crisis, due to Governments' different measures imposed to contain the virus which have led to a high economic cost that could even become a social cost. Thus, Europe faced its worst economic recession in 2020. However, as shown on the graph below (Figure 1), residential prices remained resilient despite the pandemic and shows a decorrelation with the current economic downturn.

Government actions: Central banks and governments are acting with unprecedented measures to avoid a liquidity crisis that could trigger even more serious damage:

- Thus, most governments are supporting firms with wage-subsidy programmes in order to protect jobs, which are limiting the increase in unemployment and will assist countries in getting up and running again once the virus is under control. In line with that, tenants rent collection for the residential sector remains high sustained by personal savings and government aids which have largely protected household revenues.
- Furthermore, in the European Commission's €750 billion recovery plan to boost the EU economy, a large portion (>30%) of this plan will finance the Green deal, which will in turn also positively affect the residential sector as a new wave of environmentally friendly development and refurbishment is expected

Households: The Covid-19 reshaped the way we work, with an acceleration of teleworking. Indeed, the latter has become the norm for millions of employees since the pandemic and according to some estimations, close to 40%¹ began working from home fulltime in the EU. Households are now spending relevant time at home (Figure 2) and people's residence will play an even greater role over the next few years.

Residential assets: despite the expected short-term rise in inflation, mortgages/financing conditions should remain attractive and should continue to support residential prices. On the back of that, the affordability of households to buy is weakening, this leads to a positive impact for the renting market.

Figure 1 – House price decorrelation with current economic cycle

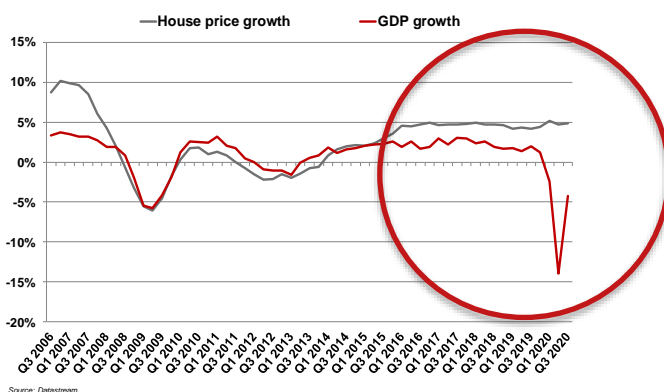
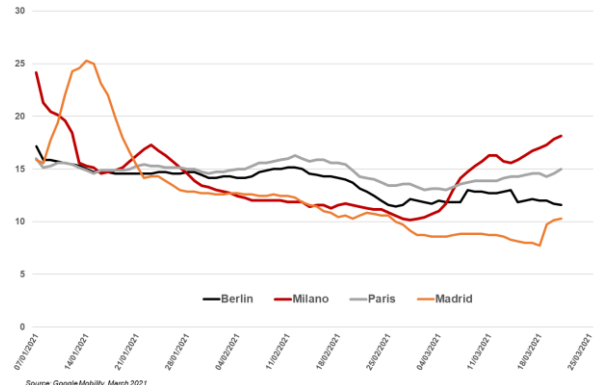


Figure 2 – Percentage variation of mobility with respect to the reference base by city



