The efficiency premium accelerates in real estate

Rising costs and energy resilience needs are reshaping priorities for policymakers and corporates

Key highlights

Rising energy costs, tightening regulations and aging building systems are converging to reframe efficiency as a critical operating cost and resilience play for real estate. JLL's latest research reveals that the most efficient buildings now cost 43–75% less to run annually than the least efficient—a saving of US$1.58 to $5.13 per square foot.

- **Electricity costs are outpacing inflation and widening the efficiency premium:** Electricity prices have surged far beyond general inflation across major markets, particularly since 2020, becoming 11% to 91% more expensive in real terms.
- **Policy is targeting buildings as energy infrastructure, expanding requirements beyond climate mandates:** Governments are implementing building performance standards increasingly driven by energy security and grid-investment-avoidance, as well as GHG targets. For corporates, that same pressure shows up as a growing focus on demand management alongside decarbonization.
- **C-suites recognize the urgency, but CRE readiness lags:** Energy efficiency to mitigate rising costs and grid constraints ranks 4th among scenarios executives identify as most transformative for their portfolios—but CRE teams rank it 7th of 8 on preparedness. Efficiency sits at the intersection of three risks CRE can't ignore: regulatory, financial and operational. Closing this gap addresses all three at once.

Energy efficiency, a lever for cost reduction and resilience

Energy efficiency is the fastest lever available for reducing a building's operating expenses, and the first step toward something bigger: active energy management. Historically, the payback on efficiency investment was often too slow to justify prioritizing it over other capital needs. That math is

fundamentally changing. Rising energy costs have shortened the payback window, turning efficiency from a long-term, nice-to-have improvement into an immediate, practical way to cut costs and reduce price exposure to an increasingly volatile energy market.

The link to sustainability is direct: buildings account for roughly 30% of final energy consumption and around 37% of global CO_2 emissions. Reducing emissions and easing strain on the grid entail the same tasks: using less energy and using it better. Technology can flag inefficiencies, but people – facility engineers, building managers and operators – are what actually close the gap between a building's potential and its real-world performance.

The scale of the shift underway is significant. The IEA projects global electricity demand will grow 40% or more by 2035, a sharp break from decades of flat load growth in advanced economies, while energy transition investment hit a record US$2.3 trillion in 2025. Trillions more are needed over the next decade as we enter the next wave of economic growth – powered by data centers, advanced manufacturing and electric transportation – all multiplying the need for power. Yet, through an efficiency-first mindset and prioritizing demand management, much of that investment could be deferred:

- Berkeley Lab's National Roadmap for Grid-Interactive Efficient Buildings projects US$100–200 billion in cumulative savings to the US power system by 2040 from combining energy efficiency with demand flexibility to remake buildings into a clean, flexible grid resource.
- A 2025 Duke Nicholas Institute study found similar headroom in data centers, which could curtail power for just 0.25–1% of annual hours to unlock around 100 GW of new capacity in the US without expanding generation.
- A June 2026 European Commission report found that aggressively building out efficiency through insulation in the EU's residential stock alone would reduce the sector's energy demand for heating by 44%, potentially saving €44.2 billion (US$50.8 billion) in distribution grid investments and cutting transmission grid congestion by 75%.
- In June 2025, the International Energy Agency (IEA) published findings revealing that across major emerging economies, including India, China and Southeast Asia, saving 1 Terawatt-hour (TWh) of electricity through energy efficiency measures costs just US$10 to $50 million. In contrast, building out the equivalent new generation and grid infrastructure to supply that same 1 TWh costs US$30 to $110 million—making efficiency more than twice as cost-effective as expanding the grid.

Governments are increasingly recognizing that optimizing performance in end-uses is critical to achieving energy resilience. That widening set of motives, from climate policy to energy security, is now visible in how building performance requirements are evolving worldwide. This research insight takes a deeper look at how energy efficiency is becoming central to energy resilience planning for governments and

businesses alike, as highlighted in JLL's latest Global Real Estate Transparency Index (GRETI) Sustainability Sub-Index.

