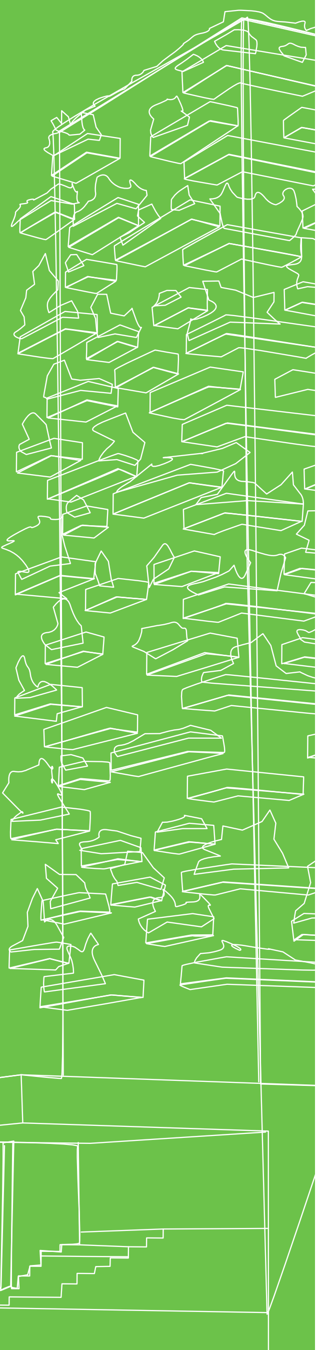

Unlocking affordable PRS

to address the twin challenges of housing need and decarbonisation

Research

INREV is the European Association for Investors in Non-Listed Real Estate Vehicles. Our aim is to improve the accessibility of non-listed real estate vehicles for institutional investors by promoting greater transparency, accessibility, professionalism and standards of best practice.

As a pan European body, INREV represents an excellent platform for the sharing and dissemination of knowledge on the non-listed real estate industry.

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Contents

Executive summary

- Residential allocations account for 23% of the total gross asset value (GAV) of the INREV Annual Fund Index
- Over 90% of INREV Residential Survey respondents consider direct and indirect subsidy as at least important to the viability of intermediary PRS. Over 25% think it is essential
- Most investors and fund managers consider fiduciary duty and decarbonisation to be fully aligned in principle, however, there are impediments to implementation
- Costs associated with decarbonisation should be considered from a return on investment and risk management perspective rather than as a cost

Institutional investment in residential real estate has accelerated rapidly over the past decade, seeing its share of assets under management (AUM) within the INREV Annual Fund Index increase from 6.6% at end 2013 to 22.7% at end 2023. The sector intertwines two of the greatest challenges to reaching a just transition of economy and society; satisfying unmet housing need and decarbonising economy and society. It offers institutional investors the opportunity to invest with purpose while exercising their fiduciary duty and generating required risk adjusted returns.

INREV's previous paper 'Housing middle income Europe' explains how PRS opportunities are positioned within the wider housing market spectrum and how this structure, which varies across countries, shapes investment opportunities. The PRS sector represents a range of segments that offer different strategic opportunities, including premium market rate, affordable intermediary, senior housing and co-living.

This paper complements INREV's recent research by outlining the scale of non-listed investment across residential PRS segments, combining analysis of INREV's proprietary data with the findings of a recent INREV Residential qualitative survey to support its interpretation. It also sets out its performance profile and risk characteristics, exploring the impact of decarbonisation strategies on returns from a short and longer term perspective, evaluating whether related capital expenditure should be viewed as an investment rather than a cost.

Key findings of the research are:

- There is a strong weighting to the intermediary PRS, with 94.1% of institutional investors and managers indicating that they invest in this sector and 52% indicating that it accounts for over 50% of residential AUM . Premium PRS strategies are also strongly preferred (82.3%), but account for a lower proportion of AUM, with 44% of participants indicating that they account for less than 25% of AUM.

- The survey also explored the extent to which investors and managers invest with equity in regulated housing opportunities, revealing that almost 30% of respondents include social and/ or cost-rental housing in their AUM. Such assets are leased to third party regulated providers rather than managed directly.

- Most institutional investors and managers consider some form of public sector intervention or subsidy as important to the viability of intermediary PRS, with over a quarter considering such intervention as essential. Indeed, over half of the respondents consider it to be an important driver of investment strategy in terms of both the macro scale capital allocation by country and the more micro scale site selection. This should be of interest to policy-makers seeking to harness institutional capital to assist in expanding housing supply, particularly intermediary PRS.

- Although the 2024 ANREV/INREV/PREA Investment Intentions Survey identified that decarbonisation activity is at risk of delay as investors and managers balance fiduciary duty and performance, the research findings demonstrate that decarbonisation remains an important objective. Importantly, investors and managers consider decarbonisation strategies to be a driver of performance, interacting with income returns and capital growth.

- Limitations of the valuation process present an impediment in the current market conditions. In the absence of regulation or the introduction of more punitive carbon pricing and a valuation process that at best reflects the price a buyer – regardless of how informed they are as to the underlying issues - is prepared to pay, investors and managers are trying to balance short and long term fiduciary duty and returns.

- Policy makers keen to harness institutional capital to assist in addressing housing supply imbalances should consider developing initiatives that facilitate intermediary housing investment. Such frameworks should embed sustainability objectives. The opportunity to address the twin challenges of housing need and climate change in unison should not be wasted.

1 Housing middle income Europe: the intermediary investment opportunity amid diverse residential market structures

Chapter 1

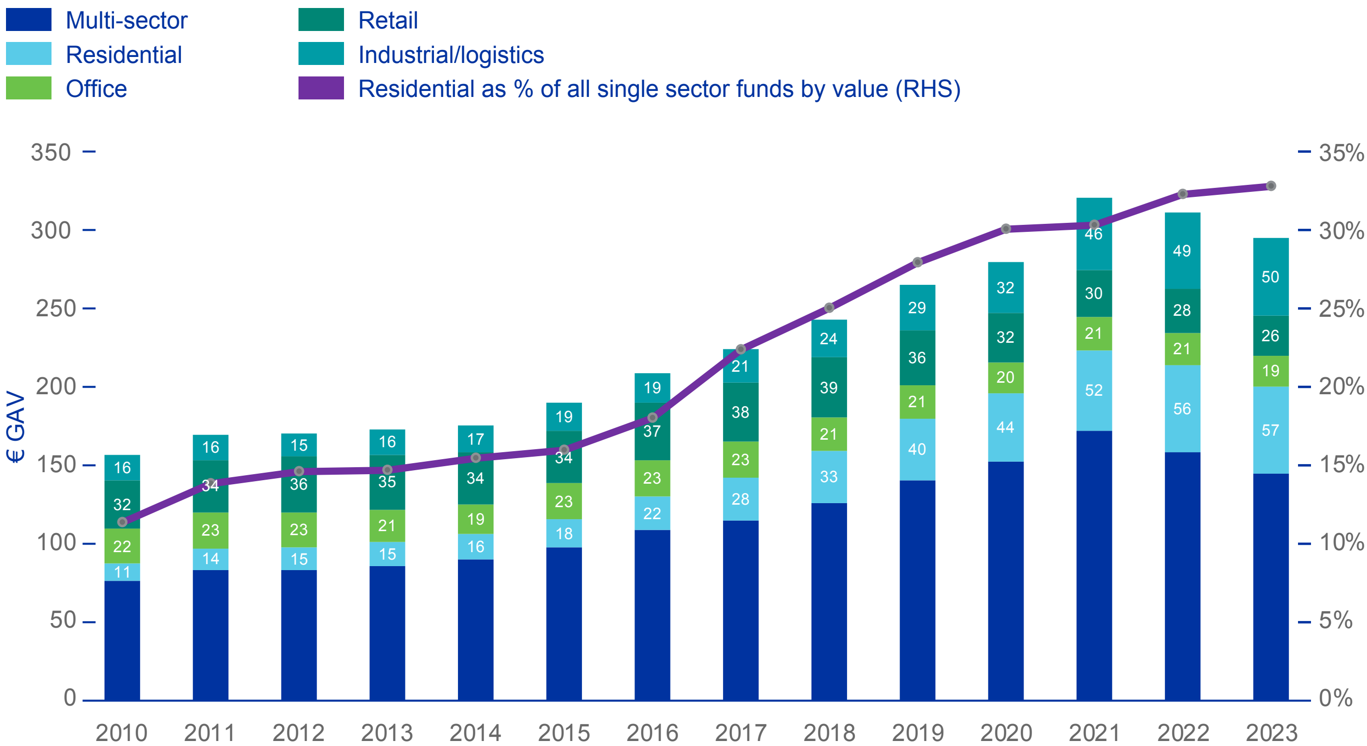
Introduction

The residential sector embodies two of the greatest challenges to reaching a just transition of economy and society. Firstly, the provision of appropriate housing to meet escalating unmet demand, particularly in urban centres. Second, accounting for 29% of total carbon emissions, decarbonising the residential sector is fundamental to achieving transformation of economy and society to net zero[2]. Attracted by stable long-term income returns, the sharp growth of institutional investment in the residential sector represents a return prospect that meets their fiduciary duty to pensioners and savers. At the same time, it affords an opportunity to deploy capital with purpose to tackle these sustainable development goals (SDG) simultaneously.

