



EXECUTIVE SUMMARY

Building a sustainability program for a real estate portfolio from the ground up is no simple task; it takes thoughtful and thorough work across, technical, financial, and market-facing elements to achieve success. That is why this Blueprint is so long: it spans the setting of the foundation to the evolution of sustainability programs. The following outline provides a high-level overview to orient readers and to help identify areas for program development.

1

BUILDING THE FOUNDATION OF A SUSTAINABILITY PROGRAM

The first step in creating a sustainability program is to develop an initial vision of what the program will do for the company, the stakeholders, and the planet.

MAKE SUSTAINABILITY SOMEONE'S JOB

Whether 10 percent or 100 percent of someone's time, a sustainability lead should have passion for the job and be empowered to assess and implement a portfolio-wide sustainability program. Strong executive buy-in will ensure that the program can be operationalized and that the sustainability lead has adequate funding for both projects and staff support.

GET THE LAY OF THE LAND

Effective sustainability leads engage across the entire company, and it is important that they understand the organization's overall structure as well as its financial priorities. To develop this knowledge and build internal support, the sustainability lead should know the basics of real estate and the key performance and financial metrics of each department to determine how sustainability can align with and help achieve those goals.

COLLECT PERFORMANCE DATA, SET A BASELINE, THEN BENCHMARK

An accurate and comprehensive collection of energy, emissions, water, and waste data for each asset within a portfolio helps sustainability leads understand and improve a building's performance. While full building data are often difficult to collect, green leases, tenant engagement, and submetering technologies can all help expand data coverage. After collecting data, the sustainability lead should then set a baseline and benchmark the performance of individual buildings against peer buildings, both within the portfolio and across external groups.

SET GOALS

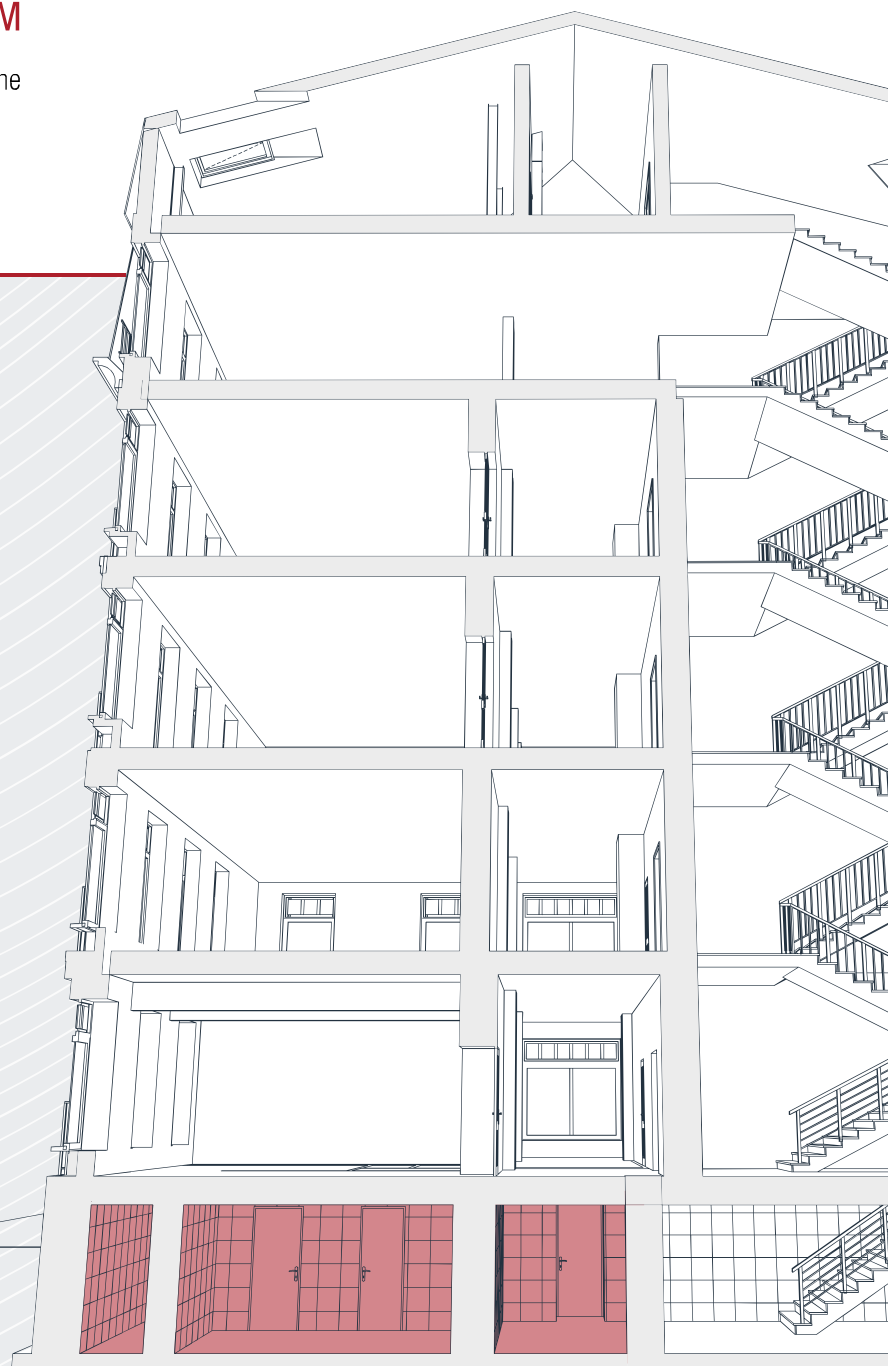
Strategic goal selection showcases an organization's commitment to sustainability and sets a target to ensure that all staff members are working toward a common goal. Sustainability leads should select goals on the basis of available data and feasibility and should consider aligning with external goals to standardize metrics and stay competitive with peers.

