– REAL ESTATE IN THE REAL ECONOMY –

2020

Supporting growth, jobs and sustainability

Real estate, as a general term, describes the built environment, which plays a vital role in every aspect of the European economy, society and environment. Businesses and society can't function without the services of commercial property, including the provision of offices, shops, factories, a wide range of housing solutions and many other forms of real estate. The commercial property sector delivers and manages the infrastructure needed for entrepreneurship and communities to thrive. It is therefore a fundamental source of employment and economic growth, and a major contributor in addressing two critical challenges of our time: providing liveable and functioning cities for a growing urban population and reducing the environmental footprint of the built environment.

The European Public Real Estate Association (EPRA) and the European Association for Investors in Non-listed Real Estate Vehicles (INREV) represent the full spectrum of the European property investment industry. EPRA and INREV have commissioned this research which evaluates the role and importance of commercial real estate in the European economy. Details of the sources and methodologies used to derive the information are presented at the end of this report.

The efficiency of the process through which the European real estate industry invests, develops, supports and maintains the built environment, and services its clients, is of crucial importance to policy makers. Although there are many factors that influence the well-being of European citizens and the European economy, a performing real estate sector provides the basic platform for all these other factors to deliver their full potential, and for the European economy to thrive and remain competitive.

1. Contributing to the economy and supporting jobs

The commercial property industry directly contributed EUR 452 billion to the European economy in 2019, representing about 3.1% of the total economy and comparable to the combined size of the European automotive industry and telecommunications sector. It employs 4.2 million people, which is not only more than the auto manufacturing industry and the telecommunications sectors combined, but also greater than banking.

The commercial property industry's economic contribution continued to grow in 2019, absolutely and as a share of the total economy. Total employment continued its upward trajectory from 2015 across all property employment activities. The slow, but persistent recovery in construction employment expanded to finally surpass 2013 levels, with existing buildings benefitting from reinvestment, repair and repurposing. In addition, new development helped to meet unmet demand in undersupplied sectors, especially housing solutions.

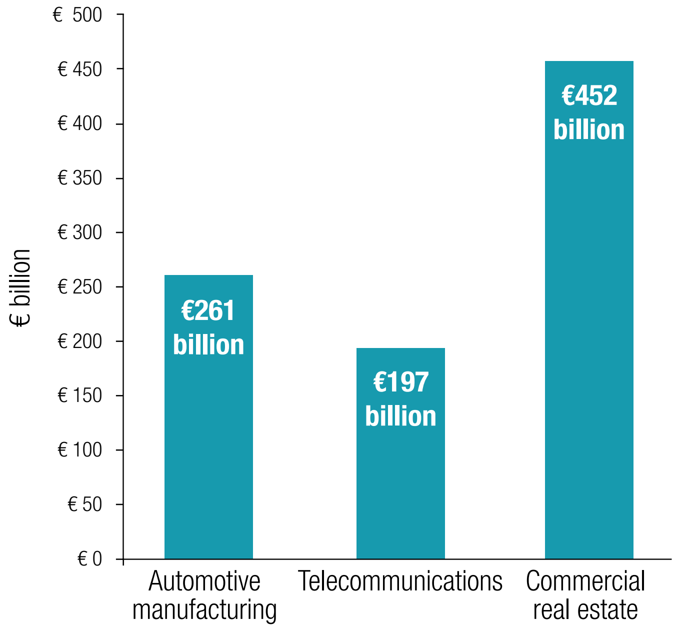
This activity in development, refurbishment and repair of buildings is the largest segment of the commercial property sector. The upkeep, management and care of commercial buildings is also a sizeable activity, undertaken either directly by property owners or on their behalf by a growing number of specialist contractors. All of these activities are an essential part of maintaining and improving the quality of the accommodation services provided to businesses and has an indirect impact on the environmental quality of public spaces.

Investment, fund and portfolio management experienced the strongest rate of employment growth since 2017. Although a small, if expanding, employment segment of commercial real estate, it represents a disproportionately high share of value-added labour. It contributes 6.5 times more per worker than the overall European average value-added per worker. In addition, employment in transactions, management and construction are directly dependent on this activity.