Over the past decade, institutional investment in the residential sectors has greatly expanded absolutely and relatively. Residential investment is spread across the range of investment modes, with the preferred mode varying with investor scale, residential segment and variation in the structure of both housing and the evolution of residential investment across countries.

Across listed and non-listed modes, institutional residential assets under management (AUM) more than trebled to €606 billion between 2015 and end 2021, representing a doubling of the residential sector's portfolio share from 14% to 27%[3]. At end 2021, the listed sector represented the largest mode of investment by value, followed by the non-listed sector which demonstrates the fastest growth, more than quadrupling its value from end 2015 to end 2021. Analysis of the INREV Annual Fund Index indicates that this trend has continued, with the residential sector increasing its share of single sector funds both absolutely and relatively.

Figure 1: Residential as a proportion of all fund GAV and as a share of single sector funds



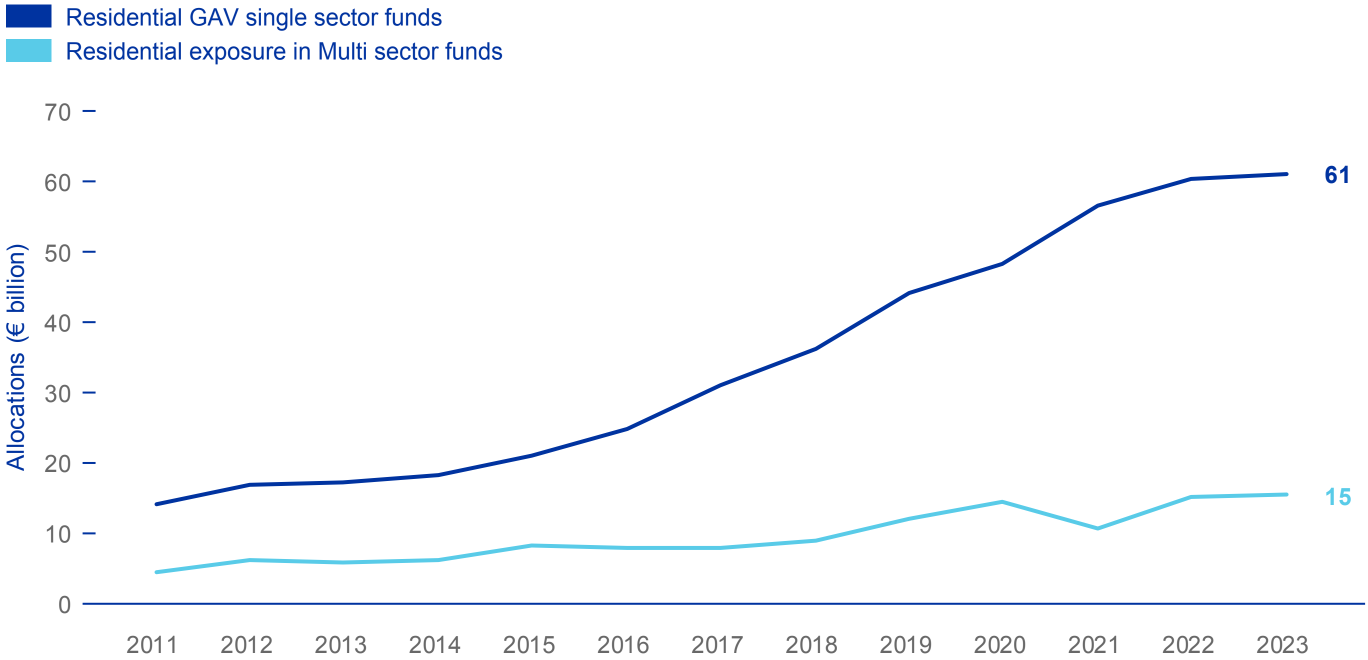
Source: INREV Annual Fund Index

2 Catella Investment Management (2024) The Great Epsilon2 Real Estate Transformation IEA (2021), Energy Efficiency Indicators Database; IEA (2021), Emission Factors Database and OECD calculations

3 INREV/ EPRA Real Estate and the Real Economy (2022)

At the of end 2013, the sector accounted for €15.1 billion representing 15% of all single sector fund GAV and this has increased to €56.6 billion representing 33% of single sector fund GAV by the end of 2023 (Figure 1). Indeed, in terms of value over this ten year period, it has moved from being the smallest to the largest major sector across single sector funds while office and retail have contracted. Additionally, residential is a growing proportion of multi-sector funds, representing a further €15.4 billion of AUM (Figure 2). Together, at the end of 2023, residential allocations accounted for 23% of the total GAV of the INREV Annual Fund Index.

Figure 2: Sharp rise in total allocation to residential within single sector and multi-sector funds



Source: INREV Annual Index

Drawing on INREV's proprietary data and analysis of a recent INREV Residential qualitative survey to support its interpretation, this paper outlines the scale and focus of non-listed residential investment in Europe and sets out its performance profile and risk characteristics[4]. It also considers the impact of decarbonisation strategies on returns from a short and longer term perspective, evaluating whether related capital expenditure should be viewed as an investment rather than a cost.

> **"At the end of 2023, residential allocations accounted for 23% of the total GAV of the INREV Annual Fund Index and is now the largest major sector across single sector funds while office and retail have contracted."**

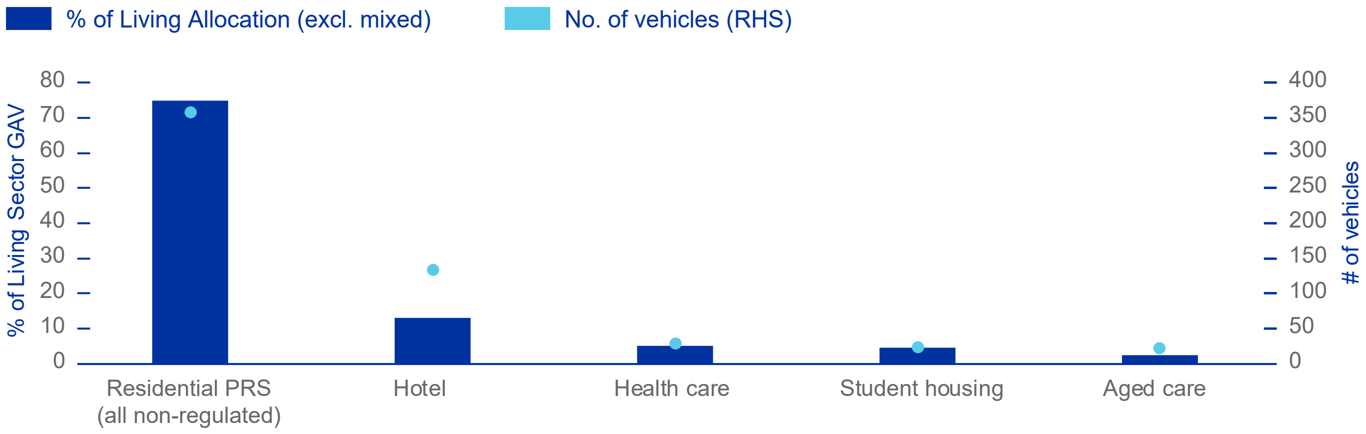
4 INREV Residential Survey carried out in May 2024, was undertaken by 34 participants representing a minimum of €330 billion European real estate AUM

Chapter 2

Residential strategies are highly concentrated in PRS, especially intermediary

The 'living' sector offers a wide range of opportunities stemming from demand and supply imbalances across multiple segments of the European market, enabling investors to develop multiple residential strategies across the risk spectrum. Across funds within the INREV Quarterly Fund Index, investment is strongly concentrated in the residential Private Rented Sector (PRS) strategies which account for 75% of invested capital across the range of 'living' segments (Figure 3).

Figure 3: Allocations to 'living' sector



Source: INREV Quarterly Fund Index, Q4 2023

Long income investors attracted to PRS value the potential to develop and acquire long income streams from multi-, and more recently, single-family assets that offer dislocation from economic cycles and the potential to manage risk through strong management. In particular, the level of excess demand over supply limits downside cyclical risk.

Given the expected persistence of the housing shortage across European countries through the next decade and the long-term fundamentals underpinning investment[5], the sector is expected to grow its share of the investment universe further. In 2024, residential claimed top position for the first time in the history of the ANREV/INREV/PREA Investment Intentions Survey with over 90% of investors indicating it as their preferred investment sector[6].

Given the recent growth and the scale of the PRS sector it is important to understand the relative weight of capital across the range of its sub-segments – and strategic opportunities - it comprises.

Distinct strategies can be identified by segmenting the PRS sector by target socio-demographic profile. These include 'premium market rate', 'intermediary rent' PRS, as well as senior living and niche strategies such as co-living (Box 1).

Box 1: Definitions of PRS segments employed in this paper

Premium PRS: Maximise possible rental income, targeting highest income available tenant audience, often top income quintile

Intermediary PRS: Targeting an affordable rent for middle income (3rd and 4th quintile) tenant audience. Such rent may equate to market rent or a discount to market rent.

