– REAL ESTATE IN THE REAL ECONOMY –

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, housing and many other forms of real estate.

The commercial property sector delivers and manages the infrastructure needed for entrepreneurship 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.

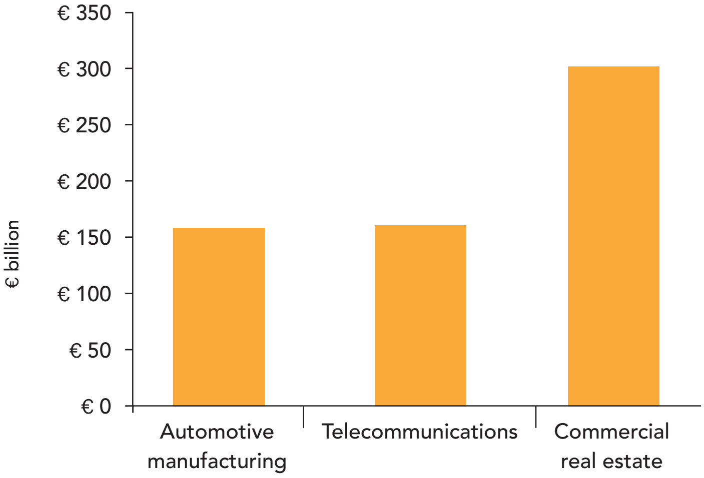
1. Contributing to the economy & supporting jobs

The commercial property sector directly contributed EUR 302 billion to the European economy in 2013, representing about 2.6% of the total economy - and more than both the European automotive and telecommunications sector. It employs 3.8 million people, which is not only more than the auto industry and the telecommunications sector, but also greater than banking.

The commercial property industry, however, has been significantly affected by recent economic weakness. Both the volume of output and the level of employment since 2011 have fallen by more than the EU economy as a whole. Construction of commercial buildings has suffered particularly, but most parts of the industry have been affected.

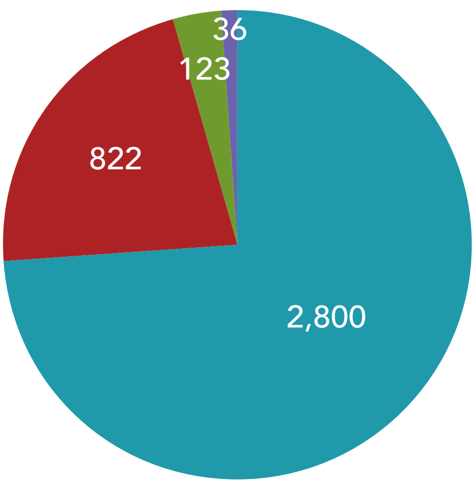
EU-27* Gross Value Added, 2013

*excludes Croatia



Source: PMRECON estimates using Eurostat data

Direct employment in the EU-27 commercial property sector ('000), 2013



- Construction, development and repair of buildings
- Management & care of buildings
- Transacting
- Investment, fund & portfolio management

Source: PMRECON estimates using Eurostat data

Most activity in the commercial property sector is through the development, refurbishment and repair of buildings. 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.

Investment, fund and portfolio management are small but disproportionately high value-added activities, contributing six times more per worker than the overall European average value-added per worker.

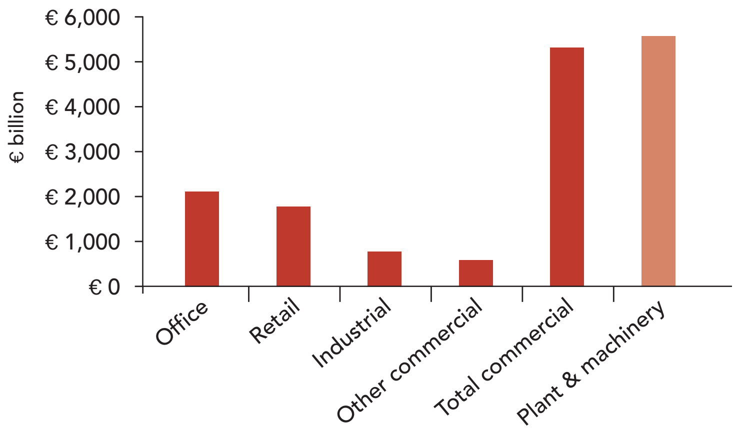
2. Commercial real estate – a significant role in business, industry & social life

Commercial property encompasses shops and retail outlets, offices, warehousing and light industrial premises, as well as hotels, leisure facilities and some other non-residential buildings. New forms of commercial property are continuously emerging.