Indirectly, employment in the CRE sector contributes a value added multiplier of 2.96 to employment across the construction supply chain, business and consumer services, professional, scientific & technical services, and public and private administration & support services. The benefits of this are manifest in improved standards of living and attainment, and the impact on consumption induces a further jobs multiplier of 0.8.

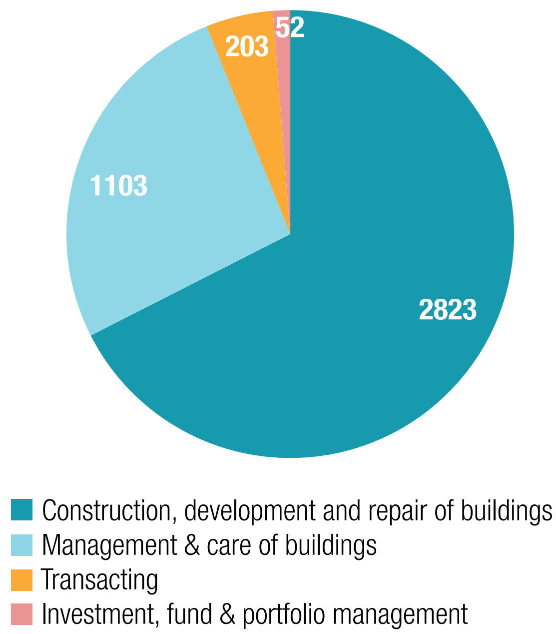
The ability to lease rather than own premises offers flexibility to businesses, including SMEs. Around 40% of all European commercial property is rented office space, allowing companies to channel more of their capital into growing their businesses.

EU-28 Gross Value Added, 2019



Source: RHL Strategic Solutions estimates using Eurostat data

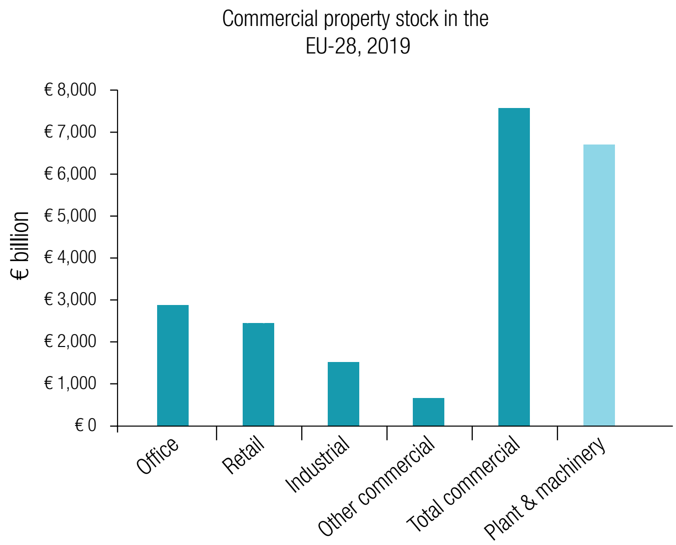
Direct employment in the EU-28 commercial property sector ('000), 2019



Source: RHL Strategic Solutions estimates using Eurostat data

2. Commercial real estate – a significant role in business, industry and social life

Commercial property, other than residential, encompasses high street shops, managed shopping and leisure facilities, offices, warehousing, logistics and light industrial premises, as well as hotels, healthcare and some other non-residential buildings. New forms of commercial property are continuously emerging. It plays a vital role in enabling Europe's business, industry and society to function. Its market value in 2019 was approximately EUR 7.5 trillion. This is greater than the value of the plant, machinery and equipment used by Europe's businesses and manufacturers. Offices are the largest property type, although retail and industrial are also substantial. The total value of residential property, at EUR 24.9 trillion, however far exceeds other property sectors.



