KPMG

The Future of Real Estate

Sector overview, new developments and forces of transformation

September, 2023

kpmg.com/gr

Contents

Summary Note

The Greek real estate market has rebounded strongly from the economic crisis of the last decade and the more recent challenges posed by the global COVID-19 pandemic. We have witnessed significant activity in the real estate development and investment markets from both major international and local investors. There has also been significant occupier activity as companies across all sectors demand more and better-quality space. Activity in the residential market has been also strong, with increased demand from local and, in particular, foreign buyers.

However, the Greek real estate market is not isolated from global trends; it is influenced by shifts in the international landscape. Several key factors are shaping the industry, and both corporate occupiers and real estate investors should remain aware of these trends to make informed decisions.

Sustainability and ESG: The growing global emphasis on sustainability and ESG practices is reshaping the real estate sector. Investors and occupiers must embrace sustainable strategies, such as energy efficiency, green building certifications, and responsible property management, to align with evolving market and regulatory demands.

Technology and Innovation: The digital revolution is transforming the way real estate operates. Technology-driven advancements, such as smart buildings, Internet of Things (IoT) integration, and data analytics, are enhancing efficiency, improving tenant experiences, and driving investment decisions. Embracing these innovations can yield substantial competitive advantages.

Flexible Workspaces: The rise of remote and flexible work arrangements has led to a shift in office space requirements. With the demand for hybrid work environments, companies are seeking flexible, adaptable spaces that foster collaboration and support a distributed workforce. Real estate players must adapt to this paradigm shift by offering versatile solutions that cater to evolving work dynamics.

Alternative Real Estate Asset Classes: These have gained prominence among investors seeking diversification, income generation, and exposure to emerging trends. For example, demographic shifts, such as an aging population and the rise of millennials, have created demand for specialized real estate, including healthcare facilities, senior living communities, and co-living spaces, whilst the rise of e-commerce has driven the demand for logistics and distribution centers. Moreover, the increasing reliance on data and connectivity has propelled investments in data centers and telecommunications infrastructure.

Our real estate team comprises highly experienced and accredited real estate professionals that can help clients make informed and added-value decisions on real estate issues. By combining the capabilities and expertise of the entire KPMG team we can offer seamless end-to-end services to incorporate legal, tax and deal advisory advice to cover the entire needs of real estate owners, investors and users.

Kenny Evangelou

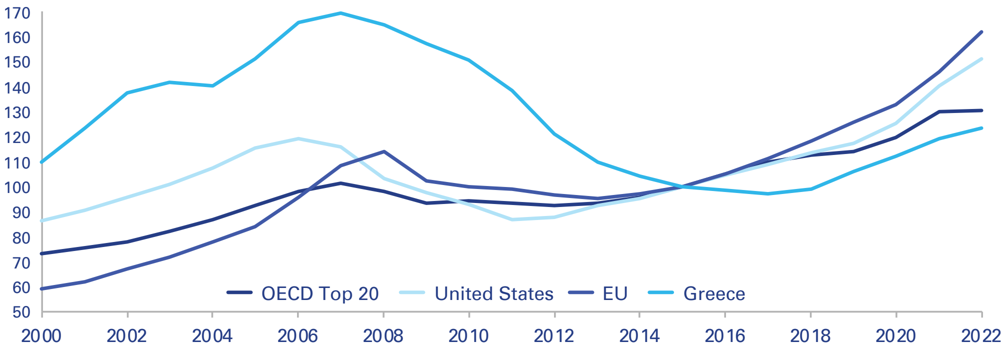
Partner, Deal Advisory – Head of Real Estate

01

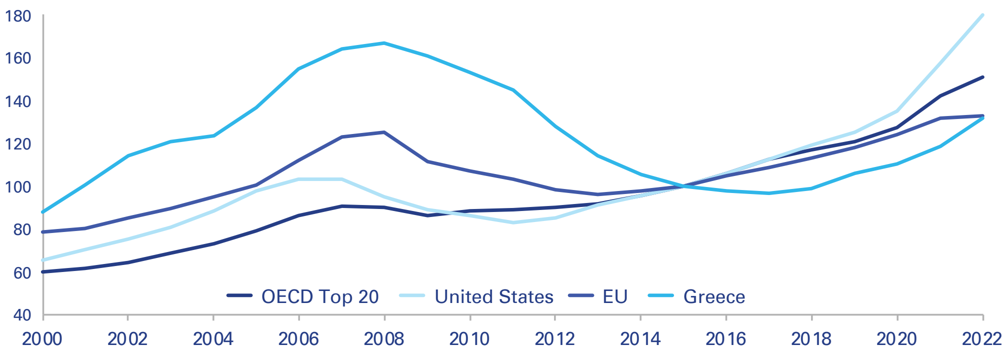
Global Market Overview

Real and nominal house prices

Real House prices. (2015=100)



Nominal House prices. (2015=100)



Source: OECD and Eurostat (sts_copr_m)

Real estate values have changed significantly around the world in the last 20 years. The global real estate market has seen highs and lows between 2000 and 2022, with some nations experiencing sharp increases in property values while others have seen declines or stagnation. Highs include the real estate bubbles that occurred in several countries during the 2000s, and lows include the decline that followed the financial crisis of 2007–2008.

The average price of a house increased by almost 50% between 2001 and 2006. Contributing dramatically to this were also the inadequate risk management procedures in credit issuance and the resulting origination of subprime mortgages and mortgage-backed securities. The collapse of the housing bubble came in 2006 in the United States, two years after the FED had started to tighten monetary policy while other countries were impacted later in 2008. House prices were declining, and interest rates had risen to levels that made homeowners unable to refinance their mortgage payments.

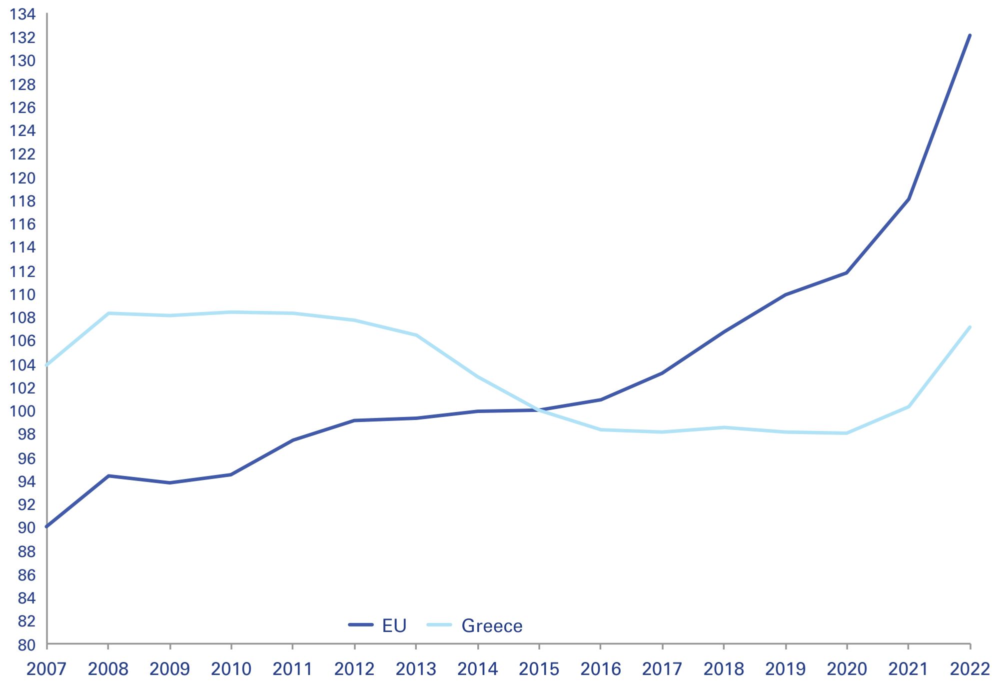
In 2007, the housing market plummeted, reaching a 20% drop between 2007 and 2011, forcing a massive sell-off in mortgage-backed securities, while numerous delinquencies, defaults, and foreclosures that followed led to the Great recession.

Prior to the COVID-19 pandemic, which increased the rate of increase in 2020 and 2021 by an average of 10% across the EU and the United States and 9% for the top 20 OECD countries, house prices had increased by an average of 6-7% per year since returning to pre-crisis levels in 2016. Lastly, the curve in 2022 became steeper due to the recent inflation hikes.