It plays a vital role in Europe's business, industry and social life. Its market value in 2013 was approximately EUR 5.3 trillion. This is comparable to the value of the plant, machinery and equipment used by Europe's businesses and manufacturers.

Offices are the largest property type, although retail is also substantial. The total value of residential, at EUR 24 trillion, far exceeds other property sectors.

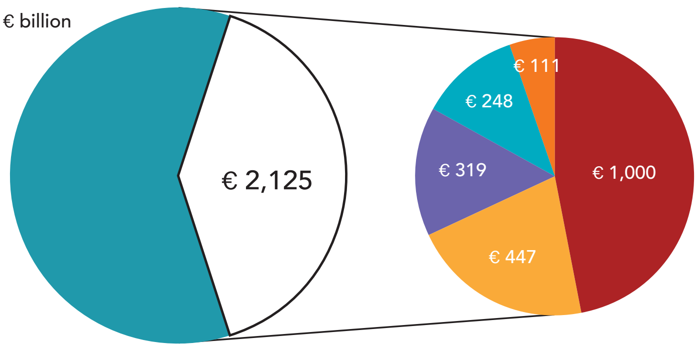
Commercial property stock in the EU-27, 2013



Source: PMRECON estimates using Eurostat, ECB, OECD and national statistical office National Accounts data

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

EU-27 commercial property holdings by investor type, 2013



Source: PMRECON estimates using data from Eurostat, ECB, EPRA, INREV, PFR and RCA.

Around 40% of all commercial property – with a total market value of over EUR 2 trillion – is held as an investment.

Businesses prefer the flexibility of renting and are reluctant 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.

Listed property companies and non-listed funds are the biggest single owners, while the directly owned share of traditional investors (insurance companies and pension funds) has been declining.

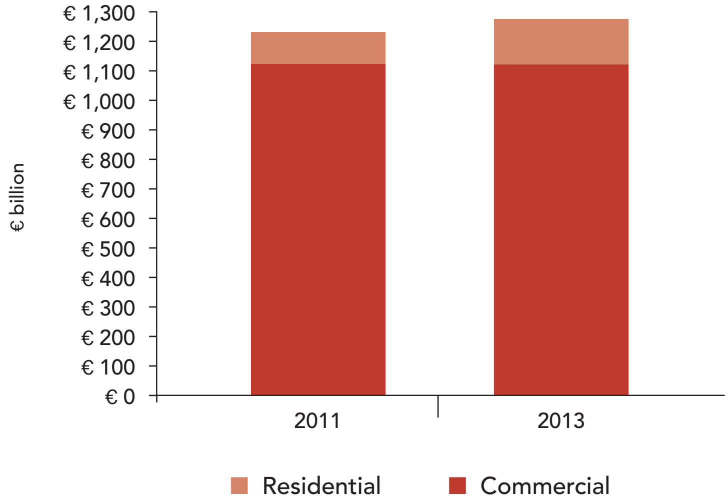
Investment, however, is becoming more global. The amount of commercial property held by non-EU institutions, including sovereign wealth funds, is estimated to be EUR 111 billion, an increase of 40% since 2011. Global investment is becoming an increasingly important source of capital in the EU commercial property market.

4. An industry increasingly providing homes

Residential represents a small but growing proportion of large investors' property holdings. The amount is estimated to have grown to EUR 143 billion in 2013, a rise of 27% since 2011; houses and apartments now represent 11% of large investors' portfolios. While growing, this is still small in comparison to the total value of residential in the EU of approximately EUR 24 trillion and to the amount which is privately rented.

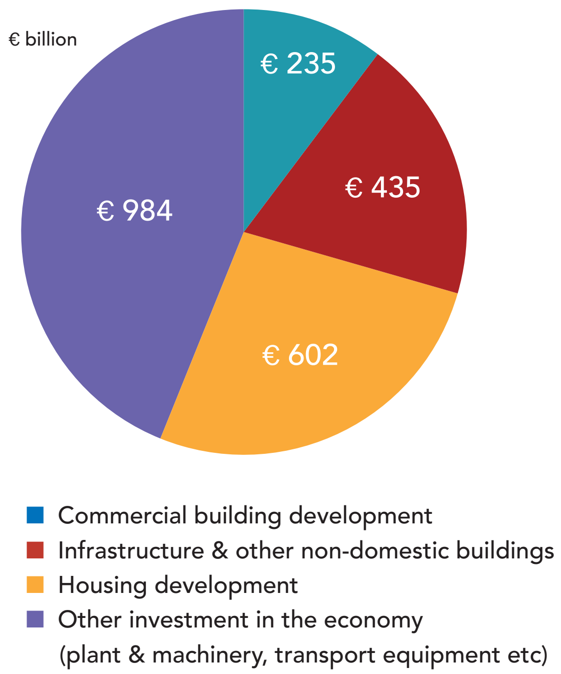
Source: PMRECON estimates using data from Eurostat, ECB, EPRA, INREV, PFR and RCA.