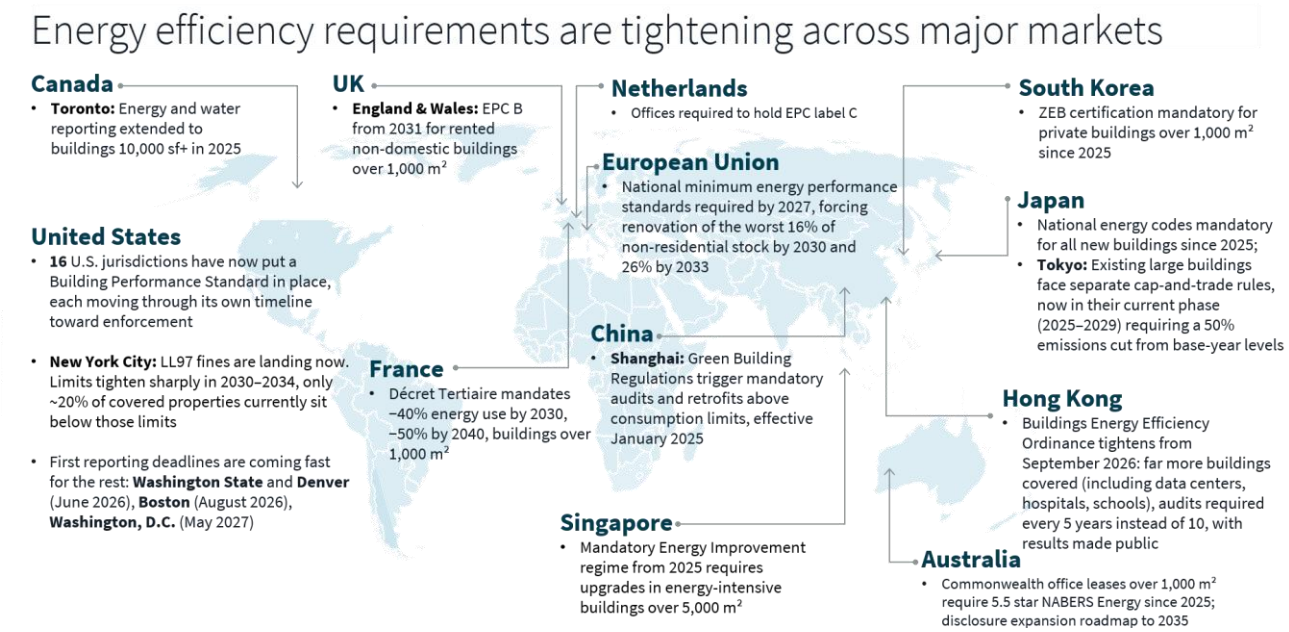
Sustainability transparency is zeroing in on building performance

City governments are targeting the largest end-user of energy: buildings. Energy availability and cost now shape where companies locate and how real estate assets perform, and this year's GRETI shows building-performance disclosure as one of its fastest-improving areas. Across 75 major cities tracked in JLL's City Climate & Resilience Policy Tracker, 41% now reference enforceable building performance standards, a sign of how quickly this policy category has moved from niche to mainstream.



Source: JLL Research, 2026
Note: Reflects how markets score across questions related to energy reporting, benchmarking and performance requirements within JLL's 2026 Global Real Estate Transparency Index

The rankings above score markets solely on whether they require companies to measure and manage energy performance in buildings, a narrower lens than GRETI's Sustainability Sub-Index, which also weighs wider sustainability-related requirements like prescriptive design and nature-related risk standards. The common thread among these leaders in energy transparency is enforcement, not just ambition: each has moved past setting targets and into building the reporting, auditing and compliance infrastructure needed to drive action.



