Research

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Global Real Estate Transparency Index, 2024

Transparency in a time of transition

JLL | LaSalle

Welcome

I'm pleased to share our 2024 edition of the Global Real Estate Transparency Index. In the 25 years since we first published the Index, JLL and LaSalle have created the industry's pre-eminent benchmark of real estate transparency, which we believe offers an invaluable and unique guide for real estate investors, lenders and corporate occupiers around the world.

Our 2024 edition coincides with a period of remarkable change as socioeconomic, technological, climate and geopolitical shifts intersect to create a new and constantly evolving real estate landscape. The most rapid interest rate tightening cycle in decades is coming to an end but has led to a prolonged period of uncertainty and price discovery in real estate capital markets as we move into a new cycle. More broadly, the widespread adoption of AI tools by both individuals and companies will have a profound impact on the economy, but also brings with it new risks. The need for decarbonization and climate resilience, increasingly fundamental to the long-term outlook for the economy and society, is also reaching a critical turning point as new regulations come into effect across multiple jurisdictions. And all of this is taking place against the backdrop of a record year for elections as more people than ever before cast their votes across the globe, raising the prospect of heightened governance and policy uncertainty.

The scale and complexity of these inter-related shifts is making decision-making more complex. The results of our Index confirm that the world's most transparent markets have registered the greatest progress, putting them in a particularly strong position to benefit from the next investment cycle. But continued improvements in transparency can't be taken for granted and many other markets are struggling to maintain previous gains or even slipping back.

Periods of change offer significant opportunity, but our industry will require greater collaboration between all stakeholders to drive better outcomes that meet this challenge. In times of transition, transparency is more important than ever in helping occupiers, investors, lenders and governments to navigate and make informed decisions. We trust that our 2024 edition provides an objective benchmark of real estate transparency that contributes to higher standards and healthier real estate markets and communities.

Richard Bloxam
CEO, Capital Markets, JLL

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Global Real Estate Transparency Index, 2024

Transparency Level	2024 Composite Rank	Market	2024 Composite Score
High	1	United Kingdom	1.24
	2	France	1.26
	3	United States	1.34
	4	Australia	1.37
	5	Canada	1.49
	6	Netherlands	1.49
	7	New Zealand	1.59
	8	Ireland	1.72
	9	Sweden	1.77
	10	Germany	1.79
	11	Japan	1.83
	12	Belgium	1.84
	13	Singapore	1.92
Transparent	14	Finland	1.97
	15	Hong Kong SAR	1.97
	16	Denmark	2.04
	17	Switzerland	2.05
	18	Spain	2.06
	19	Italy	2.12
	20	Poland	2.13
	21	Norway	2.24
	22	Czech Republic	2.27
	23	Luxembourg	2.29
	24	Hungary	2.30
	25	Portugal	2.30
	26	Chinese Taipei	2.34
	27	South Korea	2.35
	28	UAE - Dubai	2.38
	29	South Africa	2.40
	30	China - Tier 1	2.42
	31	India - Tier 1	2.44
	32	Thailand	2.53
	33	Malaysia	2.57
	34	Romania	2.61
	35	Slovakia	2.62
Semi	36	Greece	2.71
	37	Mexico	2.77
	38	Saudi Arabia	2.79
	39	Israel	2.79
	40	Indonesia	2.81
	41	UAE - Abu Dhabi	2.87
	42	Brazil	2.89
	43	Bulgaria	2.91
	44	Croatia	2.92
	45	Philippines	2.95
	46	Turkey	2.96
	47	Chile	3.06
	48	Peru	3.14
	49	Vietnam	3.25
	50	Slovenia	3.25
Semi	51	Kenya	3.31
	52	Argentina	3.36
	53	Serbia	3.37
	54	Macao SAR	3.42
	55	Colombia	3.46
	56	Mauritius	3.47
	57	Puerto Rico	3.47
Low	58	Malta	3.54
	59	Morocco	3.55
	60	Botswana	3.62
	61	Egypt	3.64
	62	Zambia	3.68
	63	Sri Lanka	3.69
	64	Nigeria	3.69
	65	Bahrain	3.79
	66	Pakistan	3.87
	67	Costa Rica	3.87
	68	Qatar	3.89
	69	Uruguay	4.00
	70	Jordan	4.02
	71	Oman	4.14
	72	Rwanda	4.14
	73	Ghana	4.15
Opaque	74	Ecuador	4.19
	75	Algeria	4.37
	76	Tunisia	4.38
	77	Angola	4.40
	78	Panama	4.40
	79	Uganda	4.40
	80	Mozambique	4.40
	81	Ivory Coast	4.42
	82	Lebanon	4.43
	83	Tanzania	4.44
	84	Senegal	4.47
	85	Honduras	4.46
	86	Dominican Republic	4.48
	87	Guatemala	4.54
	88	Ethiopia	4.57
	89	Iraq	4.60

Source: JLL, LaSalle, 2024

Highlights

1 Real estate transparency is more critical than ever in times of uncertainty

The pace of structural changes impacting real estate markets – from demographic shifts to sustainability targets and technological advances – is accelerating. These long-term changes are intersecting with cyclical challenges, as companies and markets process rapid adjustments to pricing and growth prospects. The largest election year in history and ongoing geopolitical tensions and conflict are introducing additional elements of policy uncertainty around the world. All of these factors mean that transparency is more important than ever as real estate investors, occupiers and governments navigate the transition to a new real estate cycle and the next stage of urban growth.

2 The most transparent markets are pulling ahead and positioned to lead into the next cycle

The most transparent markets have registered the strongest gains in the 2024 Global Real Estate Transparency Index as they set new benchmarks for technology integration, deeper data availability and climate reporting. The U.S., Canada, France and Australia are all among the global top improvers, while Singapore has entered the 'Highly Transparent' group for the first time, boosted by a focus on sustainability and digital services. This top set of countries has attracted over US$1.2 trillion in direct commercial real estate investment over the last two years, over 80% of the global total.

And with the lowest risk and highest levels of transparency around demand and pricing dynamics, in particular for growth property sectors, they are positioned to lead the cyclical recovery in liquidity as capital markets activity increases.

Beyond the 'Highly Transparent' countries, several major markets that have made progress and are focused on enabling higher levels of institutionalization – including India and Mainland China's leading cities and South Korea in Asia Pacific, and the UAE and

Saudi Arabia in the Middle East and North Africa (MENA) region – offer strong long-term prospects. These markets will require a significant expansion of urban infrastructure over the coming decade but have collectively received only 6% of global investment since 2022, highlighting the scale of opportunity as transparency improves further. Progress elsewhere has been limited, and countries further down the rankings will need to pick up the pace to close the transparency gap.

3 AI is enhancing transparency and creating a competitive edge

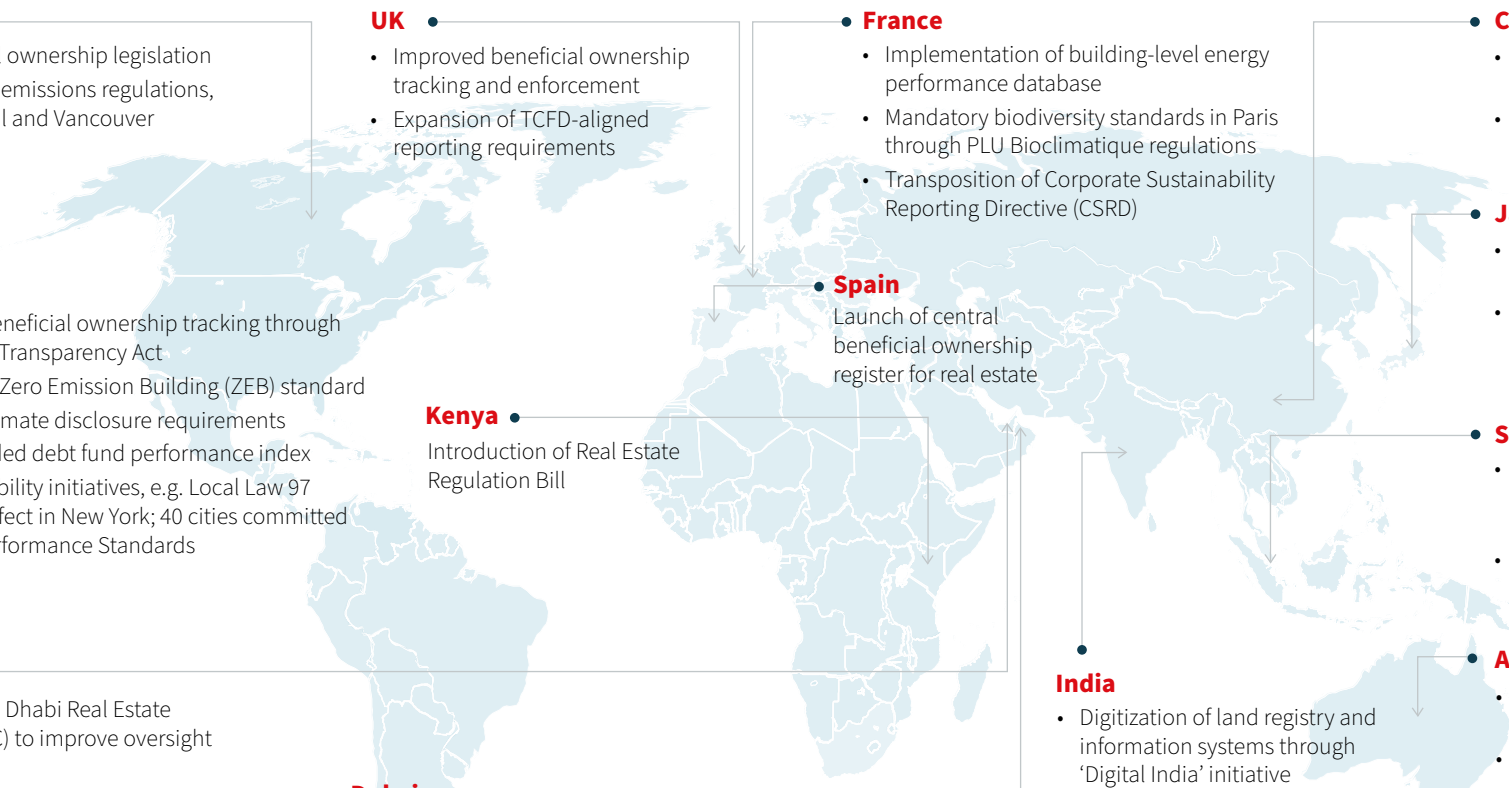
The advent of widespread generative AI (GenAI) capabilities has supercharged expectations for technology's impact on real estate. Investment into AI is growing exponentially, and although many applications are at an exploratory stage it is already boosting transparency across the industry – helping to sift through and summarize huge volumes of legal documents, automating building management, powering interactive urban and architectural design, and enabling unprecedented levels of speed and granularity in valuations and analytics. JLL's AI platform, for example, already helps to identify one in five capital markets opportunities globally. But extracting full value from AI will require considerable effort and investment in creating the right architecture and governance to capture standardized data that can be fed into models, something most companies – and governments – are still lacking. As these capabilities are built out, AI offers the potential for significant advances in productivity and transparency.

4 Sustainability transparency is at a turning point for investors and corporate occupiers

Sustainability transparency is becoming increasingly critical as the deadline to halve emissions by 2030 in line with the Paris Agreement nears and a growing number of countries and cities set out mandatory long-term decarbonization pathways. With new building energy performance standards, sustainability reporting requirements and corporate commitments ramping up, sustainability has been the largest driver of transparency improvements in the 2024 Index.

Despite the progress made so far, sustainability metrics continue to be among the least transparent globally. Many companies are still at an early stage in tracking their actual portfolio emissions, building level performance or climate risk, with a lack of standardized information and processes contributing to concerns about data quality and greenwashing. Markets with the clearest long-term pathway to more sustainable real estate – such as France, Japan, leading cities in the U.S., and the UK – will offer the most transparent and predictable environments, helping to address the significant shortfall in low-carbon buildings and allowing occupiers to make location and space decisions with confidence, governments to meet decarbonization targets and investors to future-proof their portfolios.

Selected highlights in real estate transparency over the last two years



Canada
- New beneficial ownership legislation
- Local building emissions regulations, e.g. in Montreal and Vancouver

United States
- Progress on beneficial ownership tracking through the Corporate Transparency Act
- Publication of Zero Emission Building (ZEB) standard
- Adoption of climate disclosure requirements
- New open-ended debt fund performance index
- Local sustainability initiatives, e.g. Local Law 97 coming into effect in New York; 40 cities committed to Building Performance Standards

Abu Dhabi
- Launch of Abu Dhabi Real Estate Centre (ADREC) to improve oversight and efficiency
- New AI-enabled BIM and planning review system

UK
- Improved beneficial ownership tracking and enforcement
- Expansion of TCFD-aligned reporting requirements

Kenya

Introduction of Real Estate Regulation Bill

Dubai
- Launch of technology-focused initiatives including Real Estate Innovation Incubator and Dubai PropTech Group
- Enhancements to digital services through Dubai REST interface

France
- Implementation of building-level energy performance database
- Mandatory biodiversity standards in Paris through PLU Bioclimatique regulations
- Transposition of Corporate Sustainability Reporting Directive (CSRD)

Spain

Launch of central beneficial ownership register for real estate

India
- Digitization of land registry and information systems through 'Digital India' initiative
- Publication of climate risk disclosure guidelines
- Launch of standardized development and building regulations

China
- Completion of unified national real estate registration system
- Mandatory TCFD-aligned disclosure for listed companies

Japan
- Revised Building Energy Conservation Act
- Mandatory TCFD-aligned disclosure for listed companies

Singapore
- Launch of Real Estate Industry Transformation Map 2025
- ISSB-aligned disclosure requirements for listed companies

Australia
- Updated National Construction Code
- Progress towards public beneficial ownership register
- Introduction of legislation on mandatory ESG disclosure for large listed companies

What's next for real estate transparency?