Source: RHL Strategic Solutions estimates using estimates using Eurostat, ECB, OECD and national statistical office National Accounts data

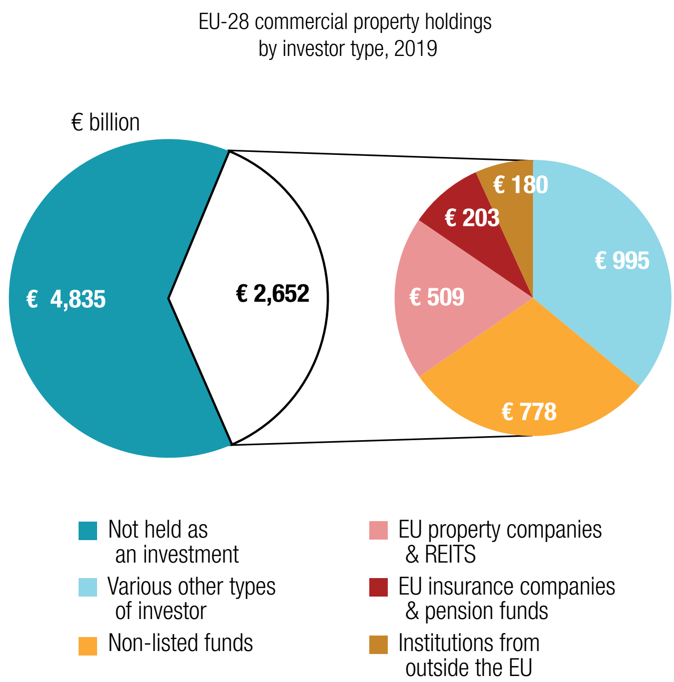
3. Investment and management of the built environment – non-listed funds and listed companies at the forefront

Around 35% of all commercial property – with a total market value of over EUR 2.7 trillion – is held as an investment.

Businesses prefer the flexibility of renting and often are unable to commit the capital and management time required of owner-occupation. The commercial property industry meets this need by investing in commercial property and providing accommodation services to these businesses.

Non-listed funds are the biggest property owners, representing almost 30% of total commercial property investment, while EU listed property companies and REITs account for 20%. In addition to their investments in the listed and non-listed sector, institutional investors also invest directly in commercial property with EU insurance companies and pension funds holding an estimated 9%.

As with other asset classes, investment in property has become more global. The amount of EU commercial property held by non-EU institutions and sovereign wealth funds is estimated to be EUR 180 billion. Global investment is becoming an increasingly important source of capital in the EU commercial property market. Directly held investment by non-EU insurance companies, pension funds and sovereign wealth funds accounts for 7% of invested commercial property in the EU and is considerably more when their indirect investments in non-listed funds and EU property companies and REITs are considered.

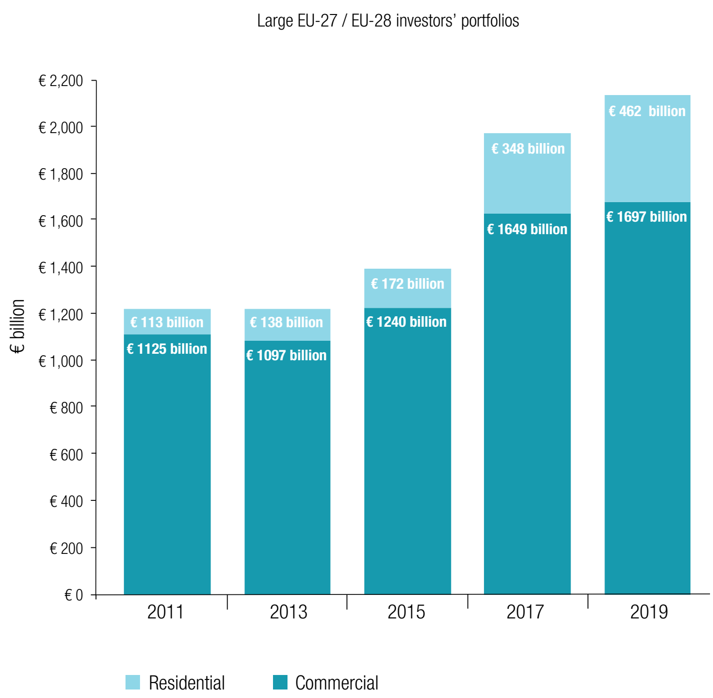


Source: RHL Strategic Solutions estimates using data from Eurostat, ECB, EPRA, INREV, PFR and RCA

4. An industry increasingly providing housing

Since 2013, institutional investment in the residential sector has increased almost three times to EUR 462 billion in 2019. It has grown at a faster rate than commercial property and its share of total property has doubled over the same horizon to 21%. Investors have responded to the challenge of meeting the underserved demand for professionally managed homes in the private rented sector across a wide spectrum of housing solutions including affordable housing, multi-family apartments, young professionals, senior living and student accommodation. Institutional investors are attracted by the long-term cashflows offered by a sector that is underpinned by accelerating structural trends, its dislocation from economic cycles and the opportunity create a positive social impact through its activity.

