



Occupiers and owners Faster and further on the pathway to decarbonisation together





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Change

C Change is a ULI-led programme to mobilise the European real estate industry to decarbonise. We're a movement empowering everyone to work together for a sustainable future. We connect the brightest minds from across the value chain. We challenge barriers, share expertise, and champion innovation to move swiftly to accelerate solutions that will transform our industry and protect our planet. C Change means real change.

C Change was formed in late 2021 by a group of leading real estate players that was united in its aim to focus on collaboration to ensure companies large and small have access to practical solutions and education on decarbonisation.





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Executive summary

Decarbonisation of real estate portfolios is a shared responsibility between owners and occupiers, with the weighting of that responsibility varying with lease characteristics, particularly lease length and duration of an occupiers' beneficial ownership and the allocation of responsibilities for M&E systems and fit out within the lease contract. Being a shared responsibility requires owners and occupiers to identify shared objectives and agree a strategy to deliver them.

Aligning owners and occupiers on decarbonisation requires a fundamental questioning of many of the working practices and structures currently in place, as well as each side gaining a deeper understanding of how the other party is approaching decarbonisation.

This research is based on interviews with 22 corporate occupiers to explore their challenges and opportunities when it comes to decarbonising their occupational portfolios. It also outlines a series of recommendations to promote more collaboration and move the topic forward.

This paper is narrowly focused on decarbonisation strategies for leased occupational real estate portfolios, which are a core component of occupying organisations' wider sustainability strategies including a broad range of environmental considerations such as biodiversity as well as social value considerations.

The report presents the occupier's perspective and reveals that in many cases, there are "missed connections" between owners and occupiers where a lack of understanding of the broader goals of decarbonisation or even the absence of a common language is holding back progress.

One clear area for improvement is increasing occupiers' understanding of the scale of aggregate emissions from real estate in the wider economy. Currently, many occupiers focus on their corporate decarbonisation priorities, which mostly sees real estate lower down the agenda than, for example, emissions from supply chains or manufacturing.

With the built environment as one of the greatest contributors to global emissions, the current

approach by occupiers underestimates the greater cumulative impact they could have if they paid more attention to real estate decarbonisation strategies. More direct action from occupiers on real estate would have the potential to make a significant impact on lowering total global emissions.

The importance of the occupier base also means that the failure to prioritise real estate has the potential to increase total emissions over the medium to long-term. Real estate decisions are often medium to long-term commitments so if decarbonisation of real estate is a low priority, there is a high potential for total emissions to expand, not merely remain static.

A second issue arises from how occupiers account for carbon when it comes to real estate. Most occupiers do not account for the embodied carbon of a new building if they are looking to lease it. Generally, they agree that real estate is a service and embodied carbon should really be included within Scope 3, but it currently isn't. If this is the case then – without accounting for the embodied carbon – a new building will be seen as more efficient with lower operational emissions than a retrofitted building, potentially deterring occupiers from pursuing the more sustainable approach.

Owners, in turn, need to recognise ways in which their approach on decarbonisation can be misinterpreted. For example, while owners wish to justify the notion of a "premium rent" for net zero assets, for occupiers, this language stifles conversation and collaboration.

This extends to retrofitting existing buildings, which occupiers suggest future proofs the owner's investment by avoiding rental decline and benefitting yield, and meanwhile owners are seeking a return on the costs of that retrofitting.

However, there is evidence of benefits for both sides. For example, increased efficiency lowers energy costs, reducing occupiers' total energy costs. In a competitive market, owners may benefit from this saving.

Any miscommunication on goals is not helped by the current issue of valuations not reflecting the risk of obsolescence associated with less



efficient assets. Valuations including projected cashflows and yields often result in investors being unable to justify capital expenditure unless there is corresponding increase in projected rents or yield enhancement, which can't be realised if valuations ignore the cost of doing nothing.

The research also highlights structure and process that could be re-examined to improve collaboration between the two parties.

Rethinking fit-out could be one area of focus. Occupiers often adapt space to their own specification and then return it to the original condition at lease end. As a result, considerable waste is generated as installations, fixtures and fittings are ripped prior to the end of their lifespan, in the process of returning the space in line with the terms specified in the lease.

In addition, certain markets such as the UK, Ireland and the Netherlands, have seen lease lengths shorten significantly from durations of 15 to 25 years to 5 to 10 years, but there has been little commensurate change in the allocation of responsibilities associated with the fit out standard.

Mechanisms for updating existing lease agreements are also outdated when it comes to including ESG considerations. With the majority of lease laws providing tenants with the right to renew leases on the same terms seeking changes can jeopardise the existing renewal rights and trigger a full and potentially costly or disadvantageous renegotiation of lease terms. Consequently, the opportunity to include ESG considerations at lease renewal and/or extension is often lost.

In some cases, the relationships between owner and occupier can be fragmented with the property manager holding the long-term relationship in many cases and/or agents representing their interests during the leasing process. It is important that the owner and occupier build a direct trusted relationship with an understanding of each other's objectives, or that they issue clear and detailed instructions to agents or managers representing them.

Finally, alignment and moving to collaborative practices between owners and occupiers matters from a social and economic development perspective. Occupiers generally agree that the ability to implement sustainability strategies decreases as you move east and south in Europe. A more standardised approach to leasing practice that is able to flow through to a wider range of institutional and non-institutional owners can also help collaboration with a greater range of occupiers to prioritise and implement decarbonisation.

Figure 1: Occupier considerations to support effective decarbonisation

Current and future regulatory requirements • Harmonisation of energy performance certifications and standards • Collection and sharing of consistent data

Corporate sustainability strategy

Culture of sustainability and C-suite attention Priority order of real estate decarbonisation

Lease arrangements

Green lease as default and in standard heads of terms Impact of shortening lease lengths Better align fit out responsibility/ lease length dynamics Type of owner (direct, indirect etc) Type of property and facilities management (in-house, thirdparty, service provider)

Real estate footprint

Challenge of geographic footprint in less mature markets Institutional vs non-institutional owners Reliance on third-party property/facilities manager to implement global objectives locally Business vs sustainability objectives in competitive markets Customer vs non-customer facing space

Owner relationships

Concentration/dispersal of portfolio Volume and type of owners Total occupation costs, rental income and valuation issues Accommodating retrofits Common language to convey mutual goals

LEASED ASSETS



1. Introduction

Decarbonisation of the built environment is pivotal to achieving the objectives of the Paris Agreement and delivering a low-carbon economy. Second only to fossil fuels, real estate accounts for 39 percent of total energy use and 37 percent of emissions.

Plotting out the path to net zero for commercial real estate is complex as there are multiple stakeholders involved, including both owners and occupiers.

Equally real estate involves different tiers of emissions. Around 27 percentage points of the 37 percent of global emissions emanates from the ongoing management and operation of buildings by the wide range of users and businesses they accommodate. There are also the emissions embodied in the materials and construction process for its development and management, which accounts for the remaining 10 percentage points.

This research examines the topic from the perspective of commercial real estate occupiers and seeks to identify opportunities where greater collaborative efforts could assist in enabling both owners and occupiers to go both further and faster on the path to real estate decarbonisation.

It is based on 22 interviews with heads of real estate for multi-national organisations responsible for large occupational real estate portfolios. The interviewees represented a wide range of industry sectors including banking and finance, education, engineering, law, logistics and distribution, media, manufacturers, retail and technology.

The organisations also differed in their maturity, including traditional corporates established over a century ago through to rapidly expanding companies established over the past decade. The interviews explored the challenges and opportunities in decarbonising existing and planned occupational portfolios. The majority of existing real estate stock was built pre-2012. Meeting the objectives of the Paris Agreement requires this stock to be retrofitted towards near net zero (NNZ) rather than abandoned and replaced with development.