Source: JLL Research, 2026

Requirements are tightening across major markets, and the US is furthest along on enforcement. Sixteen jurisdictions now have a building performance standard in place, and in New York City, where LL97 fines are already landing, only around 20% of covered properties currently sit below the limits that take effect between 2030 and 2034.

The EU makes the energy security link explicit. Its revised Energy Performance of Buildings Directive introduces national minimum energy performance standards, in force since May 2024 and mandated to be transposed into national law by May 2026, though follow-through has lagged. The standards themselves are due to apply from 2027. The directive requires renovation of the 16% worst-performing non-residential buildings by 2030 and 26% by 2033, a shift from the EU's traditional design-based standards. The task is large: 85% of EU buildings were built before 2000, and 75% of those perform poorly. The European Commission ties this directly to energy security, stating that improving building performance strengthens energy independence, lowers bills and cuts grid investment needs.

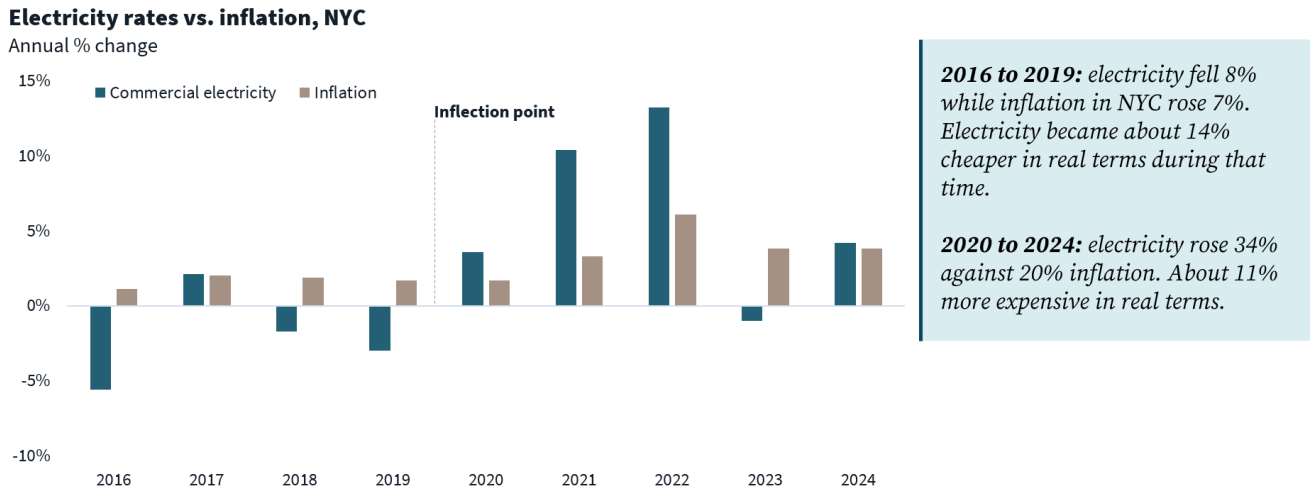
Market forces at play

Regulation is only half the pressure. Electricity spend has stopped behaving like an ordinary operating expense for CRE stakeholders. Since 2020, prices have climbed faster than general inflation across many major markets, a break from the previous decade, when electricity and broader costs moved roughly in step. The reasons echo broader pressures reshaping the grid: energy supply disrupted by geopolitical

conflict, manufacturing reshoring into higher-cost regions and utilities passing grid upgrade costs through to customers as electrification and data centers push consumption past available supply.

Electricity rate increases are outpacing inflation in key markets

New York City



Source: JLL Research, US EIA, Oxford Economics, 2026
Note: Electricity rates are a state-level average; CPI is metropolitan.

