

Sustainability Trends in Construction

What Retail and Residential
Developers Need to Know in 2025



By Bright ESG July 2025

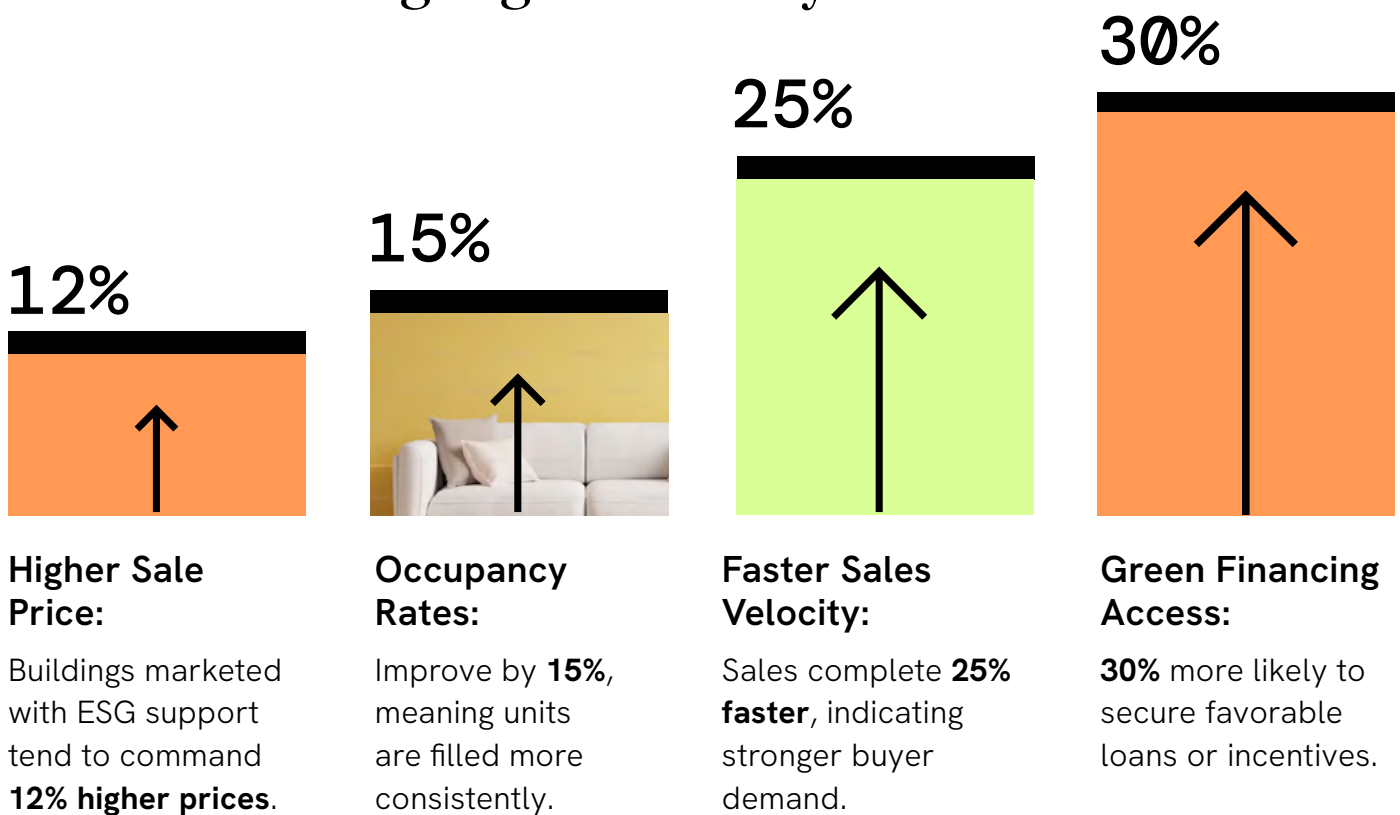
Forces Shaping Construction in 2025

Sustainability is no longer a fringe concern—it is now central to profitability, marketability, and compliance in the U.S. construction industry.