Prioritising the transformation of existing stock into efficient, low-carbon emitting assets is a shared responsibility, principally by real estate owners and the occupying businesses operating from them. Many occupiers and institutional real estate owners are independently implementing strategies to accelerate decarbonisation of their organisations and more specifically, real estate portfolios.

Often, progress is hampered by the division of rights and responsibilities over an asset between owner, occupier and increasingly an intermediary leaseholder such as serviced office providers. The legal structure frames the balance of accountability for decarbonisation and is made more complex by the diverse nature of lease agreements which vary across jurisdictions, industry sectors, scale of occupier, owner and indeed, the specific asset. These differences impact the scope and practical implementation of sustainability strategies in real estate activities.

This research first considers the range of factors influencing tenure patterns and the challenges and opportunities these present for increasing collaboration between owners and occupiers in delivering on ESG objectives.

Second, it explores the alignment of real estate decarbonisation within the wider objectives of the organisation and its implications for aligning with owners. Third, the research considers the capacity of occupiers to align sustainability objectives for real estate with the wider objectives of the business across different business functions.

Finally, the research synthesises the findings, identifying key opportunities and action points that will enable greater collaboration and assist in accelerating and deepening real estate's progress on the path to net zero.



2. The spectrum of owner/ occupier relationships

Approximately a third of all European commercial real estate by value is held as an investment and leased to third party occupiers. Most small and medium-sized enterprises (SMEs) lease all their occupational portfolios as do many large occupiers. Very large organisations including multinationals will usually have a mixed portfolio of owner occupied, build-to-suit and leased assets.

Where assets are owner-occupied, the responsibility for sustainable investment, management and operation of assets lies solely with the owner occupier. Where assets are leased, the responsibility is shared between the owner and the occupier, requiring collaboration to effect meaningful change.

Ideally, the weight of responsibilities should be proportionate to the characteristics of a lease, in particular duration, fit out, supply of resources, waste and repairing obligations.

This section looks at how those different responsibilies play out across different aspects of leasing: leasing arrangements, legacy portfolios, structure and plant, lease length, investment mode and duration and fit-out.

Lease arrangements

Lease arrangements – and by extension the allocation of owner and occupier ESG responsibilities – vary considerably by market, size, sector and degree of specialisation pertaining to an asset. Rationally, the weighting of responsibilities for decarbonising real estate should mirror the broader weight of responsibilities embedded in lease arrangements.

Many occupiers and owners align to the Paris Agreement or with strong corporate sustainability objectives employ some form of "green" lease in contemporary lease practices. Such leases require owners and occupiers to commit to the sustainable operation of the building.

The lease might specify reducing energy consumption and associated emissions through

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

renewable energy generation and/or a purchasing power agreement (PPA), specify low energy fittings and equipment, water use and waste treatment. In addition, associated data will be measured, shared and utilised to facilitate management of progress, performance and benchmarking.

However, occupiers have lease contracts with a much wider range of owners that may not always have closely aligned ESG objectives. Many interviewees – whose companies are likely to be more advanced than the average tenant – commented that despite occupiers having ESG criteria, they are either not being communicated to intermediaries – leasing agents and/or property managers – or not being translated by them into day-to-day working practices.

As ESG considerations are not a general or specific discussion point in heads of terms conventionally, they are often overlooked at the outset. Where the owner (or their representative) is ESG agnostic it can be difficult to address and integrate such criteria at a later stage. This is potentially an opportunity for owners and occupiers to pursue with leasing professionals.

Legacy portfolios

Most organisations hold many buildings within their occupational and/or investment portfolios that pre-date the initial adoption and subsequent rapid development of sustainability policies and practices. Such legacy investment and occupational portfolios are often characterised by more conventional leases, with the majority of legal frameworks favouring lease renewals on the same terms as the initial lease. Equally, as the majority of these assets were constructed pre-2012, they usually require investment to improve their energy efficiency and reduce emissions.

This may include replacement of major plant, for example replacing fossil fuel boilers with air or ground source heat pumps (ASHP, GSHP), adaptation/replacement of cladding, windows and other opportunities for improved insulation, HVAC systems, optimisation of controls, smart systems, lighting upgrades etc.

Building structure and plant

Most aspects concerning the building structure and major plant are the responsibility of the owner



while responsibility for operational systems and fittings is shared between owners and occupiers, with the allocation of responsibilities varying with the characteristics of the asset and the lease. Greater collaboration between owners and occupiers has the potential to both accelerate progress and optimise efforts.

There are two related lease characteristics that strongly influence the allocation of responsibilities, namely lease length and fit out terms.

Lease length

Buildings can be provided and leased for single or multiple occupancy. Generally single occupancy and/or larger space use will be longer lease, or at least a longer expected lease duration (given legal requirements for lease breaks at prescribed intervals in some countries, for example, Belgium and France).

This matters as costs and payback periods are usually calculated over a longer duration and this



Figure 2: Lease options by fit-out categories





can mean an improved quality to the systems, technology and fit out that are in place for the heating/energy/cooling systems infrastructure and renewables that are regarded as viable for the asset.

The corollary is that for multi-let assets and shorter lease terms, this can be considerably more burdensome as the investor is often trying to balance the competing requirements of a range of different occupiers, across different space holdings and lease durations.

Investment mode and duration

Where buildings are owned directly by an investor there is often greater potential to revise investment objectives and asset strategy plans for improvements during an existing lease term if the occupier shares these objectives. This is more difficult where buildings are owned indirectly and held by a legacy fund that, at inception, did not make reference to sustainability objectives within the fund terms. Although fiduciary duty requires effective risk management which includes protecting value and complying with regulation, wider initiatives during the lease term and over the life of the fund are out of scope.

A corporate's sustainability credentials are also increasingly important to attract and retain talent.

While this should flow to all real estate decisions, it is particularly important for head office and "front office" locations to signal these corporate values to prospective employees. Currently, occupiers trying to secure office buildings in good locations that embed these credentials appropriately are likely to be struggling with a demand/ supply imbalance.

Fit out

Single and multi-occupancy tenancies may also influence whether the asset is leased as shell and core, CAT A, CAT A+ or CAT B. This further varies by sector, market and by lease duration. Figure 2 (page 8) provides a summary of the scope of each fit out category, indicating their relevance across sectors and by lease duration.

The fit out standard agreed in the lease allocates responsibilities for the structure, building infrastructure, services, fixtures and fittings. Shell and core is common for large space and/or more specialist occupiers, for example single tenancy office buildings or logistics facilities. These are often characterised by long lease durations and beyond the building structure and base plant for mechanical and engineering services (M&E), the weight of responsibility for implementing ESG policies falls to the occupier. Generally, multi-let office buildings are leased as CAT A and/or CAT A +, with the occupier responsible for CAT B fit out. Occupiers often adapt the initial CAT A, including to their own specification and then return to the landlord's specification at lease end. A number of interviewees commented that in certain markets, for example the UK, Ireland and the Netherlands, lease lengths have shortened significantly from durations of 15 to 25 years to 5 to 10 years, but there has been little commensurate change in the allocation of responsibilities associated with the fit out standard.

As a result, considerable waste is generated as installations, fixtures and fittings are ripped prior to the end of their lifespan, in the process of returning the space in line with the terms specified in the lease. This turnover is exacerbated with average leases getting shorter.

Serviced office providers – essentially space intermediaries – add an additional layer of complexity. They usually take leases as CAT A and generally provide sub leases or licence contracts as CAT B or plug-and-play. Where they are providing private/own-entrance office space on 3- to 5-year contracts fit out may vary from CAT A + to plugand-play.

Interviewees considered serviced office providers to have more advanced sustainability policies than traditional landlords, however they are likely to face similar limitations as occupiers in terms of how they lease and – more importantly – return space.

Many interviewees occupying office space consider this an opportunity where owner and occupier collaboration could reduce such waste by aligning fit out terms with lease length more appropriately and adapting the standard conditions for returning space at lease end.