STAY ON TOP OF TRENDS

New policies and incentives regularly change the sustainability landscape but can be difficult to track. Sustainability leads should engage with cities in the development and implementation of new climate policies and join industry organizations to learn from peers.

INTEGRATE SUSTAINABILITY ACROSS THE ORGANIZATION

As part of its sustainability strategy, the sustainability lead can begin setting company-wide policies for new developments and major renovations, sustainable building operations, investment and due diligence, and reporting and communications.



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BEST PRACTICES IN NEW CONSTRUCTION

Integrating sustainability at the start of a new development maximizes cost-effectiveness and ensures that portfolios remain on track for achieving climate goals.

START EARLY WITH INITIAL BUILDING DESIGN

Making sure that the development team understands an organization's sustainability goals at the start of a project is key. Sustainability leads can lean on internal design standards or third-party green building certifications to provide a performance baseline. Then, additional features can be added to ensure that each building remains relevant for the future needs of its specific market, including upcoming regulations and tenant demands.

IMPLEMENT SUSTAINABLE CONSTRUCTION STRATEGIES

Investments made in sustainable construction can reduce waste and optimize the efficiency of the final product. The sustainability lead should create a plan to maximize the diversion of construction waste and should be familiar with the sustainability benefits of innovative practices, like modular construction or augmented reality. The sustainability lead can also help quantify and mitigate material impacts by suggesting low-carbon building materials, which often come with no cost premium and can provide other benefits, like a faster development schedule.

REUSE AND REDEVELOP

The redevelopment of existing buildings can provide significant environmental benefits, reducing embodied carbon and material waste, while also promoting placemaking. However, there are also challenges, as adding new technologies to an older structure can be costly. Sustainability leads should work to balance design aesthetics with sustainability goals and should consider green building certification standards to set a baseline for performance.



3

QUICK WINS IN EXISTING BUILDINGS

From the single-building level to portfolio-wide, opportunities exist to achieve low-cost, high-value successes in existing properties. Sustainability leads should find and implement these opportunities to create an internal track record of success on which to build.

IDENTIFY AND QUALIFY OPPORTUNITIES

Each building type has a different menu of options to maximize cost savings, and efficiency can be assessed in multiple ways—from a systems and equipment inventory to third-party audits. Sustainability leads should work across the portfolio and with key building stakeholders, like property management, to improve the environmental performance of a building.

IMPLEMENT LOW-COST, HIGH-VALUE SUSTAINABILITY OPPORTUNITIES

Best practices for energy, water, and waste help building owners reduce consumption, improve system efficiency, and reuse resources. From installing lighting upgrades and regularly checking for leaks to encouraging tenants to use reusable materials, sustainability leads should implement no-cost operational changes and look for utility incentives to finance other upgrades.

ESTABLISH TENANT ENGAGEMENT PROGRAMS

Fifty percent or more of energy use in a building comes from tenant spaces, and occupant engagement programs can yield consistent savings over time. Sustainability leads should employ green leases to align owner and tenant goals, as well as provide guidelines for sustainable tenant fit-outs to maximize the efficiency of tenant spaces. Ongoing communications across all building types can help educate tenants and ensure an ongoing commitment to sustainable behaviors.