Across both retail and residential sectors, developers are responding to rising demand for environmentally and socially responsible buildings. ESG pressures are coming from all directions: government regulation, capital markets, community stakeholders, and the increasingly discerning consumer.

This white paper synthesizes the dominant forces shaping construction in 2025. From embodied carbon and prefabrication to health-driven design and workforce equity, we explore the data and insights that matter most to forward-thinking developers. U.S.-specific data, incentives, and market behaviors are highlighted throughout to ensure maximum relevance.

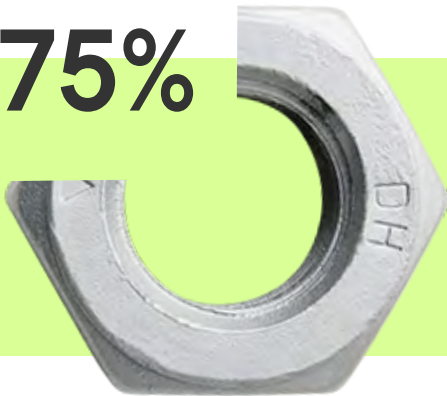
Highlights of the year



01. Regulatory Pressure & U.S. ESG Compliance

Developers in the U.S. face an evolving and increasingly complex regulatory environment that demands not only compliance, but proactive adaptation. Sustainability regulations are no longer limited to the planning phase—they extend deep into the post-occupancy performance of a building.

75%



Of construction firms report ESG requirements will “significantly impact” operations by 2027

Source: McKinsey Global Construction ESG Survey, 2024

Key U.S. Policy Drivers:

New York’s Local Law 97 sets carbon caps on large buildings, with noncompliant owners facing fines as early as 2025.

California’s Title 24 and similar energy codes now require advanced HVAC and lighting systems, performance verification, and low-leakage envelopes.

The SEC’s Climate Disclosure Rule mandates emissions transparency for public companies, which will affect construction firms and REITs in procurement chains.

The Inflation Reduction Act (IRA) injects over \$370B into the clean energy and building performance ecosystem—fueling everything from solar tax credits to subsidies for low-carbon construction.

By mid-2025, over \$55B in green building rebates had been distributed, with multifamily projects leading uptake.

Implication: Developers that integrate ESG performance into their standard operations—not just for high-profile projects—are better equipped to secure tax incentives, avoid fines, and meet future compliance thresholds.

02. Carbon, Materials, & Modular Construction Trends

Reducing operational energy use is no longer enough. U.S. developers are now confronting the “hidden emissions” in their material supply chains. Embodied carbon—the emissions released during the manufacture and transport of building materials—can represent up to half the lifetime emissions of a residential structure.



Mid-rise U.S. residential buildings may attribute **40–50%** of lifecycle emissions to materials.

Sources: World Green Building Council, Arup

U.S. Industry Trends:

Low-Carbon Materials:

Concrete mixes with fly ash and slag now account for **30%** of commercial projects in the U.S. Wood framing and mass timber are making inroads, especially in the Pacific Northwest and New England.

Environmental Product Declarations (EPDs):

More commonly required by institutional buyers and for certification credits (LEED v4.1, GRESB).

Prefab & Modular Expansion:

77% of U.S. contractors use modular or prefabricated elements. Modular builds offer **30–50%** faster delivery, **20–50%** lower costs, and generate **50% less waste**. Panelized systems are widely used for walls and MEP assemblies.

Implication: Forward-leaning developers are prioritizing material transparency and off-site fabrication to lower emissions and improve cost predictability in a volatile materials market.

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Carbon, Materials, & Modular Construction Trends



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11-14% of global building emissions are from embodied carbon
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03. Tenant & Buyer Demand for Health, Energy & Resilience

Today's renters and buyers aren't just shopping for square footage—they're looking for homes and retail spaces that align with their health values, sustainability ethics, and energy budgets. Across the U.S., demand for high-performance, wellness-focused buildings is driving a market shift.