There is strong potential to have more sustainable practices in terms of re-use, recycling and of getting the full lifespan out of M&E equipment. In contrast, retailers prefer to retain control over their environment as it is considered fundamental to brand value and consumer marketing. Units are commonly leased as shell and core, despite both lease durations and retail brand lifecycles shortening. Decarbonisation strategies require alternative solutions to reallocating responsibilities between owners and occupiers through fit out terms, potentially through reusing installations in new store openings.



3. The influence of occupiers' real estate decarbonisation strategies

Across industries, there are leaders, followers and agnostics when it comes to ESG. Although this paper is narrowly focused on decarbonisation strategies for leased occupational real estate portfolios, the umbrella of sustainability encompasses a much wider range of environmental, social and governance considerations.

Many organisations embed their sustainability objectives firmly in the culture of all aspects of an organisation's operations while others simply keep within the margins of their legal obligations.

The sustainability culture of an organisation informs the design and implementation of their real estate decarbonisation strategies. These are also influenced by the hierarchy of perceived priorities of decarbonisation across the wider business, the control of assets by tenure and lease arrangements, the sustainability objectives of corresponding lessors and financial considerations.

3.1. Commitment to ESG

It is becoming increasingly common for large corporate occupiers and multinationals across all industry sectors to have ESG objectives embedded in – and central to – an organisation's mission, vision and values. If this is the case, then it tends to be a C-suite priority that flows through the organisation.

This corporate culture matters. For organisations led by sustainability-rich values, interviewees report that it becomes integral to the culture of the work environment and is not merely a natural extension of decision-making, but integral to it.

A corporate's sustainability credentials are also increasingly important to attract and retain talent. While this should flow to all real estate decisions, it is particularly important for head office and "front office" locations to signal these corporate values to prospective employees. Currently, occupiers trying to secure office buildings in good locations that embed these credentials appropriately are likely to be struggling with a demand/ supply imbalance. Although the organisation will have a strategic plan including decarbonisation priorities alongside wider sustainability objectives, the over-arching objectives cascade through the business, with learning shared and transferred across business units.

For example, take a global digital solutions company focused on its data centres as a priority. Although a separate business division to the sales and marketing business line which has a separate business operations division including corporate real estate, the corporate real estate managers were able to draw on the expertise in writing green leases and service contracts developed within the digital systems operating division. Although this might seem obvious, there are few crossovers between the divisions and in this instance, they are also headquartered in different regions.

In many organisations, ESG criteria are considered as central to strategic business risk management, with the focus more tipped towards safeguarding the business than to contributing towards solutions to meet a global challenge. There is a desire to be a good global citizen, but this longer-term objective is second to short- to medium-term business priorities. The activity generating the largest emissions within the business are prioritised. However, there is little cascading of a sustainability mindset through wider business/operational units outside these priorities.

In contrast, other organisations that do not consider sustainability to be embedded in their over-arching mission often take a more legal compliance approach. Responsibility is often passed to a manager with no direct reporting line or support to the senior management executive team. This individual and/or team might have support to develop a strategy, but its implementation relies on their capacity to influence and recruit champions across the business and upwardly manage within the organisation. Being an example of responsibility without authority, decarbonisation objectives are separate to wider business objectives and often result in them being a lower priority.



3.2. Prominence of real estate in decarbonisation strategies

For many organisations, real estate represents a low proportion of their over-arching carbon footprint, obviously depending on the activity of the company. For example, a drinks manufacturer would be more focused on emissions from manufacturing and supply chains. Therefore, the contribution of real estate to an organisation's total emissions often determines how it is prioritised within decarbonisation strategies.

Organisations that are signatories to the Paris Agreement usually share an overarching ambition to be good global citizens and often align their objectives with specific UN Sustainable Development Goals (SDG), while committing to do no significant harm in repsect of all SDGs.

When reducing their carbon footprint, many organisations tend to align their initial priorities with emissions from activities in scopes 1 and 2 of the Greenhouse Gas (GHG) Protocol as they are required to measure them (see box). These are perceived as being more directly within the organisation's control and capacity to influence through decision-making.

In general, occupiers do not need to account for the embodied carbon within Scope 1, which are direct emissions from owned or controlled energy sources, for example boilers and furnaces. This might only be the case if companies develop owner-occupied assets and may be required to account for associated embodied and operational emissions within Scope 1. Even in these cases, it is more common for such developments to be structured as forward funding and long-term lease arrangements.

Purchased energy through direct contracts with third party suppliers is accounted for in Scope 2, and leased real estate is generally captured in Scope 3. Where such assets are serviced office assets with an all-in rent, this would also be captured within Scope 3.

This breakdown matters as occupiers generally prioritise their core activities in Scope 1 and 2 that represent the largest emissions from the organisation. However, this priority setting is at odds with the activities generating the largest emissions in aggregate to total global emissions, which is real estate.

If occupiers weighted their decarbonisation strategies towards the activities contributing to the largest global emissions, real estate would receive earlier and greater attention across organisations. The aggregate of this has the potential to make a significant impact on lowering total global emissions.

Indeed, occupiers representing organisations with sustainbility rich cultures suggested that decarbonisation strategies led solely by GHG protocol reporting can lead to poor decisionmaking from a sustainability and wider business perspective.

These interviewees consider that a more holistic approach enables shorter-term decisions to be made in the context of longer-term business objectives, resulting in a more optimum outcome. In particular the expected lifespan of materials, equipment and products should be considered beyond the lease end or expected lifecyle of the building and take into account the potential for reuse and circulatory potential.

By taking a more objective and holistic approach, sustainability can be enhanced, often with significant financial cost benefits to the business directly for operational real estate costs and indirectly for operational resilience, risk management and brand value, benefitting talent and custormer recruitment and retention and shareholder value.

For companies with a less mission-driven sustainability culture, ESG issues are often addressed more systematically, with the GHG protocol used as a strategy rather than as a mere reporting mechanism. There is a narrow focus on the hierarchy of the organisations emissions, with an absence of any context of the more global hierarchy of emissions within the wider economy or society.

A number of interviewees explained that this lack of weighting is creating difficulties in getting C-suite attention to address or prioritise decarbonisation of real estate. This is exacerbated by carbon emissions being lowered if the overall portfolio was



rationalised. This results in a recorded decrease in emissions even though there is no improvement at an emissions/unit area or on a like-for like basis.

Given real estate is often a low priority, some interviewees indicated that beyond energy procurement, it can be difficult to secure the attention of senior management and get sign off for capex. This appears to be a considerable missed opportunity for decarbonising real estate for two reasons.

First, if individual organisations aligned their priorities to confront the hierarchy of emissions by source globally, real estate would be elevated to a primary decarbonisation goal by all occupiers. By having a shared focus across all industries, the 37 percent of global emissions attributed to real estate could be greatly – and sharply – reduced, with the combined effort greatly accelerating achievement of the Paris Agreement.

Second, the failure to focus on real estate has the potential to increase total emissions over the medium to long-term. This is because real estate decisions are often medium to long-term commitments. Hence, where decarbonisation of real estate is a low priority, there is a high potential for total emissions to expand, not merely remain static.

Box 1: GHG Protocol and scopes 1 to 3

Any organisation aligning with the Paris Agreement must calculate its carbon footprint. The Green House Gas (GHG) Protocol is the global standard framework for calculating GHG emissions.² It provides a pathway for organisations to assess the scale of direct and indirect emissions driven through company activities using the discrete lenses of scopes 1 to 3 (Figure 3). Direct emissions are captured in Scope 1, while indirect emissions are captured in scopes 2 and 3. Scope 2 centres on emissions associated with energy supply purchase. Scope 3 includes all indirect emissions that occur through the value chain and are subdivided into downstream (acquired goods and services) and upstream (supplied goods and services) activities.