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FINANCING AND IMPLEMENTING CAPITAL PROJECTS

Retrofits that result in deep emission reductions and savings also require large upfront capital investments and engineering support. Sustainability leads should assess opportunities for capital investments, either during acquisition due diligence, through audits, or to replace major mechanical equipment at the end of its useful life.

BUILD THE FINANCIAL BUSINESS CASE FOR THE INVESTMENT

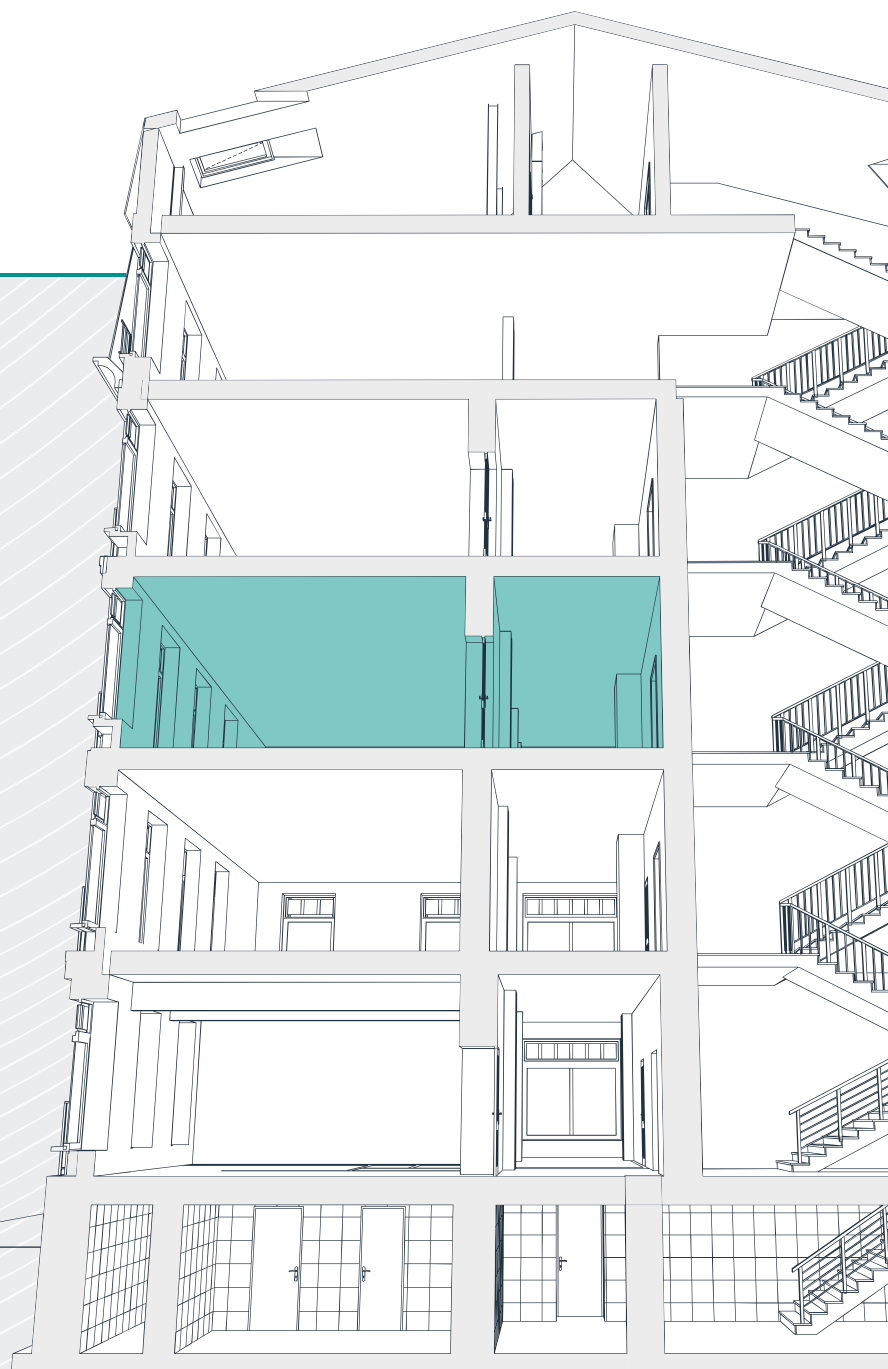
The business case for capital investments will vary by project and a company's investment return threshold. Sustainability leads should work to understand and calculate the value of large sustainability investments, considering the project payback, opportunities to improve the financials by bundling projects, and the source of capital.