The scale of that divergence varies widely by market. Across six electricity markets studied, commercial electricity prices rose 11% to 91% more than local inflation between 2020 and 2024, a sharp reversal from 2016–2019, when the same markets saw real electricity costs range from 14% below inflation to just 13% above it. The UK and Australia saw the sharpest increases in the recent period. JLL's own client portfolio data across those two markets shows electricity costs rising 37–45% over the past five years (2021 to 2026)[1], against around 26% inflation over the same period.

Real electricity rate increases are significant across the board, but the extent varies dramatically by market, reflecting differences in local generation, demand and regulatory environments. The takeaway for occupiers: the cost case for efficiency is real, but it's local and more acute depending on the market.

The readiness gap

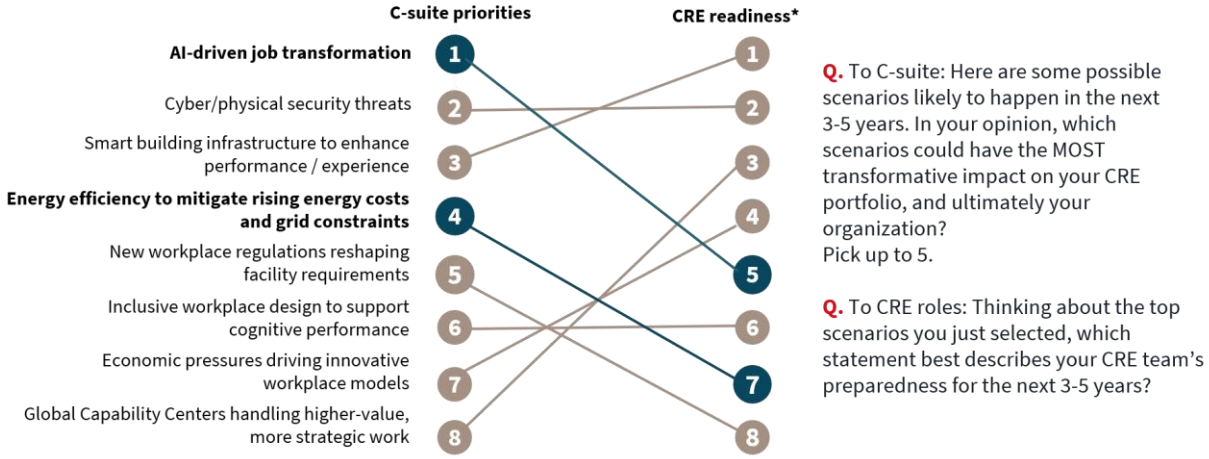
Energy cost and security concerns have reached the boardroom, but the real estate function is still catching up. JLL's 2026 Future of Work survey, drawing on more than 2,200 C-suite executives and CRE leaders across 21 countries, found energy efficiency ranks 4th among the scenarios leadership sees as most transformative for their CRE portfolios, while CRE teams rank their own preparedness for it 7th of 8,

[1] Analysis of client data across 440,000 records

a three-place gap between how urgent leadership sees the issue and how ready the CRE function feels to act on it.

Energy efficiency emerges as a C-suite priority – and critical CRE preparedness gap

Future scenarios identified by the C-suite as most transformative, with the greatest impact on CRE strategies