The emissions generated by real estate span scopes 1 to 3 and depend on whether real estate is owned, the type of lease agreement and the supply and control of energy resources. The scopes focus on emissions generated through the operation of real estate. Embodied carbon associated with the development – the production – of buildings, including their demolition, is generally only captured by the framework for the organisation directly undertaking development. Under the framework, investors of standing assets and occupiers are required to assess the emissions from the operation and management of real estate, but not its production. This imbalance in GHG accounting can potentially distort ESG aligned real estate decision-making and creates space for greenwashing.

2 https://ghgprotocol.org



Figure 3: GHG Protocol Framework: Scopes 1 to 3





3.3. The importance of like-minded thirdparty investors/owners

For assets that are leased from third-party owners, the type of investor and how they consider sustainability issues is a significant factor for occupiers seeking to achieve their own sustainability goals. As for occupiers, the importance of ESG within investor objectives varies considerably by geographical region, country, city and at the sub-market level.

Many institutional investors and managers with specialist real estate portfolios are signatories to industry frameworks such as the UN Principles for Responsible Investment (PRI) and committed to the Paris Agreement. This is aided by their longer-term investment objectives, with a greater focus on risk-adjusted income returns than returns generated by short-term capital.

However, across all sectors, their portfolios are highly concentrated in the largest and most mature real estate markets at both the country, city and sub-market level. While institutional investors are estimated to be the underlying owners of approximately a third of assets leased to third parties, the concentration in prime markets across all geographic tiers indicates that non-institutional investors dominate non-prime markets.

Generally, interviewees said challenges to implementing sustainability strategies increased as you move east and south in Europe. In particular, occupiers commented on Germany, Nordics and France as having sustainability and efficiency in real estate as a higher priority, supported by public policy initiatives.

There is a wide range in the level of professionalism and sophistication of noninstitutional owners, which tends to decrease as you move away from prime, again at any level of the geographic hierarchy, and also with the scale of any investor by portfolio size. There are a number of issues from a sustainability perspective that emerge from this polarisation of the market by ownership.

First, many such owners are focused more on shorter-term growth and achieving the highest rent, regardless of risk characteristics associated with income, for example covenant strength, rental affordability, income duration and expectations of cyclical, structural and regulatory change. This can greatly inhibit an occupier's ability to progress towards net zero, including in many markets where there is an absence of regulation, measuring energy use and emissions.

Occupiers involved in expanding their business in such markets explained that it is often difficult to even get permission to install their own equipment to measure energy efficiency, emissions and usage. The absence of even the most basic data impedes progress, limiting the organisation's capacity to implement measurable decarbonisation strategies.

In these circumstances, occupiers committed to a net zero footprint attempt to estimate their emissions based on data from other locations and off-set through investments in forestry or renewables. However, the inability to measure the carbon footprint of their activity will influence their wider business strategy and such locations will be disregarded when identifying new regional and sub-regional hubs for the organisation.

The presence of facilities management/corporate solutions intermediaries instructed by occupiers can further exacerbate this issue. Once a head lease is signed, it can be very difficult to achieve a change of terms, including reporting metrics for emissions.

A number of interviewees commented that occupiers that have an internal real estate platform that has the capacity to lead on at least leasing, if not on facilities management, are in a better position to prioritise ESG considerations and efficiency metrics into agreements. This data is essential to establishing baselines, monitoring performance, changing behaviour and measuring progress.

Many of these interviewees had experience of positions as an occupier client and previously, within third-party manager/corporate solutions/ facilities management businesses. They explained that as these are very low margin business there is often an emphasis on volume and speed. More positively, it was commented that sustainability issues are beginning to move from the back towards the front of pitchbooks and service





agreements, in response to increasing demands for sustainable real estate strategies by occupiers.

In addition to owner-occupied and leased premises, large office space occupiers also use serviced office space as a core component of their occupational portfolios. Originally developed for casual/temporary and highly flexible users, the concept has expanded to meet the space needs of SMEs as well as the "spoke" of "hub and spoke" space requirements of large/medium and fast growing occupiers.

Interviewees in this segment indicated that across the largest serviced office providers, the occupier base may be roughly broken down as a third small companies and approximately half serving medium and hypergrowth companies. A majority of these occupiers lack real estate and real estate sustainability expertise, but recognise its importance and request sustainable practices, often on trust.

Interviewees representing large organisations using serviced offices for a significant proportion of their portfolios commented that leading spaceas-a-service providers tend to be progressive in their approach to sustainability. These occupiers indicated that one of many reasons why many medium and some large occupiers use serviced offices (private and separate office space on 3- to 5-year contracts) for upwards of a third of their portfolio is because having one provider of both the leased space and its facilities management enables them to achieve alignment across a portfolio more easily, including for sustainability objectives.

However, global agreements and green leases may not be fully understood and/or implemented at the local level, especially in more emergent economies and immature real estate markets driven by a more local business culture. In markets driven by excess demand over supply, both occupiers leasing directly and those leasing indirectly through intermediaries may need to design and implement their own solutions, where permitted by the owner.

This spectrum of owners and the variation in both investment objectives and sophistication, in this case around sustainability, represents an issue for collaboration between owners and occupiers. Large corporate occupiers often have fit out procurement agreements (or access them through their property/facilities managers), including (if shell and core) for building infrastructure systems such as HVAC. However, the lifecycle of such building systems often extends significantly beyond the duration of the lease. In markets characterised by the shortening of historically long leases, the responsibilities for building infrastructure have often not shifted in line with this change.





As a result, there is the potential for considerable waste where systems with a 15- to 20-year lifespan are churned every three, five or seven years as occupiers change. Some occupiers indicated that if emissions and waste can be reduced by shifting this responsibility to investors and landlords, they would favour such a change on a cost neutral basis for both parties, subject to having an auditable trail to energy performance.

However, for occupiers that have a high concentration of leases from non-institutional investors across a portfolio representing thousands of leases – notably retailers, local logistics/delivery and also large space-as-a-service providers beyond their prime portfolio – this is less likely to be cost effective. Economies of scale are derived from bulk procurement and standardised fit out and given the low proportion of institutional owners across their portfolios, a piecemeal approach to responding to individual investors keen to provide a solution is not viable.

Occupiers report that the type of ownership impacts the structure of their portfolios. In prime locations in the most mature markets, the presence of institutional investors has a wider impact across the market. In an institutionally competitive market, shorterterm developers and investors aim to meet institutional investor requirements, including sustainability criteria, to satisfy institutional requirements and broaden their potential transaction opportunities. This better enables occupiers to access more sustainable real estate

and derive appropriate performance metrics. In contrast, more secondary markets and locations present a challenge, with occupiers reporting that there is low to no availability of sustainable assets and no access to data on energy use, efficiency or other performance metrics.

This is especially pronounced in respect of data centres, regional distribution hubs and corporate real estate portfolios. For the latter, the 80/20 – or often 90/10 – rule applies, where 80 percent to 90 percent of occupiers' revenues (and occupation) are driven by 10 percent to 20 percent of office locations.

This represents the hub and spoke model, with the hub representing regional HQs. For many occupiers, the ability to execute net zero operations is one of the decisive factors in selecting the country/city location that will act as a regional/ sub-regional hub. This has further implications for



economic development and risks increasing wealth polarisation between and within global regions, countries and cities.

The interviewees considered that these differences between jurisdictions are enabled and exacerbated by an absence of a common global, or even regional standard for policy and measurement frameworks and metrics. As a result, occupiers are currently unable to derive consistent data on energy efficiency, use and/or emissions.

For many organisations, particularly corporate occupiers, that are fully committed to achieving their commitments on net zero, the polarisation in sustainability objectives by type of ownership is already resulting in a two-tier market, and this is anticipated to accelerate rapidly.

For example, one organisation explained that any contract that causes it to vary on its commitments to net zero requires an internal review process to achieve an exception certificate. This process will be avoided wherever possible as it is time consuming and internally, applications will be noticed. Therefore, sustainability is driving decisions and a two-tier market is emerging rapidly.

