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Climate Change



Hot Trends and Even Hotter Litigation

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The buzz about global warming is everywhere from the news to the movie theaters. While scientists still debate the causes and extent of global warming, mandatory and voluntary green measures continue to sweep the country.

The construction industry is directly tied to the sectors that focus on climate change initiatives, including transportation, power generation, residential and commercial construction, manufacturing, forestry and waste management.

Climate change has been heating up the construction industry with additional regulations, court rulings and insurance-related green building claims.

GREEN BUILDING TRENDS

Life cycle assessment (LCA) and the Leadership in Energy and Environmental Design (LEED) rating system are the two biggest trends in green building, but neither is without criticism.

The goal of LCA is to achieve sustainable construction by considering the entire life cycle of a construction project: planning, design, construction, operation, renovation and retrofit, and the end-of-life fate of materials. This approach looks not only to the building, but to the overall environmental impact of the project, from design to excavation, construction, maintenance, recycling and renovation.

Critics argue that gaps and biases in current data indicate LCA radically distorts results, overemphasizes some impacts and hides other critical impacts.

The Center for Life Cycle Analysis also notes LCAs are based entirely on material and energy flow; they ignore the external costs and risks related to water and land use, fuel depletion, energy security, and accidents in fuel production, transportation, use and disposal.

Similar issues surround the LEED rating system, the most widely recognized green building certification in the United States. LEED is a voluntary rating system that awards points to buildings based on the impact on the environment and recognizes four levels of certified buildings: green, silver, gold and platinum. The LEED certification program, however, falls short of addressing the total life cycle of construction due to its failure to address building site locations, building maintenance and building removal.

ADDITIONAL REGULATIONS

Waste is quickly rising on the global warming hit list, and recent statistics indicate the construction industry is a prime culprit.

- The construction industry consumes and incorporates nearly 40 percent of all raw materials extracted from the earth.
- The industry is responsible for an estimated one-third of all materials sent to landfills.
- The majority of construction materials sent to landfills results from demolition of existing construction.
- The current reuse and recycle rates of construction waste is only 10 percent.

To limit the total waste contributions to landfills, states are passing regulations governing the quantity and types of waste

material deposited in landfills and enacting requirements for mandatory recycling of construction debris.

For example, Portland, Ore., requires at least 75 percent of construction and demolition waste to be recycled on all city-owned construction projects. Some advocates also have proposed measures to tax the use of virgin materials and subsidize the use of recycled materials.

Contractors must be aware of and comply with recycling requirements in their project locations. One project team turned to litigation after a county

fined the owner for the contractor's failure to recycle materials per the county's requirements.

Construction suppliers also are feeling the heat with additional regulations on cement, forestry and lumber. The cement industry is an obvious target of environmental regulations, with estimates indicating cement production causes 5 percent of all greenhouse gas emissions in the United States. Potential adjustments include changing production methods, increasing fuel efficiency of the production process and using alternative fuels in producing cement.

The forest and lumber industry is another target of regulation as concern surrounding carbon dioxide emissions rises. For example, Portland passed regulations requiring the city to plant new trees and develop policies to reduce old-growth timber consumption. Similarly, Jersey City, N.J. passed an ordinance prohibiting the purchase or use of products containing wood obtained from unsustainable harvesting of tropical or temperate rainforests.

Green rooftop construction is on the rise, and many building owners are considering "green walls" with plants on the side.

RECENT LITIGATION

Climate change also has been generating a buzz in the courts. While many cases focus on carbon dioxide emissions that do not directly relate to the construction industry, they merit close attention because success in any related case will have significant implications for construction activities that result in greenhouse gas emissions.

- **Regulation of emissions.** In April 2007, a 5-4 majority of the U.S. Supreme Court held that carbon dioxide is an "air pollutant" under the Clean Air Act for purposes of vehicle tailpipe emissions. The court found that the Environmental Protection Agency (EPA) must regulate carbon dioxide emissions if it finds such emissions cause or contribute to air pollution. Perhaps most significantly, the court rejected the EPA's finding that global warming science is too uncertain to justify regulation. The court also found the EPA's analysis failed to consider the effects of emissions and was inadequate under the Clean Air Act.
- **Suburban sprawl.** The California attorney general filed an action against the state's largest county, holding it accountable for greenhouse gas emissions caused by poorly planned suburban sprawl. The

lawsuit alleged that San Bernardino County failed to account for emissions when updating its 25-year blueprint for growth by not adequately analyzing the effects of development on global warming and not identifying ways to mitigate emissions related to development. As a condition to settlement, the county agreed to take environmentally friendly development measures.

- **Power plants as a public nuisance.** A group of plaintiffs, including eight states and the city of New York, filed suit against owners of power plants that emit carbon dioxide. The petitioners have appealed a district court decision dismissing the case.
- **Challenges to permits for power plants.** In October 2007, the Kansas Department of Health and Environment became the first government agency in the United States to deny an air permit for a proposed coal-fired electricity generating plant on the grounds that the plant would emit unacceptable levels of carbon dioxide emissions.

In September 2007, Congress launched an investigation into the EPA's decision to issue a permit authorizing the construction of an additional coal-fired boiler at the Bonanza Power Plant in eastern Utah.

GREEN BUILDING CLAIMS

While no reported case has addressed green building issues, insurance carriers are seeing a rise in claims related to green building. Claims are made against contractors and design teams under theories of design defect, LEED certification as a guarantee, green measures as performance specifications, and responsibility for delays on green materials.

Project teams can take action to limit claims with clear contract language that defines responsibilities of various parties for green issues and certification; adequately adjusts the expectations of all parties; and clearly states the standard of care that applies to the project.

Contractors also should contract to limit their responsibility for consequential damages on a green project, in the event that the project fails to achieve the desired result.

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