However, the situation in Greece has been slightly different. The country experienced a more than 50% increase in real house prices and almost 90% in nominal prices between 2000 to 2007. Following that, both the international and domestic financial crises negatively affected the country and house prices declined sharply for more than a decade, such that by 2018 they were below those of 2000. Only since 2019 have real house prices in Greece normalized, following global trends and gradually picking up (see Section 2.0).

Construction producer prices or costs, new residential buildings

Construction producer prices or costs, new residential building.
(2015=100)



Source: Eurostat (sts_copr_m)

Construction costs in the European Union (EU) and EU member states has fluctuated over the past decade, influenced by several factors such as the type of construction, the location, the materials used, and the cost of labor. Overall, they have generally trended upwards, with some fluctuations due to economic and other factors such as geopolitical events and the COVID-19 pandemic.

From 2007 to 2008, construction costs in the EU increased ~ 4.8%. However, in 2009, the construction industry was affected by the global economic crisis, resulting in a decline in demand that saw costs fall by about 0.9%.

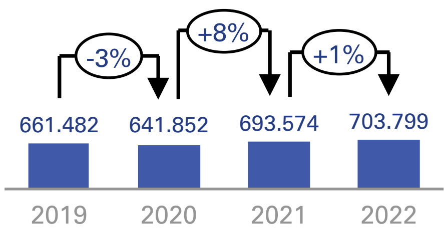
In the following years between 2010 to 2016, construction costs grew at a steady rate of almost 1.5% except 2011 when it reached 3%. Until 2022, and even during the COVID-19, the average percentage of change was about +3% only to see the Russo-Ukrainian conflict result in costs skyrocketing by 11.8%.

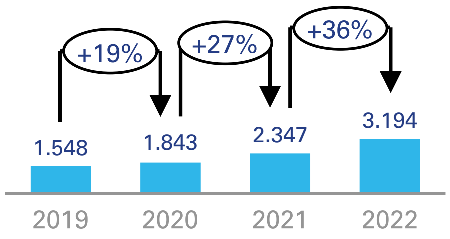
However, variations do exist inside the continent with Sweden holding the record of having the highest construction costs throughout the years that reached even 58% higher than the EU average in 2020. At the same time the highest change from 2007 to 2022 (151%) was observed in Hungary, while the EU-27 increase during these years was 46.7%, while the lowest labor costs are observed in Bulgaria.

Greece did not follow these trends mainly because of the construction boom and increased demand which resulted in significantly higher costs than the average of EU-27 until 2015, despite the domestic financial crisis of the time. From 2016 to 2020 the changes were not noteworthy. In 2021 and 2022 construction costs rose at a rate of 2.8% and 6.8% respectively proving that Greece was among the countries in Europe that were affected at a lower scale compared to the EU-27 average.

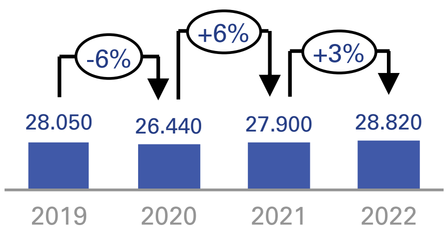
Key factors driving the housing market

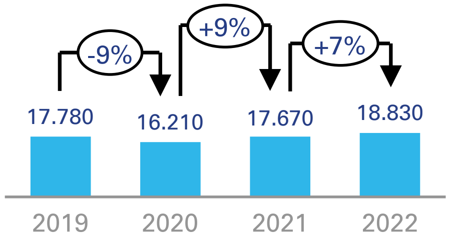
Dwellings (million euro)



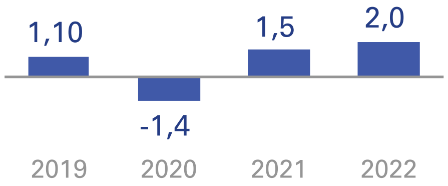


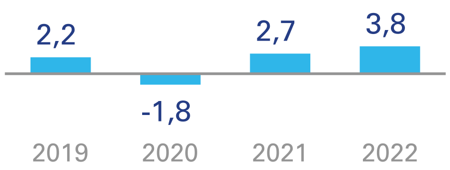
Real GDP per capita. Ratio of real GDP to the average population(euro per capita)





Employment growth. (% change on previous year)





Source: Eurostat (sts_copr_m)

The housing market is influenced by several factors including macroeconomic factors which impact in different ways. Two critical drivers among them are the Real GDP per capita which is the economic output of a country divided by the average population and Employment growth, the increase in the number of jobs

Real GDP per capita and Employment growth do affect the housing market in a way that leads to a common positive or negative outcome. More specifically, a strong Employment growth increases the amount of people that generate an income and can also lead to higher wages for workers meaning that the general population has a higher allowance to spend on housing. At the same time, an increase in Real GDP means that people have more money to spend on housing, which can drive up demand for homes. The competition that is created can cause prices to rise even further. As a result the amount spent on dwellings increases.

Dwellings investment showed an overall increase in the European Union from 2019 to 2022 of almost 6.4%. The European housing market was influenced by both COVID-19 and the Russo-Ukrainian war. However, it looks like the impact of the pandemic did not last for long as while in 2020 there was a decrease of 3%, the following year saw a rise of 8% compared red to 2020. The conflict did however negatively impact the market in 2022, resulting from a downturn in Real GDP and Employment growth regarding European Union.

The Greek housing market grew significantly and did not follow the trends of European Union. The domestic market has been rising since 2019 and did not seem to be influenced by the pandemic and the war. Apart from the increase in terms of Real GDP and Employment growth, the "Golden Visa" regulation has attracted a lot of foreign investment in Greece since April 2013. The 36% increase in 2022 compared to 2021 can be explained by the 7% increase in terms of Real GDP, 3.8% employment growth and the upcoming changes in "Golden Visa" that boosts the minimum amount of investment from €250K to €500K resulting in applicants rushing to buy dwellings before the changes take effect by the summer of 2023.

02 Greek Market Developments

Greek market at a glance

€700 million

Net FDI historical outperformance on Q4 2022

Building surface / volume reached

5.4m sqm

and

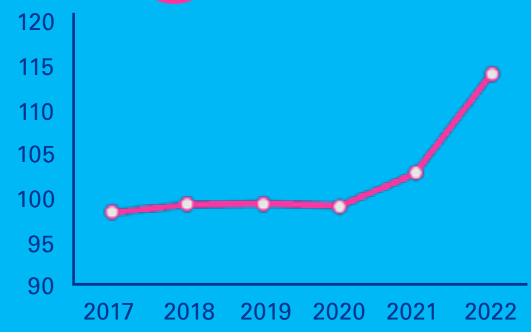
24.5m cu m

which correspondingly represents versus the year 2021 a decrease of

8% and **2%**

Material Cost index continues its high pace initiated during the pandemic era, demonstrating a year on year increase of:

11%



60%

Increase in the share of foreign investors in the real estate market in 2022 compared to the same period of 2021

29.216

building permits on 2022, corresponding to

4.6% year on year increase

Energy related materials rose in 2022 by

34%

and the cumulative increase from 2020 amounts to

50%

Source: ELSTAT & Bank of Greece - Statistics department

Residential property prices

Annual Index Increase / Geographical Area

Athens 13.7%

Thessaloniki 12.5%

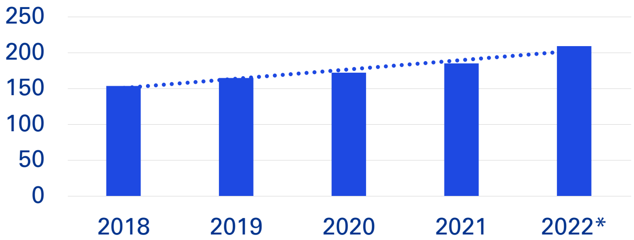
Rest of Greece 7.9%

Residential Property Prices rose steadily during the last 5 years as the Greek market recovered post the economic crises, showing a c.36% increase during the five year period (2018-2022). This was fueled by rising activity in the market by domestic buyers (pent-up demand from the years of the economic crisis for new housing, strong tourism arrivals fueling investment in homes for e.g. Air BnB rentals, increased availability of mortgage lending) and foreign buyers (affordability of Greek residential prices Vs other European markets, demand for Golden Visas and luxury real estate in Athens southern suburbs and high-end tourist destinations). The suspension of 24% VAT on sale prices in 2020 also had a positive effect on the development and sale of new housing, helping to attract new buyers into the market and underpin prices.