An expanding real estate investment universe

Real estate markets are in the early stages of a significant reallocation of capital as investors target property types benefiting from structural growth in demand. Demographic and technological changes, combined with shifting government and occupier priorities, are requiring investors to understand dynamics across an increasingly broad investible universe – from the growth of living investment strategies in Europe and Asia Pacific to the rapid scale-up in data center requirements globally. The transparency of infrastructure planning, trade policy and operating models will be increasingly important factors in decision-making as primary drivers of prospects for sectors such as data centers or advanced manufacturing facilities.

Real estate debt markets in the spotlight

Real estate debt markets have broadened as non-bank lenders expand and complement traditional sources of credit. With an estimated US$2.1 trillion of real estate debt that will need refinancing between 2024 and 2025 – approximately 30% of which has been completed over the first half of 2024 – monetary authorities have raised concerns about potential risks emanating from the relative lack of transparency around private credit lending volumes and financing conditions in many markets. With still-high interest rates pushing the refinancing gap higher, debt market transparency will remain on the agenda as investors continue to diversify into credit strategies and distress rises in certain parts of the market.

Digitization and AI push the boundaries of transparency but raise new risks

As AI applications are integrated across the industry, the regulatory and compliance risks associated with these tools are also rising. AI regulations are hitting a milestone in 2024, with new legislation or guidance underway in markets including the U.S., EU, China, Canada and Australia. Many of these efforts are focusing on the transparency of the underlying models as well as data security and privacy, while real estate-specific regulations targeted at tools such as Automated Valuation Models (AVMs) are also in progress. At the same time, awareness is growing of the potential risks of AI tools inadvertently leading to price-fixing or other anti-competitive behavior; for example, through pricing optimization algorithms. More consistent standards on data collection, model training and use are a promising step. Tracking this evolving regulatory background and building a comprehensive understanding of how AI tools function and their security and compliance risks will be key for companies to navigate the risks and realize the transparency gains that AI offers.

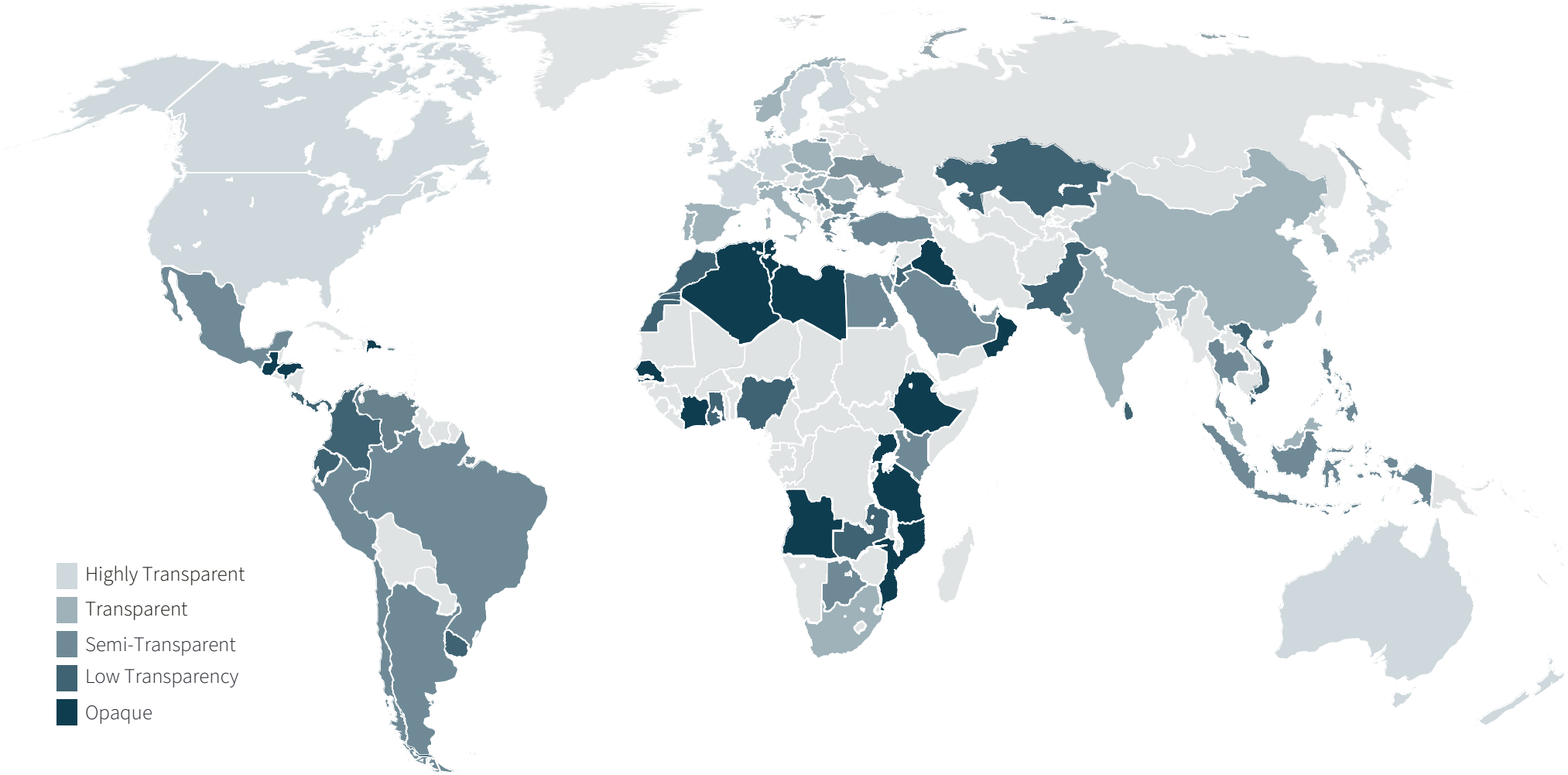
Sustainability transparency accelerating as reporting and risk requirements reach a critical stage

New or expanded corporate sustainability reporting mandates are set to come into effect over the next two years across many of the world's largest economies, including the U.S., EU, UK, China, Japan, Korea, Canada and Australia. These measures will result in a substantial increase in the number of companies with mandatory reporting requirements and a widespread need to formalize sustainability metrics and measurement methodologies, leading to a deeper and more consistent view of sustainability performance globally, particularly for emissions and physical climate risks. With more governments also mandating building-level energy and emissions disclosure, a combination of more granular and consistent data, progressively more stringent standards and improved building management will drive faster progress. As sustainability decisions become embedded in occupier and investor decision-making and drive location and investment decisions, lagging markets will need to speed up their adoption of higher standards to stay competitive.

Money laundering and beneficial ownership regulations rising up the agenda

Updated guidance from the Financial Action Task Force (FATF) which requires countries to ensure they can track the true ownership of companies, combined with widening financial sanctions regimes, has maintained momentum for improving anti-money laundering (AML) and beneficial ownership (BO) regulations. This has spurred an increase in the number of countries introducing changes to AML or BO rules in recent years, with additional progress underway in a growing number of markets. The effectiveness of existing regulations continues to be under scrutiny, with implementation and definitions often inconsistent and relatively easy to circumvent. But as geopolitical tensions and risk rise up the agenda and tighter standards are introduced in more jurisdictions, investors and corporations will need to devote more resources to ensuring compliance and will increasingly gravitate towards markets with robust regulatory systems and lower reputational and financial risk.

The 2024 survey covers 89 countries and territories worldwide



Source: JLL, LaSalle, 2024

JLL SEE A BRIGHTER WAY

Be empowered to shape a brighter way

Students from more than 200 different universities across the globe use JLL and LaSalle's Global Real Estate Transparency Index to learn and better understand this complex sector. We are delighted to be able to help you in your studies!

At JLL, we are collectively shaping a brighter way so our people can thrive, grow meaningful careers, and find a place to belong.

We choose to take the more inspiring, innovative, and optimistic path on our journey toward success, and are committed to creating an environment where everyone feels welcomed, valued and empowered to reach their full potential.

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Highly transparent markets offer strongest recovery prospects

Leading markets pulling further ahead, while Singapore joins the top ranks

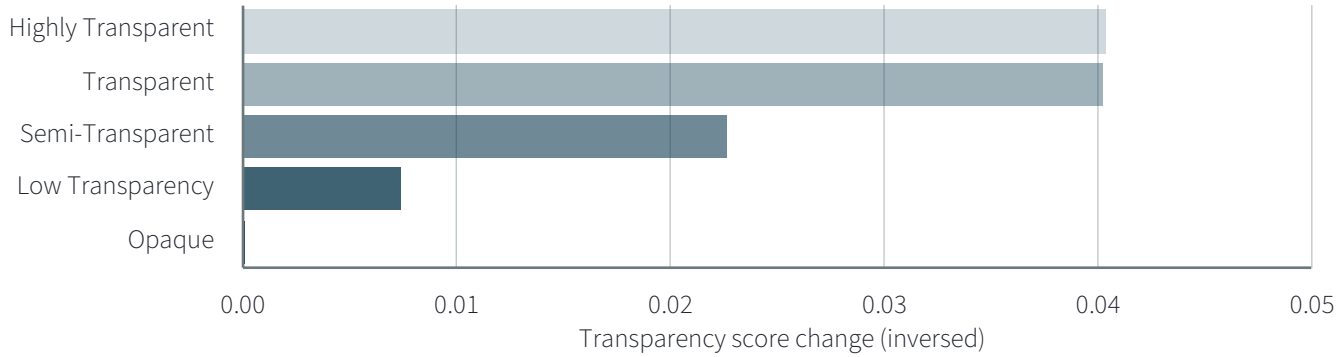
JLL's 2024 Global Real Estate Transparency Index shows that transparency has improved across the majority of countries and territories, but the top group of 'Highly Transparent' markets have registered the strongest progress and continue to pull away from the rest. The UK maintains its position at the top of the rankings, while a combination of measures including cutting-edge technology integration, enhanced sustainability regulations and reporting, granular data availability and digital service provision have contributed to the U.S., Canada, France and Australia all joining the list of top improvers.

Over 80% of real estate investment globally is allocated to highly transparent markets

The composition of the most transparent markets continues to shift away from the Anglophone markets. Following Japan's inclusion in the 'Highly Transparent' group in 2022, Singapore also enters the top tier for the first time, supported by higher sustainability standards and a focus on integrating technology and digital services through its Real Estate Industry Transformation Map and other initiatives.

The 'Highly Transparent' markets collectively account for over 50% of total income-producing real estate worldwide and more than 80% of direct investment globally. As we enter a new real estate cycle in 2024, those countries with the deepest understanding of market dynamics, greatest transparency around price discovery, broadest capital markets and largest potential for diversification will lead the recovery in real estate liquidity.

Transparency improvement by tier, 2022 – 2024



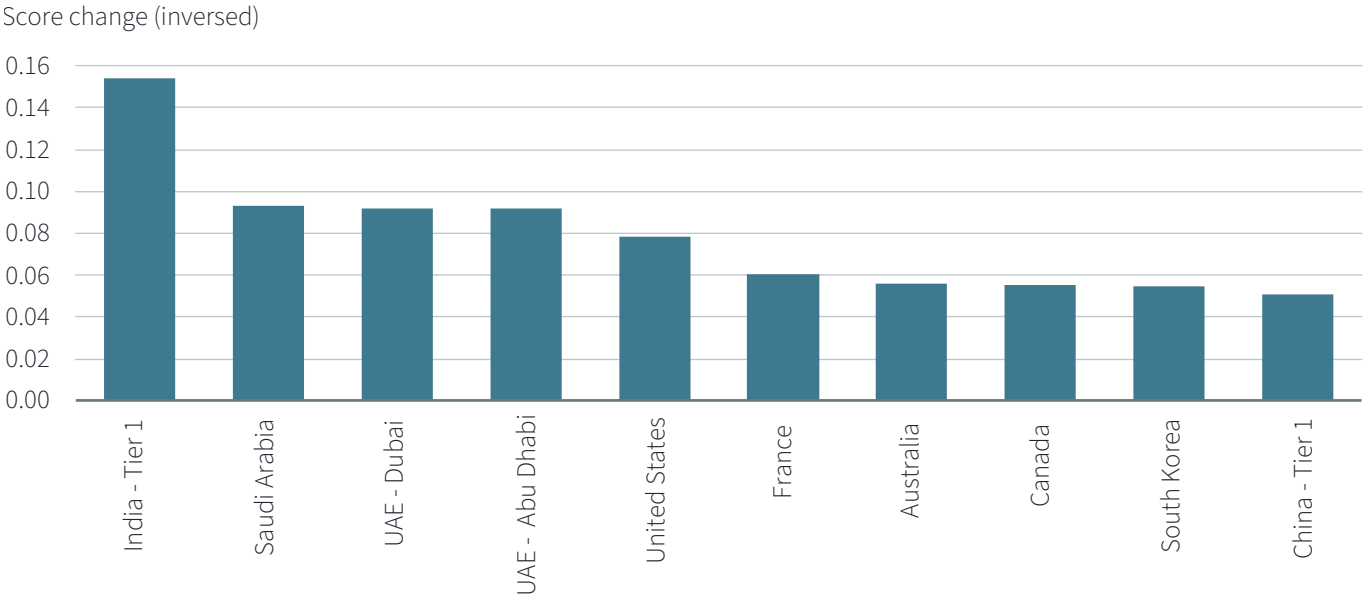
Source: JLL, LaSalle

Greatest regional progress across Asia Pacific

Countries in Asia Pacific have recorded the strongest average transparency improvements since 2022, led by the region's most transparent and largest markets. Singapore enters the 'Highly Transparent' group in 2024, while new ESG and climate disclosure requirements and construction standards, combined with deeper data availability for alternative property sectors, have also resulted in rising scores in Japan and Australia.