Long-term trends on residential

Urbanization, cities polarization & importance of infrastructure

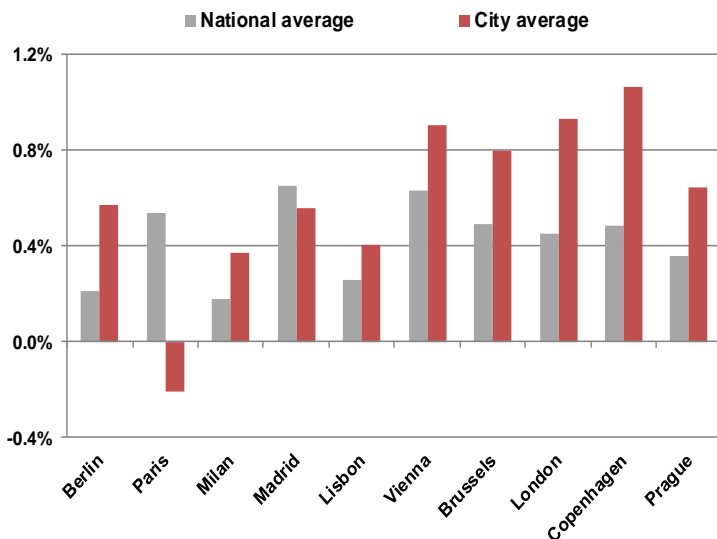
The UN estimated that 68% of the world's population will live in an urban environment by 2050, up from 55% today. While most of the gain concerns the Asia and Africa, the proportion of the urban population in Europe should rise from 74% to 84%. The **urbanization dynamic** should be particularly strong in Northern Europe. Generally speaking, the growth in the number of households (and therefore of dwellings) in large European cities (Figure 3) tends to exceed the pace of growth at national level, which makes them particularly attractive. Large divergences appear at the European level concerning the **housing ownership structures** (Figure 4) with Southern Europe countries favoring own ownership while their Northern Europe counterparts are clearly more renter friendly. But here again, the proportion of tenants in large cities tends to exceed national averages, particularly in Germany or Switzerland. Rent vs. buy decisions are also dependent from national/local rental legislations, with the UK, Finland and Norway generally considered as more landlord friendly and from cultural aspects (see below).

The role of **transportation infrastructure** is obviously crucial in supporting the urban development capacities of metropolitan areas over the long term. While large infrastructure projects are still being deployed, they tend to favor public transport over private cars, as evidenced by the Grand Paris Express & 2024 Olympic Games project (please refer to the dedicated section in the paper). At the same time, the concept of "15-minute city" aims to limit unnecessary travel in order to relieve congestion on major axes but above all to offer urban populations, some of whom had fled the city during the lockdown, a better life experience with high priority given to local activities and rapid access to goods and services essential to daily life.

Job market/ academic and cultural offer

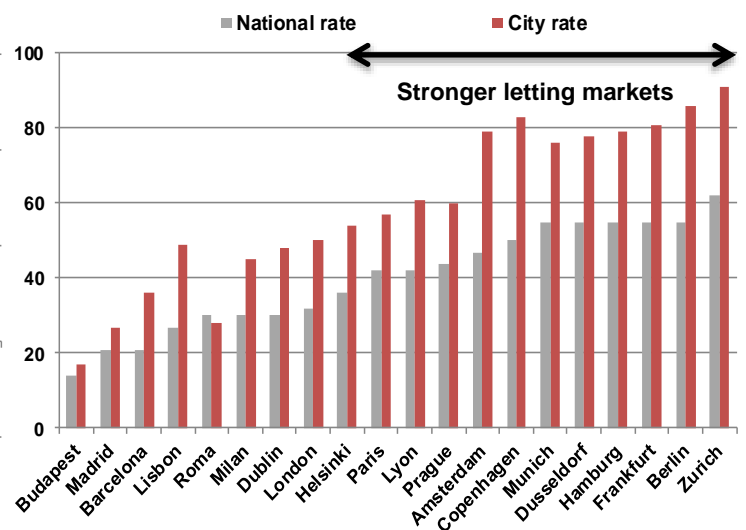
Although the link between residence and workplace is weakening due to the accelerated development of teleworking, large employment pools are still offered in large metropolitan areas/ gateway cities able to attract talents and professional also for their cultural and social offer. European champion cities could also claim for a leading cultural and technological landscape with world-class universities and scientific clusters in addition to a truly exceptional theatre, performing arts and cultural institutions.

Figure 3 – National vs City household growth [% p.a., 2021-2025]



Source: Oxford Economics

Figure 4 – National vs City proportion of renters [%]



Source: Eurostat
(Note: with the most recent available data)