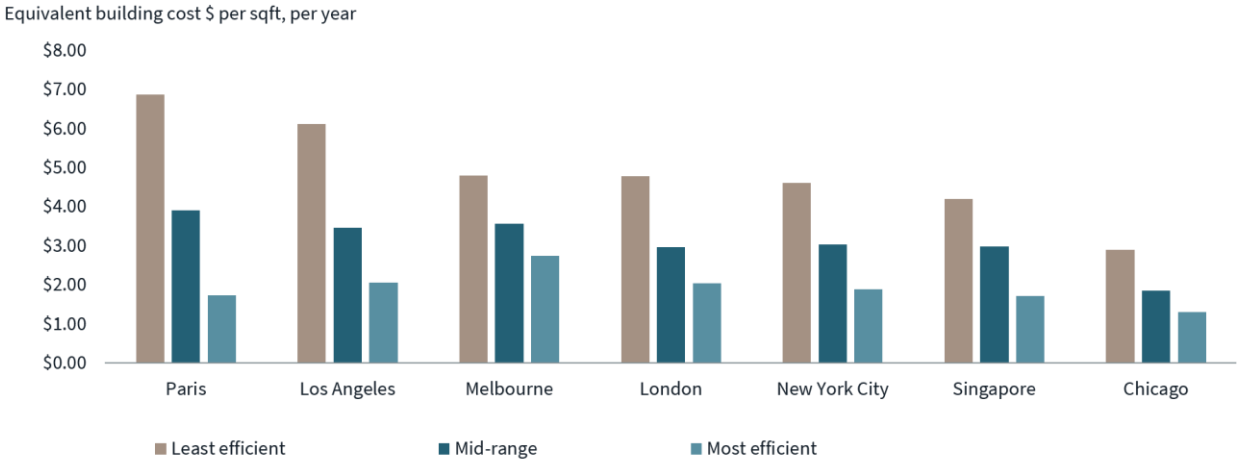
**From "Initial planning" to "Actively embedded" and "Fully embedded" into strategy*

Source: JLL Research, Future of Work Survey, 2026

The gap isn't only a matter of awareness lagging urgency. Most buildings still have real, measurable room to close it. Using leading building performance standards as a benchmark for good performance, a previous JLL study of 46,600 buildings across 14 global markets found that around 66% perform poorly. That shortfall carries real and increasing financial, operational and regulatory compliance costs.

The value of efficiency is accelerating

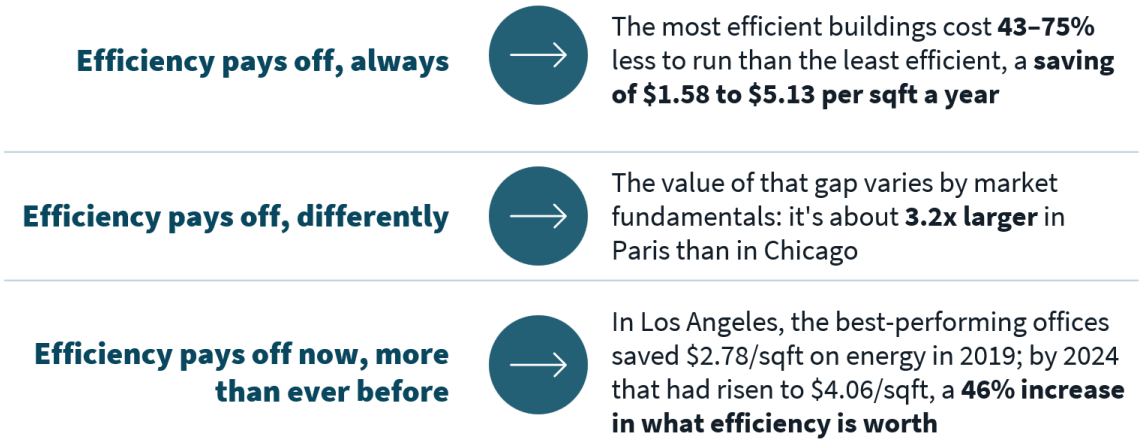
Annual energy costs by energy performance tier, offices



Source: JLL Research, 2026
Note: Shows median annual energy cost per square foot. Reflects total energy cost across all fuels (electricity, gas and other). London reflects modeled EPC performance data (post-June 2022 methodology), as measured energy use data is not made publicly available.

The cost of that underperformance is stark. Across 4,437 offices in seven global markets, JLL Research finds the most efficient buildings cost 43% to 75% less to run each year than the least efficient ones in the same city, a gap worth US$1.58 to $5.13 per square foot annually. Paris shows the widest spread of any market studied, while Chicago shows the narrowest, a roughly threefold difference driven as much by local electricity prices as by building performance itself. The energy price swings of recent years have made this inefficiency more expensive. In Los Angeles, the best performing offices saved US$2.78 per square foot a year on energy in 2019. By 2024 that had risen to US$4.06, a 46% increase in what efficiency is worth. In New York City, the same saving grew from US$2.27 to $2.69 per square foot, up 19%. The value of getting this right is compounding as electricity price volatility becomes a structural trend.