India is the top global improver, with greater data coverage and quality across both core and niche property sectors – ranging from industrial to data centers – as institutionalization in the market increases. A more proactive financial regulator, new climate risk disclosure guidelines, streamlined building regulations and digitized land records have also contributed to its leading cities entering the 'Transparent' tier.

Top global transparency improvers, 2022 – 2024



Source: JLL, LaSalle

South Korea is also among the largest improvers, supported by a growing REIT market and benchmarks from the Korean Appraisal Board, improved data availability – in particular for the office and industrial sectors – and new Zero-Energy Building (ZEB) regulations, while TCFD-aligned sustainability reporting is set to come into effect from next year.

The region's largest market, Mainland China, continues to deal with challenges in the property industry and wide disparities in transparency between cities. However, a new unified land registry system, diversifying investment landscape as the REIT and private equity fund regimes evolve, implementation of building energy efficiency requirements, progress towards mandatory ESG disclosure for large listed companies and improved market data have boosted transparency in its leading cities, Shanghai and Beijing.

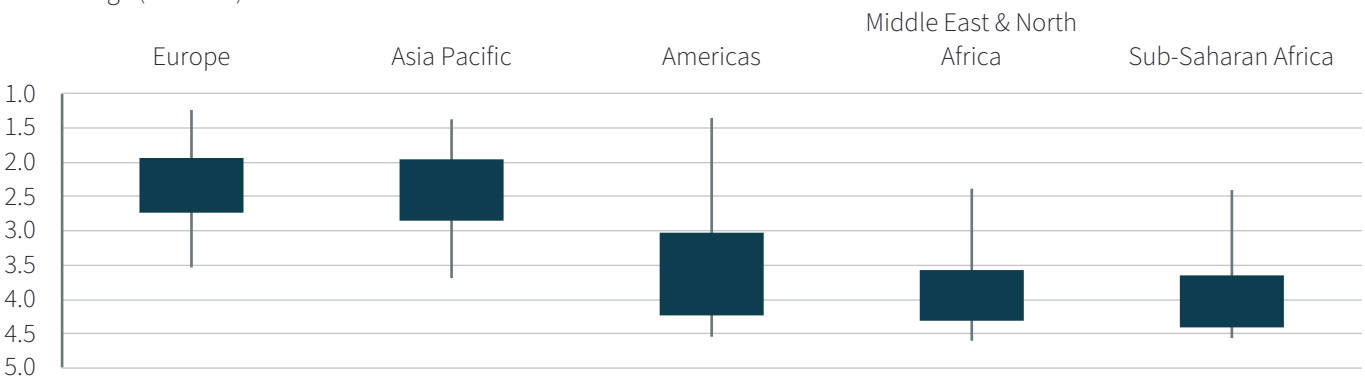
Europe tops the transparency rankings

Europe remains the most transparent region, with the EU driving further progress in sustainability standards – for example, through the revised Energy Performance of Buildings Directive (EPBD), which sets new minimum energy performance requirements and mandates global warming potential and whole life carbon reporting for buildings, together with publication of the EU Taxonomy and implementation of the Corporate Sustainability Reporting Directive (CSRD). France heads the Sustainability Sub-Index rankings; its new initiatives such as the PLU Bioclimatique regulations in Paris – introducing mandatory biodiversity protection and restoration – as well as the Operat platform for reporting building-level energy use, combined with enhanced data on alternative property sectors and real estate financing markets, have helped France join the group of leading improvers.

The UK has also increased its score at the top of the rankings, tightening up its beneficial ownership register through the Economic Crime and Corporate Transparency (ECCT) Bill, updating its Minimum Energy Efficiency Standards (MEES) Regulations, introducing new performance-based building standards and expanding the number of companies subject to TCFD-aligned reporting.

Transparency by region, 2024

Score range (inversed)



Source: JLL, LaSalle

Government initiatives boost transparency in UAE and Saudi Arabia

In the MENA region, Saudi Arabia as well as the UAE markets of Dubai and Abu Dhabi all rank among the top global improvers as they benefit from a government focus on market effectiveness. Higher transparency will play a key role in enabling some of the world's largest urban development projects that are underway in Saudi Arabia, and its score has been boosted by the formalization of the land registration system through the Real Estate Registry, public provision of digitized data on sales, leases and planning developments from the Real Estate Regulatory Authority, enhanced online services and deeper coverage of the market from data providers.

Dubai and Abu Dhabi have continued to enhance their data and service offerings through the Dubai REST and DARI (Abu Dhabi) platforms, with additional improvements in anti-money laundering legislation and greater availability of information from both established and start-up market providers.

Elsewhere in the MENA region, progress in transparency has been muted, with political and economic challenges resulting in a regression in several countries including Iraq and Lebanon.

Continued advances in top North American markets

While there is a range of transparency across markets in both countries, leading cities in the U.S. and Canada – such as New York and Toronto – are among the top improvers. New York has been one of the most proactive markets globally in setting aggressive building emissions performance standards, which took effect this year, and it also benefits from national measures such as the Corporate Transparency Act, which is resulting in new beneficial ownership disclosure requirements and anti-money laundering rules for real estate agents, and the expansion of data coverage by a range of providers across emerging asset classes and debt markets.

In Canada, data for both core and alternative sectors has continued to deepen, while the national government's move towards TCFD-aligned company reporting and a beneficial ownership registry have been supplemented with new building emissions disclosure rules in markets like Montreal and Vancouver.

New York and Toronto are among the world's most improved cities

Transparency improvements elsewhere in the Americas have been limited. Although a few major markets such as Brazil and Mexico have continued to see deepening data availability, most other countries have recorded little change, and several in the lower tiers have seen their scores decline further.

Progress stalls across Sub-Saharan Africa

The Sub-Saharan Africa region has made the least progress in transparency, following largely stable results over the previous three editions of the Index. There have been some signs of improvement in select markets; for example, enhanced market data coverage and access in Kenya, Nigeria and Ghana, while Kenya's Real Estate Regulation Bill will enhance oversight and accountability of real estate agents and developers. But most countries have registered minimal change as limited legal and regulatory frameworks, governance challenges, a lack of urban infrastructure planning and management experience and barriers to institutional investment combine to hold back progress. With the region set to account for the largest share of new urban residents globally over the next decade, faster improvements in transparency will be crucial in supporting rapid, high-quality urban growth.

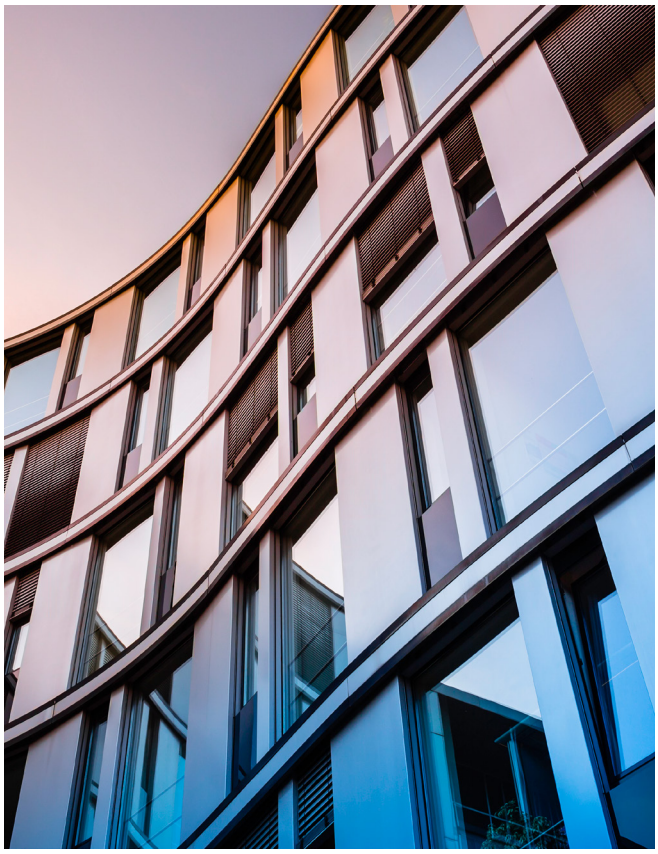
Key transparency themes to watch

An expanding real estate investment universe

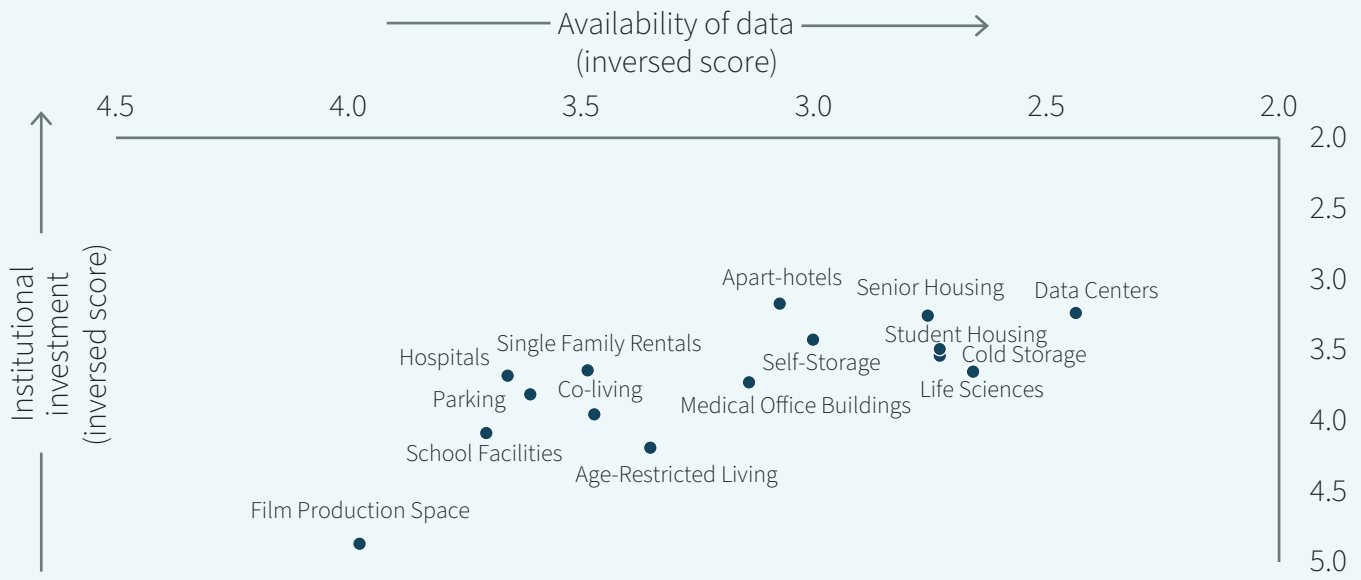
Diversification has been a consistent theme in real estate investment markets over the past decade, but the expansion of the investible universe is picking up pace. As demographic changes, technology integration, shifting supply chains and evolving occupier preferences redefine growth prospects across property types and introduce new emerging asset classes, investors are focused on identifying assets that will benefit most from these long-term themes. This is leading to a significant reallocation of capital; the share of global investment into the industrial and living sectors has risen from 29% ten years ago to account for 50% of global direct investment over the past year. Institutional capital is also increasingly active beyond the major property sectors, with direct investment in 'emerging' property types, ranging from healthcare facilities to cold storage or lab space, in over two-thirds of markets tracked within the 2024 Transparency Index.

The maturity of property types varies widely across geographies; for example, institutionally-managed multihousing is an established asset class in the U.S. but is still emerging in many markets across Europe and Asia Pacific. The scale of growth, though, is substantial. The living sector – encompassing multifamily / build to rent, student housing, senior housing and other high-growth sectors such as single-family rentals and affordable housing – is now the largest investible real estate sector globally and JLL expects US$1.4 trillion to be deployed into living strategies globally over the next five years. Data centers are another rapidly expanding investment target, with capacity expected to increase by over 20% a year through 2027.