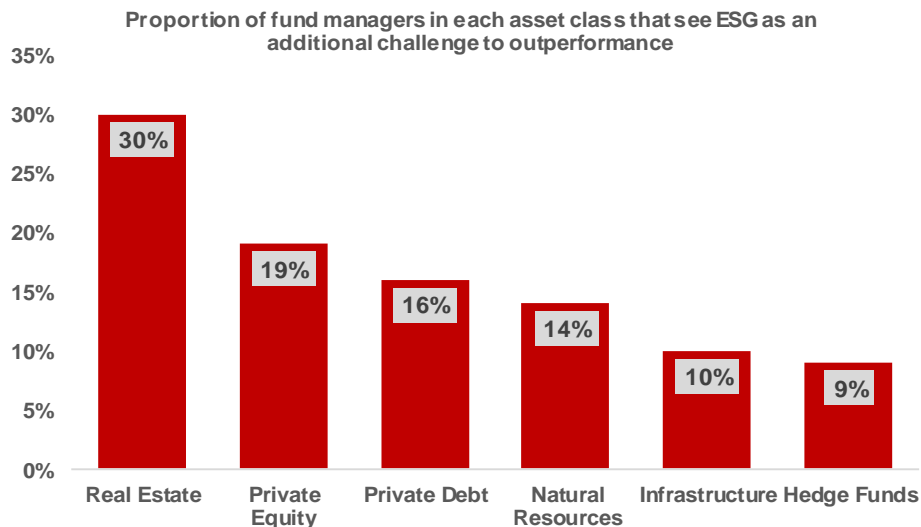
Long-term trends on residential

Environmental, Social and Governance [ESG] factors

The current pandemic has greatly contributed to significantly accelerating some pre-existing long-term trends (development of teleworking, increased importance of operators in line with short term occupational models) but also to lastingly modifying the perception of hitherto underestimated structural factors such as ESG, climate risk or greening of urban spaces.

According to a recent survey from Preqin³, among alternative managers, Real Estate fund managers are, by far, the most concerned by the impact of ESG rules on assets performance (Figure 5). One obvious explanation for this is the direct impact of energy & environment related capital expenditures on IRR. However, further analysis by JLL⁴ on Central London demonstrates that tangible financial benefits can be delivered by sustainable buildings to investors through a combination of higher rents and stronger leasing dynamics.

Figure 5 – Preqin ESG Survey [Nov. 2020]



Furthermore, as of March 10th 2021, the EU Sustainable Finance Disclosure Regulation (SFDR) did come into force, affecting the daily operations of real estate managers with the aim to create more ESG transparency and awareness towards the investor's community. The Regulation is expected investment managers to integrate sustainability risks in the investment decision making process and to identify principal adverse impact (PAI) and related mitigation strategies on the underlying investments. Moreover, the ESG Regulatory wave would send to the market a strong signal that ESG is finally becoming mainstream, placing greater emphasis on the Governance criteria and greenwashing avoidance.

Residential sector is intrinsically offering several opportunities to foster ESG aspects:

Environment: Green housing, zero emission housing are becoming the new norm, aiming to help in reducing noise, air and water pollution via a more efficient use of material and energy in the design process of new units or renovation.

Social impact: HaaS (Housing as a service, bringing a new approach focused on active management and innovative offerings) is especially appreciated by young working age population as a meaningful alternative to home ownership. It not only points to better access to home services but also to shorter and more various residential experiences more in line with contemporary style of life.

Younger (student housing) and older (home care & serviced apartments) are also of great importance as both age categories are expected to increase globally during next years.

3. Preqin "Real Estate Managers Are the Most Skeptical About ESG", March 2021.

4. JLL "The Impact of Sustainability on Value", March 2020.

The upward trend in residential transactions is continuing

It is worth noting that European residential investment volumes continue to gradually increase (Figure 7). Despite the Covid-19 pandemic, the residential sector was one of the sectors which continued to rise in 2020 (+13%) and recorded the strongest increase. Therefore, it was the second most traded asset class, holding a market share of 24% in 2020 (vs 34% for offices). Moreover, this increasing trend in transactions is expected to go on, as in times of uncertainty, investors search for stable income and should therefore continue to increase their exposure toward the residential market. Indeed, its low volatility combined with demographic trends and its disconnection from the current economic downturn, tend to support capital flows towards this destination of use eventually increasing its liquidity.

