Climate Policies: Carbon Reduction and the Targeting of Building Emissions



In response to the societal challenges posed by climate change, state and local governments are taking action. A flurry of policies has been aimed at addressing climate concerns and related sustainability goals, resulting in an apparent race to determine who can become more "green." The commercial real estate industry shares many of the same goals and is increasingly focused on resilience, but a pair of misconceptions—that the built environment is "the problem" and unfunded government mandates are the solution—need to be overcome.

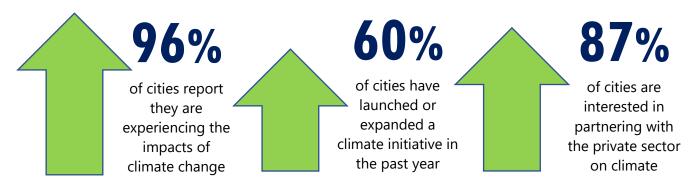
Background

The threat of climate change is steadily becoming less hypothetical and more urgent in the U.S. as the effects are becoming increasingly evident. Due in large part to the emission of greenhouse gasses, global temperatures are rising, the oceans are warming, and natural disasters are becoming more frequent and intense. It's not only coastal cities that need to worry, as evidenced by a variety of morphing threats, ranging from wildfires to insect invasions. Beyond the worst effects, day-to-day changes are now commonplace, whether it's the frequency of severe weather events or the significant shift in plant growing seasons. The environmental, financial and social ramifications are increasingly clear, and the building industry shares in the goal of assuring a sustainable future.

In an effort to combat the warming of the atmosphere, governments around the world have

sought out solutions and cooperative agreements, highlighted by the United Nations Paris Agreement signed in 2016. The agreement promotes incremental change, allowing each country to voluntarily set its own emissions reduction targets and policies. When the Trump Administration announced its intention to withdraw the United States from the Paris Agreement, the governors of California, New York and Washington stepped in to support the international agreement through the creation of the U.S. Climate Alliance, a bipartisan coalition of states and territories committed to upholding the objectives of the U.N. agreement. This continues a trend that dates back at least to 2001, when the U.S. retreated from the Kyoto Protocol—an earlier attempt to establish emissions reduction targets, which resulted in U.S. local governments rallying to take up the cause.

CLIMATE ACTION AT THE LOCAL LEVEL



Source: survey of 182 U.S. cities by The U.S. Conference of Mayors & the Center for Climate and Energy Solutions

Most global carbon emissions are a result of the built environment, and attempts to limit the emission of greenhouse gases have led to a wideranging reevaluation of transportation systems, energy sources and building stock. The concept of "carbon neutrality" and achieving a "net zero carbon footprint" is centered on eliminating carbon-based forms of energy and replacing them with renewable, sustainable alternatives. From these concepts emerged the goal of "net zero carbon buildings" or "zero energy buildings" that are: 1) highly efficient in their operations, and 2) produce onsite or procure enough carbon-free renewable energy to offset their energy consumption.

Many state and local governments are constructing their own policies—often with a goal of becoming carbon neutral by a specified date—utilizing a wide range of strategies. As these governments scramble to identify appropriate public policies, commercial real estate—and the built environment in general—

has sometimes been cast as a problem to be solved instead of a partner that can accomplish the necessary results. This is presumably due to oft-repeated, but oversimplified, statistics stating that buildings are responsible for a significant percentage of overall emissions. As a result, in some instances, climate action plans center on unfair and unfunded mandates targeting certain sectors of the economy, instead of comprehensively addressing this complex issue.

Buildings are where we all live and work, and commercial real estate will continue to lead in addressing "downstream" emissions through efficiency and conservation measures, but the root of the emissions issue continues to be the "upstream" production of energy. If society is going to achieve solutions to climate change, everyone is going to need to share in this tremendous responsibility.