Co-living: Purpose built shared accommodation and amenities, operated or leased to third party

Student accommodation: Purpose built student accommodation

Senior living: Includes senior housing, sheltered housing/ non-medical assisted living

5 For a detailed discussion and estimation of the housing shortage please refer to INREV's 2024 paper 'Housing middle income Europe: the intermediary investment opportunity amid diverse residential market structures'

6 ANREV/INREV/PREA Investment Intentions Survey 2024

Analysis of the qualitative INREV Residential survey data indicates that intermediary PRS strategies are the most strongly preferred strategy, employed by 94.1% of respondents. It also represents the greatest share of residential AUM, with 26% indicating the segment comprises at least 75% of their AUM, and 52% indicating it accounts for greater than 50% of AUM (Figure 4). Just over a fifth of respondents have an exposure to intermediary PRS of less than 10% of residential AUM.

Premium PRS strategies are also strongly preferred (82.3%), but their contribution to residential portfolios is more varied with 27% of respondents indicating they account for more than 50% of their AUM, while 44% indicate they account for less than 25% of AUM.

A lower, but significant number of survey participants employ senior living (61.8%) and co-living (41.1%) strategies and where investments are held, they represent a lower proportion of total residential AUM. For senior living, 27% of respondents indicate the segment accounts for between 10% and 25% of residential AUM and 35% state that it represents less than 10%, while a further 38% do not invest in the segment. Co-living appears to be a more niche and specialist segment with 59% holding no investments, a further 33% having an exposure that accounts for less than 10% of their AUM and only 8% having an exposure to co-living of 10% to 25% of residential AUM.

The PRS sector forms part of a wider housing spectrum spanning, regulated and non-regulated rental and owner occupied tenures. INREV's recent residential paper 'Housing middle income Europe' examines the composition of this spectrum and the role of the PRS within housing market structures[7]. It also identifies opportunities for institutional investment to contribute to regulated social and cost-rental housing through public/ private structures. Indeed, while the systems and frameworks are very different, markets including Belgium, France, Germany, Ireland, Spain and the UK have structures that facilitate and attract institutional equity investing in regulated housing.

The survey also explored the extent to which investors and managers include regulated housing investment opportunities within portfolio strategies. Almost 30% of respondents indicate that they invest equity in social and/ or cost-rental housing, with assets leased to third party regulated providers rather than managed directly. The respondents also indicate the geographic location of their holdings, which aligns with those markets facilitating investment through public/ private mechanisms as highlighted previously. This demonstrates the capacity to harness institutional capital to expand the provision of regulated housing public policy intervention.

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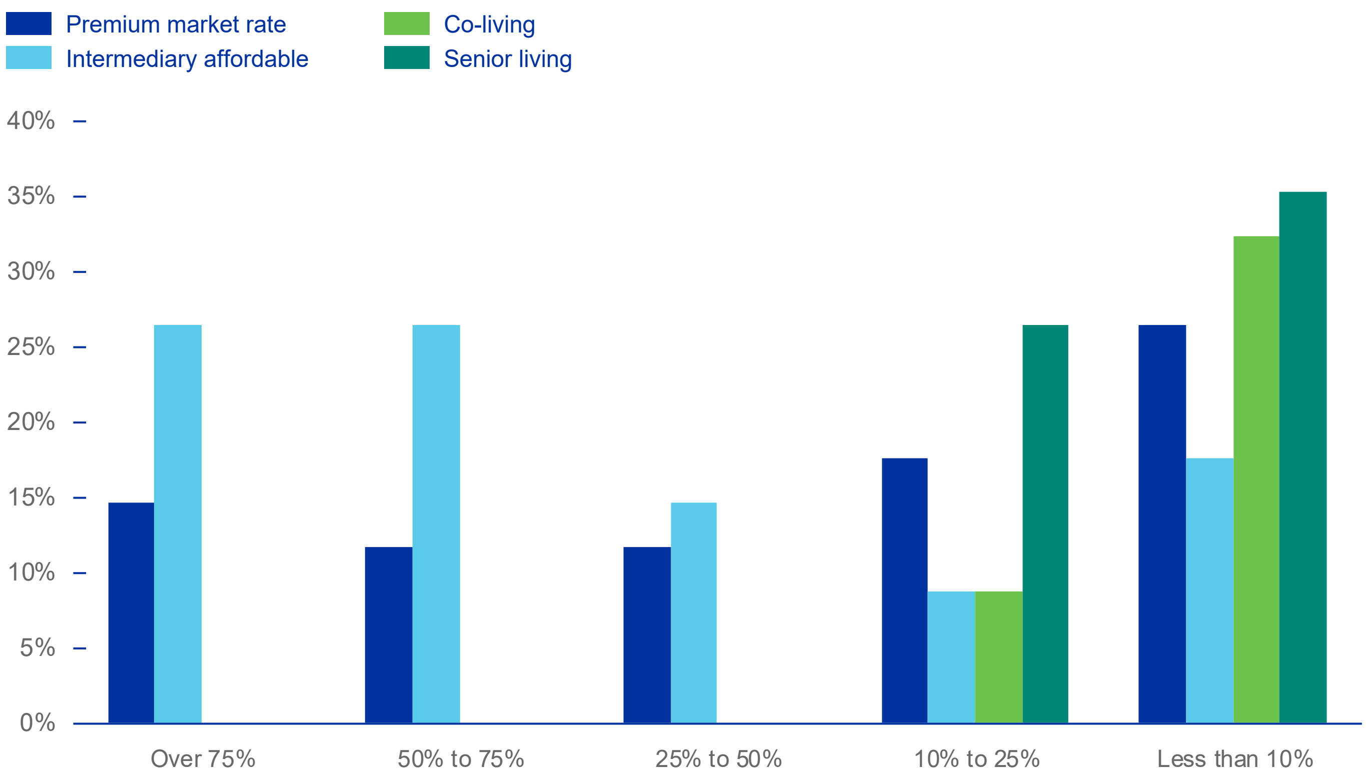
Figure 4: PRS sub-segments as a share of total residential AUM



Source: INREV Residential Survey, May 2024

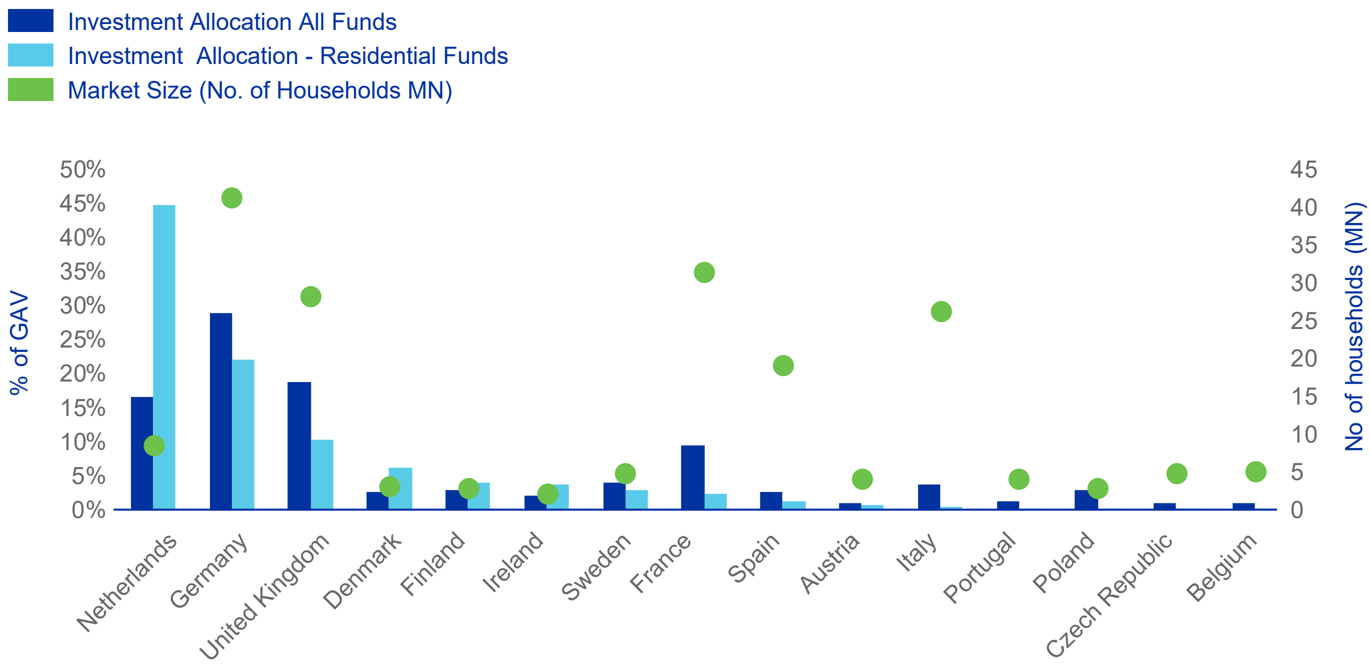
Chapter 3

The intermediary PRS invested universe differs from the all property distribution

It is usual for core commercial real estate (CRE) investment strategies to consider a 'neutral' portfolio as a baseline, weighted by strategic and tactical allocations in line with structural trends and cyclical market risk expectations. For CRE, the neutral baseline might be based upon GDP or GVA, or other relevant economic variable specifically related to a sector, the invested or investable real estate market size by value at a country or city level, or some combination of these variables. Analysis of any portfolio represents the strategic and tactical allocations made and while they will vary between sectors and through an economic cycle, the anchorage to a neutral portfolio based on economic or real estate market size is usually apparent. However, strategic allocations to the residential sector have a distinct profile to that of CRE.