Industrial and living now account for over 50% of global real estate investment



Institutional investment vs market data availability for emerging sectors



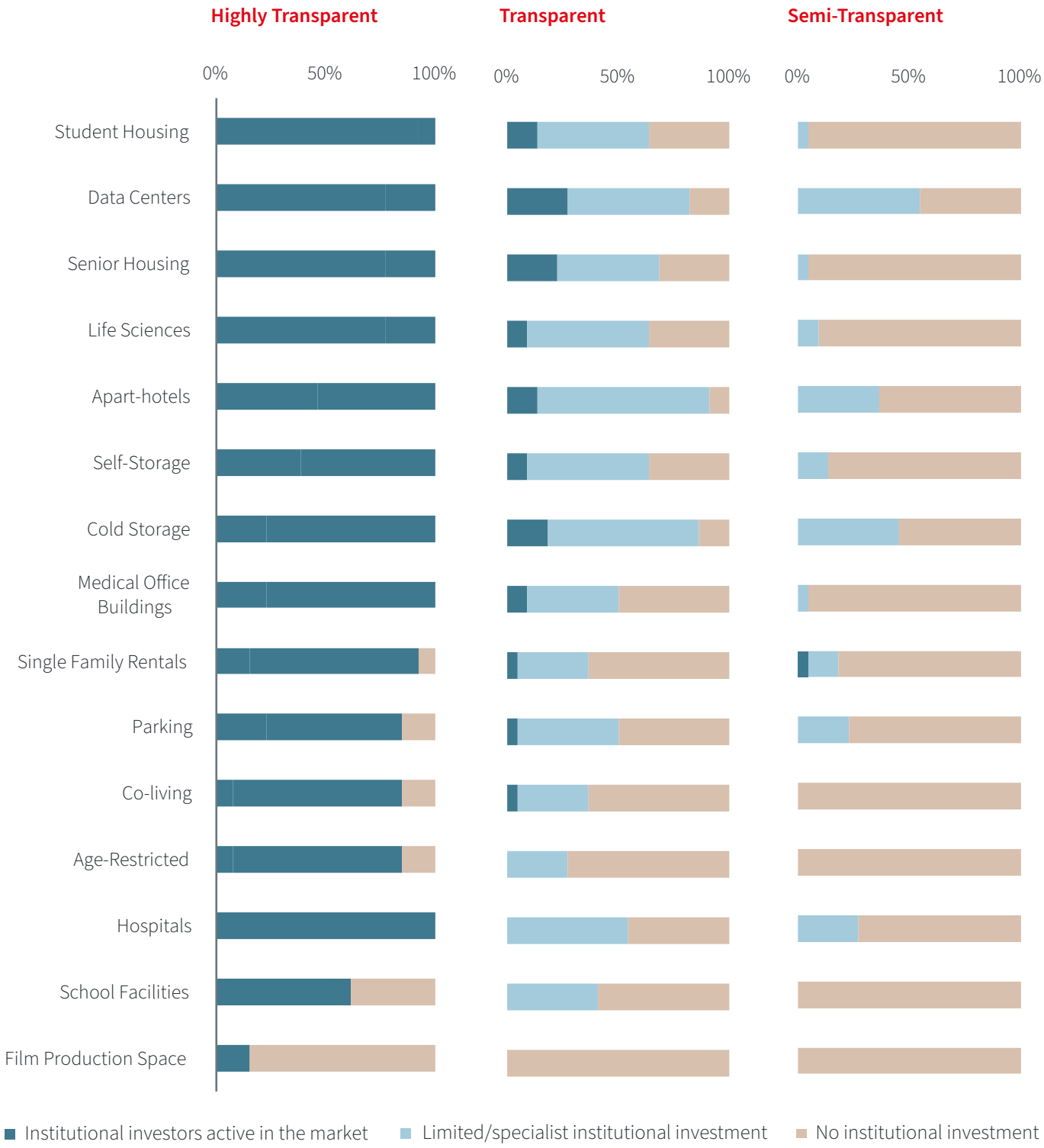
Source: JLL, LaSalle

While many of these emerging sectors are being gradually integrated into institutional portfolios in target markets, new opportunities are also continuing to emerge. As many cities and companies shift to cleaner energy solutions, demand for renewable energy real estate assets has been on a significant upward trend. The surge in electric vehicle usage has also escalated a need for supporting infrastructure through a substantial expansion of public charging stations as well as investment in battery manufacturing facilities. And the growth of advanced manufacturing for robotics, automation and nanotechnology, among other industries, will increase demand for research & development and manufacturing facilities.

Transparency and information on operating and pricing fundamentals in many niche parts of the market is rising but remains considerably lower than in more established property types, with over one-third of markets lacking any reliable data outside the 'core' sectors. While institutional investors are selectively active in these sectors across a broad set of markets, the 'Highly Transparent' countries account for the majority of stock and highest-quality data, positioning them to capture an outsized share of diversification benefits.

Investors are increasingly targeting emerging real estate sectors

Institutional investment in emerging sectors by market transparency tier



Source: JLL, LaSalle

Many of these in-favor emerging asset types provide a range of benefits for institutional investors: they are exposed to long-term demand drivers, can be less correlated with economic cycles, provide diversification from traditional sectors, and may be less dependent on major lease events or tenants. But they are also typically more operationally intensive, and many are exposed to unique infrastructure or policy factors. Developing a broader understanding of how these interlinking factors are shaping prospects across sectors and markets will be key to identifying opportunity and minimizing risk as the investible universe continues to expand. There are several factors which will be increasingly important in enabling occupiers and investors to go beyond market data and understand relative growth trajectories:

Regulatory interventions, trade policy and incentives

Government policies are a primary driver for many of the fastest-growing emerging sectors, and occupiers and investors are having to navigate a shifting and more uncertain regulatory landscape. Legislation such as the Inflation Reduction Act (IRA) and the CHIPS and Science Act in the U.S.are currently expected to result in over US$470 billion in government incentives for clean energy and semiconductor manufacturing. Similar initiatives such as the EU's Green Deal Industrial Plan and Net Zero Industry Act, or investment programs in countries including China, Japan and Korea – combined with local-level incentive programs – are reshaping the global landscape for advanced manufacturing facilities and supply chains. At the same time, data localization requirements, which mandate local data storage and processing or put restrictions on data exports, are now in place in over 70% of countries and have implications for data center location decision-making and operational risk. And sustainability policies are driving growth in renewable energy assets but will also lead to significant – and differentiated– changes in building operations across markets and sectors as net zero carbon rules and reporting mandates come into effect.

In-depth understanding of operating models

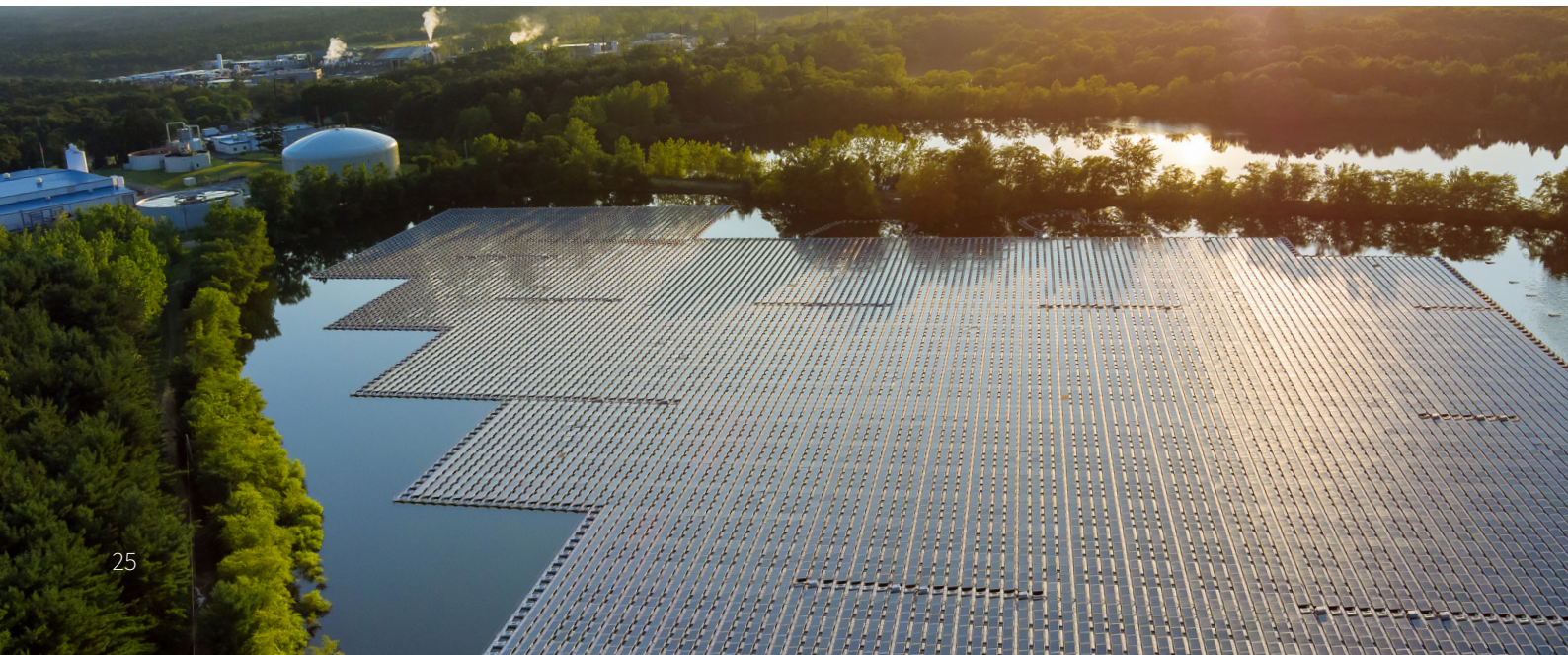
Many emerging asset types require a high degree of operational intensity and expertise. This can be due to shorter lease lengths and higher turnover, as in living sectors like student housing and co-living, or technical building functionality as in wet lab space or data centers.

A detailed understanding of the different operating models across sectors, including management skill sets needed, obsolescence risk and capex requirements, is essential to identifying the best opportunities and management structure.

Transparency of planning processes and infrastructure provision

Available inventory is limited for many emerging sectors, compounded by 'crowding-in' as occupiers and investors seek growth markets. Companies are turning to forward-funding, JVs and direct development to access stock, but planning and infrastructure provision will play a vital role in facilitating growth. Power supply is a critical consideration for data center operators as well as manufacturing facilities; for example, struggles to match soaring power consumption in data center hubs like Northern Virginia, Singapore and Ireland highlight the importance of government transparency around infrastructure planning and are contributing to a growing focus by operators on renewable energy provision as well as a rapid expansion in capacity across less energy-constrained secondary markets such as Salt Lake City, Milan and Melbourne.

Growing interest in emerging sectors will increase demand for greater transparency

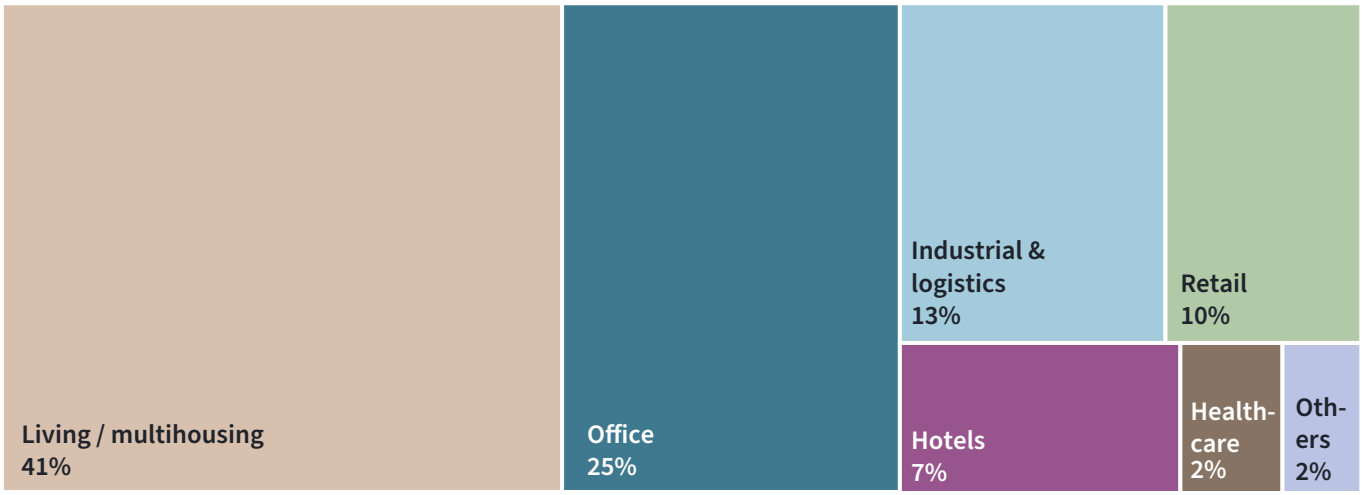


Debt markets in the spotlight

The fastest interest-rate tightening cycle in decades has highlighted the relative lack of transparency in many markets around real estate debt and financing, as a wave of loan maturities come up for refinancing and more investors diversify into credit strategies.

JLL projects that U$3.1 trillion of real estate assets globally have maturing debt over 2024 and 2025, with US$2.1 trillion of debt which will need refinancing – approximately 30% of which has been completed over the first six months of 2024.

Share of upcoming global loan maturities



Source: JLL, LaSalle

Commercial real estate lending has historically been dominated by regulated banks with stringent reporting requirements in many markets, and central banks are a primary source of information on credit flows. But the lender landscape is broadening, with new sources of credit including debt funds, pensions and insurance companies increasingly complementing traditional sources of finance as the higher interest rate environment boosts the relative appeal of credit strategies – for example, investors have raised US$129 billion across 411 closed-end debt funds since 2020.

This diversification is resulting in a more balanced market, as private credit providers are able to step in where regulations or appetite may limit the ability of banks to lend, while offering solutions across the capital stack and risk spectrum through mezzanine financing, rescue capital or other structures.

However, more limited reporting requirements for non-bank lenders has raised concerns from regulatory authorities about a lack of clarity around the total amount of outstanding debt, trends in new issuance

and financing rates, and the relative performance of credit strategies in many markets. The U.S. accounts for some 77% of outstanding real estate loans globally and has the greatest depth of information given the maturity of its real estate lending market, involvement of government agencies, public CMBS markets and multiple data providers tracking financing markets. Markets elsewhere, though, are less transparent in terms of debt market performance, and operational regulations can also be more complex – in Europe, for example, enforcement procedures are different across countries, resulting in significant time needed for lenders to research risks across jurisdictions and a focus on the largest markets.