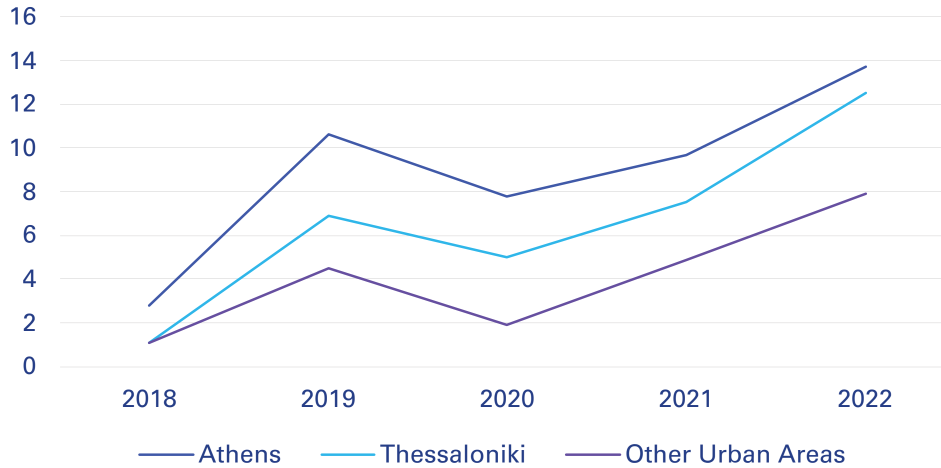
Post-COVID, the rate of increase accelerated, and in 2022 reached 14% Vs 2021. Although Q1 (2023) is not representative for the whole upcoming year, the first quarter shows an even higher level of increase of 15% versus the Q1 of 2022.

It is worth noting however that residential prices still remain about 15% below the previous peak of 2008. Looking forward, it is possible that higher borrowing costs will have an impact on demand, particularly from the domestic market, and hence the rate of price increase.

Residential Property Price Index

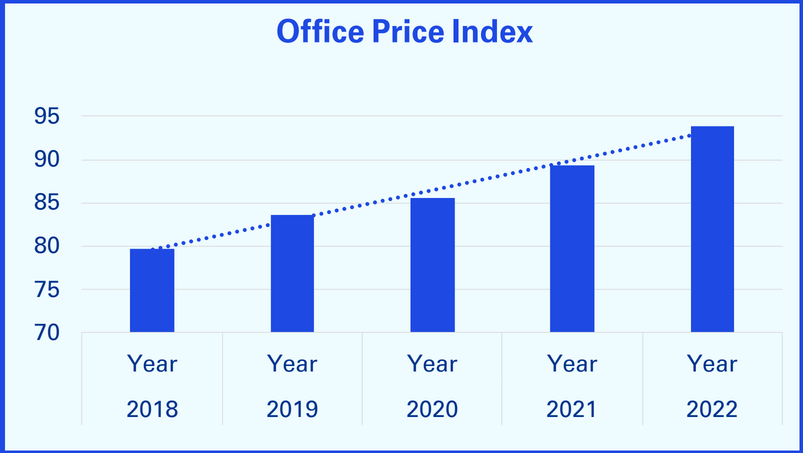


% Delta of Index per Geographical Area



Source: Bank of Greece-Index of Prices of Dwellings (Historical Series) & Table II.7 New Index of Apartment Prices by Geographical Area | 2022 and Q1 (2023) data are provisional

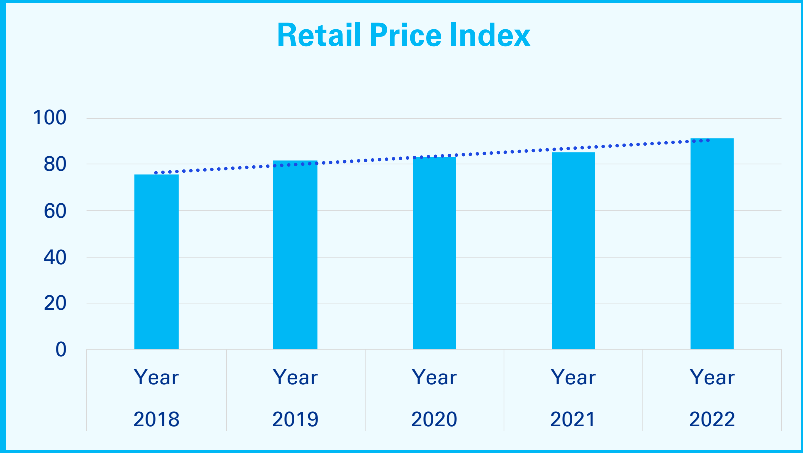
Commercial property prices (Retail & Office)



A steady increase in the overall level of Office Capital Values has been observed over the last 5 years (c. 18%). On the one hand, healthy demand for space has led to increased rents, and on the other hand increased investor activity has led to a decline in yields.

However, official indices do not truly capture the marked distinction between new, Grade A buildings and older stock. The former have seen sharp increases in rental values as demand remains strong from large corporates (for new, green certified buildings incorporating wellness features for staff to meet their ESG goals), while supply remains limited, despite increasing developer activity in new construction and refurbishment projects.

In contrast, there is a relative over-supply of older, B and C class buildings where rents and values have remained more stagnant. Going forward, there is a question mark as to how such buildings will perform, as they become even more obsolete and in need of major capex.



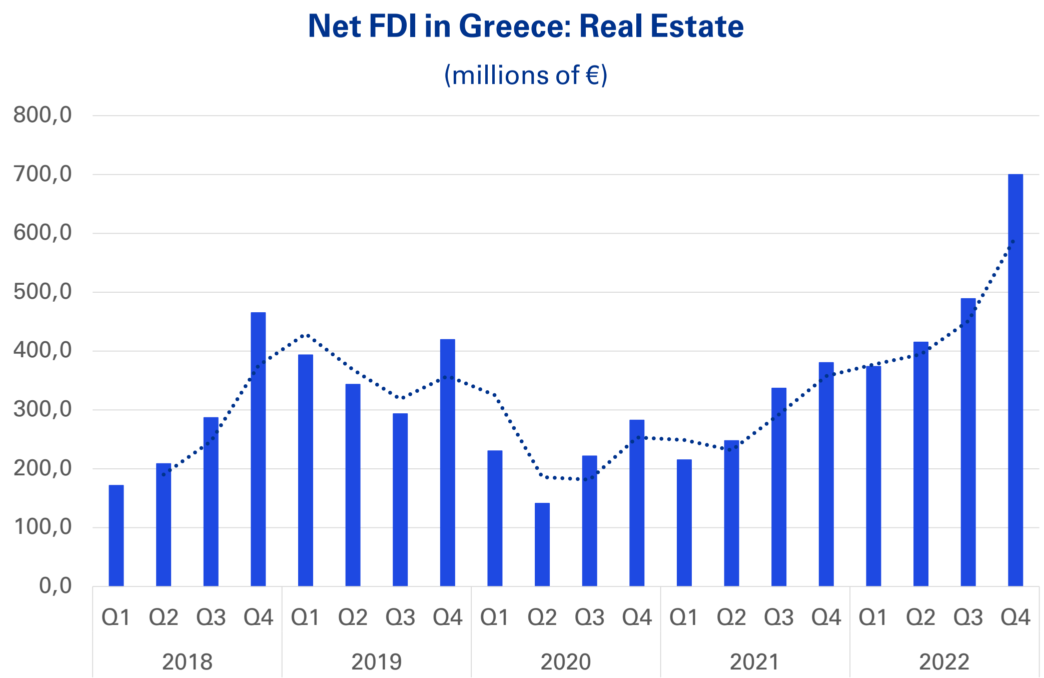
A similar growth pattern has been witnessed for Retail Capital Values, with an overall growth of ~21% achieved in the last 5 years.