Previous analysis of the INREV Quarterly Fund Index indicates that as a percentage of Gross Asset Value (GAV), single sector residential fund allocations by country follow a different distribution to that observed for all funds. Allocations also differ from the distribution that might be expected from a neutral distribution based on market size, either by economic scale or as measured by the demand in terms of number of households (Figure 5)[8].

Figure 5: Tilts to residential fund allocations v all fund allocations and market size



Source: INREV Quarterly Fund Index, Q4 2023

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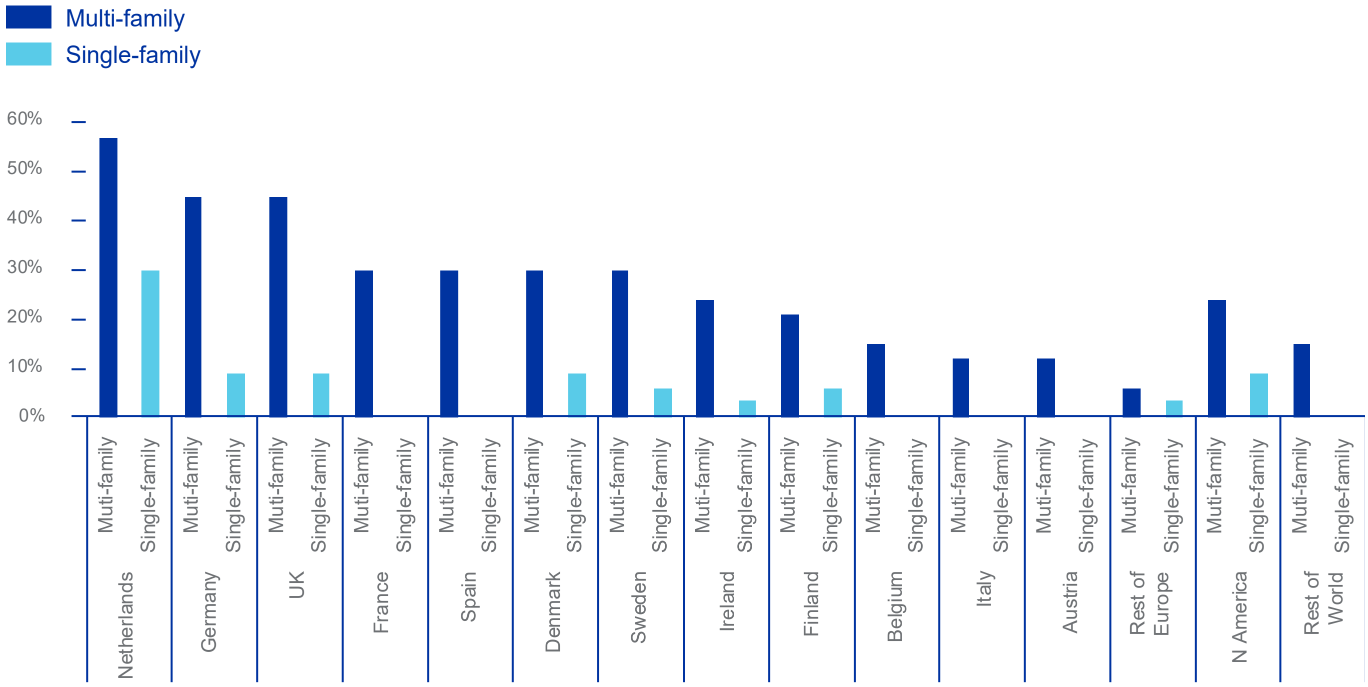
The survey explores the range of markets in which investors and managers invest in Intermediary PRS, specifically. Although the survey simply indicates the countries where investors and managers hold investments and is not weighted by value, the relative representation broadly aligns with the fund index (Figure 6).

Figure 6: Residential holdings by country and type of housing (% of respondents)



Source: INREV Residential Survey, May 2024

Respondents indicate that there is a high level of investment in intermediary PRS in the Netherlands, Germany and the UK. The Netherlands represents the biggest over-weighting with activity in the Nordics and Ireland also strong relative to market size as measured by the number of households (Figure 5). Although as the INREV Quarterly Fund Index and survey data are not directly comparable limiting the precision of findings, the survey analysis also suggests that intermediary PRS activity maybe stronger in France and Spain than across all residential funds.

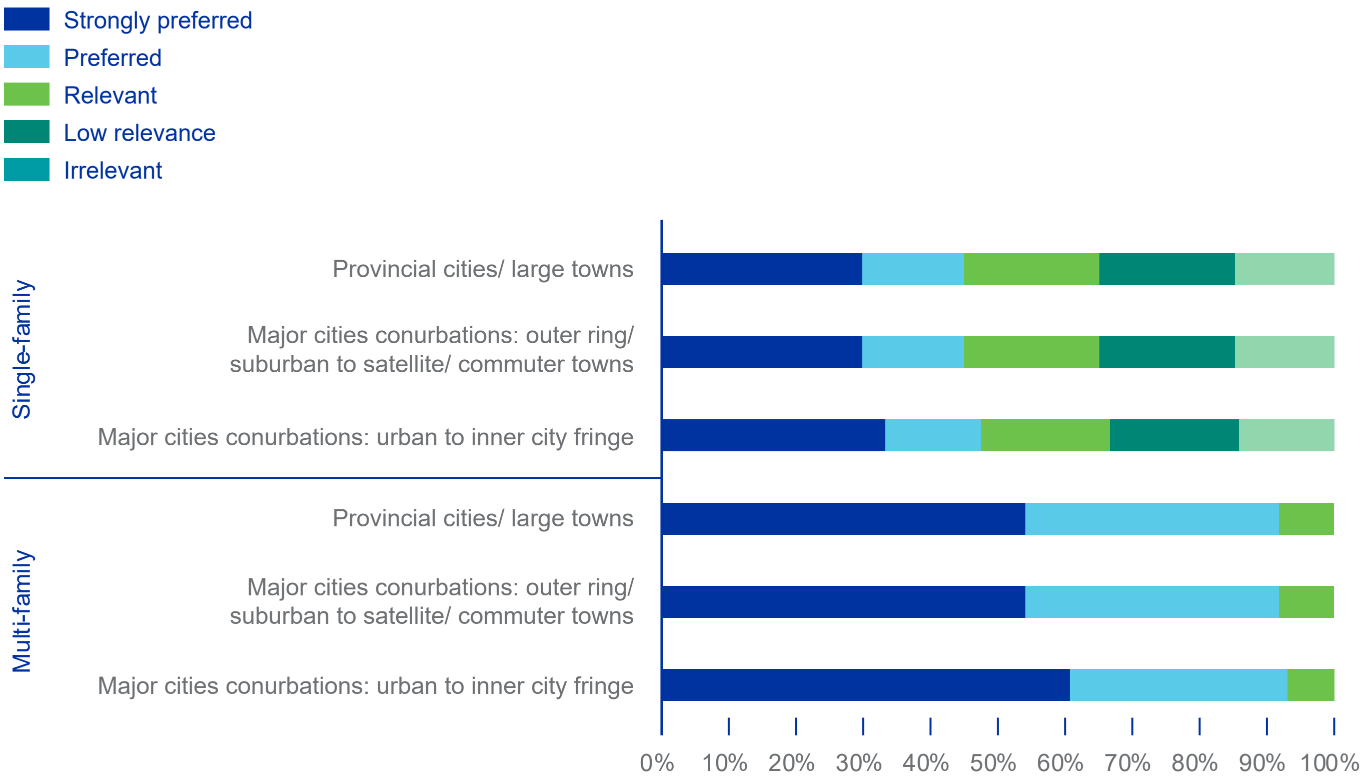
The survey analysis indicates that current investment activity is primarily concentrated in multi-family housing across all markets. Although a lower number of respondents hold single-family intermediary investments, there is significant investment in this housing type in countries where it traditionally comprises a high proportion of housing stock, including the Netherlands and the UK.

“There is a high level of investment in intermediary PRS in the Netherlands, Germany and the UK, relative to the overall market size as based on the number of households. Activity is also strong in the Nordics and Ireland.”

In addition to macro location, the survey also explores the preferred urban location of investment activity for both multi- and single family intermediary investment activity (Figure 7). Of those respondents investing in intermediary PRS, major cities and especially urban to inner city fringe locations are the most preferred locations. However, outer fringe and satellite locations within the commuter belt of major cities and provincial cities are also favoured.

For single-family intermediary PRS, the analysis indicates that there is less consensus as to preferred locations. This is perhaps due to geographical variation between the urban form, prevailing density, land availability and other housing culture considerations that impact on the relevance and viability of single-family housing across urban locations.

Figure 7: Preferred micro locations by housing type vary



Chapter 4

The importance of subsidy to rental affordability and intermediary PRS strategy

Intermediary PRS strategies are focused on delivering rented tenure housing for middle income socio-economic households at a rent that is economically sustainable and therefore affordable for tenants. Determining an affordable rent is fundamental to the over-arching purpose of the investment both in terms of risk adjusted returns and in its wider contribution to addressing Europe's housing challenge.