68%



72%



68% of renters say they'd pay more for a home that is energy-efficient or wellness-certified

72% of homebuyers accept a 2-5% price premium for such features

Sources: Zillow Trends Report 2024; National Housing Survey 2024

Preferred Building Features:

High-Efficiency HVAC: Demand for MERV-13 air filtration and heat recovery ventilators is growing in response to wildfire smoke, urban pollution, and post-COVID air quality awareness.

Smart Energy Management: Real-time dashboards that track electricity, HVAC usage, and cost savings help tenants make informed choices—and lower energy bills.

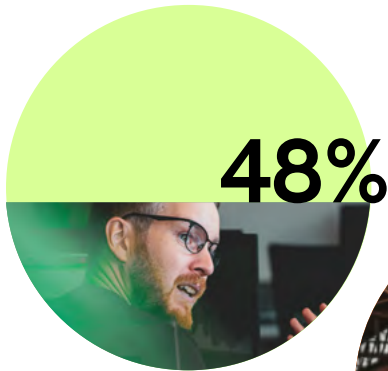
Biophilic Design & Passive Cooling: Rooftop gardens, thermal massing, daylighting, and operable windows are increasingly used in both retail and residential projects.

Climate Resilience: As extreme heat and flooding become more common, passive design for thermal comfort is shifting from "nice-to-have" to "code-critical." These features also make buildings more appealing to institutional buyers and help protect asset value over time.

Implication: Wellness and resilience-focused design is no longer optional—it's a key differentiator in winning leases, resale premiums, and community support.

04. Labor Shortages, Social Equity, & DEI Integration

Construction firms across the U.S. are grappling with critical labor shortages, while also being challenged to modernize workforce practices. ESG expectations now include not just environmental performance, but social accountability—from jobsite safety to equitable hiring.



48% of Gen Z workers prefer ESG-aligned companies



80% of U.S. contractors report difficulty filling skilled trades



41% of current U.S. construction workers expected to retire by 2030

Sources: Autodesk Outlook 2025; Talenttraction.org; McKinsey

Strategies Emerging in the U.S.:

Jobsite Safety Technologies:

AI-driven safety apps reduce incidents by **25%** by allowing real-time reporting and monitoring. Digital credentialing is being used to track training, safety certifications, and compliance across subcontractors

Workforce Innovation:

Modular systems and BIM are helping firms overcome skilled labor gaps by reducing complexity and allowing faster upskilling

Implication: Firms that treat social equity and workforce safety as core values—not compliance checkboxes—are better positioned to win public contracts, attract talent, and reduce risk.

05. ESG Reporting & Performance Tracking as Differentiators

What was once seen as a compliance chore—ESG reporting—is now becoming a strategic advantage. Developers who invest in transparent, real-time data systems are unlocking access to green capital, insurance discounts, and tenant trust.

63%

of real estate investors screen projects based on ESG performance

Source: PwC Real Estate ESG Outlook, 2025

Most-Used Frameworks in the U.S.:

GRESB: For ESG benchmarking of real estate portfolios

TCFD & CDP: Climate risk and emissions disclosure

SASB: Financial risk reporting tailored to real estate and construction

EPDs: Product-level emissions and lifecycle transparency

Enabling Technologies:

With digital ESG tools, developers can streamline rebate compliance (like IRA incentives), reduce legal exposure, and communicate transparently with investors and tenants.

IoT Sensors:

Enable granular data on HVAC usage, water consumption, and lighting performance

Digital Twins:

Simulate future energy and emissions performance

Blockchain Procurement Logs:

Improve traceability for sustainable materials

Implication: ESG data maturity isn't just about risk mitigation—it's about outperforming the competition and building brand equity.

06.

Strategic Recommendations for U.S. Developers

To navigate 2025's complex and opportunity-rich ESG landscape, developers should take the following concrete steps:

Run an Embodied Carbon Audit

Use tools like EC3 or OneClick LCA to identify carbon-intensive materials and plan substitutions.