There was a strong increase from 2018 to 2019 of 8.06%, driven mainly by a decline in yields. However due to COVID-19's implications, the incline was more moderate in the following years, with an average annual increase of 2.2% from 2019-2021.

Capital value growth picked up again to nearly 7% (6.9%) between 2021 to 2022, as strong tourism growth led to an increase in rents in key retail locations and relatively strong retailer demand for new space, particularly from retailers entering the Greek market for the first time.

Source: Bank of Greece-Table 1. OFFICE PRICE INDEX & Table 3. RETAIL PRICE INDEX

Foreign Direct Investment



As the Greek economy recovered, a sharp increase in the amount of Net Foreign Direct Investment in real estate has been witnessed during the last 5 years.

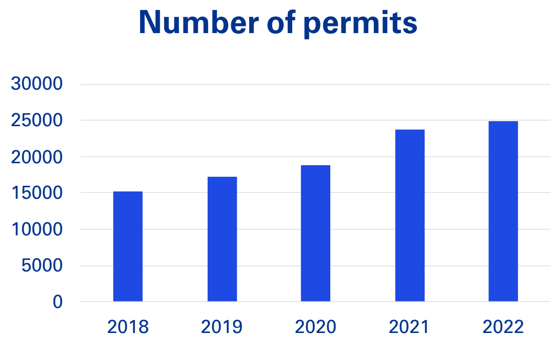
- Starting from 2018, the amount of Net Foreign Direct Investment gradually increased until the last quarter of 2018 when it peaked substantially.
- The same pattern / pace was witnessed in 2019 with a 28% increase compared to 2018.
- There was a sharp decline during 2020, as the COVID pandemic restricted the number of foreign visitors to Greece.
- Thereafter, the market saw a gradual increase, leading to a record year in 2022 with almost €2 billion FDI (+68%) compared to 2021.

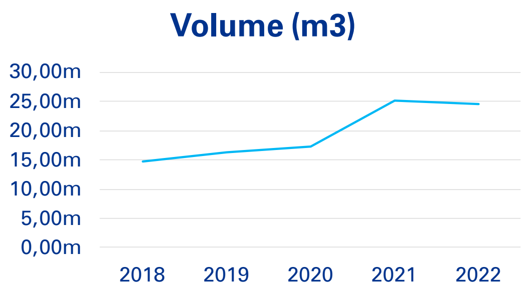
Source: Bank of Greece - Statistics department, Net Foreign Direct Investment in Greece: Real Estate

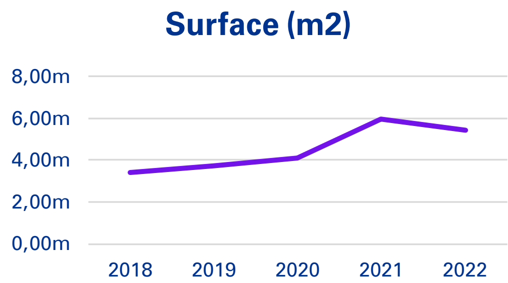
Building permits activity & material cost indices

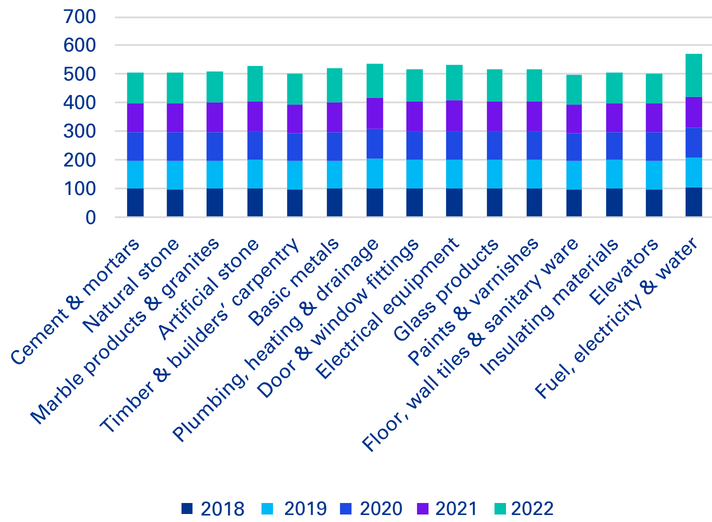
> Real estate activity in 2022 continued the previous year's strong momentum.

The number of total issued building permits amounted to 29,213 an increase of 4.6% versus 2021. Building surface / volume reached 5.4m sqm and 24.5m cu m, which corresponds to a decline versus 2021 of 8% and 2% respectively. In respect to the Material Cost index, prices continued the high pace of increased initiated from 2020 and onwards. The increase for year 2022 versus 2021 was 11%. Among all materials, the energy related materials rose by 34% and the cumulative increase from 2020 amounts to 50%.









Source: ELSTAT

03

Greek Competitive Landscape

Real estate landscape

Fueled by the economic recovery, loose monetary conditions and a perceived dislocation in pricing, from 2018 onwards the Greek real estate market witnessed a large increase in activity from foreign as well as domestic real estate players, often in partnership. This has resulted in a large consolidation of the fragmented real estate market and a massive transfer of asset ownership from over-leveraged, unsophisticated and non-institutional investors (including private individuals, family businesses, the Greek State, Greek banks and NPL portfolios) to sophisticated, well-funded and professionally managed investors.

There is also still a large potential supply of assets for investment and development as Greek banks and NPL funds/servicers look to sell on a relatively large stock of REOs in the coming years, as well as public entities such as the Hellenic Public Properties Co. (HPPC) look to maximize the value of real estate owned by the Greek State.

In the following slides we present the three main categories of real estate players currently active in the real estate market:

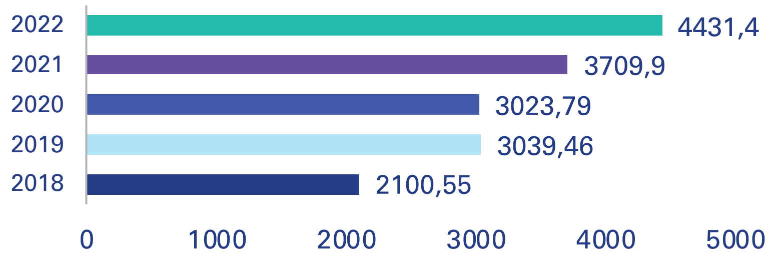
> “The Greek market still has some way to go to reach the level of maturity of other Western European markets, but the main real estate players are fueling demand for standardization, professionalism, accreditation, technology and transparency, with an increasing focus on sustainability and urban regeneration.”

01 REICS

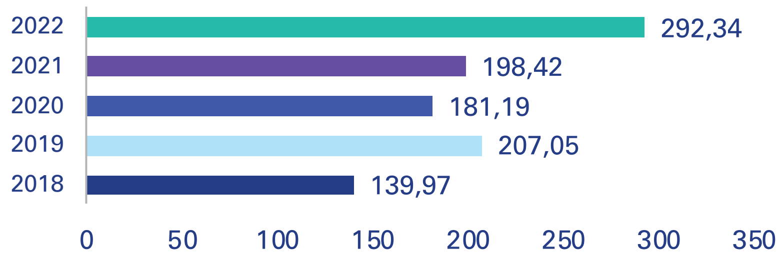
Real estate investment companies (REICS) (1/2)

The total assets held by Greek REICs have grown significantly over the last 5 years, with the appraised value of real estate assets and revenues more than doubling over this period. This is as a result of new investments, upward appraisal of existing assets and, to a lesser extent, the formation of two new REICs during this period.

Appraised Real Estate Value (million €'s)



Revenues (million €'s)



> "The number of REICs in Greece has risen steadily over the last 8 years or so as have their investment portfolios."

Real Estate Investment Companies included in the survey*:

1. **Prodea**
2. **Noval**
3. **Trastor**
4. **Briq Properties**
5. **Ble Kedros**
6. **Orilina Properties**
7. **ICI**
8. **Trade Estates**
9. **Premia**

Real Estate Investment Companies (REICs), similar to REITs in other countries, represent a liquid, transparent and professionally managed asset class which allows for diversified exposure to real estate returns over the medium to long-term and high cash dividends. Almost all REICs are obliged to list on the Greek Stock Market within a specific time period after establishment. The number of REICs in Greece has risen steadily over the last 8 years or so as have their investment portfolios. Most REICs were established by Greek banks or major Greek corporates spinning-off operational real estate or investment assets and, via stock market listing/share capital increases, have subsequently attracted a wide range of foreign and local institutional capital as well as retail investors, making them an attractive asset class in themselves.