Figure 6 – Historical volatility of Europe total return [% , 15-year]

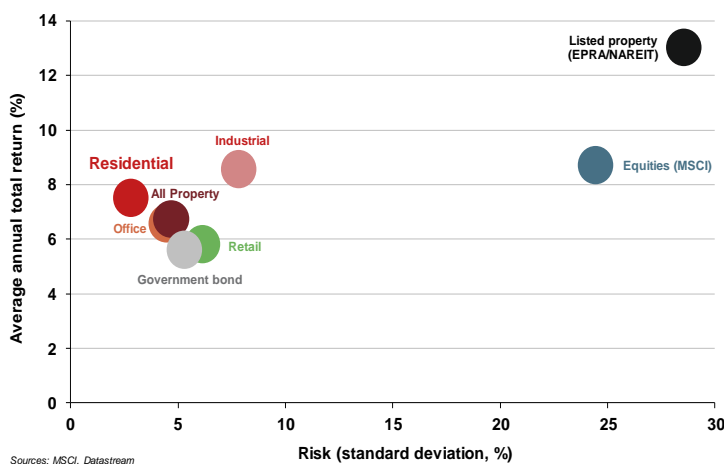
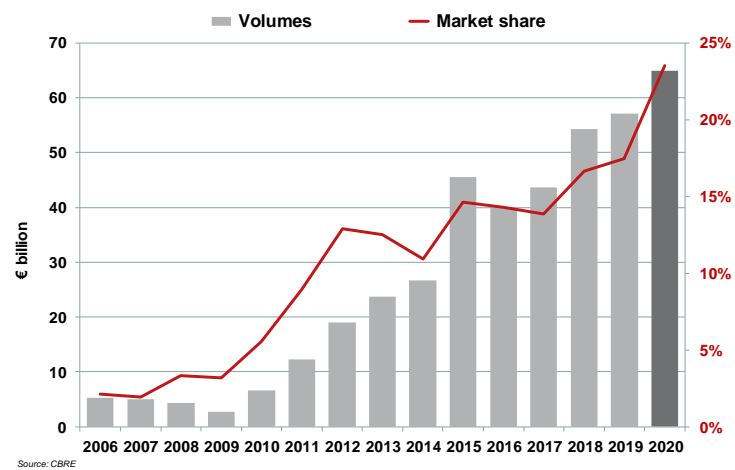


Figure 7 – Europe residential investment volumes



GRE view on residential, from theory to practice:

GRE launched a dedicated strategy on residential (Generali Real Estate Living Fund - GRELIV) aiming to create a diversified high quality core portfolio across Europe. The fund has a € 2bn target size and already deployed more than € 200m among Paris, Frankfurt and Milan.

GRELIV has the following elements as distinctive features:

Prime assets quality

Evolving location: Location has always been considered as the main component of prime asset quality and this will remain the case in the future. But location quality itself is evolving rapidly in many cities in line with a mix of sociologic, demographic, transportation or urban transformation factors that should be monitored and analyzed carefully. The powerful alliance of deep local market knowledge and deep data analysis is key to preserve and enhance prime asset quality in a residential portfolio.

Resilience: Asset quality criteria are also enjoying a phase of rapid development. Home technology and environmental quality are becoming mainstream and are expected to support tenant experience in the residential universe as they already do in the working environment. This will in turn help to improve average occupancy and ultimately asset performance.

Data driven GRE proprietary research

The Business Intelligence and Analytics team is composed of real estate researchers, data scientists and data engineers. This mix of competencies creates a unique approach that combines analysis of traditional data with more niche location-based and mobility data.

All data are elaborated with proprietary modelling and algorithms, developed to bring all Generali Real Estate business knowledge into the research output. The results are real insights that bring assets and geographies discussion to a new level.

For example, our Transaction Team, Asset Management and Fund Managers can leverage the power of **City Forward®**. The solution improves analysis and investment decisions, providing geo-referenced data and predicting accurate market value per asset type, at a hyperlocal level, leveraging more than 650 data sources including real time ones such as mobility and web sentiment. It also allows us to more confidently navigate through uncertainty, as the one represented by the pandemic, through scenario controls. This scientific and quantitative approach is blended with the long lasting experience of GRE management team able to timely leverage market information coming from a team of ~400 professional on the ground.