Examples of State Government Initiatives

U.S. Climate Alliance

The U.S. Climate Alliance is comprised of states committed to implementing policies that meet the goals of the Paris Agreement. The alliance represents nearly half of the states, more than half of the U.S. population and nearly 60% of U.S. GDP. Upon joining, each member state pledges to implement policies that advance the goals of the Paris Agreement; track and report progress to the global community; and accelerate new and existing policies to reduce carbon pollution, while simultaneously promoting clean energy. In addition to setting goals to curb emissions, many states have also committed to adopting other climate solutions, such as limiting the use of hydrofluorocarbon super-pollutants and joining regional programs to reduce power plant emissions.

Regional Greenhouse Gas Initiative (RGGI)

Established in 2005, RGGI is the first market-based program in the U.S. to reduce greenhouse gas emissions through a regional cap on the amount of carbon dioxide pollution that power plants can emit—essentially a cap-and-trade program specific to the Northeast region. Participating states include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont. The states receive a limited number of tradable CO₂ allowances, and fossil fuel power plants with capacity greater than 25 megawatts must obtain an allowance for each ton of CO₂ they emit annually. Compliance can be achieved by purchasing allowances from quarterly auctions, other generators within the region, or offset projects. Auction proceeds are generally invested in energy efficiency, renewable energy and other consumer benefit programs. Since the initial implementation of this initiative, RGGI states have received over \$3 billion in economic benefits.

Renewable Portfolio Standards

State-level Renewable Portfolio Standards (RPS) have been adopted in 29 states, Washington, D.C., and three U.S. territories. These are market-based, technology-neutral policies requiring that a specified percentage of the electricity utilities sell comes from renewable sources. Such policies help establish the country's market for renewable energy resources, such as wind, solar, biomass

and geothermal, with some experts estimating that half of the growth in U.S. renewable energy generation since the year 2000 can be credited to these standards. RPS policies vary widely across states, but together, they encourage wider deployment of renewables and provide measurable progress toward carbon neutrality.

Examples of Local Government Initiatives

Mayors Climate Protection Agreement

On the day that the Kyoto Protocol took effect in 2005, Seattle Mayor Greg Nickels launched an initiative to have U.S. mayors commit to advance the goals of that agreement, vowing to reduce carbon emissions in their cities below 1990 levels. By the time of the U.S. Conference of Mayors Annual Meeting several months later, 141 mayors had signed onto the agreement; today, more than 1,000 mayors have made the commitment. Participating cities commit to meet or surpass the Kyoto Protocol emissions targets; urge states and the federal government to take similar action; and urge Congress to pass legislation that would establish a national emission trading system.

C40 Cities

Also launched in 2005, the C40 Cities Climate Leadership Group is a network of 94 of the world's largest cities, committed to addressing climate change through collaboration and driving action that reduces emissions and climate risks, while increasing the health, well-being and economic opportunities of urban dwellers. The mayors of these cities now commit to meeting the goals of the Paris Agreement at the local level as well as calling on national governments for support.

American Cities Climate Challenge

A partnership between Bloomberg Philanthropies and a half-dozen organizational partners, this \$70 million initiative launched in 2018. The program is working with 25 U.S. cities to accelerate their efforts to tackle climate change and promote a sustainable future for residents. Accepted cities enter into a two-year "acceleration program" that provides new resources and access to cuttingedge support to help meet or beat near-term carbon reduction goals.

New York City

In 2019, New York City passed Local Law 97, known as the Climate Mobilization Act. Its goal is to reduce building emissions by 40% by 2030 and by 80% by 2050 using 2005 numbers as the baseline. The law is applicable to all buildings over 25,000 square feet—certain building types, including city-owned buildings, affordable housing, hospitals and houses of worship have been granted alternative compliance options. The initial compliance period begins in 2024, and the penalties are potentially exorbitant, set at \$268 per metric ton. The aggressive targets and penalties have led many observers to conclude that there will be massive numbers of buildings unable to comply even with the best of intentions, resulting in considerable revenue for the city through the penalties but limited results in emissions reduction.

Washington, D.C.