Trade Estates and Premia were established in 2021 and 2022 respectively. Grivalia has not been included because of its merger with Eurobank in 2018.

01 REICS

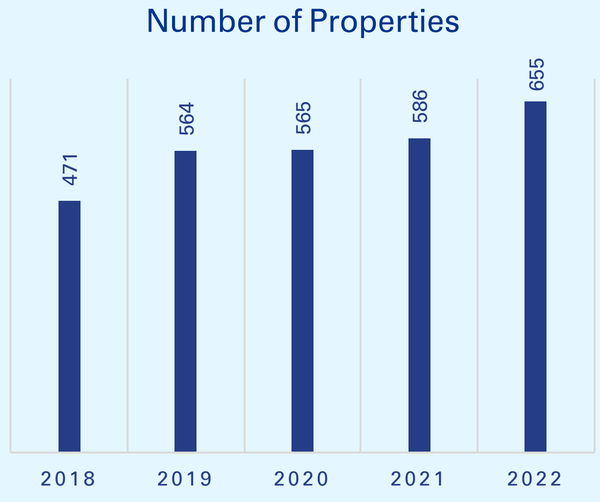
Real estate investment companies (REICS) (2/2)

€108.1m

Between 2018 and 2022, the FFO displayed notable changes from 76.46 million euros in 2018 to 108.1 million euros in 2022, marking a significant growth of **41.6%**.

655 properties

Starting at 471 properties in 2018, there was a steady increase each year, reaching 655 properties in 2022, indicating a total growth of **38.4%**. The most substantial increase occurred between 2018 to 2019, with a notable rise from 471 properties to 564 properties, representing a notable surge of **19.7%**.



> Most REICs follow strict ESG guidelines, and the largest REICs have raised "green" bonds in recent years to fund sustainable investments."

Apart from traditional office and retail assets, Greek REICs in recent years have diversified into alternative asset classes such as logistics, hospitality, residential, student accommodation and even schools. Increasingly, they have become more active in real estate development and refurbishment, given the relative lack of ready-made good quality product available. Most REICs follow strict ESG guidelines, and the largest REICs have raised "green" bonds in recent years to fund sustainable investments.

**Funds from Operations (hereinafter "FFO") are defined as Net profit for the period plus depreciation of assets, less net change in fair value financial instruments determined at fair value through profit and loss statement, less/plus the adjustments on equity accounting, less / plus net profit / (loss) from revaluation of investment property in fair values, less/plus the adjustments in subsidiaries and plus the non-cash expenses for Stock Option Plan.*

02 Developers

Key players in Development (1/4)

Lamda Development

(publicly listed)

Market focus

Considered the leading developer of shopping centers in the country, with a GAV of €3.2bn.

Completed projects

Lamda has developed the 3 best performing malls over the last 15 years or so, and acquired a 4th mall in 2022 (total mall GAV in excess of €1bn).

Current development pipeline

The Ellinikon project, one of the largest urban regeneration projects currently being undertaken in Europe. With a total budget in excess of €8bn on completion, and located on the Athens Riviera (on the 620ha site of the ex. Athens Airport), the project will comprise of residential developments, hotels, shopping centers, family entertainment venues, museums, cultural venues, health and wellness centers, sports infrastructure recreation spaces, a modern business park with an educational and R&D hub as well as the total regeneration of the existing marina and the entire Coastal Front that, along with a major 20ha Metropolitan Park, will be the major attractions of the site. The first phase of the project is due to be completed by 2026 and significant residential pre-sales have already been achieved for the first high-end developments, as well as pre-leases for the retail space and agreements with investors/ occupiers for, amongst others, a retail park, luxury hotels, a casino, and office tower.

02 Developers

Key players in Development (2/4)

Dimand
(publicly listed)

Market focus

This recently listed development company has a 20-year track record in urban regeneration and sustainable buildings and has a partnership for equity financing with EBRD.

Completed projects

Dimand has developed 14 green certified buildings and currently has 22 projects pursuing LEED certification under development. Their projects cover a wide range of sectors, including offices, mixed-use, retail, hospitality, sports arenas and logistics. Key completed projects include the Karelias Office Park , the Piraeus Port Plaza including the regeneration of an ex. industrial complex in Piraeus, and the Moxy hotel in Omonia Square.

Current development pipeline

Dimand's impressive current development pipeline consist of 19 projects under development with a GDV of €915mn including the 35.000sq.m Piraeus Tower, the 17.000sq.m ex. Minion Department store near Omonia Square, and the 28.000sq.m office project in Thessaloniki. Dimand has also secured a large stake in Project Skyline, a portfolio of over 570 properties to be purchased from Alpha Bank and with a value in excess of €430mn.

02 Developers

Key players in Development (3/4)

REDS
(publicly listed)

Market focus

A member of the Ellaktor construction group, and active in real estate development for over 23 years.

Completed projects

REDS has developed retail parks, retail & entertainment centers, residential complexes, mixed-use developments, office buildings and exhibition centers. Key completed projects include the Veso Mare center in Patras, the Escape Center in western Athens, the Lofos Edison residential complex in Pallini with over 200 units, and the Smart Park retail park near Athens airport, with 53.000sq.m GLA.

Current development pipeline

REDS currently has 3 large projects under development. The mixed-use Cambas Park near Athens Airport which comprise 89.000sq.m GLA of office, retail, and leisure facilities, Alimos Marina in southern Athens which wiwillll include 18.500sq.m GBA of commercial and leisure space, and the Gournes project in Hrakleio, Crete, comprising a large 34.5 ha sea-front land plot to be developed for a variety of uses including retail, leisure, and theme park, as well as an integrated resort with hotel, casino and villas, with a total GBA of 62.000sq.m.

02 Developers

Key players in Development (4/4)

In recent years numerous private foreign developers from countries such as Cyprus, Israel and the Middle East, as well as local developers, have significantly increased their activities in the market across a variety of sectors, with many focusing on the residential market. We mention some of the key players below:

Temes

The owner and developer of the unique Costa Navarino in the Peloponnese, comprising a number of distinct mixed-use resorts, integrating deluxe hotels, signature golf courses, world-class spas, state-of-the art conference facilities and high-end private residences over a site of 1.000 ha. They are also owners of the Hilton in Athens, which is currently being redeveloped into a Conrad Hotel and will feature 50 Waldorf Astoria branded residences, and have a JV with Lamda Developments to develop two luxury hotels at the Ellinikon project.

Ten Brinke

This is a subsidiary of the Dutch Ten Brinke group and has been active in Greece for over 10 years, having developed numerous retail, office, logistics and residential projects. Their completed projects include a 45.000sq.m logistics warehouse in Elefsina to the west of Athens, a 15.000sq.m retail park on Pireos Ave., office buildings in Athens center and numerous supermarket units as well as residential buildings in the southern suburbs of Athens. They currently have a large pipeline of projects including retail parks, retail buildings and upscale residential complexes.

Green Properties

Is a residential developer with a strong track record and numerous successful projects in the suburbs of Athens and around Greece, with an emphasis on sustainable and energy-efficient design.

Zoia

Is an Israeli backed property company which has purchased and refurbished/redeveloped more than 40 residential and commercial properties in Athens. Many of its residential buildings are operated as serviced apartments for short-term stays.

Other notable developers active in the Greek market include Mendekidis Construction (office, residential, hotel), WH Europe (hotels), Hellenic Properties (commercial and residential), Gnosis Investments (hotel, residential) and MIBS, Livewise, Estia Developments and Zafido (upscale residential in Athens)

03 International Funds

International real estate funds (1/2)

Foreign investors active in Greece include a wide variety of private equity funds, global institutional investors and family offices, as well as high-net worth individuals. Investment activity has been spread across all real estate sectors including logistics, offices, residential-serviced apartments and, increasingly, hotels and resorts, with mainly add-value and opportunistic investment strategies.

Certain large-scale investors with credit funds (e.g. Bain Capital Credit , Apollo Global Management, Fortress Credit, Davidson Kempner) initially became active in the Greek real estate market indirectly via the purchase of asset-backed NPL portfolios from the Greek systemic banks, subsequently converting many assets into REOs (via their local servicer platforms) for future exploitation.