While investment in the residential sector is growing as a proportion of all property investment, at 1.8% it presents a small fraction of the EUR 24.9 trillion estimated total value of EU residential and of the amount that is privately-rented.

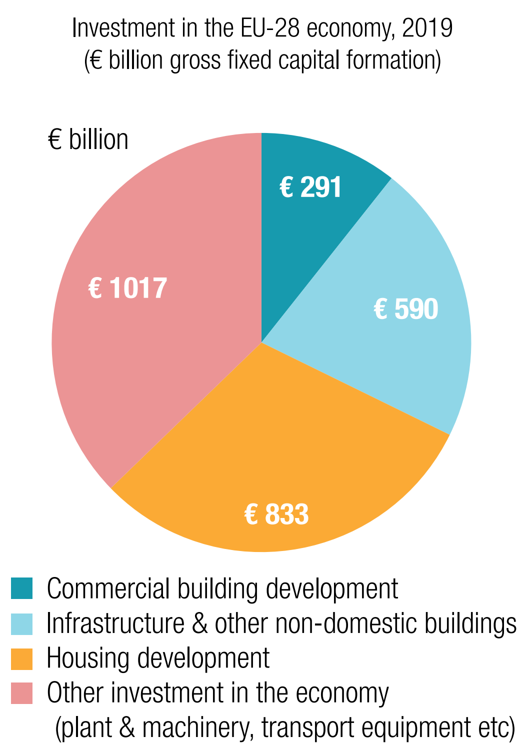


Source: RHL Strategic Solutions and PMRECON estimates using data from Eurostat, ECB, EPRA, INREV, OECD and RCA.

5. Investment - improving the built environment

Annual investment in new commercial property buildings and the refurbishment and development of existing buildings increased to EUR 291 billion in 2019, after remaining steady at around EUR 255 billion in the preceding five years. Although this represents an increase in volume, its share as a percentage of total investment in the EU economy remains relatively steady at above 10%. This highlights how sensitive commercial property development – and, as already illustrated, jobs in the commercial real estate industry – are to the strength of the EU economy. This data does not include the annual investment in housing, which has increased sharply since 2013. Even so, the scale of investment in commercial buildings is substantially higher than the GDP of Finland and while lower, is comparable to the GDP of Denmark.

Investment in housing, infrastructure and other non-domestic buildings is also substantial, totalling EUR 1.4 trillion, and when included with commercial property, represents almost two-thirds of capital investment in the European economy.



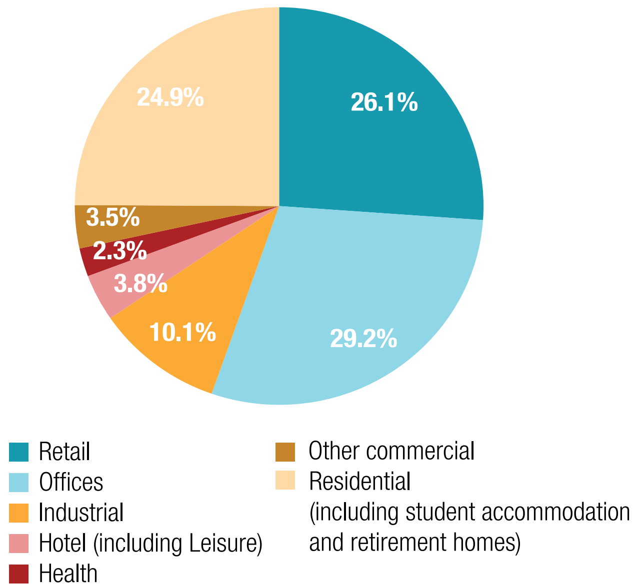
Source: RHL Strategic Solutions estimates using Eurostat data

6. Providing the capital, ownership and management behind a wide spectrum of business and social activities and housing

The traditional retail and office sectors continue to dominate investors' portfolios but their share has been declining over time. In responding to new business, social and public needs, new types of property are increasingly populating investors' portfolios. "Alternative" property sectors (including residential, hotels, healthcare and mixed use property) now account for over a third of portfolios. Notably, healthcare, senior living and education facilities are becoming more prominent in portfolios, albeit from a low base.