The type and value alignment of owner is a recurring theme across the interviews and topics discussed. For occupiers that have a strong commitment to sustainability in the mission, vision and values of the company, it is of rising importance. Such organisations are increasingly identifying like-minded real estate owners and/ or real-estate-as-a-service intermediaries and partnering with them across the portfolio where feasible. Certainly, the professionalism of owner is a factor in real estate decision-making, particularly for large requirements and/or lease duration decisions.

For example, corporate occupiers, particularly when seeking to enter new markets and establish HQ premises through a build-to-suit agreement generally prefer to work with an established partner. Equally, logistics and distribution operators often prefer to enter new markets with an investor/ manager with which they have an existing, trusted relationship. In this instance sustainability is one of a range of drivers that also include the investor/managers understanding of their business requirements and ability to agglomerate compatible occupiers within a sub sector.

3.4. Financial considerations: costs, rents versus income and alignment of interests

Most occupiers indicated that occupational real estate sustainability strategies are wideranging and include total property costs, total operational costs, notably energy use, and fit out. In undertaking the cost benefit analysis for net zero, sustainable fit outs are usually cost effective as they often involve recycling and reusing furniture and other equipment, and a more sustainable approach to CAT B specifications usually results in a lighter, less expensive finish.

Many occupiers commented on the need to take a more objective and holistic approach to assessing the financial cost benefits of sustainability. Total operational costs should assess the costs of fit out, M&E equipment, internal structures, fittings and furniture and energy use/costs across the expected lifespan of different options.

Specifically, some occupiers explained that in their analysis they consider the return on sustainability practices across the overall business, and suggested that owners/developers and managers should adopt this practice. In addition to considering the cost-benefit in respect of total occupation costs, the analysis extends to further aspects of risk management including the impact on:

- Operational resilience and future proofing of the business
- Energy security
- Benefits for recruitment in terms of talent retention and attraction, and importantly in respect of the capacity to offer an appropriate environment whether a working environment or the provisions of safe, secure housing
- Benefits to shareholder value, and/or reduced liability either to the company balance-sheet or to the public sector
- Protection and enhancement of brand value and its impact on business generation.

These interviewees consider that a more holistic approach aligned with strategic business planning and risk management enables shorter-



term decision-making to be better aligned with wider and longer-term business objectives. It is particularly important for short-term decisions involving real estate as they often endure into the longer term. Importantly, these benefits are shared by occupiers and owners. The interviewees considered that if the approach were more common across occupiers and owners, there would be less focus on the notion of "premium" rents and values, which is perceived as a barrier to progress.

3.5. Rents and valuation

Across the interviewees, the concept of a rental premium being justified for an energy efficient or NNZ asset is considered as a contentious issue resulting in the immediate restoration of more traditional adversarial tenant/landlord negotiations. Occupiers stated that when investors put forward the notion of a "premium rent" being justified, this stifles conversation and collaboration instantly.

Exploring the issue, it is apparent that to some extent this is due to parties speaking at cross purposes as this is one of the rare occasions where the outcome can truly be win-win if understood fully. Generally, investors/owners that mention premium rents are leading with what the benefit is to them, rather than explaining the potential value of lower total occupation costs to occupiers.

Generally, occupiers consider that there is an evolution in the market in respect of modern methods of construction, materials, M&E installations and that energy efficient buildings are fundamental to the concept of Grade A rent.

Equally, with access to sustainable assets being increasingly polarised by location, this tends to drive a two-tier market. Excess demand for limited product may cause rents to polarise between efficient and inefficient assets in the short-term, but the use of the term "premium" in addition to the market rent, immediately lowers trust between owner and occupier. Language is important.

In addition, market analysis often refers to evidence of a "rental" premium, however, this is often an impact on net income, rather than the rental level. Where there is real value in a rebalancing of total occupancy costs through access to lower energy costs, then this may be reflected in a premium income for owners where the positive impact on lower total occupation costs may be shared. Over time, this would be naturally reflected in the market rent for such assets. The key is for owners to focus on the benefits to total operating costs for both owners and occupiers, rather than leading with demands for a "premium" rent.

This issue of premium rents and in addition yields, also impacts upon plans for existing assets. A number of occupiers commented that some owners/investors always approach existing assets from a current valuation perspective. It is argued that because valuations don't reflect the risk of obsolescence associated with less efficient assets, valuations including projected cashflows and yields often result in investors being unable to justify capital expenditure unless there is corresponding increase in projected rents.

However, occupiers consider rental values of inefficient assets as deteriorating and contend that such capital expenditure future proofs the assets, protecting income and yield. Many investors agree that valuation issues are constraining activity as by maintaining a status quo, they impede retrofitting as it is difficult to demonstrate the financial benefits if current valuations fail to reflect the risks appropriately. This topic is explored further in the ULI C Change report *Breaking the value deadlock: enabling action on decarbonisation*³.

This issue is most prevalent in markets where there is weak signalling in respect of policy or regulation. Many occupiers and investors consider that well thought out regulation would assist in rebasing values to better reflect both underlying occupier demand and additionally, it might assist in stimulating more investor retrofits.

3 ULI C Change (2022) <u>Breaking the value deadlock: enabling action on decarbonisation</u>.



3.6. Accommodating retrofitting

The most appropriate asset plan for retrofitting varies by the type of asset, ownership and lease profile.

Ideally, a vacant asset provides the easiest approach in terms of implementation. However, it is often necessary for owners to stage retrofitting works during occupation for a number of reasons.

First, there may be a long timeline of many years before vacant possession can be achieved. Second, to be financially viable it may be necessary to retain an income stream and third, it may be more prudent to undertake the works in stages in tandem with other planned investment throughout the lifetime of the asset.

Retrofits may be broken down into works that can easily be undertaken during the lease, principally upgrades to local M&E systems, light fittings, waste systems etc and those more aligned with a deep retrofit and related to the structure, for example cladding, windows etc that are better positioned at lease end.

In a multi-tenanted building, or large asset, these structural retrofits may also be undertaken in stages. This approach may also be used to undertake works while retaining tenants, requiring occupiers willing to accommodate the works and a well-executed, collaborative asset management strategy.

Some occupiers are willing to accommodate deep retrofits if cost neutral and some occupiers had experience of a process involving a deep retrofit. This tends to involve staged works floor by floor, or opposing sides of towers, with investors using retained vacant space to enable occupiers to transition to retrofitted space as the work progresses. This requires strong collaboration between owners and occupiers.

Although most occupiers are willing to accommodate light retrofits if it has a limited impact on their business and delivers efficiency benefits, some considered staged works to be too difficult and best undertaken at lease end. In part, this depends on the duration of the lease, with efficiency gains from both a financial and sustainability perspective more likely to outweigh the inconvenience to occupiers committed to long leases. Other influencing factors include the importance of the building/location to the occupier, availability of alternative accommodation and alignment of sustainability objectives between the occupying organisation and the owner.

The importance of alignment of interest is a twoway street. A number of occupiers on longer leases discussed occasions where implementation of their sustainability strategies has been impeded by being refused permission to fit renewables or undertake light retrofit works themselves by unenlightened owners.

This is unusual in Europe where aligned owners, most commonly in respect of assets leased as shell and core, are willing to facilitate and grant legal easements/amend lease contracts to permit installation of renewables, M&E plant as well as lighter fittings and equipment. In many cases, depending on the lease length as well as the fit-out standard associated with the lease and expected lifespan of any installations, owners have also shared costs.



Figure 4: Relative location dependence of business operations



4.0. Aligning occupiers' sustainability strategies and business requirements

Many interviewees commented that despite occupiers and owners often having ESG policies, requirements and objectives, they are either not being communicated to intermediaries – leasing agents and/or property managers – or not being translated by them, into day to day working practices.