Despite the head-winds currently facing global real estate markets, resulting mainly from rising borrowing costs and high construction cost inflation, investment fund activity in Greece remains strong supported by solid fundamentals and a perceived lower level of risk compared to previous years. A potential upgrading of Greece sovereign debt to investment grade during 2023 could lead to more funds entering the Greek real estate and hospitality markets, particularly more long-term institutional capital.

Presented here are some of the key investment funds active in the Greek market. Some are in partnership with major local REICs and developers*.

Brook Lane Capital

Its investments include a JV with Lamda Development for the development of a mixed-use tower at the Ellinikon project (c. €200mn), a JV with Noval Property REIC for the development of a major office complex in the north of Athens (c. €77mn), as well as various real estate portfolios containing office and retail buildings, and individual hotel assets.

Dolphin Capital Investors

A UK AIMS listed developer specializing in high-end resort projects. Current projects include a major golf resort in the Peloponnese and a One & Only luxury resort on Kea island.

Dromeus Capital

This alternative investment management firm has been active in Greece since 2017 and has acquired and upgraded numerous office buildings in Athens and is now actively looking at logistics projects.

Henderson Park / Hines

In JV with the international real estate developer Hines, Henderson Park has been active in Greece for several years. Its portfolio includes several hotel assets which have been rebranded and upgraded, such as the Grand Hyatt in Athens and 5 resort hotels in Crete with c. 1,100 rooms, a large retail box development in Athens, and a proposed upscale residential complex in southern Athens.

Note: This is a non-exhaustive list of international real estate funds active in Greece; firms are presented in alphabetical order.

03 International Funds

International real estate funds (2/2)

Foreign investors active in Greece include a wide variety of private equity funds, global institutional investors and family offices, as well as high-net worth individuals. Investment activity has been spread across all real estate sectors including logistics, offices, residential-serviced apartments and, increasingly, hotels and resorts, with mainly add-value and opportunistic investment strategies.

Certain large-scale investors with credit funds (e.g. Bain Capital Credit , Apollo Global Management, Fortress Credit, Davidson Kempner) initially became active in the Greek real estate market indirectly via the purchase of asset-backed NPL portfolios from the Greek systemic banks, subsequently converting many assets into REOs (via their local servicer platforms) for future exploitation.

Despite the head-winds currently facing global real estate markets, resulting mainly from rising borrowing costs and high construction cost inflation, investment fund activity in Greece remains strong supported by solid fundamentals and a perceived lower level of risk compared to previous years. A potential upgrading of Greece sovereign debt to investment grade during 2023 could lead to more funds entering the Greek real estate and hospitality markets, particularly more long-term institutional capital.

Presented here are some of the key investment funds active in the Greek market. Some are in partnership with major local REICs and developers*.

HIG Capital

The U.S. private equity firm has been active over the last few years mainly in the logistics and hospitality markets. Following the acquisition of major local logistics operators such as Orfee Beinoglou, it has also acquired existing industrial facilities in Aspropyrgos and is planning a major tri-modal logistics project to the west of Athens (c. €100mn). It has also purchased several major hotel resort assets in Corfu, Rhodes, Kos and Crete for upgrading and repositioning, and has established its own operating platform, Ella Resorts.

Hotel Investment Partners (HIP)

Part of the Blackstone Group, HIP has been active in the Greek hotel resort market over the last 3 years or so, having acquired a total of 7 hotels with a total of c.1,700 rooms on large Greek islands such as Crete, Zakynthos, and Corfu, as well Halkdiki in northern Greece. All hotels have been rebranded and upgraded to upscale or luxury resorts.

Grivalia Hospitality

This hospitality investor specializes in large-scale projects in the luxury segment of the market. Its investments include the world-renowned Aman Zoe hotel and villas in Porto Heli, the new One & Only ultra-luxury resort in Glyfada, southern Athens, an upscale resort in Paros and a planned Six Senses resort off the coast of Evia island. Its investments extend to Cyprus and Panama.

Goldman Sachs Asset Management

Recently acquired a portfolio of 3 contiguous beach front resort hotels in Chalkidiki, northern Greece with over 1,000 rooms. The plan is to rebrand and upgrade the hotels into an upscale resort. The total planned investment cost is close to €200mn.

*Note: This is a non-exhaustive list of international real estate funds active in Greece; firms are presented in alphabetical order.

04

Forces of Transformation & Sectoral Trends

PropTech investments witnessed significant growth. Further, sustainability criteria continued to gain traction.

In 2021 Global venture capital investments in PropTechs totaled[1]

€ 24 bln

+28% y-o-y

Among overall VC investments, **construction and commercial sectors accounted for**

27% of global funding[2]

Global Real Estate Sustainability benchmark (GRESBM) 2021 covered

1,520 entities

with overall assets under management worth

€ 5.4 trn

+19% y-o-y

60%

of global investors have adopted ESG criteria as part of their investment strategy

Per KPMG Net Zero Readiness Index[3]

70%

of countries (23 of the 32) have implemented mandatory building energy certification, of which

30% of countries already have included a Net Zero document in political pledge or policy document

In the 2021-2028 timeframe the global space as a service market size is predicted to garner a revenue of

€ 11.4 mln

+4.2% as y-o-y

€ 8.3 mln

In 2020

Note: 1. Based on dollar to euro exchange rate on 18/07/2022.
2. Construction sector PropTech funding accounts for 19% of global VC funding, while commercial sector accounts for 8%.
3. Net Zero Readiness Index is tool that compares the progress of 32 countries in reducing greenhouse gas emissions and assesses their preparedness and ability to achieve Net Zero emissions of these gases by 2050.

Source: KPMG Real Estate, Global Real Estate Sustainability Benchmark, Statista, CBRE, Knight Frank, Research Dive

Real Estate industry is set to accelerate the sustainable and digital transformation…

ESG strategy has become an integrated cornerstone of the corporate strategy

Transitioning from cheap capital to increasing cost of debt. Rising inflation and interest rates are creating turbulence

Digitalization remains top of mind to create a competitive market advantage

Residential real estate remains an attractive asset class, but new asset types continue to grow, e.g. logistics and life science

Real estate developers, investors and occupiers are committing to net-zero glidepaths

Data is the new oil in a net-zero world. New sustainability regulations are creating a legislative maze and paper-bag exercises

Real estate M&A is not only about assets. Operating platforms and management are equally important to navigate and penetrate new sectors

PropTech VC investments have witnessed another record-breaking year with EUR24 billion in 2021

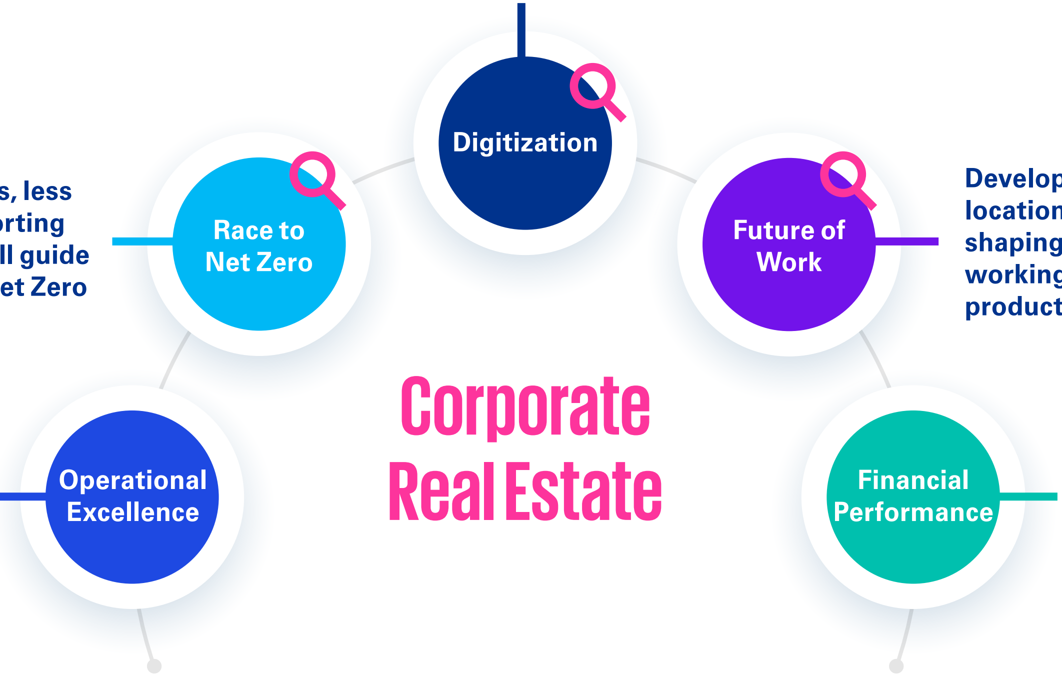
… while at the same time Corporate Real Estate is serving as a key cornerstone of a company's operating model

Corporate real estate ("CRE") represents the leasehold and freehold real estate assets of non-real estate businesses and services as a key cornerstone of a company's operating model. It can comprise of various asset types such as office, logistics, manufacturing, retail, data center, laboratory and land. As COVID-19 gradually diminishes businesses operations, businesses are entering a new era in which transformation is no longer a choice, it is the new reality. Corporate real estate management is a key function to drive business transformation aligned to the 5 key corporate strategy drivers.