EVALUATE FINANCING OPTIONS FOR BIG-TICKET INVESTMENTS

A wide range of financing opportunities exists for sustainable investments, from green loans that lower interest rates for sustainable investments to energy service performance contracts that require no upfront costs and are paid back over time with the operational cost savings. If no internal capital is available to finance large investments, sustainability leads should identify the right type of financing for their organization.

TAKE ADVANTAGE OF NEW TECHNOLOGY

New "proptech" opportunities are available for all building types to improve tenant comfort or to lower costs through energy efficiency. While sustainability leads do not need to become technology experts, they should learn about new technologies through utility partnerships, existing relationships, and conference trade shows and assess the potential of these technologies in their portfolio.



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INTEGRATING SUSTAINABILITY ACROSS THE REAL ESTATE VALUE CHAIN

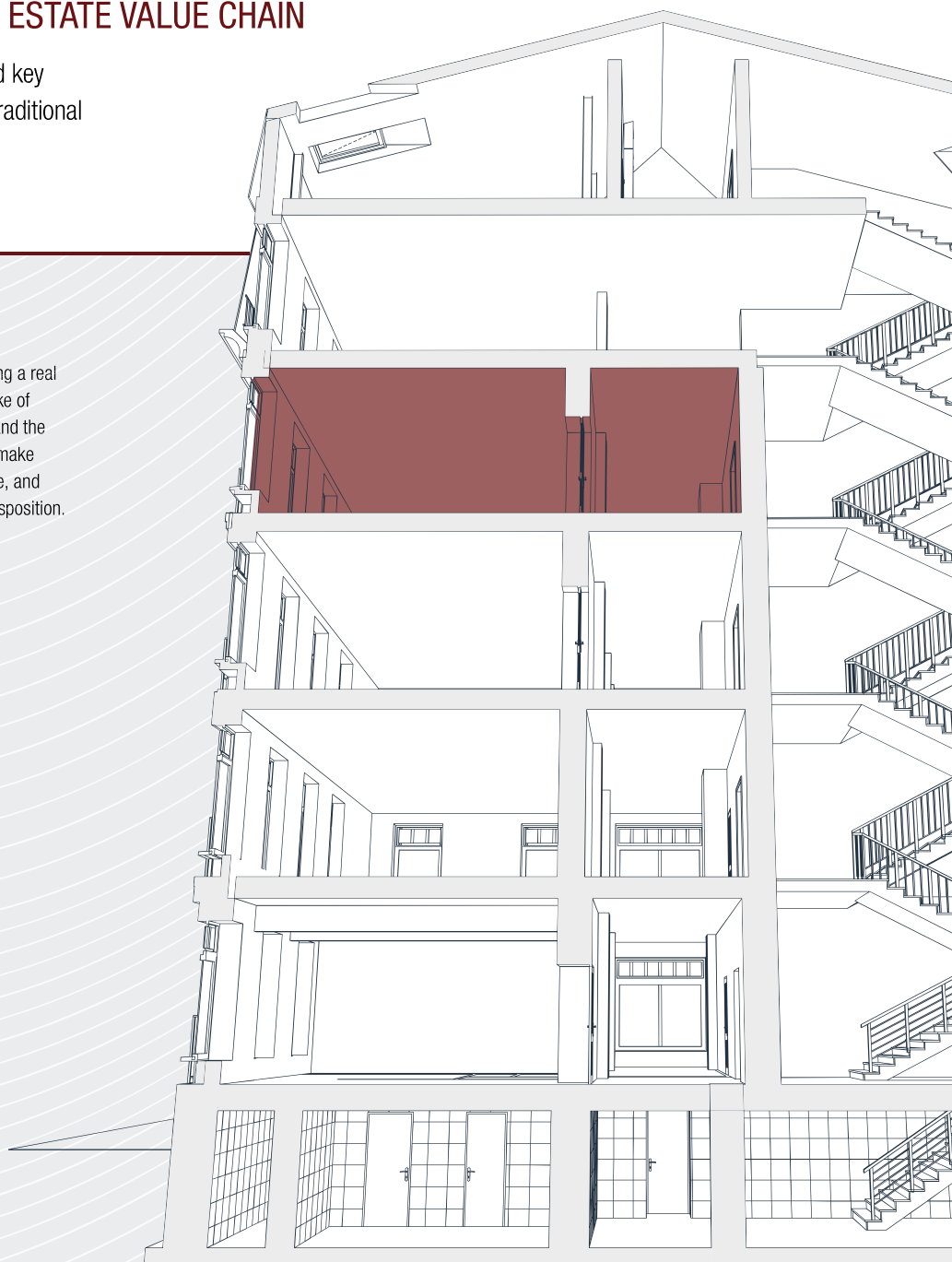
Real estate operations encompass an ever-changing set of properties and key stakeholders. Sustainability leads should integrate sustainability beyond traditional building construction and operations.