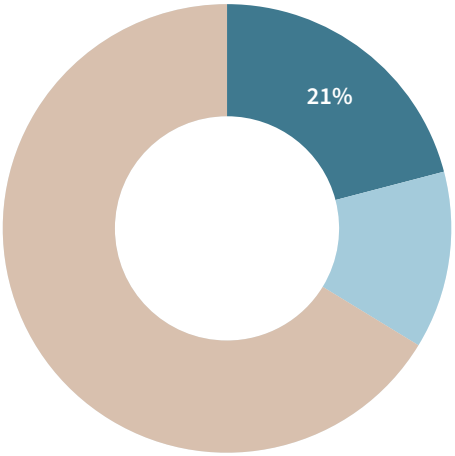
There have been a number of recent industry initiatives to improve visibility into market conditions For example, NCREIF and the CRE Finance Council (CREFC) have initiated a trial index in the U.S. to track the performance of open-end debt funds, MSCI has released an inaugural private debt fund index in Europe, and published surveys and data on lending markets and financing terms have been initiated or expanded in several countries including France and Germany. Even so, with an estimated global refinancing gap of between US$270-US$570 billion through 2025 – depending on the extent of capital value changes at loan maturity – the transparency of real estate debt markets will be increasingly in focus for monetary authorities, lenders and investors around the world as the level of upcoming loan maturities rises and repricing dynamics diverge across market and sectors.

US$2.1 trillion of real estate debt will need refinancing over 2024 and 2025

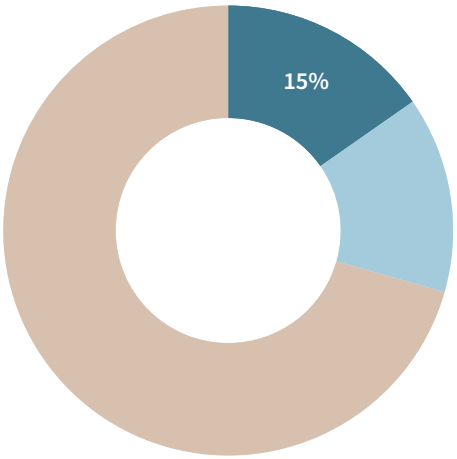
Commercial real estate debt market data availability

Share of markets

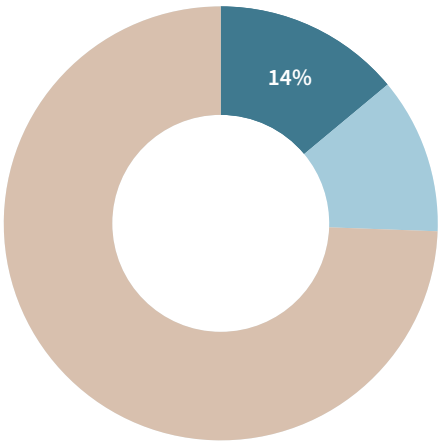
Commercial real estate debt



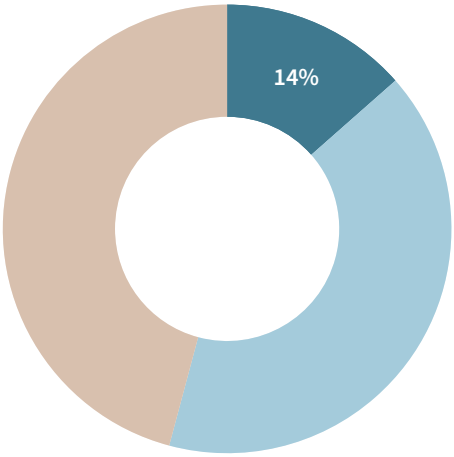
Maturities & originations



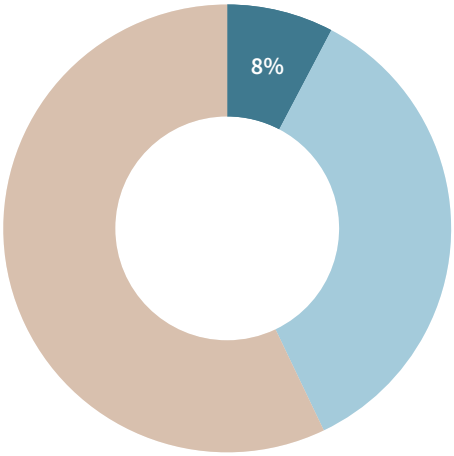
Delinquency & default rates



Maximum & typical LTV



Average lending margins



Published time series

Partial data availability

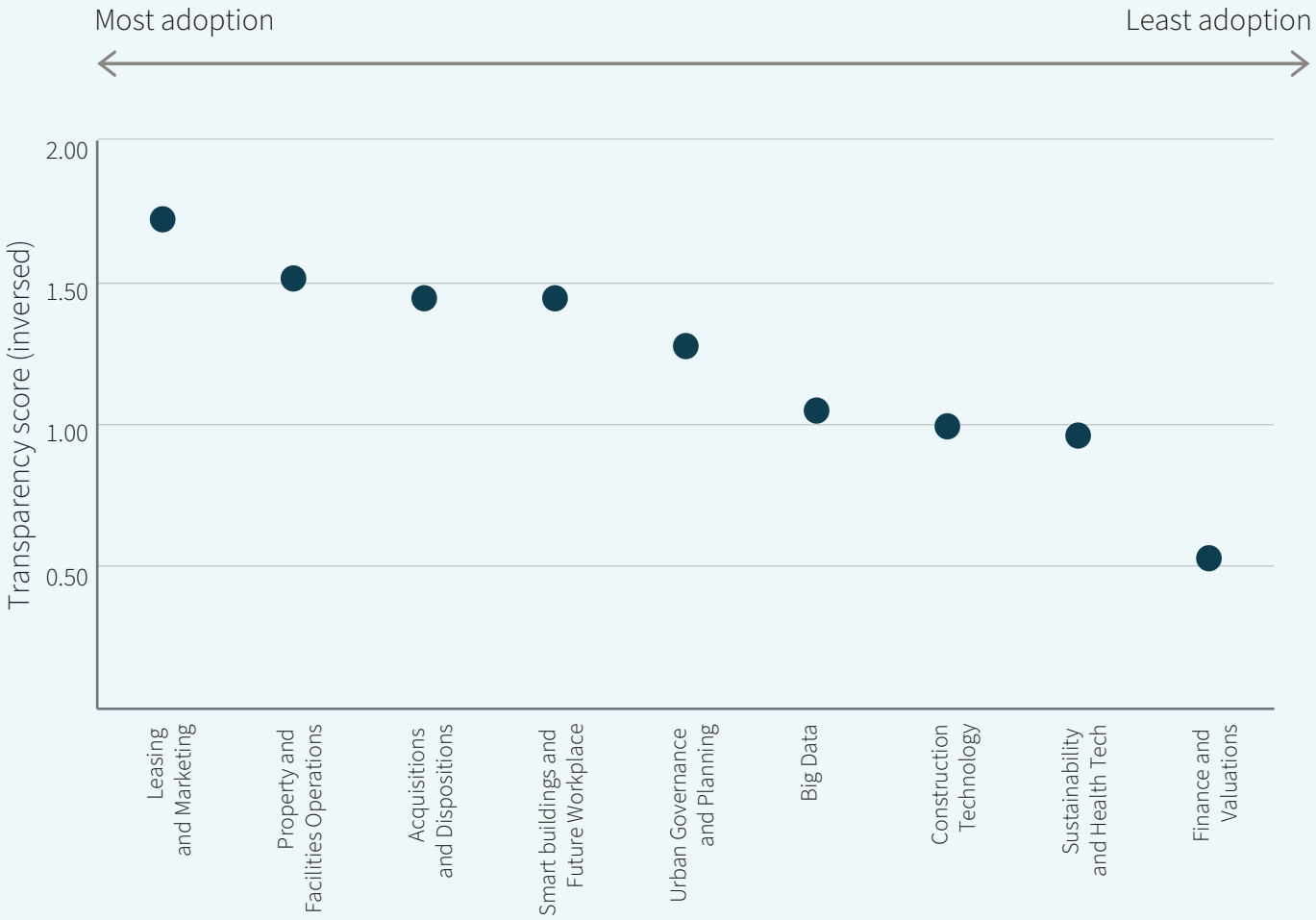
Limited / no data

Source: JLL, LaSalle

Digitization and AI push the boundaries of transparency but raise new risks

Technology has continued to play a leading role in boosting transparency across markets. Government adoption of digital services has accelerated as more countries move records online, create integrated digital platforms to collate and publish information, and use more advanced technical architecture. The 'Digital India' initiative is a notable example that has made significant progress, while governments in Dubai, Saudi Arabia, Greece and Germany have all improved access to land information or urban planning systems. Singapore has been particularly proactive through its Real Estate Transformation Map, which is focused on technology adoption and skills, and is implementing a range of programs including one-stop developer portals, integration of Building Information Modeling (BIM) in approvals processes, and utilization of modeling and simulation to improve urban planning and design.

Adoption of technology tools, 2024



Source: JLL, LaSalle

The most notable change in technology since 2022, however, has been the rapid spread of generative AI (GenAI) capabilities. Unlike classic analytical AI and machine learning algorithms, GenAI provides the ability to process unstructured data and generate text, images, audio and video. This makes it easier to integrate alternative data sources in the investment modeling process. It also provides a new way of interacting with data; for example, through chatting and asking questions instead of writing code to query data or compile reports. AI adoption remains at a relatively early stage across the industry, but the use cases for both GenAI and classic AI are expanding rapidly and touch on nearly every aspect of the building life cycle. More than 500 companies are currently providing real estate-specific AI services, and many other organizations are using existing foundational models or fine-tuning AI tools with their own data.

There are a range of uses where AI is already being applied in the market and boosting transparency. At an early level, this includes translating or summarizing documents and data – for example, reviewing lease contracts or financing documents to extract information for lease administration, due diligence or analytics. At a more advanced level, AI tools are being used to automate workflows and reporting; for instance, collating and structuring data for sustainability reports and generating the final documents. They are also being used in visualization and BIM, aiding developers to generate architectural and engineering plans in line with decarbonization requirements. Governments are increasingly developing AI adoption strategies as well, helping companies navigate planning processes, speeding up land registry systems, performing geospatial analysis and monitoring infrastructure performance.

Early adopters are seeing AI push the boundaries of market analytics and building performance, in particular through advanced analytics, helping to sort through and analyze unstructured data, and generate forecasts and recommendations. This includes using Automated Valuation Models (AVMs), clustering or recommendation engines to streamline loan monitoring for lenders or identify potential locations that match tenant or investor criteria – JLL's AI platform, for example, is involved in identifying one in five capital markets opportunities worldwide. These use cases still need manual oversight, but the rapid pricing adjustments and uncertainty over the last year highlight the value of combining AI with carefully curated data and human judgment to uncover early signals of market dynamics and opportunities. In transparent markets where competition is most intense, AI will increasingly provide a differentiating advantage in speed and agility to market for investors, while in less transparent markets it will help to boost market information and liquidity over time.

AI use cases are expanding quickly

Market Analysis & Investment Decisions

Predictive analytics, market trend analysis, lead generation and risk assessment

Acquisition & Financing

Streamline due diligence, automate document analysis, capital matchmaking, optimize finance options, buyer identification

Development & Construction

Project management, design, optimize supply chain & resource allocation, compliance adherence, automate workflows

Leasing & Tenant Management

Dynamic pricing, predictive rent retention, automated service requests, tenant experience, personalized communications

Disposals

Optimized sell window, market readiness tuning, buyer & market profile analysis and customization

Asset Management

Performance monitoring, market positioning, visibility and reporting, risk monitoring, debt management/hedging

Operations & Maintenance

Energy optimization & management, predictive maintenance, efficient operations

Workplace Experience

Occupancy optimization, personalized environment control, health and well-being

Source: JLL, LaSalle

Even though AI holds huge potential for boosting productivity and transparency across the industry, many organizations are struggling to implement or scale its use. Extracting full value from GenAI models in particular requires a sizable effort and investment in creating the right architecture and governance to capture standardized data that can be fed into models, something that most companies – and governments – are still lacking. Questions are also being asked about the transparency of AI models themselves, while awareness of data and privacy risks is rising.

Regulations on the development, functionality and use of AI models are hitting a milestone in 2024 as they are implemented in countries around the world, raising additional legal and compliance concerns. Following the U.S. Executive Order on AI at the end of October 2023 – the world's first AI law – the EU AI Act has recently been approved, and countries including China, Canada and Australia are advancing their own legislative efforts. In addition to overarching AI regulations, new rules are being drawn up targeting specific real estate tools and use cases. For instance, regulations around AVMs and appraisal standards are being implemented in the U.S. and EU, while the International Valuation Standards Council (IVSC) will shortly be releasing new AVM standards.

Although these developments promise increased transparency in model training and functionality, AI users will need to carefully monitor the solutions they are implementing. Key steps that companies and governments can take to navigate risks, develop their AI capabilities and realize the benefits of AI in enhancing productivity and transparency include:

Identify where AI can add tangible value

Determining where AI capabilities can add value through automation or enhanced decision-making and prioritizing in line with wider business objectives is a foundational step in creating an effective AI strategy. Start with low-risk use cases such as internal tools, and assess how other workflows and parts of your operating model can be redesigned.