Large EU-27 investors' portfolios



5. Investment – improving the built environment

Investment in the EU-27 economy, 2013



Source: PMRECON estimates using Eurostat data

Annual investment in new commercial property buildings and the refurbishment and development of existing buildings has recently been running at EUR 235 billion. With commercial property development being badly affected by the weak economy, this is lower than at the start of the decade in both absolute terms and as a share of overall investment in the European economy. Even so, in representing 10% of total investment in the economy, investment in commercial buildings is equivalent to the GDP of Denmark.

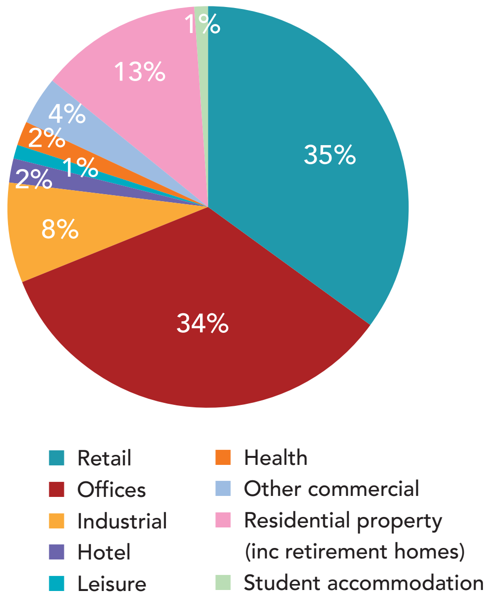
Investment in housing, other buildings and infrastructure is also substantial, totaling more than EUR 1 trillion. When included with commercial property, it represents 55% of capital investment in the European economy, slightly down from 57% in 2011. This emphasises how sensitive investment in buildings is to the health of the overall economy.

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

The traditional retail, office and industrial sectors continue to dominate investment portfolios, but their share has been declining over time.

As a response to new business, social and public needs, new types of property are increasingly populating investors' portfolios. "Alternative" property sectors (excluding residential) now account for around 9% of portfolios. Notably, healthcare and education facilities are becoming more prominent in portfolios, albeit from a low base. Residential, however, has seen the largest increase since 2011.

Portfolio structures (INREV and EPRA portfolios), 2013



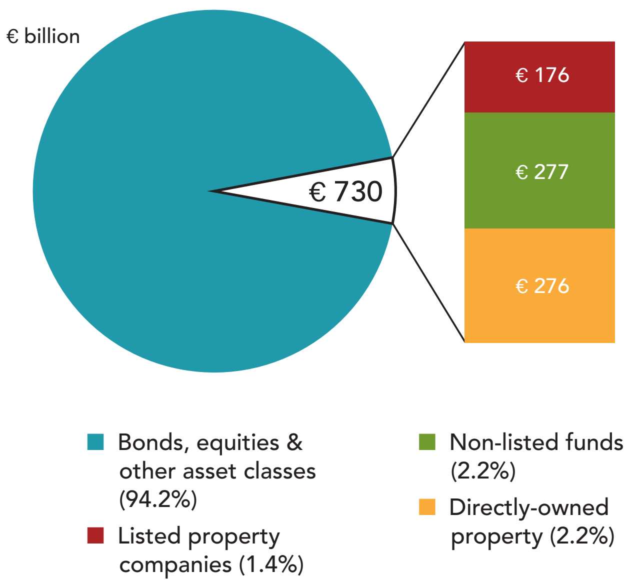
Source: PMRECON estimates using EPRA and INREV data

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

The long-term cash flows generated from property investment provide an important source of diversified income in the portfolios of European savers and pensioners. Property in its various forms accounts for EUR 730 billion of European pension funds and insurance companies' investments. This represents an allocation of nearly 6%, which is marginally lower than in 2011 given the stronger price growth of other asset classes. Direct ownership and exposure through non-listed funds are now of comparable magnitude. Overall, indirect investment – either through non-listed funds or listed property companies and REITs – is becoming increasingly important.