Energy efficiency is a 'no-regrets' decision



Source: JLL Research, 2026

Closing the gap

Innovation in building efficiency is accelerating across every front at once, from new equipment to smarter software to the platforms that tie it all together. For CRE teams ready to act, there are more leading-edge tools available now than ever before:

- Aris, a JLL Foundations portfolio company, has engineered a single hydronic system to handle heating, cooling and hot water together, in place of the separate equipment each function traditionally requires. In residential pilots, it reports energy savings of up to 70% versus a conventional furnace, air conditioner and gas water heater. It is now working toward a commercial launch.

- Hydronic Shell Technologies, another JLL Foundations portfolio company, integrates HVAC into prefabricated facade panels, letting owners retrofit aging buildings with central heating, cooling and ventilation without major construction disruption.

- Brightspace, also a JLL Foundations portfolio company, uses occupancy sensors to drive AI-based HVAC controls in high-traffic commercial spaces like airports, malls and offices, reporting 40–60% HVAC energy savings.

- JLL's own Smart Building Platform applies the same logic across a client's portfolio: demand- and weather-based controls, intelligent lighting, real-time carbon tracking and asset performance insights. In one deployment, a London office portfolio cut electricity usage by 31% within five months of adopting the technology. It also shifts maintenance from reactive to predictive, using automated fault detection to catch problems like pipe leaks before they become costly repairs.

Still, closing the readiness gap doesn't always require capital. Often, the fastest and cheapest gains are already available inside a building's existing systems. Much of it comes down to active management, buildings run by people who understand how their systems actually behave, beyond what the sensors report. JLL's Smart Building Platform, for instance, uses a fault detection and diagnostics rule engine to narrow down likely causes for on-site engineers, cutting the labor of figuring out why an anomaly occurred. But it still takes a facilities engineer to confirm the diagnosis and make the fix. The tools speed up detection and diagnosis, but the savings still come from the people who act on them.

LaSalle Investment Management put that into practice with JLL's Sustainable Consulting team. JLL runs a quarterly training program for facility and maintenance engineers across more than 200 of LaSalle's office and multifamily buildings, covering seasonal HVAC optimization, preventative maintenance and best practices in lighting, water and waste. An awards program recognizes the biggest gains each year. This kind of engagement is already paying off across LaSalle's portfolio:

- An office property cut energy use intensity by 27% through HVAC temperature and schedule optimization alone, saving roughly $100,000 a year with no capital investment.

- A mixed-use office and residential property achieved a 14% reduction and about $48,000 in annual savings by combining low/no-cost operational and building system software changes with a lighting retrofit.

It's a reminder that closing the readiness gap can come down to getting the right people speaking and aligning regularly to get results. Two further examples from JLL's own client work strengthen the case:

Case study

Energy engineering

Energy optimization payoff

Technology client

Location: US

Size: 880,000 sqft, 3 office buildings

Product: Energy audit, retro-commissioning, implementation



Challenge

Energy waste and equipment problems were driving up utility costs across the client's office portfolio, with one site at risk of penalties for exceeding local energy-use limits. The client needed to cut costs and hit a 2030 net-zero target, but had little visibility into where energy was being wasted.

Approach

JLL ran a full energy audit to identify waste, then implemented fixes alongside building teams and equipment vendors. A deeper retro-commissioning pass caught additional problems the initial audit missed, and ongoing measurement confirmed the savings held up over time.