However, there is no agreed definition of what constitutes rental affordability for any rental tenure. A ratio of 30% rent to gross household income is broadly accepted as one threshold of affordability, while cost overburden is defined by the EU on the basis of total housing costs not exceeding 40% of household disposable income[9]. In addition to rent, total housing costs include utilities, taxes, and any other service charges. The degree to which these measures deliver a similar outcome for the quantification of an affordable rent differ with taxation levels and the extent to which rents are inclusive of other housing costs.

Of course, what is affordable also depends on the extent to which income net of housing costs is sufficient to meet other essential expenditure.
As well as varying with the scale of income, this also varies with household size and dependents. It also differs across similar socio-economic households across jurisdictions, given variation in costs of provision of services, for example healthcare, childcare and transport. In any one location, the capacity to bear higher rent-to-income ratios increases with net income.

> **"What is affordable also depends on the extent to which income net of housing costs is sufficient to meet other essential expenditure."**

As intermediary PRS is targeted at middle income households, it is anticipated that affordability thresholds are sustainable at the upper end of the range of accepted affordability thresholds. Usually, this higher rental threshold also reflects the relative size and quality of amenities characterising intermediary housing.

There is a range of established mechanisms available to determine intermediary affordable rent levels. Broadly, these maybe categorised into four types, namely; an income-to-rent ratio, a target discount to market rental rate, a cost-based approach that derives rents according to funding and finance repayments, and management costs, or based on agreed/ prescribed utility scores for housing amenities[10].

> **"There is a range of established mechanisms available to determine intermediary affordable rent levels. Cost-based and utility scores are most commonly employed within the provision of regulated housing or where prescribed by law. Unless legally determined, some form of income to rent ratio or a discount to market rent are most common to PRS."**

In some locations and circumstances the mechanism may be pre-determined by law and for many public/ private structures the mechanism may be pre-determined by contract agreement. Cost-based and utility scores are most commonly employed within the provision of regulated housing or where prescribed by law. Unless legally determined, some form of income to rent ratio or a discount to market rent are most common to PRS.

9 OECD (2023) Overview of Affordable Housing Indicators, HC.1.5; https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Living_conditions_in_Europe_-_housing#Housing_affordability

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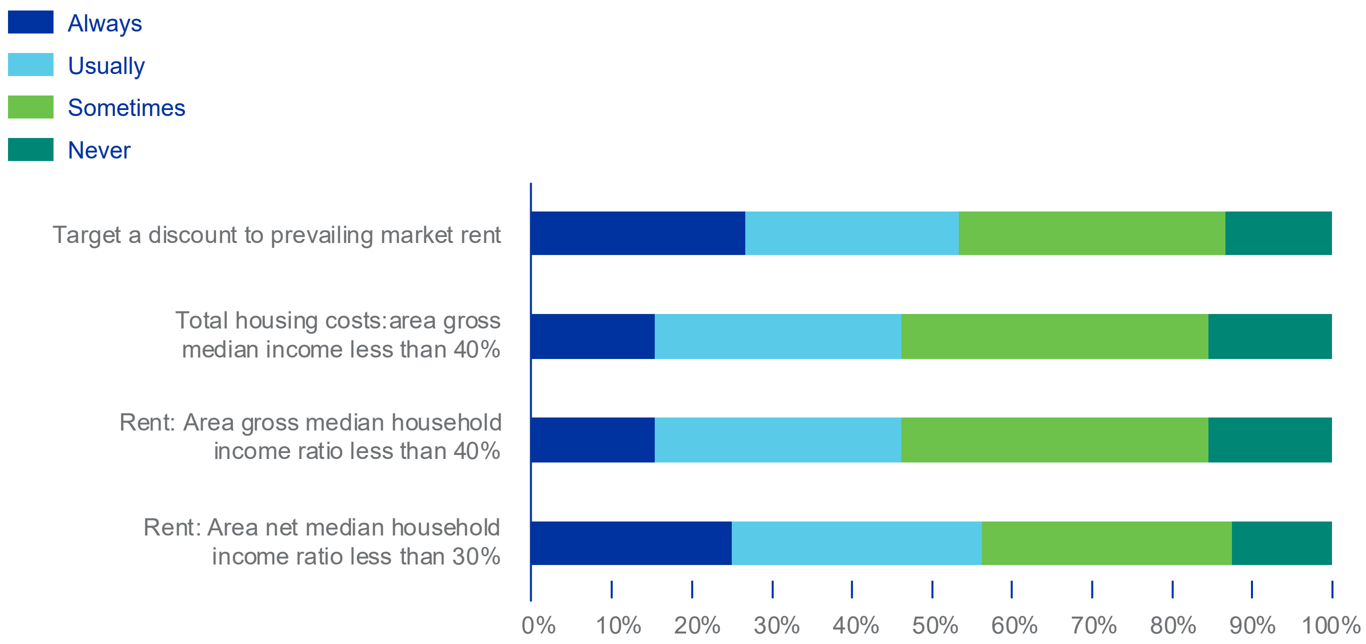
The survey explored the range of affordable rent determinations being used by institutional intermediary PRS investors and managers. The analysis indicates that a wide range of mechanisms are employed, with many investors and managers using a combination of approaches anchored to income and targeting a discount to market rent (Figure 8).

"Institutional intermediary PRS investors and managers employ a wide range of mechanisms to determine affordable rent, using a combination of approaches anchored to income and targeting a discount to market rent."

Figure 8: Variation in use of intermediary affordability measures



Source: INREV Residential Survey, May 2024

Respondents also indicate that their approach across countries adapts to legal requirements and to prevailing market practices. In addition, a number of investors also commented that rent to income ratios may also be targeted to defined income thresholds that vary with type and size of household and the size of the housing unit.

The determination of an affordable intermediary rent can be at the core of development strategy and drive location, density and design. Intermediary rents may not differ from prevailing market rents, particularly in locations where middle income households represent the maximum socio-economic market opportunity.

The challenge for intermediary PRS is in locations where there is a competing market opportunity to provide for higher income households, or where competing land uses or limitations on density make it challenging to deliver intermediary housing at an affordable rent for its target audience.

These differences in market circumstances have created debate as to whether the viability of intermediary PRS may be dependent on some form of direct or indirect subsidy to facilitate a levelling of the playing field with higher land and/ or option values in respect of pricing.

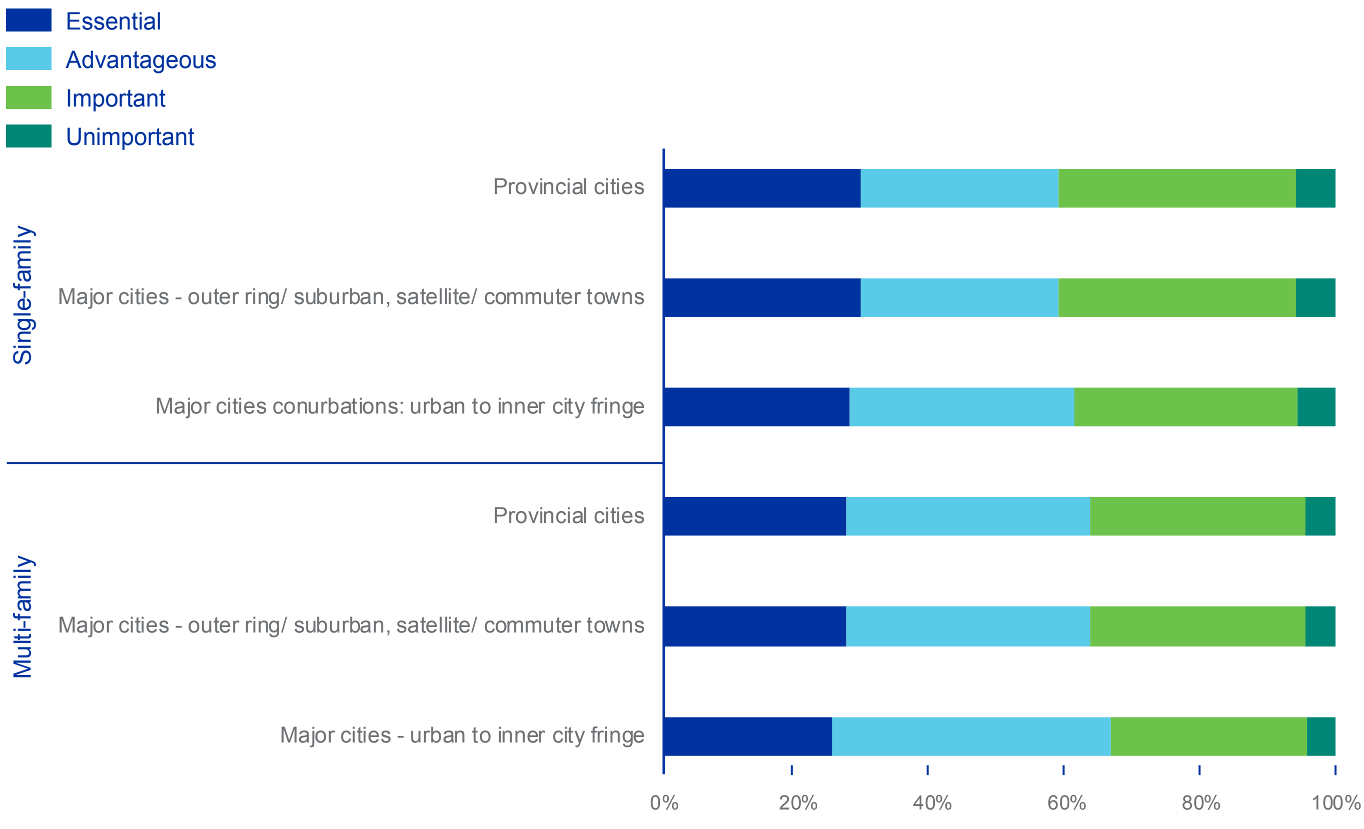
Subsidies may involve one or more incentives and often include access to a lower cost of capital, tax breaks, public land availability, accelerated planning, site ready infrastructure assistance, planning stipulations, public grants and public co-investment.