ENGAGE THE SUPPLY CHAIN

From building materials to cleaning supplies and pest management, the supply chain can have a substantial impact on a building's environmental footprint. Sustainability leads should proactively engage top suppliers and begin setting expectations for ESG performance to drive demand and create a market for sustainable suppliers.

INTEGRATE SUSTAINABILITY INTO THE INVESTMENT CYCLE

Understanding the added value of sustainability during a real estate transaction increases the overall market uptake of green buildings. Sustainability leads should understand the sustainability potential of each possible acquisition, make investments during the hold period to maximize value, and accurately market and price these features during disposition.



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TRACKING, REPORTING, AND COMMUNICATIONS

As the sustainability program achieves successes and progresses toward its goals, sustainability leads should continue tracking performance, creating progress reports, and communicating results to stakeholders.

TRACK PERFORMANCE

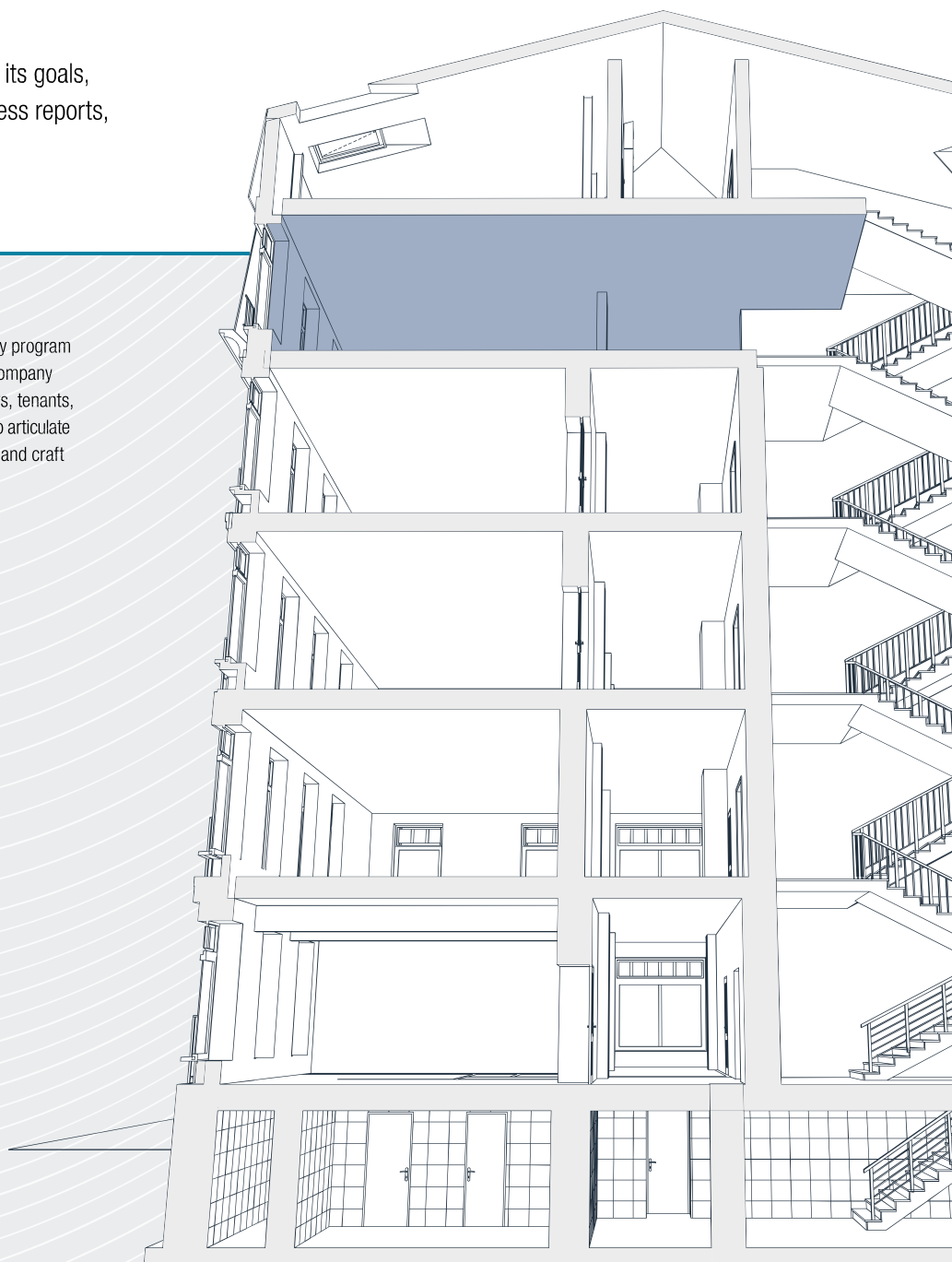
The portfolio's environmental performance data can help drive progress or identify areas for improvement. After setting up data collection procedures, sustainability leads should regularly track performance against goals and consider publishing results.