The long-standing industrial sector has recently seen a revival, driven by the growth in logistics and online shopping. Residential, including the private rented sector, student accommodation and senior housing, has seen the largest increase this decade.

Portfolio structures
(INREV and EPRA EU 28 portfolios), 2019



Source: RHL Strategic Solutions estimates using EPRA and INREV data

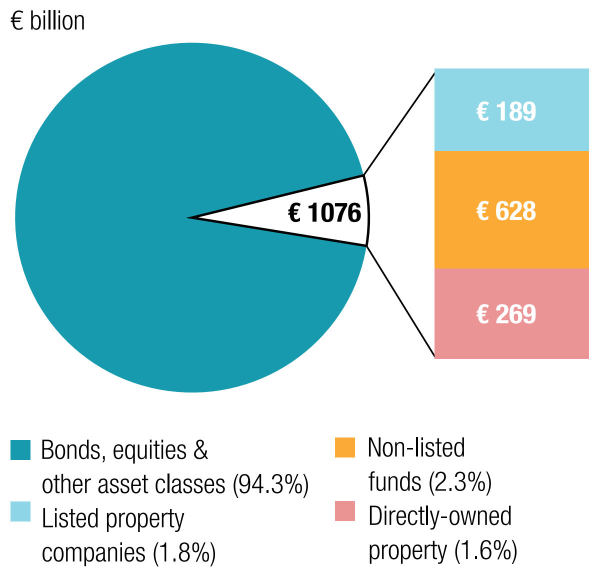
7. An important source of income for European savers and pensioners

European pension funds and insurance companies' investments include EUR 1.1 trillion of property, which represents an allocation of 6%. Having declined during the early 2010s, property's share has increased over the last two years, helped by a recovery in property prices and, in many countries, by investors increasing their allocations to property to access its diversification benefits and long-term, secure income. Although allocations have increased sharply, investors' exposure to underlying property has increased more moderately, reflecting the low level of borrowing now employed by the sector.

Non-listed funds represent the most popular route through which institutional investors gain their exposure to property. This shift has been driven by smaller investors new to property, who often lack the scale of capital and expertise required to invest directly, and by increased cross-border allocations. Listed property companies and REITs also provide an attractive opportunity to indirectly invest in the sector, often embedded within the wider allocation to equities.

Large institutional investors, with the requisite scale and expertise also invest directly in property, while continuing to invest indirectly in both the non-listed and listed sectors. For these investors, the choice of investment mode is driven by the investment opportunity.

Institutional exposure to EU real estate, 2019



Source: RHL Strategic Solutions estimates using Eurostat, ECB, EPRA, INREV, ANREV, NCREIF, OECD and other data.

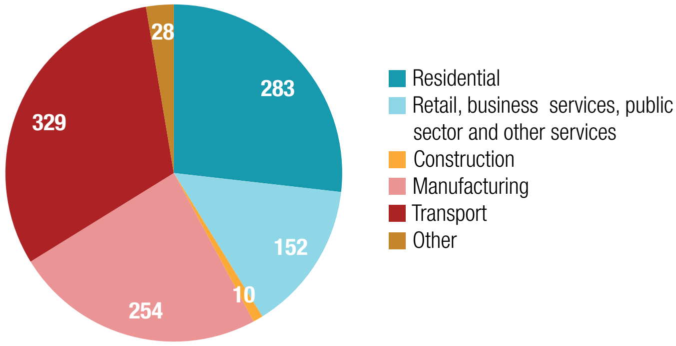
8. Contributing toward a low carbon economy

Buildings contribute significantly to energy use and greenhouse gas emissions. Institutional investors have, however, ensured that environmental considerations are embedded in investment decision-making at every stage of the investment process and are core to its management. Directly and indirectly, buildings (excluding factories) now account for about 41% of the EU's energy consumption. While this represents a decline of 1% compared with 2016, their emissions of greenhouse gases have fallen more sharply as a result of investment in renewable and clean technologies. Despite growth in housing units, emissions from residential buildings have fallen by 2.5% since 2016, while those from commercial buildings have decreased by 2.7% and from social infrastructure facilities (health, education, etc.) by 3.5%. Over the same period, total energy consumption in the economy increased by 1.2% and total emissions fell by 2.6%. Residential, commercial and public sector buildings represent one of the most important untapped potential sources of energy savings.