Pension funds' and insurance companies' exposures to buildings is effectively higher than portrayed because property companies, REITs and unlisted funds often use debt to boost the amount of property they hold. Including this, European pension funds' and insurance companies' "beneficial" interest in commercial and residential property is close to EUR 1 trillion.

EU-27 institutional allocations, 2013



Source: PMRECON estimates using Eurostat, ECB, EPRA, INREV, OECD and other data.

8. Contributing towards a low-carbon economy

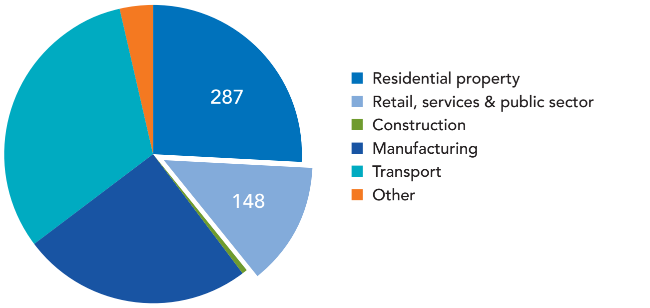
Buildings contribute significantly to energy use and greenhouse gas emissions, although the latest data show a modest decline. Directly and indirectly, buildings (excluding factories) now account for just under 40% of the EU's energy consumption and about 30% of its emissions. Residential property accounts for the vast majority of this with non-residential buildings – including the public sector – accounting for 12% of the EU's energy consumption and greenhouse gas emissions.

Residential and, to a lesser extent, commercial and public sector buildings also represent one of the most important untapped potential sources of energy savings.

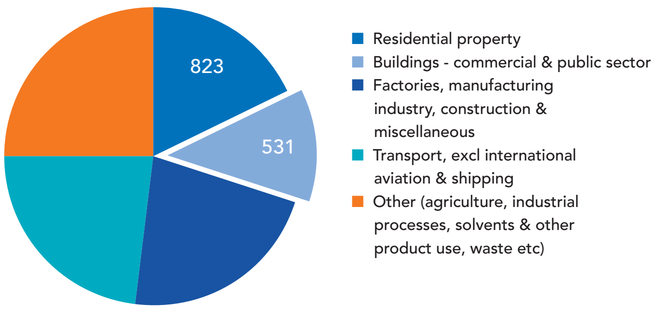
The cost over the decade of meeting this untapped potential for residential and non-residential buildings has been estimated at almost EUR 60 billion per year – a big commitment which emphasises the importance of Europe's commercial property sector in delivering these important energy efficiency improvements.

Listed property companies and non-listed funds are constantly evaluating and improving their sustainability practices and performances through their participation in the Global Real Estate Sustainability Benchmark (GRESB) annual survey.

EU-27 final energy consumption, 2012
(million tonnes oil equivalent)



EU-27 direct & indirect emissions of greenhouse gases, 2011
(million tonnes CO_2 equivalent)



Source: PMRECON estimates using EEA and Eurostat data.

Revisions to the 2011 estimates made in 2012

Many of the estimates for 2011 made in 2012 have been subsequently revised during this update. Most are relatively small and either reflect new and more up-to-date data which was unavailable at the time, revisions to the source and underlying data, or improvements to the methodology.

A more substantial revision has been made to the estimate of property owned by EU REITs and listed property companies; this correspondingly affects the estimate total amount of investment property in the EU.

The methodology for estimating the amount of property owned by EU REITs and listed property companies involves collating information on the value of the properties held by the companies in the EPRA Index (and some additional companies in countries where the EPRA coverage is thin); the property values for this sample of companies are then (for each country) "grossed-up" on the basis of their share of the total market capitalisation of all REITs and listed property companies in that country.

In making the current estimates, it has come to light that EPRA's total market capitalisation of listed property companies includes some property service companies and construction companies whose primary business is not long-term property investment and who do not own significant amounts of investment property; this means the "grossing-up" factors are too high. The basis for the "grossing-up" now excludes these companies and is limited to those REITs and other listed property companies whose primary activity is the long-term investment in buildings.

In addition to affecting the 2013 estimate in this report, this revised approach has led to a much lower estimate of the amount of property owned by REITs and listed property companies in 2011.