Results delivered

$690K+

In combined annual utility cost savings across 3 sites, projected to grow as rates rise

31%

Annual emissions eliminated (**1,870+** metric tons of CO_2e)

<1.5

Years average simple payback with **4+** months of post-implementation data confirming savings

5.5M+

kWh in annual electricity savings—plus **58K therms** of natural gas saved annually

16

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Case study

Sustainable operations

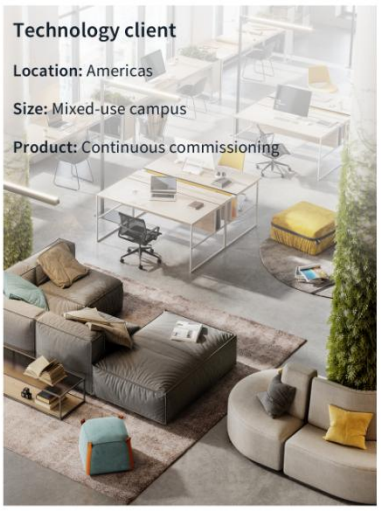
Low/no-cost measures, big savings

Technology client

Location: Americas

Size: Mixed-use campus

Product: Continuous commissioning



Challenge

With occupancy levels shifting across its real estate portfolio, the client wanted to cut energy costs immediately, without capital spend.

Approach

JLL ran a continuous commissioning program, working on-site with the client's facilities team to fine-tune what was already in place: adjusting HVAC and lighting schedules to match real occupancy, correcting simultaneous heating and cooling, optimizing supply air temperature and static pressure, and tuning boiler setpoints.

Results delivered

$550K

saved annually, entirely through low- and no-cost operational changes

5,000

MWh in annual electricity savings

$0

in capital investment required

21

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Looking ahead

The case for efficiency has never been stronger. Market forces, regulation and sustainability goals now all point the same way: buildings that manage energy well are, simply put, better buildings.

For policymakers, it starts with knowing how end-uses consume energy. Reporting and benchmarking are the baseline, but enforceable performance standards turn that data into action — and increasingly that means building two-way exchange of power and information.

Key recommendations for policymakers:

- Engage utilities early to understand grid constraints and successful demand management.
- Treat decarbonization policy as energy resilience policy — performance standards, electrification mandates and on-site generation requirements all shape grid outcomes.
- Align permitting, incentives and financing tools to speed up retrofit rates in the worst-performing stock.

For owners, the readiness gap is a value gap. Tenants, lenders and investors are scrutinizing energy performance more closely.

Key recommendations for owners:

- Prioritize operations over capital. The fastest gains are usually already sitting in existing systems.
- Treat power access, intensity and sources as standard due diligence line items, particularly for assets targeting power-intensive occupiers.
- Look for ways to deliver grid-interactive buildings that can shift and generate power. Get efficiency right first.

For occupiers, energy is no longer a background cost. Power is joining talent, location and capital as a core siting factor, and the stakes are highest for power-intensive industries.

Key recommendations for occupiers:

- Actively manage on-site consumption with an efficiency-first mindset.
- Seek on-site solutions like solar and storage where feasible.
- Factor power access and reliability into site selection and lease negotiations, especially for power-intensive use types like data centers and advanced manufacturing.

We are entering an era where power availability is becoming one of the top constraints on economic growth. If buildings aren't treated as part of the solution to one of today's most pressing challenges, they'll be part of the problem. The organizations that treat energy efficiency as core infrastructure will be best positioned for what comes next.

JLL SEE A BRIGHTER WAY

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Research at JLL

JLL's research team delivers intelligence, analysis and insight through market-leading reports and services that illuminate today's commercial real estate dynamics and identify tomorrow's challenges and opportunities. Our more than 550 global research professionals track and analyze economic and property trends and forecast future conditions in over 60 countries, producing unrivalled local and global perspectives. Our research and expertise, fueled by real-time information and innovative thinking around the world, creates a competitive advantage for our clients and drives successful strategies and optimal real estate decisions.

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About JLL

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