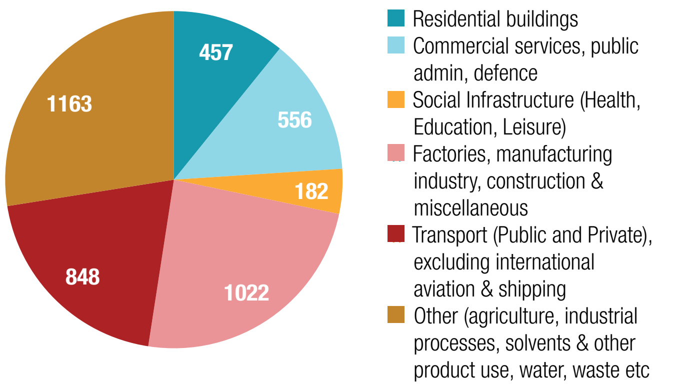
The cost over the decade of meeting this untapped potential for residential and non-residential buildings has been estimated at almost EUR 60 billion per year – a big commitment which emphasises the importance of Europe's commercial property sector in delivering these important energy efficiency improvements.

Listed property companies and non-listed funds are constantly evaluating and improving their sustainability record through their participation in the Global Real Estate Sustainability Benchmark (GRESB) annual survey. In addition, the industry it working to develop new techniques to enable the social impact of property investment to be measured and investors and managers to be benchmarked on their social impact performance.

EU-28 final energy consumption, 2019
(million tonnes oil equivalent)



EU-28 direct & indirect emissions of greenhouse gases, 2019
(million tonnes CO2 equivalent)



Source: RHL Strategic Solutions estimates using EEA and Eurostat data

This report was sponsored by EPRA and INREV and prepared by Brenna O'Roarty, RHL Strategic Solutions

About EPRA

EPRA, the European Public Real Estate Association, is the voice of the publicly traded European real estate sector. With more than 270 members, covering the whole spectrum of the listed real estate industry (companies, investors and their suppliers), EPRA represents over EUR 600 billion of real estate assets* and 94% of the market capitalisation of the FTSE EPRA Nareit Europe Index. EPRA's mission is to promote, develop and represent the European public real estate sector. We achieve this through the provision of better information to investors and stakeholders, active involvement in the public and political debate, promotion of best practices and the cohesion and strengthening of the industry. Find out more about our activities on www.epra.com

*European companies only

About INREV

INREV is the European Association for Investors in Non-Listed Real Estate Vehicles. We provide guidance, research and information related to the development and harmonisation of professional standards, reporting guidelines and corporate governance within the non-listed property funds industry across Europe. INREV currently has 461 members. Our member base includes institutional investors from around the globe including pension funds, insurance companies and sovereign wealth funds, as well as investment banks, fund managers, fund of funds managers and advisors representing all facets of investing into non-listed real estate vehicles in the UK and the rest of Europe. Our fund manager members manage more than 500 non-listed real estate investment funds, as well as joint ventures, club deals and separate accounts for institutional investors. www.inrev.org

Sources and Methodologies

All estimates relate to the 28 countries of the European Union and are based on data available up to 30 August 2020. RHL Strategic Solutions estimates based on methodology developed by Paul Mitchell Real Estate Consultancy (PMRECON) in previous editions of this paper.