The determination of an affordable intermediary rent can be at the core of development strategy and drive location, density and design."

The prevalence and importance of interventions to the viability of intermediary PRS are explored through the survey. Some form of direct and indirect subsidy is considered to be at least important by 94% to 96% of respondents, while over 25% to 29% consider such intervention as being essential to the viability of intermediary PRS depending on location and type of housing (Figure 9). This is broadly consistent across housing type and micro location, with the role of subsidies being marginally of greater importance to multi-family housing and in major cities.

> **Some form of direct and indirect subsidy is considered to be at least important by 94% to 96% of respondents, while over 25% to 29% consider such intervention as being essential to the viability of intermediary PRS depending on location and type of housing."**

Figure 9: Importance of direct and indirect subsidy to viability of intermediate PRS by type of housing and location



Source: INREV Residential Survey, May 2024

The degree of importance may vary more between different markets' housing structures and demand supply imbalances than by micro location or housing type. Indeed, one respondent commented that the need for subsidies and other interventions signals that the over-arching housing system is broken. Although subsidies may be fundamental to the viability of a specific investment opportunity, a more holistic, system wide intervention is required to address demand and supply imbalances across the housing spectrum.

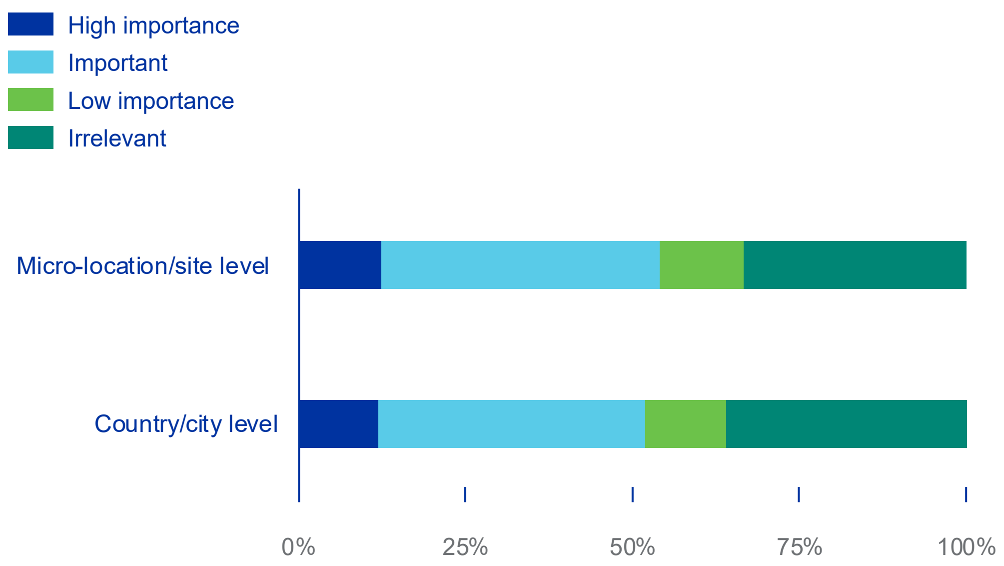
Given the significance of subsidies to the financial viability of intermediary housing, the survey also considers the extent to which subsidies or public private strategic frameworks influence investment strategy both geographically and at a micro location or site level.

Although over a third of respondents indicate the availability of interventions is irrelevant to strategic decision-making, over half of the respondents consider it to be an important driver of both capital allocation by country and site selection (Figure 10). This should be of interest to policy-makers seeking to harness institutional capital to assist in expanding housing supply, particularly intermediary PRS.

Decarbonisation strategies may also facilitate the viability of intermediary PRS if such capital expenditure is considered as an investment, rather than as a mere cost. The 2024 ANREV/INREV/PREA Investment Intention Study indicates that many investors and managers are delaying decarbonisation strategies to assist with navigating the financial implications of challenging market conditions. This includes inflationary conditions and escalating building costs, higher interest rates and as inflation moderates, an expectation of interest rate normalisation over the medium to long-term. However, decarbonisation is an important component of risk adjusted returns. It is this interaction that enables institutional capital focused on intermediary PRS to be capable of addressing the housing and climate change challenges simultaneously.

> **"Although over a third of respondents indicate the availability of interventions is irrelevant to strategic decision-making, over half of the respondents consider it to be an important driver of both capital allocation by country and site selection. This should be of interest to policy-makers seeking to harness institutional capital to assist in expanding housing supply, particularly intermediary PRS."**

Figure 10: Influence of the availability of some form of subsidy or public private initiative on investment strategy for intermediary PRS



Source: INREV Residential Survey, May 2024

Chapter 5

PRS risk profile, performance and its interaction with decarbonisation

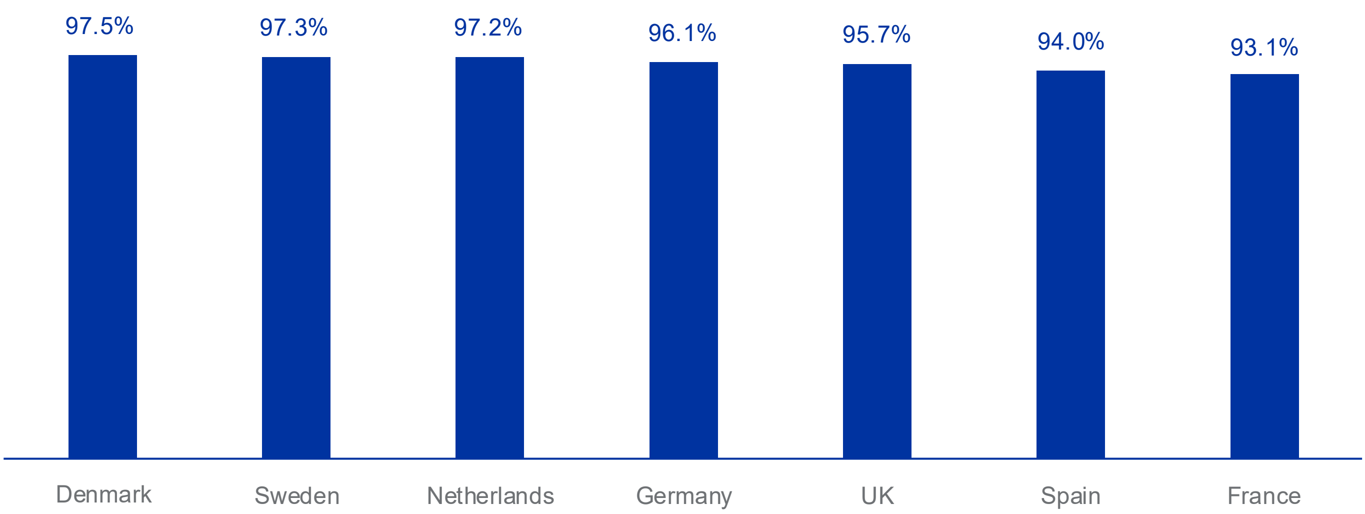
The expansion of institutional investment in the residential sectors over the past decade reflects the post global financial crisis (GFC) pivot in institutional investment strategies towards long-term stable income assets, anchored to meeting the social and economic demands of global macro trends. Residential crosscuts multiple dimensions of such structural change including shifting demographics, increasing wealth disparity, accelerating urbanisation and climate change.

> **"Income risk profile of intermediary PRS is advantageous for investors as it reduces income volatility and enhances income duration and certainty relative to the premium market rate segment."**

In addition to meeting investors' requirements for long-term, stable returns, intermediary PRS offers the opportunity to invest with purpose; the provision of appropriate energy efficient housing targeting a range of socio-economic and socio-demographic audiences contributes to satisfying a basic societal need.

Investors and managers suggest that the income risk profile of intermediary PRS is advantageous for investors as it reduces income volatility and enhances income duration and certainty, relative to the premium market rate segment. Across all residential assets, the sector benefits from high occupancy rates (Figure 11).