Digital solutions for the connected workplace, leveraging AI, data analytics as a backbone of the CRE operating model which will guide strategic discussions with business leaders

Carbon neutral RE portfolios, less energy consumption, supporting regulatory requirements will guide the CRE industry towards Net Zero

Developing new workforce, location and workplace strategies, shaping the hybrid way of working for admin staff, R&D and production facilities



CRE will have a prominent seat to shape the digital and sustainable real estate & workplace transformation

Cost saving and capital gain programs are used to capitalize on transformation agendas

Analyzed in depth in the nextslides

The race to Net Zero is not a choice anymore for a sustainable future of the planet and individual corporations ...

One of the major challenges with the built environment in the coming decades is the contribution to the transformation towards a sustainable future. Innovation will be the key in the ability to make this change happen

Short introduction ESG/Net Zero

The built environment is said to be responsible for approximately 40% of the worldwide carbon emissions. The real estate & construction industry will have to play a key role in decarbonizing new property development as well as transformation of existing properties towards net zero carbon. Not just within the EU, but on a worldwide scale, countries have committed to carbon reduction goals in 2030 and net zero carbon goals in 2050.

ESG (environmental, social, governance) however, has a wider scope than carbon neutral transformation. Several topics can be identified which are increasingly being recognized as being crucial for a sustainable future, including biodiversity, circularity and human rights.

Challenges and risk of companies regarding ESG/Net Zero

For innovations and PropTech solutions to make a real impact in the transition towards a sustainable future, scaling up in order to achieve mass implementation is crucial.

Another challenge for the industry is that standardization of solutions may be key for the industry to make the change as efficiently and effectively as possible. Standards for dealing with sustainability data, reporting and insights helps peers to learn from each other.

Opportunities for companies regarding ESG/Net Zero

Regulatory requirements such as the EU CSRD (Corporate Sustainability Reporting Directive or EU SFDR (Sustainable Finance Disclosure Regulation) are often seen as a challenge for the industry. However, for PropTech and innovation these may be an opportunity considering the importance that data and insights have, in order to adhere to the regulations.

Carbon neutral innovation

A major focus of the real estate and construction industry currently lies with the direct carbon emissions, which is related to the use of property.

To be innovative, one needs to look further ahead. This means a gradual shift of attention towards scope 2 emissions. In short, these are indirect emissions including emissions throughout the building's entire lifecycle.

Focusing on the broader picture shows that innovations reducing carbon emissions by means of more efficient construction, assembly, or transport may come to play a huge role in achieving carbon neural targets worldwide.

It may imply that companies which are able to produce prefab housing, laminated timber construction material or innovative ways of streamlining the value chain from start to finish become increasingly important.

... and can be addressed with solution in the space of energy consumption, circularity, off-site construction and mobility

Sustainability and innovation are becoming increasingly intertwined. Throughout the real estate value chain, innovations are providing the answer that the real estate investors, designers, real estate development companies, construction companies, users and property managers are looking for:

Practical examples of approaches to combat the ESG challenges of today, which are all to be found in this issue of the REIO.

- Energy and water management
- Real-time energy performance monitoring tools
- Smart building sensors supporting optimization of building performance
- Intelligent sun-and daylight control for office and utility buildings
- Insights in thermal data of buildings, visualizing energy escaping through the building
- Real-time water leak management technology

- Prefabricated and modular building design
- Modular building system and furniture solutions
- Customized architectural precast concreate and firebase façade systems
- AI-driven architectural design service
- Prefabricated building development and interion wall/millwork systems
- Prefabricated interior decoration solutions

- Sustainable mobility/ transport
- Shared transport systems, to reduce the need for personal vehicles and parking infrastructure
- Parking and mobility management solutions for checking/booking vacated storage and parking spaces
- Smart parking barrier systems to remotely reserve parking spaces

- "Sustainable" data structuring and reporting
- Energy consumption and emission analytics solutions
- Automated energy usage reporting systems
- Carbon risk calculation and retrofit scenario analytics solutions
- Indoor environmental monitoring solutions
- ESG performance reporting platforms to compare the results against industry peers and international standards

The Future of Work is one of the key challenges and opportunities for Corporate Real Estate in the near future

Many factors are changing the way we live and work, such as digital habits. COVID-19 has facilitated and accelerated the shift in how and where we work considerably. All these changes in location, technology, culture, company policies and more are covered by the 'future of work'.

The big question is: what innovations/ technologies will stay and possibly advance further to shape the future of work?

Short introduction Future of Work

Our world is more digitally connected than ever, and we operate more and more from home; i.e. Hybrid working. People want to work with the freedom of digital, but with the interaction of physical. The future of work relates to the (digital) shift in the way we work, and the associated applications than make this as seamless as possible. For instance, applications make it possible to create virtual meeting rooms where people from the office and people form home simultaneously can step into.

Challenges and risk of companies regarding Future of Work

Adoption by office employees and digital initiatives such as virtual reality tools need full attention and may be a challenge. They will seem difficult to imagine or feel like a video game in the beginning. It is a challenge to understand what they will bring to the table. Hence, this will require transformation and change management support. These virtual tools also go hand in hand with data and data privacy issues. Also, these apps have a price tag: acquisition and licensing. Note however, that the price of virtually renovating a building will be lower that renovating an actual real building. Lastly, bare in mind that your office will be used less frequently.

Opportunities for companies regarding ESG/Net Zero

Adapting to these new 'styles' of working and/or adopting emerging technologies to improve the employee journey/ employee satisfaction may be a key differentiator in the so-called 'war for talent', to attract creative minds and improve staff retention. Also, hybrid working apps may provide the flexibility of creating new spaces without the associated upfront investment in the psychical office space. Moreover, if implemented in the right way, for international companies, it may provide opportunities to work efficiently and effectively around the world.

Interactive workplaces

Today it seems unnoticed, but there have been several technological paradigm shifts in the past i.e. mobile phone connectivity, e-mail accessible to the public and more recently virtual conferencing (video calls).

With all development around us, it is difficult to judge what is here to stay. However, hybrid working is one of them.

On the one hand, digital is accelerated due to COVID-19 and the desire of employees to have more routine work life and need for physical sessions –albeit lower- is returning. This is the perfect mix for the new future of work concepts.

Virtual meetings that have the look and feel of a physical meeting may be the future. Especially considering workforce developments, wherein, work is an activity and not a place for many new generation 'talents'.

Together, this may further accelerate the move towards true smart buildings and smart cities of the future

Smart buildings and smart cities are the terms being used to describe the properties and cities of the future. They are 'ahead of time' by using innovative developments and technologies to connect with each other. Smart Cities are resilient ones that harness data and integrate the physical and digital environments. Successful re-imagination of our cities will keep the needs of the end users in mind. As a result, smart buildings and cities help to increase quality of life, improve (social) safety, limit maintenance works and costs and reduce energy usage, among others.