This report was sponsored by EPRA and INREV and prepared by Paul Mitchell Real Estate Consultancy Ltd

EPRA
EUROPEAN PUBLIC REAL ESTATE ASSOCIATION

About EPRA

The European Public Real Estate Association (EPRA) is the voice of the publicly traded European real estate sector. With more than 200 active members, EPRA represents over EUR 300 billion of real estate assets and 90% of the market capitalisation of the FTSE EPRA/NAREIT Europe Index. Through the provision of better information to investors, improvement of the general operating environment, encouragement of best practices and the cohesion and strengthening of the industry, EPRA works to encourage greater investment in listed real estate companies in Europe.

INREV

About INREV

INREV is the European Association for Investors in Non-listed Real Estate Vehicles. Since its launch in 2003, it has grown to over 350 members from more than 28 different countries. INREV's aim is to improve the accessibility of non-listed real estate funds for institutional investors by promoting greater transparency, professionalism and standards of best practice. INREV is led by institutional investors and supported by other market participants such as fund managers, investment banks, academics, lawyers and other advisors. As a pan-European body, INREV represents a unique platform for sharing knowledge of the non-listed real estate investment industry.

Sources & methodologies

All estimates relate to 27 countries of the European Union (i.e. all member states except Croatia) and are based on data available up to July 01, 2013.

1. Contributing to the economy and supporting jobs

Paul Mitchell Real Estate Consultancy (PMRECON) estimates. 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; "investment, fund & portfolio management" is mainly based on 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 Construction (NACE F) GVA and 25% of Real Estate Activities' (NACE L less NACE L68A) GVA. Comparative estimates for the GVA of Motor Vehicle Manufacturing and of Telecommunications are based on the latest available Eurostat GVA data for 2011, updated by PRECON to 2013 by drawing on the broader 2013 data for Manufacturing and for Information & Communications.

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

Commercial and residential property are PMRECON estimates. 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". For residential, where appropriate, the official data on dwellings for 2011 and 2012 is updated to 2013 using house price inflation and an estimate of stock growth. For commercial, the official data on "non-residential buildings" includes non-commercial buildings and it is apportioned to commercial property by PMRECON; it is estimated that approximately 60% of the value of these "non-residential buildings" are commercial. 2011 or 2012 values are updated to 2013 using IPD capital growth and an estimate of 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, updated by estimation, where necessary, to 2013.

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

Insurance companies and pension funds are estimates (updated by PMRECON to 2013 where appropriate) from Eurostat, the ECB and OECD of these institutions' investments in "land & buildings" or "fixed assets" (almost all of which are buildings). Non-listed funds are PMRECON estimates, based on data gratefully provided by Property Funds Research, of the gross asset value of EU domiciled funds' monies invested in EU27 countries. EU-domiciled listed property companies & REITs is EPRA Index portfolio value (EU27 only and excluding residential) grossed-up on the basis of EPRA's coverage of the total listed market. Non-EU institutional investment is a PMRECON estimate partly based on data of net investment flows gratefully provided by Real Capital Analytics (RCA).

Any residential exposures are excluded from the estimate of commercial property.

4. An industry increasingly providing homes

PMRECON estimates derived using the same approach for commercial property in Section 3.

5. Investment – improving the built environment

PMRECON estimates derived from 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 by PMRECON to get an indication of how much of this GFCF is buildings and how much of these buildings is commercial. Approximately 35% of GFCF in "non-residential buildings and 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.

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

Derived by PMRECON from the gross asset values in the INREV vehicle database and from EPRA estimates of the listed sector's property portfolio values (EU27 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 in "equities, bonds & other asset classes" are from Eurostat, the ECB and OECD, updated to 2013 where appropriate by PMRECON. Listed property company exposures are PMRECON estimates based on the product of (a) institutions' allocations to equities in total and (b) of listed property's share of equity portfolios (in aggregate, estimated respectively to be 33% and 5%). The exposure to non-listed real estate is a PMRECON net asset value (NAV) estimate using information from INREV Universe studies, investment consultants and other information.

8. Working towards a low-carbon economy

Energy consumption from Eurostat, with the published sectors re-categorised and re-aggregated by PMRECON. Emissions from the European Environment Agency, again with sectors re-categorised and re-aggregated by PMRECON; direct user emissions for 2011 are derived from the EEA's Greenhouse gas – data viewer; indirect end-user emissions estimated by Paul Mitchell Real Estate Consultancy Ltd by pro-rating the 2011 indirect emissions total according to the EEA's 2010 indirect end-user emissions data.