ESTABLISH SUSTAINABILITY REPORTING

Organizations that use standard frameworks and external disclosure initiatives create industry-wide alignment of metrics and goals. The sustainability lead should identify such reporting initiatives, including the possibility of releasing a corporate sustainability report that provides standard metrics and shares relevant ESG information with stakeholders.

COMMUNICATE PROGRAM RESULTS

Properly communicating the results of a sustainability program maximizes value for an organization. From internal company updates to build momentum to engagement of brokers, tenants, and investors, sustainability leads should be prepared to articulate the value of sustainability to each stakeholder group and craft complementary communications materials.



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THE EVOLUTION OF “SUSTAINABILITY” PROGRAMS

The sustainability lead's role continues to change over time, expanding from basic energy, water, and waste considerations to climate adaptation and resilience, health and well-being, social and racial equity, and embodied carbon. Improving the environmental performance of a real estate portfolio can have significant cobenefits for each of these topics, which are likely to be integrated into future ESG goals.

SET A PATHWAY TO NET ZERO.

Meeting the goals of the Paris Climate Accord requires the real estate industry to achieve net-zero carbon by 2050. This will be achieved in new and existing buildings through investments in energy efficiency, renewable energy, electrification, and storage. Sustainability leads should understand their portfolio's current performance and begin assessing a pathway to achieve net zero.

MAKE RENEWABLE ENERGY WORK

Installing on-site renewables or procuring off-site renewables can make energy costs more consistent but can also come with contract risks and technology challenges. Sustainability leads should assess opportunities for on-site renewable energy throughout their portfolio, from solar power to geothermal heating and cooling. After on-site renewables are exhausted, sustainability leads should consider off-site deals.

BUILD FOR CLIMATE ADAPTATION AND RESILIENCE

Adapting to climate risks requires the implementation of resilient design strategies at the building and community scale. Sustainability leads should review assets for resilience risks and develop capital investment and emergency response plans. Although multiple frameworks can assess climate risk, sustainability leads should consider long-term financial risks, including insurance costs and tenant demand.

CONSIDER HEALTH AND WELL-BEING

Across all asset types, tenants increasingly demand healthy building features. To address tenant concerns and add building value, sustainability leads can consider applying one of the many healthy building certifications, including WELL, Fitwel, and RESET.

ADDRESS EMBODIED CARBON AND THE CIRCULAR ECONOMY

Embodied carbon from the manufacture, transportation, and disposal of building materials plays a significant role in the environmental footprint of a development. Sustainability leads should encourage development teams to consider smart design choices and low-carbon materials by staying aware of new regulations that mandate low-impact materials and by requesting data on the environmental impacts of building materials.

CONSIDER SOCIAL EQUITY, COMMUNITY, AND WORKFORCE DEVELOPMENT

All asset types can play a positive role in their communities and address the “S” of ESG. Negative impacts of climate change disproportionately affect vulnerable communities, and sustainability leads can encourage developer teams and building operators to incorporate social equity through projects and programs, building community resilience.

INCORPORATE BIODIVERSITY

Degrading biodiversity reduces valuable ecosystem services for the real estate industry. Sustainability leads should encourage development teams to consider new design strategies that better integrate buildings into the larger urban ecosystem.