Short introduction Digitization: Smart buildings/ cities

Digital transformation is going to transforms the whole real estate sector. Whereas in the past, everything was done with Excel spreadsheet, or worse with pen and paper, this new era ensures large-scale Real Estate developments in the field of Big Data, IoT, GIS, AR/VR, AI and Machine learning, etc. These new technologies ensure that better decisions can be made regarding individual properties and portfolios. As buildings and cities get smarter, they become more efficient and livable for its residents. The use of 5G, open networks and connectivity in buildings and cities will enhance better decision making and thus increase the quality of life.

Challenges and risk of companies regarding Digitization: Smart buildings/ cities

Digital transformation automatically means more attention must be paid to privacy concerns. Security measures will have to be taken to prevent the increase risk of cyber-attacks. Besides the whole concept is dependent on networks and connectivity. As soon as the connection is lost, or worse the network fails, cities might be lost into darkness. Social and organizational risks should not be disregarded either. Not all demographic layers of our society and/or regions are ready for this significant development.

Opportunities for companies regarding ESG/Net Zero

By embracing the digital transformation in the real estate sector, buildings and cities will not only come more sustainable and smarter, but will also have better quality and be more efficient. Above all, they will meet the needs od the end users for the next generation to come. Therefore, smart buildings and cities will encounter a better property/ city value, both financially and socially.

Digitalization

As in many other sectors, an important transformation will take place in the real estate area. New technologies such as IoT, Big Data, GIS,ARVR, AI and Machine Learning help ensure that the end users will have more insights and influence when acquiring, developing and maintaining a property.

These developments can also make cities and buildings much more future-proof. This will not only affect the profit and quality in this sector, but above all will have an impact on the quality of living in the buildings and cities.

Furthermore, these technologies go hand in hand with the future sustainability objectives that we must achieve together. Without a good digital basis, we can never monitor evaluate, and steer towards the goals that we must realize the upcoming years in order to make sure that future generations have the ability to meet their own needs.

PropTech is essential to accelerate this Digital Transformation (1/3)

Insight-driven strategies and actions

Data is key to success for any digital transformation. Make sure that data is:

- collected and gathered at all times,
- processes and architecture are able to track and store the data.

Systems are able to handle and calculate the data into broad-ranging KPIs to set course for new strategies and business models. This could entail:

a) BIM-models, which are digital representations of an existing or planned construction with information linked to each element.

b) Performance analyses tools can help process the bulk of data, especially useful for investment and performance insights.

c) Material passports will become more and more relevant to track the footprint on the planet and adjust the course of actions.

Innovative products and services

Due to the world ever more connecting and the emergence (and success) of start/scale-ups, the status quo might not be enough.

- ESG focus is increased, investment funds will have to be innovative in their pursuits. Innovative ways to track ESG in the value chain will most likely be rewarded.
- Regulations push for less carbon and nitrogen. New materials or prefab buildings are developed every day to reduce the emission of these gases, e.g. concrete alternatives.
- Blockchain implementation on real estate, i.e. blockchain allows a property to be divided into smaller investments and hence, better accessible for smaller investors.

Experience-centricity by design

Customers are less income-driven and tend to be more focused on the experience- also for business-purposes. This can be enhanced by aiming to maximize digital experiences for tenants or other users:

- More automation, less clicks.
- Customized digital journeys tailored to the needs of the users, line an application to track the performance of your portfolio real-time or communicate with tenants about any issues in the building.
- Data tracking to enhance the experience by only showing relevant information. This may include energy consumption information and suggestions to improve.

PropTech is essential to accelerate this Digital Transformation (2/3)

Responsive operation and supply chain

Digital tools can help become more agile and adaptive to changes.

- Digital twins will help to find problems in digital world, before significant capital expenditures have to be made.
- Prefab can play a role in improving responsive operations and supply chain, which make construction more efficient and effective- especially with the crucial need for housing.
- Location tracking in commercial real estate can help understand usage, thereby could support optimizing design choices.

Integrated relationship ecosystem

It is a must-do nowadays to experiment and potentially invest in an innovation or team up in an ecosystem of partners, including PropTechs. This may be facilitated by a chief innovation officer who discusses any partnerships or alliances to:

- Identify new trends, opportunities and threats (ahead of the rest).
- Drive the other capabilities that are required to reap the benefits of an innovative culture.
- Form alliances or contribute to ecosystems with PropTechs or other organizations and become an innovation hub for talent.

This openness to innovation may be overarching and in doing so this may be elevating the ceiling of your organization.

Digitally-enabled technology architecture

The back-end of your businesses has to be supportive for your strategic ambitions, for any player within Real Estate. Therefore, facilitate an architecture that is able to support:

- Large data storage for all information that will be required for digital twins and ESD-related metrics.
- Assure compatibility of different source systems to merge and analyze internal and external data.

PropTech is essential to accelerate this Digital Transformation (3/3)

Aligned and empowered workforce

Connecting people to this digital journey is essential. However, note that the focus should not solely be on clients. Employees are important users to be considered as well.

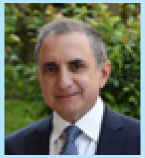
- Digitize processes and user experiences with clear designs and analysis dashboards.
- Build an innovative culture and recruit staff members that are open to change, innovation and partnering.
- Automation is key here too. More meaningful tasks can elevate the morale and this helps retain high potential staff and improve business outcomes.

Seamless interactions and commerce

Platforms to connect have been developed for multiple interactions of players within a transaction, or the Real Estate Value Chain. Consider the following:

- Real-time performance information of your investment.
- Digitally enabled interaction between key stakeholders.
- Virtual tours of properties that became relevant due to COVID-19.
- Energy usage for tenants to track carbon footprint and report on them.
- Chatbots supported by AI for questions will likely be the norm.

Our team



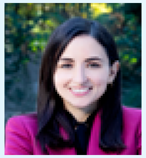
Kenny Evangelou
Partner, Deal Advisory
KPMG in Greece
M +6944 834 256
E kennyevangelou@kpmg.gr

Dimitris Papakanellou
Partner, Consulting
KPMG in Greece
M +30 6973340517
E dpapakanellou@kpmg.gr

Dimitris Dimitriou
Senior Manager, Consulting
KPMG in Greece
M +30 6974902265
E dimitriosdimitriou@kpmg.gr

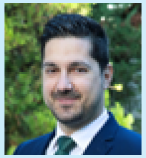
Christos Krestas
Partner, Tax
KPMG in Greece
M +30 6944553532
E ckrestas@kpmg.gr

Sophia Grigoriadou
Lawyer/Managing Partner,
Papacostopoulos – Grigoriadou
and Associates Law Firm
M +30 6936644900
E sgrigoriadou@cpalaw.gr

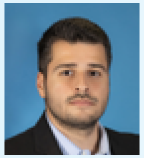


Georgia Konstantinidou
Senior Manager,
Executive Search and Selection
Consulting
KPMG in Greece
M +30 6936 042 587
E gkonstantinidou@kpmg.gr

Marios Stournaras
Senior Manager, Consulting
KPMG in Greece
M +30 6972010320
E mstournaras@kpmg.gr



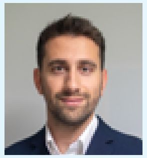
Konstantinos Konstantos
Senior Manager, Consulting
KPMG in Greece
M +30 6936044845
E kkonstantos@kpmg.gr



Miltiadis Grigoriadis
Senior Advisor, Strategy & Operations
Consulting
KPMG in Greece
T +30 2106062000
E mgrigoriadis@kpmg.gr

Marianna Botton
Advisor, Management Consulting
KPMG in Greece
M +30 6945 857 272
E mbotton@kpmg.gr

Nikos Anagnostopoulos
Supervising Senior Advisor,
Risk Consulting
KPMG in Greece
M +30 6936044848
E nanagnostopoulos@kpmg.gr



Alexandros Teleioridis
Advisor, Strategy & Operations
Consulting
KPMG in Greece
T +30 2106062000
E ateleioridis@kpmg.gr

Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.

KPMG

ATHENS
44, Syngrou Avenue
117 42 Athens, Greece

THESSALONIKI
Aghias Anastasias & Laertou, Philippos
Business Center
P.O. BOX 8405, 57001, Thermi
Tel: +30 2310 55 09 96
Fax: +30 2310 54 36 70

e-mail: info@kpmg.gr
kpmg.com/gr

kpmg.com/socialmedia

General Electronic Commercial Registry 003467701000