Monitor the rapidly changing regulatory environment and embed risk management

Regulations governing AI model development and uses will continue to evolve; most obligations currently fall on AI developers rather than users, but ensuring compliance by any third-party providers as well as internal tools will be essential. Failure to do so could result in fines, liabilities, or even criminal penalties, while some AI use cases such as price-optimization algorithms could violate price-fixing rules or real estate industry regulations including fair housing laws and antitrust regulations. Ensuring data security and privacy, particularly when using proprietary data, will also be essential and can be mitigated by taking steps including establishing a robust data governance framework, employing 'sandbox' environments to test out new tools, and setting up responsible use policies and training programs.

Invest in proprietary data and technical architecture

Training AI models with proprietary data that is specific to your company and the individual use case is necessary to generate useful results. This requires collating and structuring data in a usable format and utilizing the appropriate technical infrastructure. Much real estate information is currently held in analogue formats like PDF documents, in spreadsheets or in siloed applications, while even accessible information may not be interoperable between service providers or programs. Creating the right data management systems can be a time-consuming process, but progress is being made in specifying common data formats – for example, through the OSCRE Industry Data Model – and organizations that are able to accomplish this step will be best positioned to utilize the full spectrum of AI capabilities.

Sustainability transparency accelerating as reporting and risk requirements reach a critical stage

The most significant progress in transparency since 2022 has been made in the Sustainability components of the survey, as the top markets lead a shift to more performance-based building requirements, in-use emissions tracking and climate risk disclosure, while also broadening standards that go beyond decarbonization to include targets for nature-based solutions and biodiversity.

France, Japan and the U.S.'s leading markets like New York head the Sustainability rankings as they implement energy performance requirements for existing and new buildings, property-level energy use reporting, and biodiversity protection and restoration. The UK, Australia, Canada, Netherlands, New Zealand, Denmark and Sweden complete the top 10.

Sustainability Sub-Index, Top 10

2024 Rank	Market	2024 Score
1	France (Paris)	1.27
2	Japan (Tokyo)	1.91
3	United States (New York)	2.00
4	United Kingdom (London)	2.09
5	Australia (Sydney)	2.14
6=	Canada (Toronto)	2.41
6=	Netherlands (Amsterdam)	2.41
8=	New Zealand (Auckland)	2.50
8=	Denmark (Copenhagen)	2.50
10	Sweden (Stockholm)	2.55

Source: JLL, LaSalle

Sustainability transparency is set accelerate over the next two years as new or expanded requirements for companies to disclose their emissions and climate risks are implemented across many of the world's largest economies, including the U.S., EU, UK, China, Japan, Korea, Canada and Australia. These measures will lead to a substantial increase in the number of companies with mandatory ESG reporting requirements – for example, the EU's Corporate Sustainability Reporting Directive (CSRD) will cover approximately 50,000 companies across the bloc, compared to 11,000 for its predecessor, the Non-Financial Reporting Directive (NFRD), and will also mandate reporting by organizations based outside the region but which have significant operations there.

Policy directly requiring emissions reductions from buildings is also ramping up. For instance, over 40 U.S. cities have committed to passing a Building Performance Standard (BPS), requiring building energy use or emissions reductions by 2026 or earlier. The EU is also developing minimum energy performance standards to reduce the emissions and energy use of buildings, while Tokyo's cap-and-trade scheme requires buildings to meet emissions reductions targets through energy efficiency measures or a credit purchasing scheme.

But despite this steady improvement, sustainability metrics continue to lag and remain the lowest scoring within the survey on average. Mandatory building performance standards, public disclosure of actual property-level energy use, climate risk reporting, biodiversity requirements and planning for greater resilience are all still limited beyond the most transparent markets. Against this backdrop, JLL estimates that the rate of building decarbonization retrofits will need to triple from current rates to align with net zero carbon (NZC) pathways, while demand for green buildings is significantly outstripping demand – as an example, only 30% of demand for low carbon office space in the major global markets is likely to be met by 2030. Sustainability transparency will need to increase faster to put the industry on track for its 2030 targets, and those markets with the clearest long-term pathway to more sustainable real estate will offer the most attractive environment for companies, investors and citizens. As sustainability factors become embedded in occupier and investor decision-making and drive location and investment decisions, lagging markets will need to speed up their adoption of higher standards to remain competitive.

Paris is the world's most transparent city when it comes to real estate sustainability

We expect transparency – and the need for actions by corporations, investors and governments – to accelerate across three key areas in particular over the next two years:

Mandatory ESG reporting

As ESG reporting mandates are implemented across the majority of the world's largest economies, companies will have to contend with an increasingly complex and detailed variety of reporting regimes and metrics. While many large organizations are already committed to some form of sustainability reporting, we have reached a critical juncture where companies will need to assess their obligations across all of the jurisdictions in which they operate, establish a long-term plan to formalize their measurement methodologies and continuously track progress against more stringent non-financial metrics, including scope 3 emissions through the value chain. There are signs of progress towards greater harmonization, with many countries planning to align their public ESG reporting with International Sustainability Standards Board (ISSB) requirements, which build on the Task Force on Climate-Related Financial Disclosures (TCFD) framework. Nonetheless, notable differences in scope, metrics and targets remain between several of the largest reporting standards. Companies will need to plan ahead now to identify the different reporting standards they are exposed to, carry out materiality assessments, specify sustainability targets, and put in place the ability to measure, verify and improve their emissions performance.

Increasing focus on asset-level disclosure and in-use performance standards

The measurement of real-world emissions from individual properties is becoming a priority as governments progressively transition towards whole life carbon calculations and in-use net zero building (NZB) requirements. The U.S. announced its definition of a Zero Emissions Building in June 2024, while a number of other countries including the UK, France and Sweden are currently finalizing their own NZB standards. These definitions will provide a more consistent and measurable basis for zero emissions buildings and respond to industry calls for a unified framework. With greater clarity around NZB performance and more data available, occupiers will be better equipped to understand where a building sits on its decarbonization pathway and integrate these factors into site selection decisions. The transparency and comparability

of performance data and standards – many of which remain inconsistent – will take on greater urgency. Building owners and developers will need to map out decarbonization strategies aligned with these NZC pathways for their assets and portfolios, invest in technologies to measure and manage emissions, and be prepared to report or provide their space-level emissions to tenants and governments.

Enabling resilience and adaptation

With the frequency and severity of extreme weather events increasing, ensuring cities and buildings are able to withstand climate changes is rising in importance. The growing focus on raising biodiversity standards and nature-based solutions in urban planning will help to mitigate some aspects of climate impacts, but examples of detailed urban planning incorporating climate risk, or revising building codes to take into account forecast changes to heat, precipitation or flooding, remain limited globally. This will necessitate greater effort from investors and occupiers to review their physical and transition risk exposure, include climate risk data and local infrastructure defenses into their location decision-making, and develop asset-level resiliency planning that reflects the impacts of higher temperatures or storm risk on building operations.

Money laundering and beneficial ownership regulations rising up the agenda

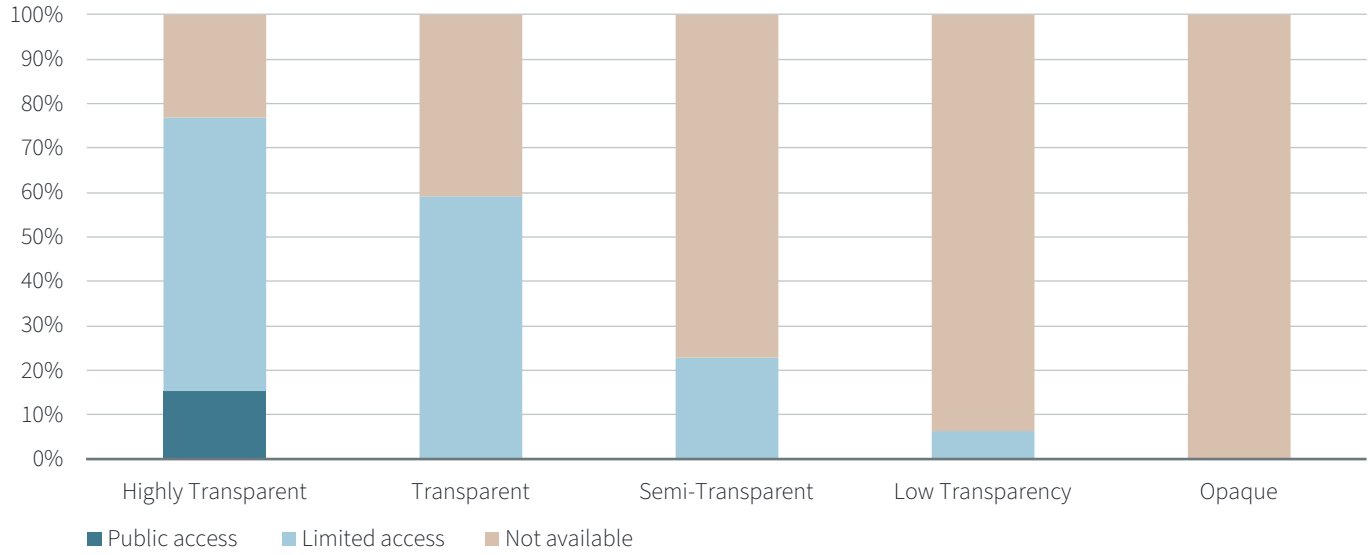
Ongoing sanctions regimes and updated guidance from the Financial Action Task Force (FATF) have maintained momentum for improving anti-money laundering (AML) and beneficial ownership (BO) regulations. A number of countries have introduced changes to AML or BO rules in recent years, including India, Indonesia, UAE and the U.S., where new beneficial ownership reporting regulations came into effect in 2024. Additional progress is underway in the U.S., with proposed tighter AML rules for real estate agents, as well as in Singapore, Switzerland, Canada, Australia and the EU, where the 6th Anti-Money Laundering directive will establish a new AML Authority and the EU Parliament is planning to create a BO register of all foreign entities that own real estate in the bloc.

Despite this progress, the effectiveness of existing regulations remains under scrutiny, with implementation and definitions often inconsistent and relatively easy to circumvent, for example through trust holdings or shell companies. In the EU, a judgment by the Court of Justice of the European Union (CJEU) annulling public access to BO registers has led to a patchwork of approaches across the region, while authorities in many countries find it difficult to verify the information submitted. The UK, which is the most open market globally in relation to beneficial ownership with publicly accessible registers for domestic companies, trusts and overseas entities owning property, has recently introduced measures to improve its ability to track and confirm the information it collects.

With significant differences in approach between even the most closely aligned markets, a wide gap is evident between tiers. 'Low Transparency' and 'Opaque' markets have made limited progress, and as geopolitical tensions and risk rise up the agenda, investors and corporations will increasingly gravitate towards markets with robust regulatory systems and lower reputational and financial risk.

Questions remain around the effectiveness of existing policies and enforcement practices

Availability of public beneficial ownership records by tier



Source: JLL, LaSalle

Retrospective and prospective reflections on the Transparency Index

Jacques Gordon
Executive in Residence
MIT Center for Real Estate

The Transparency Index was launched in 1999 as a tool to demonstrate the wide diversity of real estate practices around the world. The scoring system was designed to give cross-border stakeholders a way to be prepared for differences in information flows, investment and leasing processes, and regulatory regimes. The goal was not to discourage clients from operating in countries with low transparency scores. Instead, it emphasized the importance of managing transparency risk by gaining local knowledge and experience through local advisers. This approach also motivated JLL to introduce international practices in emerging markets, especially those that were of greatest interest to cross-border investors and occupiers.

Now, 25 years later, we can see how well this naïve approach worked. More than a dozen countries have earned the 'Transparent' designation and many others have moved from 'Opaque' or 'Low Transparency' ratings to 'Semi-Transparent'. This is especially remarkable given that the requirements to achieve a transparent rating are much more stringent today. New attributes have been added for energy reporting, sustainability factors, specialized property types and the role of technology. Thus, achieving a highly transparent, transparent or semi-transparent score in 2024 is much harder than it was in 1999.

The Index itself has perhaps played a role in this progression towards higher transparency. Over the years, a number of government ministries have consulted with JLL's global research team to find out how they could improve their international rankings. More importantly, the spread of consistent, transparent, international practices was driven by the rapid expansion of multinational occupiers and investors who required basic levels of market information and a clear understanding of property rights before entering new cities and countries.

In 2024, the accumulated knowledge of cross-border real estate experience is more easily accessed via online tools that use, for instance, artificial intelligence (AI), machine learning (ML) and data analytics. Language translation of leases and other contracts is now done routinely. Digital geomapping of streets and buildings is nearly universal in urban areas. Many

more land registration systems are digitized. In short, hard and soft data are much more easily accessed and new streams of real estate information come on line as each year passes.

The new challenge is how to process and understand all this data – Is it reliable? What's missing? Sometimes, the underlying drivers of change get lost amid the noise of real-time metadata. What biases are embedded in how the data is collected and disseminated? How can newcomers assess the differences in the legal and dispute resolution systems in a country? As energy usage and CO2 emissions data gets collected and reported, what will regulators do with this information? How are 'transition risks' assessed in different regulatory systems? These questions illustrate how higher levels of transparency do not eliminate volatility, even though they often reveal it.

In the 25 years since the Transparency Index was first launched, the real estate industry has moved from data scarcity to data abundance. Yet, all of this information has not prevented massive swings in values and rent levels. Cyclical and secular trends boost demand for specialized sectors while legacy property types struggle to stay relevant.

To summarize, a transparency index score or ranking is no substitute for learning a market through direct experience, transactions, and on-the-ground observation. However, it can be an excellent starting point to see what to expect when venturing into different countries or cities for the first time. What we wrote in the 2020 edition still rings true: "Even though investors and occupiers cross international borders routinely, local real estate practices around the world remain quite diverse. The Transparency Index highlights this diversity and helps practitioners prepare for it."