GRE sustainability commitment and real actions

GRE sustainability approach reflects the long-term ambition to be a:

- Life-time partners for its investors and clients
- Enabler able to generate welfare for the stakeholders and communities impacted by our business

Given the peculiarities of the real estate industry⁵, GRE ESG guidelines are focused to increase the exposure to energy efficient real estate assets characterized by limited energy consumption intensity and able to decrease the greenhouse gas emission. Nevertheless, a series of tangible initiatives aimed to generate Social impact and Governance enhancements are carried out.

As long as environmental aspects are concerned, GRE is implementing a series of real actions implemented across the overall asset investment life cycle, and specifically:

- **Investment selection:** buildings eligible for acquisitions undergo **environmental/ sustainable due diligence** (SDD) with outputs taken into consideration in the investment decision process and preference for **assets certified** by international labelling houses such as LEED/BREEAM
- **Recurring asset management activities:** asset equipped with **“green” system aimed to monitor consumption with data also leveraged to engage with tenants** on consumption trends and behavior
- **Re-positioning and extraordinary maintenance:** integration of responsible considerations into the design and specification of major refurbishments **ensuring that the most appropriate level of technology and efficiency is achieved**

On Governance, GRE approach is based on a set of policies and processes able to grant transparency, fairness and productivity enhancer. As for example, the implementation of multiple risk management layers is granting sound monitoring capabilities, the development of cutting edge data driven research adds objective ground to the underwriting phase, the robustness of a lean investment process ensures safe and fast execution.

Social aspects are embedded in the asset management activities and typically depend on the peculiarities of the assets and of the communities it is located. At company level GRE provides material help to the communities impacted by its business, the last initiative implemented is the provision of an asset in Milan to be used by the public administration as COVID 19 vaccine hub (please refer to <https://www.generali.com/media/News/Generali-Square-Garden-hosts-the-largest-vaccination-hub-in-Lombardy>)

LIVING ESG ANGLE

On top of the above, the newly launched GRE Living fund, investing in residential core assets across top European cities, has been designed to meet additional ESG requirements.

GRESB

Investor-driven Global ESG Benchmark for the Real Estate sector: the assessment offers high-quality ESG data and powerful analytical tools to benchmark ESG performance, identify areas for improvement and engage with investors



MSCI CLIMATE VAR

Climate VaR is designed to provide a forward-looking and return-based valuation assessment to measure climate related risks and opportunities in an investment portfolio



ASSET USE AND SERVICE INTEGRATION

Fund deploying in multi-family and senior living assets, characterized by the presence of daily services to the tenants and high environmental performance (please refer to the right hand side)

EXAMPLE OF LIVING SUSTAINABLE ASSET

Location: 6 rue Petit in Clichy (Hauts-de-Seine), city adjacent to the North-West of Paris

Size: ~35 flats (part of bigger project, composed by 3 buildings and 82 flats)



Construction realized with wood. Reducing the carbon footprint of housing favoring the use of bio-based materials, increasing comfort and improving the quality of life of inhabitants



The builder, Woodeum, undertakes to plant trees for each purchased housing



CLT solid wood technology requires the involvement of local small/medium artisans, a light industrial manufacture and on-site assembly process.

Targets:
BBCA Low carbon "Excellent"
RT 2012-6%

5. The buildings sector has one of the highest carbon footprints – it currently contributes to 30% of global annual greenhouse gas (GHG) emissions and consumes around 40% of the world's energy. Source: UN Environmental Programme Finance Initiative



GENERALI

Real Estate

Case study (Clichy / Saint Ouen)

The Grand Paris Express project

The Grand Paris Express is the biggest public transport scheme in France (estimated costs at €35bn) that will allow the creation of the circular automatic metro, that will link the suburbs of Paris without passing through the capital, as well as the airports. It will serve the great poles of activity and the expected competitive clusters in the Paris region and the territories which are today too difficult to access. Thus, 68 new metro stations will be created, as well as 200 km of metro lines by 2030. Therefore, 4 new metro lines will be in service by 2030 (lines 15, 16, 17 and 18) and metro lines 11 and 14 will be extended, as shown on the map below (Figure 8).