Occupiers across multiple sectors identified three major challenges to achieving their sustainability objectives:

- First, in locations where demand outstrips the supply of targeted real estate, it is difficult to achieve sustainability objectives for efficiency, renewable sources and procurement, and even securing reporting metrics due to the imbalance in negotiating power between the parties.
- Second, there are often differences in how sustainability is defined, exacerbated by a lack of standardisation in Energy Performance Certificate (EPC) ratings and a myriad of certifications – LEED, BREEAM etc – and a focus on operational rather than the sum of embodied and operational emissions. Many

certifications are also still focused on theoretical (or modelled) performance based on design and materials rather than actual results achieved. This highlights the importance of measuring energy efficiency and use consistently, enabling comparable analysis of derived data that in addition to changing behaviour in respect of a building-in-use, can greatly assist in progressing best practice in design materials use.

 Third, the understanding and acceptance of sustainability as a global priority may be a low priority within the local country/city cultural agenda.

The interviews reveal that the range and intensity of these factors varies with the nature and objectives of business operations being accommodated. Broadly, these can be divided into non-customer facing operations that might be less dependent on a specific physical location to achieve their business objectives in comparison to many customer-facing operations that have a higher sensitivity to location at a micro level (Figure 4).

4.1 Non-customer facing operations

Non-customer facing business operations are the most straightforward, especially those that are more location-agnostic. Data centres are a clear example of such real estate. Of course, there are



other significant business objectives that must be achieved such as resilience, security and protection, and low geopolitical risks.

Organisations can be a sole occupier of data centres, but more often lease space within a centre. An alternative approach is the use of an intermediary cloud provider that is responsible for the procurement/management of data centre facilities. The ability to embed sustainability criteria is highest where the organisation is the sole occupier (or indeed, owner) or a significant tenant for co-location space in a multi-tenanted asset. It is more difficult when acquiring space provision through an intermediary cloud provider.

For organisations with embedded sustainability objectives, key criteria include seeking facilities that are powered by renewables, and/or energy efficient and that don't use any significant water resource.

Where large multinationals build strong relationships with data centre owners, the tenant's sustainability criteria can assist in driving the data centre owners' – and often operators' – portfolio strategy. In this way, the sustainability objectives become circular and extend to the sustainability performance of other tenants, regardless of their individual sustainability objectives.

Although less direct and acute, it can also influence the strategy of cloud intermediaries. These are required to provide data on resource use and emissions, including energy and water by sustainability-led companies which are key factors in the selection of a cloud service provider. In this way, the occupier indirectly influences the supply chain.

Other real estate housing non-customer facing business operations include back-office functions such as administration, accounting, legal, IT and other more location-agnostic functions. Notwithstanding other criteria such as costs, labour force dynamics etc, it is relatively easy to prioritise sustainability criteria in the occupational strategy at the macro and micro scale.

However, the availability of sustainable assets tends to deteriorate away from prime locations and this can be a limiting factor. This is often exacerbated by a shift in the type/quality of owner as the dominance of institutional investors deteriorates in favour of private individuals and companies that are often less sophisticated in terms of resource and expertise and who often pursue rental growth over long-term income strategies. As a result, such owners often have an emphasis on shorter-term returns and rental maximisation, rather than optimisation.

Where occupiers (predominantly in the office sector) seek sustainable assets in more secondary locations, they tend to focus on new assets that have greater sustainability characteristics embedded in their construction given near net zero building regulations. However, this ignores the carbon emissions generated by construction. At present, occupiers do not need to consider embodied carbon as part of Scope 3, although many occupiers agree that as real estate is a supplied service, they should.

4.2. Customer-facing operations

Interviewees report that the demand and supply dynamics of a market are a major influence on the degree to which sustainability criteria may be achieved for real estate assets at the micro level.

For some business operations, even small differences at the micro-scale can have a big impact on potential outcomes for the occupying business. As a result, competition for the strongest micro-locations may remain strong even where there is oversupply in the wider market.

This is a long-standing characteristic of the retail market, with the "prime pitch" providing the greatest access to consumers and that access falls away rapidly over small distances at the micro-scale. However, it is also relevant to customer-facing business occupiers seeking to have a prominent location in the micro-location, often with adjacencies to competitors. Similarly, micro locations are crucial for logistics (especially access to labour force and distribution networks) and also local logistics and delivery services.

Where the leasing market is competitive and location decision-making includes criteria such as adjacency to clients, competitors, consumers, transport nodes/networks and or labour force, the ability to press for energy efficiency and wider





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sustainability considerations tends to decrease the more market imbalance swings to the presence of excess demand over supply.

4.3. Development

Some occupiers in the office sector prefer build-tosuit premises and investors/developers continue to build new assets to meet demand in certain locations for modern, efficient, well-designed buildings certified for the health and wellbeing of users.

It is widely acknowledged that the "greenest" building is the asset that is never built and that retrofitting the existing built environment should be a primary ambition. Nevertheless, repurposing, repositioning, rejuvenating and repairing existing assets and functionally obsolete buildings requires at least some degree of development activity. A need for some new development also persists and this is particularly true for certain markets and sectors. For example, maturing and evolving markets require new assets across all sectors as their economies expand. Social and affordable housing is acutely undersupplied in most metropolitan areas that have been a focus of rapid urbanisation in tandem with changing household formation patterns.

Similarly, ageing populations and advancements in medical technology and practice generate both increased demand for healthcare and a wider range of required facilities including hospitals, multi-disciplinary medical centres, rehabilitation, elderly care as well as the provision of a range of senior housing solutions.

Equally, sectors such as data centres and large regional distribution warehouses, especially for ecommerce, continue to expand their requirements with limited access to secondary real estate products. It was commented that since entering Europe in the late 1990s, Amazon has not sold



one such distribution warehouse, but has grown its portfolio significantly. There is now established product, but the market is still expanding, so little if any turnover of existing assets.

Where development activity is required, regulation in Europe and many occupiers' ESG strategies target NNZB construction that minimises emissions both through the construction process and in source materials. Many interviewees commented that they seek the highest certification from LEED, BREEAM, or WELL, as discussed on page 21.

However, occupiers with an advanced sustainability-rich culture suggest that – depending on the expected lifespan of an asset – the criteria for LEED or BREEAM may favour materials that are not the most sustainable when the reuse and recycling of materials into a replacement building are taken into account.

These occupiers favour a cradle-to-cradle approach that considers the durability of materials through more than one lifecycle. As every decision on process and materials at the outset of the process has potential implications for all other decisions through the time horizon, it is essential that a holistic whole lifecycle(s) approach is taken from the inception of the project and that the later impact of initial decisions is traced so that the cradle-to-cradle impact is assessed.

This approach focuses on the end goal of achieving an enduring net zero, across four components of activity, namely: location, construction and supply chain, the figure says operation and end-of-life (Figure 5). For example, one ecommerce occupier has high energy demands associated with cooling and, as a result, places strong emphasis on renewables, systems and energy storage, as well as the capacity of local energy infrastructure. It also considers the potential impact across the wider business operations, seeking locations that facilitate fourhour journey times across their supply chain, enabling an electric distribution fleet, powered by renewable installations.

However, interviewees adopting a cradle-tocradle approach explained that it requires strong commitment as the process is iterative.

Figure 5: Cradle-to-cradle approach



Interviewees highlighted two major impediments to success.

First, as the process is iterative, it is time consuming. Every time a material changes, the design and materials are all recalibrated to optimise the emissions generated through each quadrant. In certain markets, this requires education efforts in respect of building control/ planning authorities to gain acceptance of a material or design approach. This may also prove unsuccessful and result in planning refusal, requiring a reiteration of the design.

For example, interviewees commented that there is low acceptance of the use of fire-retardant timber for construction in the UK by building control and planning authorities. This is exacerbated by such decision-making being delegated to local authorities, resulting in repeated requirements to explain, inform and educate planning and building officers in each area, with inconsistency in decision-making and outcomes.