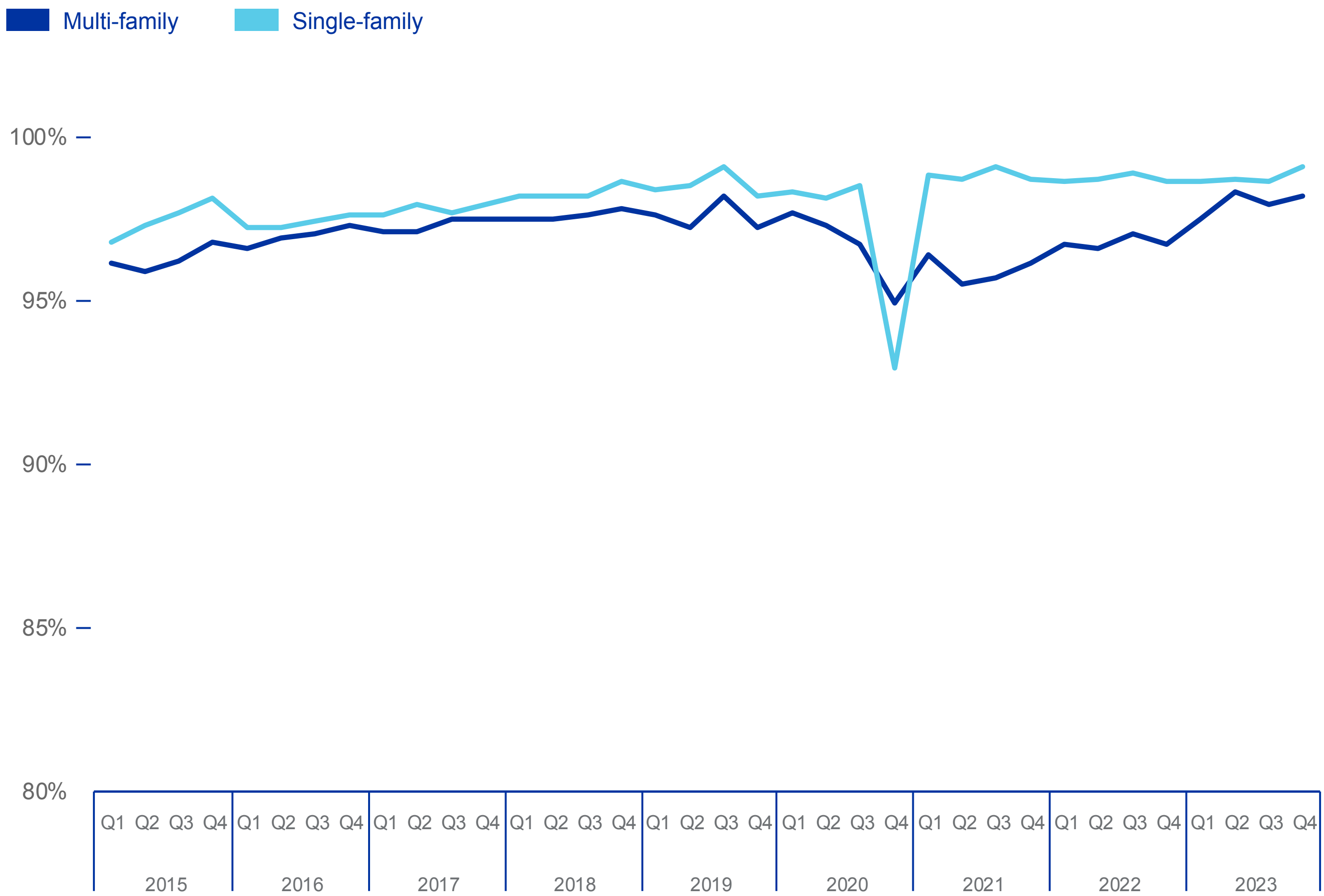
Figure 11: Occupancy rates are high across all markets



Source: INREV Quarterly Asset Level Index

An analysis of Dutch residential suggests that while occupancy rates are high across all types of residential, single-family housing has the highest occupancy rate (Figure 12). Indeed, a number of investors and managers in multi-family and single-family residential across Europe have indicated that although both types of investments are characterised by low churn rates, single-family investments tend to have longer duration of tenancies, averaging approximately seven years.

Figure 12: All PRS occupation rates by type of housing, Netherlands



Source: INREV Quarterly Asset Level Index

Strong rental affordability metrics embedded in intermediary PRS can enhance net income by accelerating tenant lease-up and lowering management costs lowering management costs. For example, rental affordability lengthens the duration of tenancies, reducing tenant churn, voids and reletting costs, as well as decreasing non-payment rates and associated costs. Investors and managers contend that this also reduces the margin of gross to net income, relative to premium market rate housing.

Across a one, three and five year horizon, the INREV Asset Level Index indicates that income has been a stable component of total return (Figure 13). Geopolitical events and the outworking of loose monetary policy both in the aftermath of the GFC and during the Covid-19 pandemic have led to inflationary conditions and in turn, higher interest rates. This has resulted in a rebasing of capital market pricing across all asset classes absolutely and relatively, and at the same time increased the return required from real estate relative to bonds.

In these more constrained market conditions, some investors and managers have indicated that they may be forced to delay capital expenditure associated with decarbonisation[11]. Although the importance of decarbonisation for the economy, society and for the long-term value of their real estate portfolios is not disputed, their fiduciary duty to deliver expected returns to their underlying investors, ultimately pensioners and savers, remains their primary objective.

Figure 13: Components of return, by sector

Most investors and fund managers consider fiduciary duty and decarbonisation to be fully aligned in principle, however there are impediments to implementation. As market pricing adjusts to higher interest rates, investors and managers are seeking to protect value. There is a general acceptance that current valuations do not fully reflect decarbonisation risks over the short or longer term. As such, the value of low carbon assets may be understated and high carbon assets overstated. As a consequence, it is hard to justify the cost of implementing decarbonisation strategies. Without the introduction of a regulatory imperative or some form of punitive measure such as carbon pricing, current values of high carbon assets may not accurately reflect the decarbonisation risk. This leaves little scope to demonstrate how retrofitting or constructing to net zero will enhance values.

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Box 2: The valuation conundrum

This conundrum in valuation exists because valuations reflect the market price of assets, not the value at risk. Across the wider market, asymmetric knowledge between institutional, expert and sophisticated investors and the wider investment market persists in many respects and particularly in regard to decarbonisation costs and risks. To some extent, market pricing in respect of high carbon emitting assets reflects the price paid by the least informed investors. As a result, underpinned by market transactions of a willing buyer and a willing seller, valuations often do not adequately differentiate between the risks associated with energy efficient and inefficient assets. Nor can they differentiate between the knowledge or expertise of an investor.

This is exacerbated by a valuation process that is reliant on comparable evidence as the interpretation of market transactions is quasi-judicial in nature, with the attribution of value across an asset's real estate characteristics being guided by past practice and case law, making it somewhat retrospective in nature[12]. The process assumes that the underlying set of variables driving value is stable, making the process slow to adjust to change. Afterall, comparable evidence is not provided with a breakdown of how the market price was determined or in respect of decarbonisation, the specific impact this had on pricing.

There are a number of initiatives being undertaken to try and remedy this process by accelerating the evidence base for use within valuation practice, for example, the C Change initiative[13].

Equally, while current regulation signals the need to decarbonise voluntarily before future regulation or some form of penalty such as carbon pricing is introduced, at a country level it often has yet to translate into specific requirements or a timeline, creating uncertainty.

The issue for investors is that current valuations of assets within their portfolios are not adequately reflecting the value of either net zero, retrofitted or high carbon assets. This creates a cliff edge for values at some point in the future when either some form of regulatory requirement to decarbonise, or carbon pricing – essentially a punitive tax on carbon emissions – is introduced.

It also makes it more difficult to justify capital expenditure on decarbonisation as an investment rather than an optional cost. Yet, the decarbonisation of PRS assets does more than safeguard against regulatory risks; it is a driver of income and capital growth.

12 C Change (2022) Breaking the value deadlock: enabling action on decarbonisation

13 C Change is a cross industry collaboration with the mission of accelerating decarbonisation through creating practical solutions to identified barriers of change https://europe.uli.org/research/c-change/

Chapter 6

The impact of decarbonisation on short and longer term performance

6.1. Decarbonisation and housing affordability

Decarbonisation has a direct relationship with housing affordability and is therefore an important driver of rental income. Optimising rental affordability is pivotal to income return as it represents the trade-off between the level of rent contracted and the certainty of net income. Rent levels that represent a cost overburden are expected to result in higher non-payment rates, management costs, churn rates and voids. However, rent is only one component of total housing costs, with energy, utilities and property taxes representing other dimensions.

"Optimising rental affordability is pivotal to income return as it represents the trade-off between the level of rent contracted and the certainty of net income."

Constructing or retrofitting to high energy efficiency standards reduces energy use and in turn costs. Installation of renewable energy sources also have the potential to reduce energy costs further and at the same time, create energy security and reduce energy price volatility for both tenants and occupiers.

By reducing both the price and demand for energy, rents have the capacity to increase without impacting on rental affordability. In some markets where rent regulation has been introduced and in some public-private partnership frameworks prescribed housing affordability metrics are anchored to a metric directly related to a discount to market rent, a rent to income ratio or a utility value based rent that does not always adjust for energy efficiency or generation of proprietary renewable energy. As a results, there is less potential for investors to realise the return on their capital investment for decarbonisation as the dynamic of rent with total housing costs is inhibited. This acts as a potential barrier to such investment, but could be readily addressed by changing the affordability metric from rent to total housing costs. This is equitable from an occupier's perspective also as a tenant should not pay higher total occupation costs an energy inefficient home that costs more to heat or cool.

From a capital growth perspective, the valuation conundrum creates the potential for cliff edges in values as regulation and carbon pricing are introduced, as is anticipated by many investors and managers[14]. Clearly, decarbonising prior to such cliff edges will protect value.