Figure 8 – Map of the new lines of the Grand Paris Express



Figure 9 – Commissioning schedule

Line 14 North	Mairie-de-Saint-Ouen <-> Saint-Denis-Pleyel	2024
South	Olympiades <-> Aéroport d'Orly	2024
Line 15 South	Pont-de-Sèvres <-> Noisy-Champs	2025
West	Pont-de-Sèvres <-> Saint-Denis-Pleyel	2030
East	Saint-Denis-Pleyel <-> Champigny-Centre	2030
Line 16 West	Saint-Denis-Pleyel <-> Clichy-Montfermeil	2025
East	Clichy-Montfermeil <-> Noisy-Champs	2030
Line 17 West	Saint-Denis-Pleyel <-> Le bourget-Aéroport	2025
East	Le bourget-Aéroport <-> Triangle-de-Gonesse	2027
East	Triangle-de-Gonesse <-> Le-Mesnil-Amelot	2030
Line 18 East	CEA Saint-Aubin <-> Aéroport d'Orly	2027
West	Versailles-Chantiers <-> CEA Saint-Aubin	2030

Source: Société du Grand Paris (SGP)

The impacts on residential prices

In line with this Grand Paris Express project, residential prices have started to be impacted around the stations of the new metro lines. By shortening travel times, the Grand Paris Express therefore offers opportunities in areas where residential prices are half of Paris prices.

Notably, the 4 new stations of metro line 14 (Mairie de Saint-Ouen, Clichy – Saint-Ouen, Pont de Cardinet et Porte de Clichy), which have been completed and opened in December 2020 and January 2021, have already recorded strong increases in prices by an average of 50% over five years (Figure 10). As opposed to this, residential prices around the stations planned for 2024, increased less but they are expected to follow this trend. Nevertheless, the Saint-Denis-Pleyel station price has already jumped by 40% in five years, as it is set to become the most important crossroads of the Grand Paris Express where 4 metro lines (14, 15, 16 and 17) of the Grand Paris Express will pass and have a direct access to the centre of Paris in under 15 minutes. Moreover, it also benefits from the potential developments of the Olympic Games scheduled for 2024.

Figure 10 – Evolution of residential prices in the new stations of line 14

Stations	Residential price (per sq.m)	1 year growth	5 year growth	Date of commissioning
North				
Pont de Cardinet	11 372 €	2.7%	37.5%	December 2020
Porte de Clichy	9 555 €	7.0%	45.6%	January 2021
Clichy - Saint-Ouen	6 894 €	5.8%	47.9%	December 2020
Mairie de Saint-Ouen	6 365 €	4.6%	55.0%	December 2020
Saint-Denis Pleyel	5 092 €	9.0%	40.5%	2024
South				
Maison Blanche - Paris XIII	8 807 €	-0.5%	19.2%	2024
Kremlin-Bicetre Hopital	5 764 €	0.5%	16.8%	2024
Villejuif - Institut Gustave Roussy	5 002 €	9.9%	26.2%	2024
Chevilly Trois Communes	4 109 €	8.2%	28.3%	2024
M.I.N. Porte de Thiais	4 263 €	2.7%	11.2%	2024
Pont de Rungis	3 463 €	n.a	n.a	2024

Already completed

Under construction

Source: Meilleurs Agents

Continue

Generali Real Estate actions to face Covid-19 emergency

Generali Group has created a fund of up to EUR 100m for the Covid-19 emergency and did launch **Fenice 190**, a five-year €3.5 billion plan to support the sustainable recovery in Europe and the real economy (please visit <https://www.generali.com/it/media/press-releases/all> for further details).

Generali Real Estate has contributed to face the Covid19 by making the hotel “The Square” in Milan available for healthcare personnel and quarantined people.



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Generali Real Estate

Generali Real Estate (“GRE”) is a real estate asset management specialist currently managing assets for €32.7bn

GRE is part of Generali Group, one of the leading European insurance companies

GRE has a unique Pan-European footprint, with a team of more than 400 deployed in 9 European offices

Historically, GRE has mostly managed the entire Real Estate value-chain process developing unparalleled industry capabilities

GRE, coherently with Generali Group strategy, serving the Group (eleventh investor in Real Estate in the World) is expanding its product catalogue thanks to 9 cross-border vehicles and targeting also external clients, institutional ones in particular

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