However, after a lengthy education process, one stakeholder has recently achieved acceptance with one authority indicating that while progress may be slow, it is possible to effect change. However, it also suggests that this is an issue that could be more effectively addressed at a national policy level by industry organisations and representatives, relieving individual stakeholders from having to address it in a piecemeal fashion.



The approach requires patience, and the lack of certainty can be costly. In a strong market, the capacity to align with a developer that is willing to share the costs of delay can be very difficult. As a result, other occupiers seek to comply with national/city regulations and materials only, perhaps delivering LEED/BREEAM in that market, but not necessarily optimising environmental performance over the lifecycle(s). It is also further driving the two-tier market and alignment of likeminded investors, developers and occupiers.

Although it is possible to achieve NNZ assets in terms of operational use, the embodied carbon in materials and construction cannot be eradicated, even using the most sustainable cradle-to-cradle practices. Some interviewees acknowledge them and in addition to seeking to minimise them, make reparations through off-setting through investments in woodlands, renewables etc.

However, the greater issue is that occupiers don't have to account for the embodied carbon of a new building if leasing. A newly constructed building designed to high sustainability standards will be more efficient, have lower operational carbon emissions and greater bio-phyllic qualities than a retrofitted asset.

By disregarding the embodied carbon involved in the construction of a new building, occupiers with a weaker sustainability culture that may over-focus on the calculation of an organisation's carbon footprint using the GHG Protocol may mistakenly perceive newly constructed assets as being more sustainable than retrofitted assets. Most occupiers agree that as real estate is a service, embodied carbon should be included within Scope 3 and that this would assist in signalling the most sustainable approach within occupational real estate decisionmaking.

5.0. Certifications, policy and reporting frameworks

Globally, there are a myriad of building certifications with BREEAM, LEED and WELL all being common at the asset level, especially in respect of new developments. Each has a tiered rating level of certification, however, they do not use the same metrics or weighting of metrics.

In Europe, GRESB is often adopted for investment portfolios and using a rating system, enables benchmarking between portfolios. In addition, GRESB offers a global ESG benchmark and reporting framework for investors and managers while CRREM provides science-based transition pathways that align with the Paris Agreement and account for differences across assets by age, type and original construction. As sustainability evolves, the base metrics naturally change across all these standards and the thresholds to reach different standards tend to be raised.

Many of the interviewees commented that the range of standards being employed across cities, countries and regions makes it difficult to set and adhere to standards at an organisational level and to develop actionable targets for sustainable development and leasing policies.

In Europe, occupiers considered that there is a lack of accepted regulatory standards, with too much scope for variation at national level, especially in respect of setting the hurdles for regulations that do exist.

Multinational occupiers stated that the diverse range of regulations at a national and also at a city level, especially in the US, makes it difficult to implement a portfolio-wide solution. Moreover, it is financially inefficient in terms of time and human resources. It also has a significant impact on financial outcomes as it limits efficiencies of scale, for example through procurement or standardisation of space planning, development, fit out and operations.

Within the EU, much of the regulation to date is anchored to energy performance certificates (EPCs). For example, the EU taxonomy aims to create a common classification system for



sustainable activities. For real estate, EPCs are employed as technical screening criteria. However, each country has been able to devise its own EPC classification framework, with some based on energy use and others based on emissions, with further variation in the thresholds for gradings.

While EPC ratings using an alpha numeric system are common, they are not ubiquitous and markets such as Germany and Poland devised numeric scoring systems. Added to this, there is no standardisation of the thresholds that determine the different levels (i.e., EPC A1, A2, B1, B2, C, C1, C2 and so on).

Indeed, some interviewees commented that some national regulators made the thresholds very low to enable a high proportion of assets to achieve C or above, in the expectation of further regulation that might use the gradings as cut offs. Others have used more stringent criteria and the result is that ratings are incomparable across borders, as many interviewees suggest that it is a case of comparing apples and oranges. Moreover, it was commented that it is too easy to manipulate the EPC rating by making rather cosmetic changes to drive a high score in one element contributing to the composite score.

Regulations have also varied in stringency when introduced at the national and often at the city level. In Europe, the Netherlands has introduced regulation that puts the onus on building owners, with a focus just on office buildings in use required to be at C or above by 2023, and the trajectory is to A by 2030. The difficulty is that what constitutes an A is expected to change by 2030, making it difficult to make the capex to invest towards an A now. In addition, in the Netherlands, the regulation is diluted as it is not always enforced and a significant proportion of buildings not complying are government occupied.

In France, new regulations have been introduced that share the responsibility between owners and occupiers, with improvement targets set as a relative measure. All owners and occupiers must measure energy use and performance and the *Décret Tertiaire* requires any building/used/leased space greater than 1,000 sq m to improve its energy performance and reduce emissions by 40 percent, moving towards EPC C by 2027 and B by 2050.

The approach requires collaboration between landlord and occupier. The rules and responsibilities are a clear mandate and the approach encourages a sense of a shared responsibility in regard to the transition, not just between owners and occupiers, but across wider society.

Generally, occupiers and owners/managers are in favour of well thought out regulation, especially where it introduces standardisation across markets and clear targets that take account of different starting positions for existing assets that vary by type, age and construction. The interviewees stated that this can greatly assist in driving activity and collaborative behaviour that can focus on a clear destination set by regulation.

In countries where the government/public authorities are not prioritising sustainability in policy, regulation can be an obstacle. Especially where slow, bureaucratic systems have not kept pace with behaviour in the market, including materials, available renewables or retrofitting technologies and requirements for existing and historic buildings.

For example, the reluctance of UK planning and building control to accept fire retardant timber for high rise is cited by a number of interviewees, as discussed on page 24.

A number of occupiers stressed the importance of initiatives such as the Better Building Partnership in the UK. This is a forum focused on jointly educating all stakeholders and aligning interests of owners, occupiers, policy-makers, developers, consultants and advisors to create a shared baseline of knowledge, understanding and solutions. It was considered that initiatives such as C Change, led by ULI, could initiate this approach in many markets.



6.0. Setting out an expressway forward

This paper primarily focuses on the challenges identified by real estate occupiers in decarbonising their occupational portfolios, with the aim of identifying opportunities to accelerate progress in collaboration with real estate owners and managers. These opportunities are summarised into three areas.

6.1. Education, communication and collaboration

Traditionally, the legal framework and negotiation of lease agreements creates an adversarial relationship between owners and occupiers. However, going forward it is important that the two parties build a direct trusted relationship with an understanding of each other's objectives.

This requires each side to be open about their perspectives and learn from each other by offering mutual education on the wider context faced by each stakeholder. From the owner's perspective, this also requires education on decarbonisation to have a broader and deeper reach to ensure more non-institutional players are conversant on the topic and aligned with occupiers' needs.

In part, the adversarial relationship has been because the parties speak a different language in pursuit of their different objectives, and in addition education, communication are also key. Many interviewees commented that from their perspective, collaboration with owners to retrofit existing assets often quickly stalled because the owner rapidly introduced the notion of a "premium rent". Interviewees suggested that from their perspective, retrofitting buildings future proofs the owner's investment by avoiding rental decline and benefitting yield, while owners are seeking a return on the costs of retrofitting.

The inertia embedded in the valuation process exacerbates the issue⁴. In the absence of legal or regulatory requirements, or specific evidence of repricing solely due to sustainability/energy performance standards, current valuations do not yet account for sustainability risk.

In short, the cost of doing nothing in respect of sustainability is not yet reflected in valuations, despite most stakeholders recognising that low energy performing real estate values are at a cliff edge in respect of the introduction of regulatory thresholds or restrictions on finance. The corollary is that the costs of retrofitting are also not yet resulting in an enhanced valuation. This situation can make it challenging to closely align owner and occupier objectives, at least in the short-term.