1. Contributing to the economy and supporting jobs

Approach is to take Eurostat estimates of Gross Value Added (GVA) and employment for the Construction, Real Estate Activities (excluding imputed income from owner-occupiers) and other sectors from its National Accounts and Structural Business Statistics series and apportion shares to commercial property based on various criteria (for example, commercial real estate's share of construction output, of the total amount of rented property, and its share of total property transactions etc); value added and employment in "investment, fund & portfolio management" is calculated directly (following principles consistent with national accounts methodology) using information from a sample of fund managers and listed property companies, grossed-up on the basis of gross asset value. Overall, commercial property is estimated to account for 18% of total EU Construction (NACE F) GVA and 29% of Real Estate Activities' (NACE L less NACE L68A) GVA.

2. Commercial real estate - a significant role in business, industry and social life.

The calculations use Eurostat, ECB, OECD and national statistical office national accounts balance sheet data relating to the value of the stock of "fixed assets" and "Land and Buildings". For residential in non-Eurozone countries, the official data on dwellings is updated to 2019 where required using house price inflation and an estimate of stock growth. For commercial, the official data on "non-residential buildings" includes non-commercial buildings and is apportioned to commercial property; it is estimated that approximately 63% of the value of these "non-residential buildings" are commercial. For non-Eurozone countries, values are updated to 2019 where required using INREV Aset level index capital growth and an estimate of floorspace stock growth.

The comparative Plant and Machinery estimate is derived on a similar basis from Eurostat, ECB, OECD and national statistical office national balance sheet data.

3. Investment & management of the built environment - non-listed funds & listed companies at the forefront.

4. An industry increasingly providing housing

Insurance companies and pension funds are estimates from Eurostat, the ECB and OECD data (updated to 2019 where only 2018 data is available) of these institutions' investments in "land & buildings" or "fixed assets" (almost all of which are buildings). Non-listed funds are estimated from data provided by INREV and ANREV/ INREV/ NCREIF of the gross asset value of EU domiciled funds' monies invested in EU28 countries. EU-domiciled listed property companies & REITs is based on estimates of EPRA members' portfolio values (EU28 only and excluding development) grossed-up on the basis of EPRA's coverage of the total listed property investment companies market (i.e. excluding "Real Estate Services", Construction, and "Building Materials & Fixtures"). Non-EU institutional investment is estimated using data on net investment flows gratefully provided by Real Capital Analytics (RCA).

5. Investment - improving the built environment

Estimates derived from 2017 Eurostat data on "gross fixed capital formation" (GFCF, commonly known as investment). Housing and other investment are directly from Eurostat. Commercial property is derived from Eurostat's estimate of "non-residential buildings & other structures"; additional information from other sources has been used to get an indication of how much of this GFCF is buildings and how much of these buildings are commercial; in this respect, approximately 33% of GFCF in "non-residential buildings & other structures is estimated to be in commercial buildings, the remainder in infrastructure and other non-residential buildings such as public hospitals, universities, museums, and manufacturing etc. The total GFCF ("Investment in the economy") figure excludes "Cultivated biological resources" and "Intellectual property products".

EPRA EUROPEAN PUBLIC REAL ESTATE ASSOCIATION

INREV

6. Providing the capital, ownership & management behind a wide spectrum of business & social activities and housing
Derived from the gross asset values in the INREV vehicle database and from EPRA estimates of the listed sector's property portfolio values (EU28 standing investments only).

7. An important source of income for EU savers & pensioners
Insurance company and pension fund investments in directly-owned property are from section 3 and for "equities, bonds & other asset classes" and total investments from the institutional balance sheets data of Eurostat, the ECB and OECD and national statistics offices, updated to 2017 where appropriate.

Listed property company exposures are estimated based on the product of (a) institutions' allocations to equities (including those held indirectly in mutual funds etc) and (b) of listed property's share of equity portfolios (in aggregate, estimated respectively to be 26.8% and 3.4%). The exposure to non-listed real estate is a net asset value (NAV) estimate using information from INREV Universe studies, investment consultants & other information.

8. Contributing toward a low carbon economy
Energy consumption from Eurostat, with the published sectors re-categorised and re-aggregated. Based on European Energy Authority (EEA) data, direct and indirect emissions derived from Eurostat and re-aggregated by RHL Strategic Solutions. Residential and commercial exposures are estimated separately.

Based on European Energy Authority (EEA) data, direct and indirect emissions derived from Eurostat and re-aggregated by RHL Strategic Solutions.