The District of Columbia has committed to reduce greenhouse gas emissions by 50% below 2006 levels by 2032, through reduced energy use and increased renewable energy. In addition, at the North American Climate Summit in 2017, Mayor Muriel Bowser committed to making the city carbon-neutral and climate resilient by the year 2050, joining other cities in making pledges in reaction to the U.S. withdrawal from the Paris Agreement. The city is building off its Climate Ready DC Plan, a climate adaptation plan launched in 2016 to respond to the changing climate and related heatwaves, severe storms and flooding. The city has established a range of related, cutting-edge initiatives, including a firstof-its-kind "green bank" to finance clean energy projects and the largest municipal wind power purchase agreement in the U.S.

San Francisco

In 2018, recently-elected Mayor London Breed set an aggressive goal requiring that all newly-constructed buildings starting in 2030 are to be net-zero carbon emitters. This was intended to be a key contributor to meeting the city's existing goal of being completely carbon neutral by the year 2050. Many details of the city's climate-related plans remain in flux. According to the city, its current green-energy policies have already helped to cut emissions by 30% below 1990 levels, despite significant growth in both population and the city's economy.

Chicago

The Chicago Climate Action Plan dates to 2008, an early and ambitious municipal plan with an overarching goal of reducing emissions by 80% below 1990 levels by 2050. The plan featured 26 mitigation steps to reduce greenhouse gases and nine adaptation steps to prepare for climate change, and many of the specific policies and priorities have evolved over the intervening years. In 2019, the city achieved a separate, but related, milestone, as Chicago became the first major U.S. city to achieve a carbon-neutral investment portfolio, achieved in part by offsetting emissions with green investments that finance renewable energy projects.

Action Steps

The commercial real estate sector, and BOMA International specifically, has a long record of leadership on sustainability issues, centered on energy efficiency, voluntary benchmarking and sustainable building operations. As attention toward climate change and building emissions grows, commercial real estate can play a significant role in these efforts, particularly with a focus on existing buildings. As state and local governments attempt to craft climate policies and build on existing benchmarking ordinances or other legislation, this is a critical time to engage with elected officials and other decision makers to ensure that policies are fair and effective.

Build relationships

- It's always better to get to know your elected officials long before you need to engage them on any contentious issue. Strengthen the relationships you've already built and introduce yourself to additional officials either by making appointments to see them or by inviting them to attend BOMA events.
- Capitalize on the relationships you have built with other real estate advocacy groups and additional stakeholders, and maintain an open-door policy for potential new partners who may be helpful allies. A large and broad coalition that speaks with one voice can be a very effective lobbying entity.

Participate in sustainability initiatives

- Many BOMA local associations are already active participants in city-led sustainability efforts. Research to see if your city is holding any challenges or offering other programs that can build on your sustainability efforts and help BOMA get the recognition in this field that it deserves.
- Similarly, take full advantage of the innovative sustainability programs offered by BOMA International. This includes the BOMA Energy Efficiency Program (BEEP) education series, the BOMA Energy Performance Contracting (BEPC) model and the BOMA 360 Performance Program. You can also highlight BOMA's recent publications, "Unlocking Hidden Value in Class B/C Office Buildings: Best Practices for Pursuing Low-Cost, High-Impact Energy Efficiency and Green Leasing Strategies" and "Green Lease Guide: A Guide for Landlords and Tenants to Collaborate on Energy Efficiency and Sustainable Practices."

Be part of the discussion

- Many cities have sustainability or climate advisory groups. Have someone from your local association participate and report back to the membership on a regular basis.
- If a climate ordinance is proposed or imminent in your city, consider hosting a special meeting to discuss the proposal and invite elected officials. And again, fully participate in any stakeholder groups and at any associated meetings or hearings. It's always best to be at the table.

BOMA International is available to assist BOMA local associations by providing strategic guidance and other assistance in engaging local officials, conducting research, and developing position papers, letters, op-eds, testimony and any other communications.

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