Often, there are financial benefits for occupiers and owners, which would be more apparent if they considered each other's perspectives and

⁴ For a detailed discussion of the valuation issue please see ULI C Change (2022) Breaking the value deadlock: enabling action on decarbonisation.



Figure 6: How relationships feed into occupier requirements



communicated them in a shared language. Installation of renewables and increased efficiency is likely to reduce occupiers' total occupation costs through more energy efficient buildings. In a competitive market this may lead to rents increasing as a proportion of total occupation costs and in some instances, in absolute terms, although in most instances occupiers will benefit from lower total occupation costs per unit area.

Similarly, a more efficient asset and/or installation of renewable energy sources is likely to lower management costs and improve net rental income. The often identified "premium" may be more driven by cost reduction than rental growth, albeit in a competitive market this may also be achievable in the short term.

Regulation to support decarbonisation is generally welcomed by both sides. However, as regulation is often tailored for economic sectors, rather than written holistically for real estate, differences in regulatory requirements can impede collaboration. One exception to this is the *Décret tertiaire* in France, which places a joint responsibility for achieving targeted energy and emissions reductions on owners and occupiers.

Conflicts with existing regulation can also hinder progress. For example, regulation intended to protect occupiers from being exploited might prohibit data sharing requirements or owners controlling energy source and supply.

Fostering a collaborative approach requires owners and occupiers to focus on devising strategies that progress the decarbonisation of real estate, which ultimately requires solutions that deliver a winwin. In this instance, going together means going further and going faster, than going alone.

6.2. Total lifecycle versus operational emissions assessment

The research findings identified areas where occupational real estate decision-making would be assisted by adjustments to existing regulatory requirements and standards.

The interviewees are supportive of regulatory requirements to measure, reduce, mitigate and ultimately eliminate carbon emissions. However, current requirements under scopes 1 to 3 require occupiers of leased assets to report solely on emissions associated with their operation.

Real estate is not considered as the supply of a service and, as a consequence, emissions embodied in materials and the construction process associated with newly developed assets are not accounted for.

By ignoring embodied emissions, this creates a distortion when comparing emissions generated by standing assets that may be less efficient, even when retrofitted, with newly developed assets constructed to NNZB standards. This may encourage demand for new development which leads to a higher generation of total emissions, rather than retrofitting, refurbishing, repositioning and/or redeveloping existing assets.

For occupiers, real estate decision-making in respect of sustainability should not be solely anchored to the measurement of emissions for the GHG Protocol. Rather, occupiers should adopt a more holistic perspective taking into account total lifecycle emissions and wider environmental considerations such as biodiversity as well as social value considerations. This requires the organisation to have a clear sustainability strategy set out in policies and objectives, that enables informed decision-making that better aligns shorter-term real estate decision-making with the longer-term objectives of the business.

Many interviewees suggested that considering real estate as the supply of a service and accounting for whole lifecycle emissions associated with an asset would provide for more effective comparison of the sustainability implications of occupational real estate options.

The Proposal for a Directive of the European Parliament and Council on the energy performance of buildings (recast) seeks to include whole lifecycle of emissions generated by real estate. As the methodology is developed, it is suggested that the approach should be cascaded through wider regulations applicable to real estate investment and occupation to facilitate alignment between owners and occupiers.

The absence of a common language and indeed, a common goal in respect of policy, measurement



frameworks and metrics across regions and jurisdictions at a national and city level inhibits the capacity to set and adhere to organisation-wide standards for sustainability practices generally and specifically for occupational real estate strategies. Introducing a mandatory requirement to measure energy usage is important as this enables actual data to be derived which is crucial for establishing a baseline, measuring the impact of new policies, building improvements and progressing best practice.

As well as enabling findings to be shared across an organisation, data and knowledge sharing between owners and occupiers assists in aligning objectives. Again, the *Décret tertiaire* in France is a good example of a government policy that is designed to rapidly accelerate progress in the decarbonisation of buildings. It makes measurement of energy in use mandatory in addition to the joint responsibility for owners and occupiers to achieve targeted energy and emissions reductions.

As well as differences across global regions, the interviewees considered that there is a lack of harmonisation within the EU due to the considerable variation in how EU policy and regulation is translated into national policy frameworks, particularly in respect of setting frameworks and hurdles in respect of energy performance. The interviewees are in favour of well thought out regulation that introduces greater standardisation and clear targets for energy use and emissions across the whole lifecycle of a building.

Importantly, they would prefer any variation in implementation of policy to focus more on differences arising from different vintages, types and associated building materials of existing buildings, rather than variation by jurisdiction. It is argued that placing a greater policy emphasis on the relative reduction of emissions generated by existing buildings would assist in driving collaborative activity focused on a common goal.

6.3. Leasing practice

The research also identifies changes to leasing practices that would support and progress the reduction of operational real estate emissions. Currently, there is no standard due diligence questionnaire used by occupiers when searching for space. A standardised approach to gathering information on emissions and other factors would support best practice and make the process more efficient for managers.

The interviewees indicate that across the market as a whole, sustainability and specifically energy use, efficiency, including measurement and metrics, are not included as a general or specific item within the standard heads of terms provided at the outset of the leasing process. It is contended that once a head lease is signed, it can be very difficult to achieve a change or addition to the terms. Interviewees suggest that occupiers – and by extension investors – that have their own internal real estate platforms are better placed to ensure the inclusion of ESG considerations into the terms at the outset.

However, change is required to ensure ESG is included as a standard component of heads of terms across the wider market, thereby ensuring that any aims and objectives - or lack thereof - are expressly determined. This requires education and industry-wide commitment of all stakeholders, particularly of third party legal and agency providers of leasing services. The relationship between owner and occupier can be fragmented with the property manager holding the long-term relationship in many cases and/ or agents representing their interests during the leasing process. There needs to be a direct trusted relationship between owner and occupier with each having an understanding of the other's objectives, or that they issue clear and detailed instructions to agents or managers representing them. Interviewees commented that green clauses are not included in standard heads of terms and that once these have been agreed, it is extremely difficult to insert new clauses including those relating to sustainability.

Green leases/clauses should play an increased role. In reality, a standard green lease does not yet exist with most lawyers using their own version. There is also a tendendency for green lease clauses to be the first to be sacrificed in negotiations and to move forward best practice should see minimum requirements as "nonnegotiable".



Equally, mechanisms for updating existing lease agreements, especially in respect of lease renewals and extensions could assist in accelerating change. The majority of lease laws across European jurisdictions provide security of tenure, providing tenants with the right to renew leases on the same terms, all other things being equal. Changes to the terms can be agreed mutually and may also be required if revisions need to align with new regulations or other changes in law.

Often, seeking to change the terms of the lease upon renewal can jeopardise the existing renewal rights and trigger a full renegotiation of lease terms that results in a new agreement rather than renewal or extension that can be costly and sometimes, disadvantageous. Consequently, the opportunity to include ESG considerations at lease renewal and/or extension is often lost, with that loss of decarbonisation progress extending for the duration of the renewal/extension.

In the absence of regulatory requirements, establishing market practice that enables renewals to allow for revision and/or inclusion of terms related to ESG without prejudice to renewal rights would assist in accelerating decarbonisation strategies.

At lease end, lease terms usually require tenants to return assets to a standard specification, usually involving the removal of any systems, fixtures and fittings by the occupier. Given the relatively short duration of contemporary lease durations this can result in significant and unnecessary waste, similar to that generated by a failure in some markets to realign responsibilities under the lease with the term of the lease.

To reduce waste, it is suggested that leased space is reviewed at the end of the lease prior to remedial works and that the standards to which an asset should be returned are reviewed. This would enable the unnecessary stripping out of systems and fixtures, avoid unnecessary remedial works to comply with specification at lease end, that would likely be stripped out by a new tenant.







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