Indeed, from a value at risk (VAR) perspective, it is more financially prudent to decarbonise now for a number of reasons[15]. Firstly, income will benefit from a rent and cost reduction perspective and potentially where renewable installations are appropriate, from the generation of an energy surplus. Indeed, there are examples where such installations have resulted in an income stream that is more valuable than that directly related to the asset[16].

"By reducing both the price and demand for energy, rents have the capacity to increase without impacting on rental affordability."

14 C Change (2022) Breaking the value deadlock: enabling action through decarbonisation

15 Catella Investment Management (2024) The Great Epsilon2 Real Estate Transformation IEA (2021), Energy

16 Ibid

Second, it is more cost effective to decarbonise in anticipation of measures that make it obligatory as supply bottlenecks can be avoided. Moreover, as CO2 is cumulative in the atmosphere, the sooner it is addressed the less remediation is required.

Third, the longer decarbonisation of the built environment is delayed, the greater the impact of climate change on economy, society and specifically on real estate portfolios. The costs of adapting to climate change in the short, medium and longer term should global temperatures exceed the limit of a two degree increase are often not adequately considered within financial analyses of the costs of decarbonising existing portfolios on performance[17].

In the short-term these include clean-up costs of more frequent and more pervasive storm and flood damage, in the medium term adaptation of assets to withstand regular climate events, as well as high or lower water tables and sea level change. In the longer term, if there is a failure to address climate change, the built environment in more temperate climates will need to adapt to significant population change as the habitable world contracts, necessarily leading to extremely high migration flows.

> **"Costs associated with decarbonisation should be considered from a return on investment and risk management perspective rather than as a cost."**

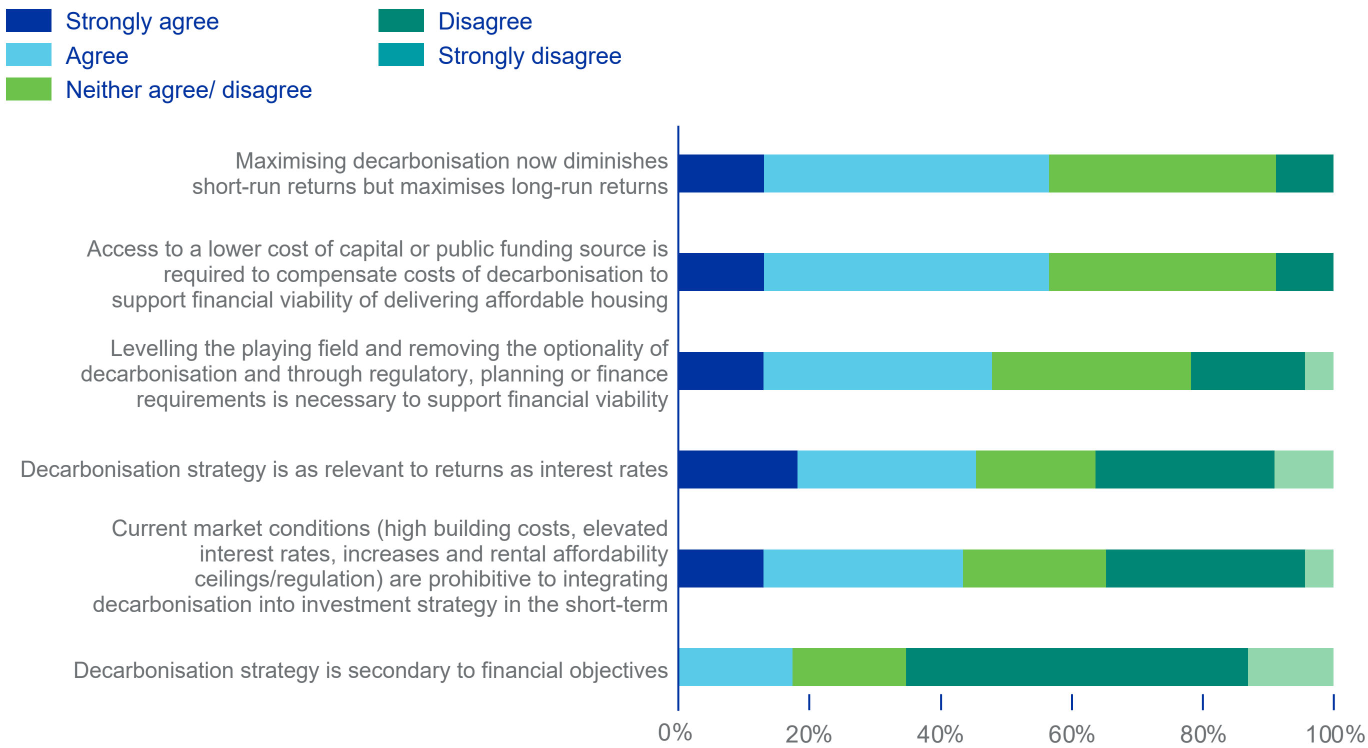
Considering these impacts, costs associated with decarbonisation should be considered from a return on investment and risk management perspective rather than as a cost. From a return perspective, early action enhances income, strengthens energy security and avoids paying a carbon tax. It also reduces the total costs of decarbonisation both in terms of avoiding price inflationary supply imbalances and reducing the scale of works required. From a risk perspective, it avoids value destruction and from the perspective of institutions as universal investors, this is relevant to their whole portfolios, not merely real estate.

17 Op Cit

6.2. Investor and manager perspectives on decarbonisation and performance

Given that the 2024 ANREV/INREV/PREA Investment Intentions Survey identifies that decarbonisation activity is at risk of delay as investors and managers balance fiduciary duty and performance, INREV's Residential Survey explored the extent to which investors and managers consider decarbonisation activity as a capital cost or capital investment (Figure 14). It is clear that decarbonisation remains an important objective, with 63% indicating that it is not secondary to financial objectives.

Figure 14: Consideration of costs of decarbonisation and investment returns



Source: INREV Residential Survey, May 2024

Although not unanimous, decarbonisation is considered to be a significant driver of financial performance. A majority of respondents agree or strongly agree (57%) that while impacting negatively on short-term returns, decarbonisation maximises returns over the long-term, with a small minority disagreeing with this contention (8.7%). Equally, the highest proportion of investors and managers who are considering decarbonisation costs to be beneficial to long-run returns also believe decarbonisation to be as consequential as interest rates for returns (45%). However, there is more polarisation of opinion on this perspective as a larger minority (36%) of respondents expressed disagreement with this assertion.

> **"Decarbonisation is considered to be a significant driver of financial performance. A majority of respondents agree or strongly agree (57%) that while impacting negatively on short-term returns, decarbonisation maximises returns over the long-term."**

Respondents are more split as to whether current market conditions are prohibitive to executing decarbonisation strategies in the short-term.
A partial solution in the short-term may be to stagger investment annually and undertake lower costs works that have a high carbon reduction impact such as insulation and repointing windows. It is further suggested that investors should set third party fund managers annual targets for carbon reduction.

Some 57% of respondents agree or strongly agree that some form of assistance is required to support the costs of decarbonisation associated with affordable housing investment. This is twice as many as those disagreeing or strongly disagreeing with the same contention (22%). This suggests an opportunity for public policy interventions and subsidies to ensure they embed a strategic system intervention approach that ensures the capacity to address the challenges of housing need and climate change simultaneously is achieved.

Chapter 7

Conclusions

Investment in intermediary PRS represents a major opportunity to simultaneously address two of the greatest challenges facing economy and society, housing need and climate change. Institutional investors have been accelerating their residential activity over the past decade and their appetite remains strong.

Institutional investors and managers are eager to invest with purpose where it aligns with their financial objectives and fiduciary duty to meet the needs of underlying pensioners and savers. The residential sector's risk characteristics, notably the capacity to generate long-term secure income streams is attractive. Institutional investors recognise the beneficial risk attributes of intermediary PRS which has relatively lower income volatility than premium market rate PRS. As a result, institutional investors and managers indicate that the sector accounts for the largest share of residential portfolios.

However, where there are competing higher use values intermediary PRS requires some form of direct or indirect subsidy to assist in levelling the playing field. The distribution of invested capital indicates that public policy initiatives can assist. Indeed, many investors and managers indicate that the availability of some form of intervention is considered in determining investment strategy. Policy makers keen to harness institutional capital to assist in addressing housing supply imbalances should consider developing initiatives that facilitate such investment. Ideally, this should be a component of a wider housing policy that seeks to address imbalances across the housing spectrum and strategically directs the contribution of institutional capital to the most appropriate segments.

Such policies should also embed sustainability objectives, especially decarbonisation. At 29% of total emissions, decarbonising the residential sector should be a high priority[18]. In the absence of regulation or the introduction of more punitive carbon pricing and a valuation process that at best reflects the price a buyer – regardless of how informed they are as to the underlying issues - is prepared to pay, investors and managers are trying to balance short and long term fiduciary duty and returns. As decarbonisation is an important aspect of the return profile and risk management of residential investments, including housing cost affordability, it should be integrated into frameworks seeking to address housing supply. The opportunity to address the twin challenges of housing need and climate change in unison should not be wasted.

18 Catella Investment Management (2024) The Great Epsilon2 Real Estate Transformation IEA (2021), Energy Efficiency Indicators Database; IEA (2021), Emission Factors Database and OECD calculations

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