The Transparency Index's rising value for real estate education

Graduate programs of real estate education have become a somewhat unexpected, but important, user group for biennial Transparency Index reports. The rapid rise of real estate master's degrees around the world coincides with the last 25 years of producing the Index. Real estate education has become multinational in many respects. Students come from a wider diversity of countries and so do many of the instructors, compared to the 1990s. The top real estate textbooks have chapters devoted to 'international' topics, and the Transparency Index is frequently cited as a useful tool for quickly assessing how real estate markets in different countries operate.

Professors of real estate in Australia, Canada, France, Germany, Japan, Hong Kong, Netherlands, Singapore, the UK and the U.S. often assign Transparency Index reports as required reading. Transparency scores can be linked to lessons in the 'Weighted average cost of capital' (WACC) approach to risk analysis and to capital market asset pricing models. The Index doesn't tell a student everything they need to know to do a valuation or a return calculation for a property in an unfamiliar country. However, it helps them see what an investor or occupier would need to know before they decide to lease, own or invest.

The number of companies with operations in multiple countries has grown tremendously since 1999. Investment managers, corporate occupiers, retailers, supply chain managers, legal/financial service firms and construction companies all now use the Index to understand what the 'state of play' is in a particular country or city. Thus, students can also use the Index to demonstrate the cross-border skills that many employers are looking for in their future hiring decisions.

Transparency in tables and charts

Top 20 markets by transparency sub-index, 2024

Performance Measurement

Sub-Index Rank	Market	2024 Sub-Index Score	2024 Composite Score
1	United Kingdom	1.02	1.24
2	United States	1.09	1.34
3	Australia	1.13	1.37
4	France	1.26	1.26
5	Canada	1.54	1.49
6	Netherlands	1.55	1.49
7	Japan	1.59	1.83
8	New Zealand	1.85	1.59
9	Sweden	1.89	1.77
10	Switzerland	1.92	2.05
11	Germany	1.96	1.79
12	Hong Kong SAR	1.97	1.97
13	Belgium	2.08	1.84
14	Italy	2.13	2.12
15	Singapore	2.27	1.92
16	Finland	2.32	1.97
17	Spain	2.40	2.06
18	Ireland	2.43	1.72
19	South Africa	2.48	2.40
20	China – Tier 1	2.54	2.42

Market Fundamentals

Sub-Index Rank	Market	2024 Sub-Index Score	2024 Composite Score
1	United States	1.41	1.34
2=	Australia	1.64	1.37
2=	Canada	1.64	1.49
4	France	1.66	1.26
5	Hong Kong SAR	1.67	1.97
6=	Netherlands	1.72	1.49
6=	United Kingdom	1.72	1.24
8	China – Tier 1	1.76	2.42
9	Ireland	1.77	1.72
10	New Zealand	1.78	1.59
11	Singapore	1.87	1.92
12	Germany	1.98	1.79
13	Denmark	1.99	2.04
14	India – Tier 1	2.03	2.44
15	South Korea	2.05	2.35
16	Poland	2.06	2.13
17=	Belgium	2.14	1.84
17=	Finland	2.14	1.97
19	Italy	2.17	2.12
20	Spain	2.23	2.06

Source: JLL, LaSalle

Governance of Listed Vehicles

Sub-Index Rank	Market	2024 Sub-Index Score	2024 Composite Score
1=	United States	1.00	1.34
1=	Australia	1.00	1.37
1=	United Kingdom	1.00	1.24
1=	New Zealand	1.00	1.59
5	Ireland	1.05	1.72
6	Belgium	1.14	1.84
7	Canada	1.17	1.49
8	Netherlands	1.23	1.49
9	Sweden	1.30	1.77
10	France	1.34	1.26
11	Finland	1.35	1.97
12	Germany	1.45	1.79
13	Switzerland	1.60	2.05
14	UAE - Dubai	1.64	2.38
15	Singapore	1.71	1.92
16	Spain	1.74	2.06
17	South Africa	1.79	2.40
18	Czech Republic	1.87	2.27
19	Denmark	1.90	2.04
20	UAE - Abu Dhabi	1.94	2.87

Regulatory and Legal

Sub-Index Rank	Market	2024 Sub-Index Score	2024 Composite Score
1	United Kingdom	1.03	1.24
2	France	1.12	1.26
3	Sweden	1.20	1.77
4	Ireland	1.23	1.72
5	Canada	1.26	1.49
6	Netherlands	1.27	1.49
7	Denmark	1.31	2.04
8	United States	1.37	1.34
9	Poland	1.39	2.13
10	Australia	1.41	1.37
11	New Zealand	1.43	1.59
12	Japan	1.47	1.83
13	Germany	1.50	1.79
14=	Hong Kong SAR	1.57	1.97
14=	South Korea	1.57	2.35
16	Czech Republic	1.58	2.27
17	Singapore	1.66	1.92
18	Israel	1.67	2.79
19	Finland	1.71	1.97
20	Switzerland	1.74	2.05

Source: JLL, LaSalle

Transaction Process

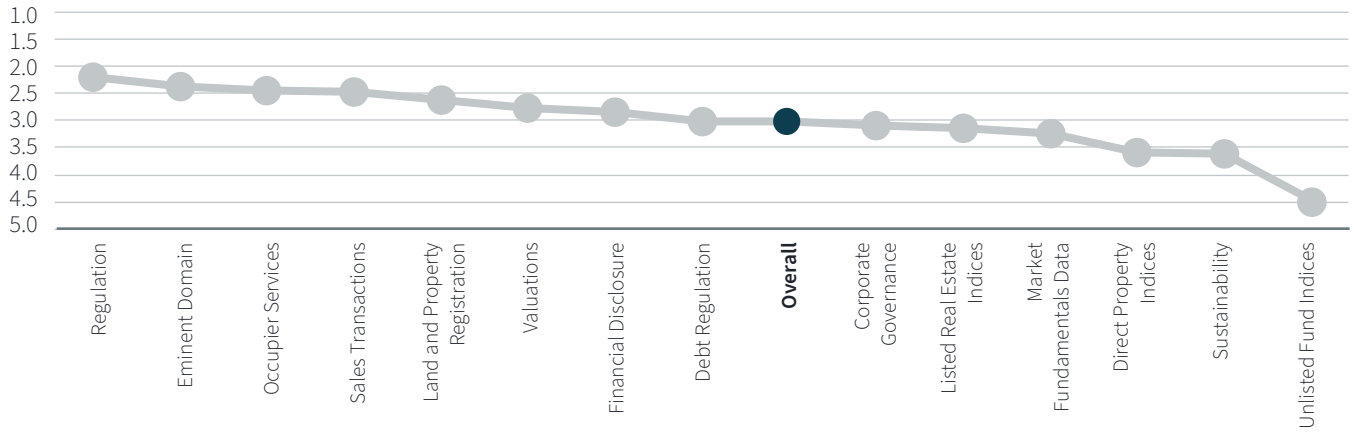
Sub-Index Rank	Market	2024 Sub-Index Score	2024 Composite Score
1=	France	1.00	1.26
1=	United Kingdom	1.00	1.24
1=	Ireland	1.00	1.72
1=	New Zealand	1.00	1.59
1=	Denmark	1.00	2.04
6	Netherlands	1.03	1.49
7	Belgium	1.10	1.84
8	Australia	1.13	1.37
9	Spain	1.17	2.06
10=	Canada	1.20	1.49
10=	Sweden	1.20	1.77
12	Portugal	1.23	2.30
13	Luxembourg	1.28	2.29
14=	Germany	1.30	1.79
14=	Italy	1.33	2.12
16	Czech Republic	1.35	2.27
17	Finland	1.37	1.97
18	Poland	1.40	2.13
19=	United States	1.45	1.34
19=	Norway	1.45	2.24

Sustainability

Sub-Index Rank	Market	2024 Sub-Index Score	2024 Composite Score
1=	France	1.27	1.26
2	Japan	1.91	1.83
3	United States	2.00	1.34
4	United Kingdom	2.09	1.24
5	Australia	2.14	1.37
6=	Netherlands	2.41	1.49
6=	Canada	2.41	1.49
8=	New Zealand	2.50	1.59
8=	Denmark	2.50	2.04
10	Sweden	2.55	1.77
11=	Belgium	2.64	1.84
11=	Singapore	2.64	1.92
13	Ireland	2.73	1.72
14=	Luxembourg	2.82	2.29
14=	Germany	2.82	1.79
14=	Italy	2.82	2.12
14=	Poland	2.82	2.13
14=	Norway	2.82	2.24
14=	Chinese Taipei	2.82	2.34
20	Switzerland	2.86	2.05

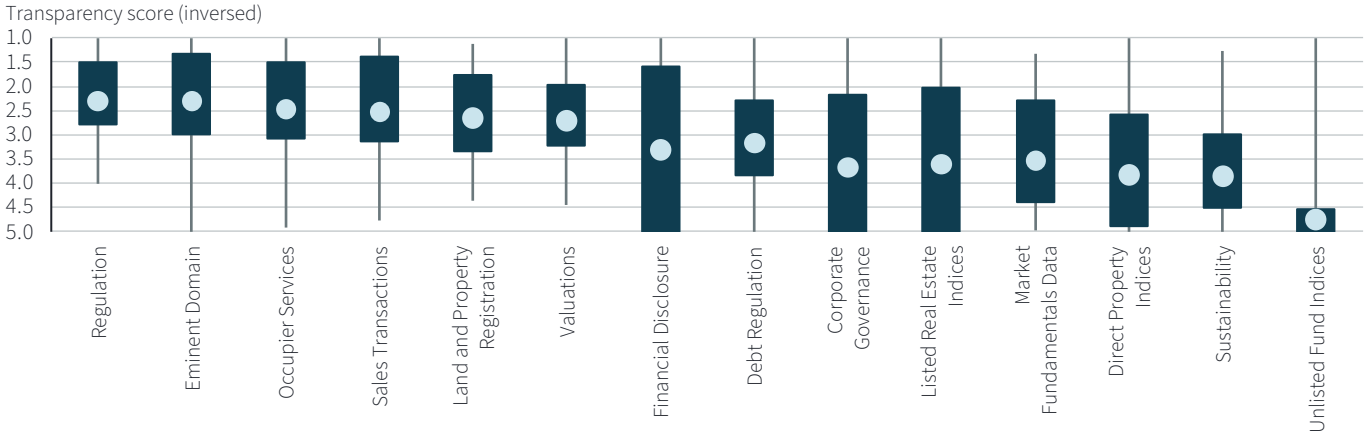
Source: JLL, LaSalle

Average score by topic area, 2024



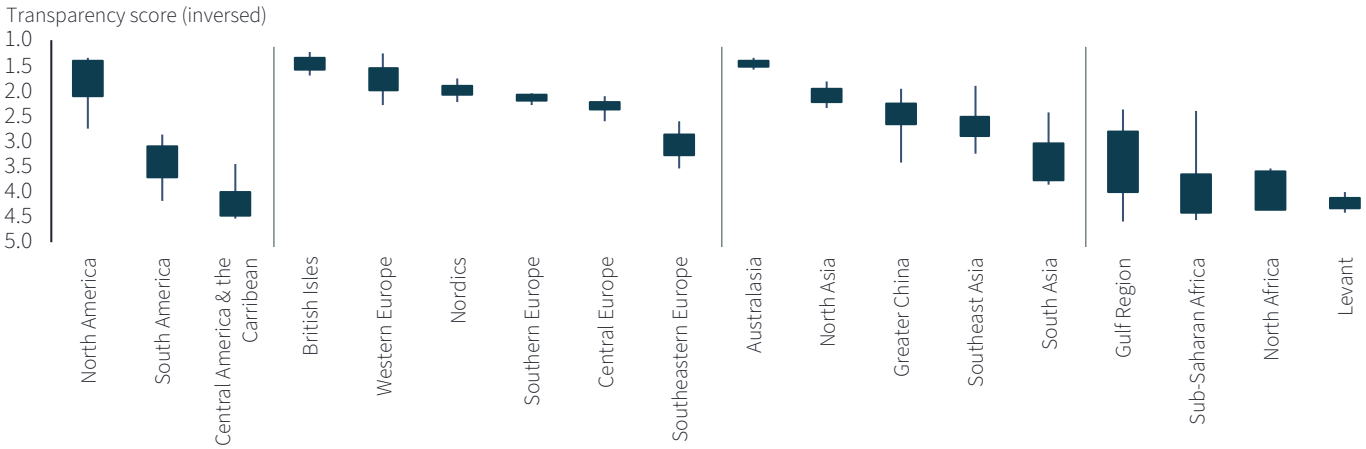
Source: JLL, LaSalle

Score range by topic area, 2024



Source: JLL, LaSalle

Score range by subregion, 2024



Source: JLL, LaSalle

Technical note

The Transparency Index

The JLL Global Real Estate Transparency Index is based on a combination of quantitative market data and information gathered through a survey of the global business network of JLL and LaSalle across 89 countries and territories and 151 city markets. For each market we use 256 separate factors, both quantitative datapoints and survey questions, to calculate the composite score. The survey data and quantitative measures complement each other. For instance, knowing the market coverage and length of a country's direct real estate index is only one half of the story; for a complete picture, we also gather qualitative data on whether investors actually trust and use the index. Local research teams, in consultation with business leaders and real estate professionals active in each market, complete the survey. A table summarizing the factors behind the Index is at the end of this note.