Adopt Real-Time ESG Platforms

Track HVAC efficiency, water, jobsite safety, and emissions in real time using IoT-based dashboards.

Apply for Federal Incentives

Set aside \$10-20/sq ft for rebate processing under the Inflation Reduction Act—especially in multifamily and mixed-use projects.

Integrate DEI & Safety in Bids

Include subcontractor diversity metrics and digital safety reporting in your RFP templates.

Design for Certification

Pursue WELL, LEED Gold, and Energy Star MFHR to future-proof assets and reduce operating costs.

Need help? Contact us

To navigate 2025's complex and opportunity-rich ESG landscape, you need a partner you can count on.

References

McKinsey Construction ESG Report, 2024

Zillow Housing Trends, 2024

World Green Building Council, 2023

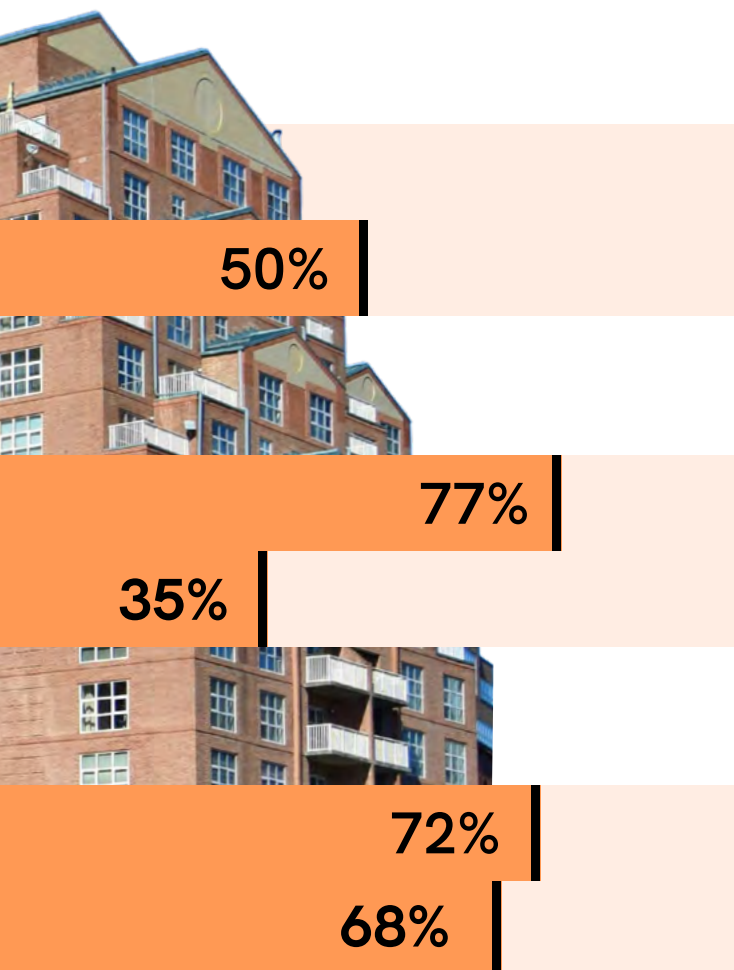
PwC Real Estate ESG Outlook, 2025

Autodesk Construction Outlook, 2025

CE Delft & Arup Modular Carbon Studies, 2024

Gitnux.org, Talenttraction.org, MCAA, e-architect.com, Wikipedia, SEC, IRA guidelines

Here are three visual charts tailored for U.S. developers that illustrate:



Carbon Breakdown: Embodied and operational carbon each contribute roughly 50% of total lifecycle emissions in mid-rise residential construction.

Modular Construction Adoption: 77% of U.S. contractors use modular or prefab methods, with 35% planning full standardization by 2030.

Tenant Willingness-to-Pay: 68% of renters and 72% of homebuyers are willing to pay more for energy-efficient or wellness-certified homes.