In the 2024 Index we have continued to break general questions into more specific, granular components. For example, we have revised the list of Sustainability topics covered with new questions on building energy reporting and benchmarking; prescriptive construction standards; energy performance standards; and climate risk reporting. These changes allow us to drill deeper into where markets differ and to reduce measurement error by making the overall scoring less reliant on any single factor.

Quantitative Factors

53 of the 256 scoring factors, accounting for 27% of the overall factor weighting, are quantitative. These quantitative factors, primarily added to the Index in 2012, include the number of years fundamentals' data series (like vacancy) have been available, the market coverage of property returns indices, and the free float of publicly listed real estate securities markets. We score most of these quantitative factors on a continuous scale from 1 to 5, with 1.00 indicating very high transparency. For datapoints on performance measurement indicators, such as the market coverage of property returns indices, we have set the top score of 1 equal to the 90th percentile observation in 2012. The cut-off thresholds to qualify as a 'Highly Transparent' market have been fixed at their 2012 level, so that markets can improve to higher tiers over time. For datapoints on market fundamentals data, like the length of a market's office vacancy series, we have set the top score of 1 equal to a time series of 30 years or more, which we view as the 'gold standard'.

Researchers at JLL and LaSalle have collected detailed data on the available market fundamentals' time-series for each of five property types: office, retail, industrial, residential and hotels. We have included all available data series, not only those produced by JLL. For national surveys, the market fundamentals data is based on conditions in the top-scoring city of each country.

Data on property-level returns indices is from MSCI, NCREIF and other industry associations. Data on publicly listed real estate comes from the European Public Real Estate Association (EPRA), Bloomberg, NAREIT and the LaSalle Investment Management Securities group. Fund-level index data is primarily from INREV, NCREIF, MSCI and ANREV.

Qualitative Survey Factors

The balance of the scoring factors, totaling 203 datapoints, are qualitative survey questions scored by local JLL and LaSalle teams. For each, local research teams are provided with a detailed rubric of five answer choices, ranging from 1 – most transparent – to 5 – opaque. Based on where their market fits within that rubric of options, local experts assign a score. Respondents consult JLL's local accounting, finance, asset management and legal experts to inform their responses to questions in those topic areas.

Scores within each region are then reviewed by regional and then global coordinators to ensure objectivity and rigor. Global and regional reviewers interrogate country teams' responses and challenge teams to justify changes in question scores from prior updates. The review process, high level of detail provided in the answer choices, and improved question granularity reduce subjective bias in scoring, and all contributors strive for impartiality in their responses.

Compiling the Transparency Index

We group the 256 individual transparency measures into 14 topic areas, summarized in the table at the end of this note. These topic areas are grouped and weighted into six broad sub-indices:

- Performance Measurement – **25%**
- Market Fundamentals – **16.5%**
- Governance of Listed Vehicles – **10%**
- Regulatory and Legal – **23.5%**
- Transaction Process – **15%**
- Sustainability – **10%**

The Transparency Index scores range on a scale from 1 to 5. A country or market with a perfect 1.00 score has total real estate transparency; a country with a 5.00 score has total real estate opacity. Markets are then assigned to one of five transparency tiers. The thresholds for these tiers are based on Jenks' Natural Breaks classification. 2012 scores are used to fix the thresholds, so that markets can move between tiers as transparency changes over time, even if their relative position does not change. This algorithm finds the cut-offs that minimize within-group variance and maximize between-group differences. We create 10 groups using this method and then aggregate them into five tiers with the following thresholds:

Tier 1: Highly Transparent	Total Composite Score: **1.00–1.96**
Tier 2: Transparent	Total Composite Score: **1.97–2.65**
Tier 3: Semi-Transparent	Total Composite Score: **2.66–3.50**
Tier 4: Low Transparency	Total Composite Score: **3.51–4.16**
Tier 5: Opaque	Total Composite Score: **4.17–5.00**

Transparency Index Time Series

2024 marks the 13th edition of the JLL Global Real Estate Transparency Index. Since its inception in 1999, the Index has evolved and been refined to reflect the changing demands of cross-border investors and corporate occupiers. Factors added over time have been included historically where available. Where no historic data is available, we have extended back data from the edition in which a factor was added so that changes in the new factors do not drive movement in the historic scores.

Factor Comparison	No. of Factors 2012	No. of Factors 2014	No. of Factors 2016	No. of Factors 2018	No. of Factors 2020	No. of Factors 2022	No. of Factors 2024
Direct Property Indices	5	6	6	9	9	12	12
Listed Real Estate Securities Indices	5	6	6	6	6	6	6
Unlisted Fund Indices	2	3	3	5	5	5	5
Valuations	2	4	4	5	5	5	6
Market Fundamentals Data	47	47	68	94	110	151	150
Financial Disclosure	2	4	4	5	5	5	5
Corporate Governance	2	3	4	4	4	4	4
Regulation	6	13	13	13	13	13	14
Land and Property Registration	3	7	7	9	9	9	9
Eminent Domain	2	3	3	3	3	3	3
Debt Regulations	2	7	8	8	8	8	8
Sales Transactions	3	5	5	9	9	9	9
Occupier Services	2	6	7	9	9	11	11
Sustainability	0	0	0	7	13	13	14

Sub-Index	14 Topics	Factors (256 Total)
Performance Measurement	Direct Property Indices	Existence of Direct Property Index
		Reliability of the Index and Extent to which it is Used as a Benchmark of Performance
	Listed Real Estate Securities Indices	Type of Index (Valuation Based vs. Notional)
		Length of National Direct Property-Level Returns Index Time Series
	Private Real Estate Fund Indices	Size of National Institutional Invested Real Estate Market
		Market Coverage of Direct Property Index
	Valuations	Length of City-Level Direct Property Returns Index Time Series
		City-Level Private Real Estate Index Publication Frequency
		Size of City Institutional Invested Real Estate Market
		Dominant Type of Listed RE Securities (i.e. long-term holders of real estate vs. homebuilders and conglomerates)
		Use of Listed Real Estate Securities Data on the real estate market
		Years Since the First Commercial Real Estate Company was Listed
		Value of Public Real Estate Companies as % of GDP
		Existence of a Domestic Listed Real Estate Index and Its Use as a Benchmark
		Existence of an International Listed Real Estate Index and Its Use as a Benchmark
		Length of Public Real Estate Index Time Series
		Existence of a Domestic Fund Index and Its Use as a Benchmark
		Existence of International Fund Index and Its Use as a Benchmark
		Length of Unlisted Fund Index Time Series
		Existence of Unlisted Fund Indices for Distinct Investment Styles (i.e. core vs. higher-return)
		Independence and Quality of Third-Party Appraisals
		Use of Market-based Appraisal Approaches
		Competition in the Market for Valuation Services
		Incorporation of ESG Risk into Valuation Processes
		Frequency of Third Party Real Estate Appraisals
		Availability of Appraisal Assumptions

Sub-Index	14 Topics	Factors (256 Total)
Market Fundamentals	Market Fundamentals Data	Existence and Length of Time Series on Property Rents (Office, Retail, Industrial, and Residential)
		Existence and Length of Time Series on Net Effective Rents (Office, Retail, Industrial, and Residential)
		Existence and Length of Time Series on Take-up/Absorption (Office, Retail, Industrial, and Residential)
		Existence and Length of Time Series on Vacancy (Office, Retail, Industrial, and Residential)
		Existence and Length of Time Series on Yields/Cap Rates (Office, Retail, Industrial, Residential, and Hotels)
		Existence and Length of Time Series on Capital Values (Office, Retail, Industrial, Residential, and Hotels)
		Existence and Length of Time Series on Investment Volumes (Office, Retail, Industrial, Residential, and Hotels)
		Existence and Length of Time Series on Revenue per Available Room for Hotels
		Depth of Data Providers for Time Series Data (Office, Retail, Industrial, Residential, and Hotels)
		Frequency of Publication of Time Series Data (Office, Retail, Industrial, Residential, and Hotels)
		Availability of Data on Office Re-Entry / Physical Occupancy
		Existence and Geographical Coverage of a Database of Individual Buildings (Office, Retail, Industrial, Residential, Hotels)
		Existence and Geographical Coverage of a Database of Leases (Office, Retail, Industrial, Residential, Hotels)
		Existence and Geographical Coverage of a Database of Property Transactions (Office, Retail, Industrial, Residential, Hotels)
		Existence and Geographical Coverage of a Database of Rental Deal Terms (Office, Retail, Industrial, Residential, Hotels)
		Proportional Coverage of Databases of Individual Buildings (Office, Retail, Industrial, Residential, Hotels)
		Proportional Coverage of Databases of Leases (Office, Retail, Industrial, Residential, Hotels)
		Proportional Coverage of Databases of Property Transactions (Office, Retail, Industrial, Residential, Hotels)
		Proportional Coverage of Databases of Rental Deal Terms (Office, Retail, Industrial, Residential, Hotels)
		Institutional Investment Market for Emerging Sectors (Parking, S. Housing, Self-Storage, Medical Offices, Hospitals, Life Sciences, Data Centers, Cold Storage, School Fac., Student Accom., Co-living, Serviced Apart's, Single-Family Rentals, Age-Restricted Living, Film Studio Space)
		Existence and Coverage of Databases for Emerging Sectors (Parking, S. Housing, Self-Storage, Medical Offices, Hospitals, Life Sciences, Data Centers, Cold Storage, School Fac., Student Accom., Co-living, Serviced Apart's, Single-Family Rentals, Age-Restricted Living, Film Studio Space)
Governance of Listed Vehicles	Financial Disclosure	Stringency of Accounting Standards
		Level of Detail in Financial Statements
		Frequency of Financial Statements
		Data Disclosure by Listed Vehicles
		Availability of Financial Reports in English
	Corporate Governance	Manager Compensation and Incentives
		Use of Outside Directors and International Corporate Governance Best Practice
		Alignment of Interests / Shareholder Power
		Free Float Share of the Public Real Estate Market

Sub-Index	14 Topics	Factors (256 Total)
Regulatory and Legal	Regulation	Extent to which the Tax Code is Consistently Applied for Domestic Investors
		Extent to which Real Estate Tax Rates are Predictable for Domestic Investors
		Extent to which the Tax Code is Consistently Applied for Foreign Investors
		Extent to which Real Estate Tax Rates are Predictable for Foreign Investors
		Existence of Land Use Rules and Zoning
		Predictability of Changes in Land Use and Zoning
		Enforcement of Land Use Rules and Zoning
		Clarity of Planning Processes and Requirements
		Existence of Building Codes and Safety Standards for Buildings
		Enforcement of Building Codes and Safety Standards for Buildings
		Simplicity of Key Regulations in Contract Law
		Efficiency of the Legal Process
		Level of Contract Enforceability for Domestic Investors
		Level of Contract Enforceability for Foreign Investors
	Land and Property Registration	Existence of Land Registry
		Accessibility of Land Registry Records to Public
		Accuracy of Land Registry Records
		Completeness of Land Registry Records on Ownership
		Completeness of Public Records on Transaction Prices
		Completeness of Public Records on Liens and Easements
		Existence of Property Beneficial Ownership Records
		Accessibility of Beneficial Ownership Records to Public
		Enforcement of Beneficial Ownership Disclosure Legislation
	Eminent Domain / Compulsory Purchase	Notice Period Given for Compulsory Purchase
		Fairness of Compensation to Owners in Compulsory Purchase
		Ability to Challenge Compulsory Purchase in Court of Law
	Real Estate Debt Information	Existence and Length of Time Series on Commercial Real Estate Debt Outstanding
		Existence and Length of Time Series on Maturities and Originations of Real Estate Loans
		Existence and Length of Time Series of Delinquency and Default Rates of Commercial Real Estate Loans
		Availability of Data on Loan-to-Value Ratios for Commerical Real Estate Loans
		Availability of Data on Margin Rates for Commerical Real Estate Loans
		Requirements for Lenders to Monitor Cash-Flows and Collateral Value of Property with Loan Facilities
		Requirements for Lenders to Carry Out Real Estate Appraisals
		Penalties for Non-Compliance with Requirements

Sub-Index	14 Topics	Factors (256 Total)
Transaction Process	Sales Transactions	Quality and Availability of Pre-Sale Information
		Fairness of the Bidding Process
		Confidentiality of the Bidding Process
		Professional and Ethical Standards of Property Agents
		Enforcement of Professional and Ethical Standards of Property Agents
	Occupier Services	Existence of Anti-Money Laundering Regulations
		Enforcement of Anti-Money Laundering Regulations
		Availability of Professional Third-Party Facilities and Project Management Companies
		Providers of Property Management Services Known to Occupiers
		Service Expectations for Property Management Clear to Occupiers
		Alignment of Occupier and Property Manager Interests
		Frequency of Service Charge Reconciliation
		Accuracy and Level of Detail in Service Charge Reports
		Ability for Tenants to Audit Landlord's Accounts and Challenge Discrepancies
		Quality and Clarity of Corporate Procurement and Tendering Process
		Consistency of Property Measurement Standards
Sustainability	Sustainability	Existence of Green Building Financial Performance Index
		Existence of Building Energy Performance Databases and Reporting Requirements
		Existence of Building Energy Benchmarking System and Availability of Information
		Existence of Prescriptive Building Standards for Existing Buildings
		Existence of Prescriptive Building Standards for New Buildings
		Existence of Performance Standards for Existing Buildings
		Existence of Performance Standards for New Buildings
		Requirements for Climate Risk Reporting
		Requirements for Nature-Related Risk Reporting
		Existence of Building Standards for Biodiversity and Nature-Based Solutions
		Existence of Climate Resilient Building Codes and Standards
		Existence and Coverage of Health and Wellness Building Certifications
		Existence and Use of Green Lease Framework

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