

The Launch of the “North American Electric Construction Coalition”

September 20th, 2024

DEAR READER

We are government officials from some of the largest cities around the world and are committed to reducing our greenhouse gas emissions and air pollution, achieving carbon neutrality, and advancing the goals of the Paris Climate Agreement through the increased use of electric construction equipment. The market availability for electric construction equipment is nascent. Therefore, this letter intends to signal a commitment to use more electric construction equipment in North America.

Our neighborhoods are experiencing the impacts of climate change, such as coastal storm surge flooding, chronic tidal flooding, extreme rainfall, and extreme heat. Simultaneously, as our cities continue to develop, our communities are faced with localized health and air quality hazards associated with construction.

According to [C40 Cities](#), the construction sector alone is responsible for more than 23 percent of global greenhouse gas emissions and more than 30 percent of global resource consumption. C40 found that continuing business-as-usual in the construction sector threatens to put the world on a fast track toward a global temperature rise of 3°C or more.

Fossil fuel-burning construction equipment emits pollutants such as carbon dioxide, nitrogen and sulfur oxides, carbon monoxide, and particulate matter (PM2.5 and PM10), and endangers people’s respiratory health on construction sites and in surrounding neighborhoods. This equipment also contributes to neighborhood-wide noise pollution, which affects the health of construction workers and residents alike.

Three North American cities—Los Angeles, New York, and San Francisco—have pledged to join the [Clean Construction Accelerator](#) (CCA), where the Mayors have committed to use municipal purchasing power to procure or demand zero emission construction machinery in municipal projects from 2025, where available. The CCA also sets a collective goal to require zero emission construction sites citywide by 2030, where technology is available.

As signatories to this letter, we have a vested interest in the health and wellbeing of our communities. One way to address construction-related health impacts is to deploy electric construction equipment, which decreases localized air and noise pollution as well as greenhouse gas emissions. We strongly support pursuing programs and policies that would advance the use of electric construction equipment wherever possible.

As major capital construction entities, the signatories to this letter collectively spend significant capital dollars on purchased, rented, or contracted construction equipment. (See *Appendix 1* for a breakdown of each signatory’s annual capital construction expenditure.) As a coalition, the signatories have the potential to spur significant market growth of the electric construction equipment industry in North America.

The letter signatories are taking significant steps to encourage the use of electric construction equipment.

- *Austin, Texas:* The City of Austin is committed to reducing carbon emissions from municipal purchasing by 50 percent and reducing community-wide greenhouse gas emissions to net zero by 2040 through its council-approved Climate Equity Plan. The City protects air quality by participating in the regional Capital Area Council of Governments Air Quality Plan, which includes reducing emissions from construction, establishing “green” contracting policies, and encouraging the use of low-NOX vehicles and equipment. The City of Austin is also electrifying its fleet assets, which feature about 300 EVs, more on the way, and a goal of 40 percent of total vehicle miles travelled by electric vehicles.
- *Boulder County, Colorado:* Boulder County is committed to achieving rapid and deep emission reductions and accelerating carbon dioxide removal with an aggressive climate goal of achieving carbon neutrality by 2035. Through the Boulder County Commissioners’ strategic priority on climate and [Climate Action Plan](#), the county is exploring procurement specifications for capital construction projects mandating low-emission building materials and construction equipment. They are also undertaking a pilot using carbon negative construction materials. Finally, Boulder County is also exploring signing onto the C40 Clean Construction Accelerator in September 2024, which commits the city to take actions to lower embodied carbon citywide.
- *Los Angeles, California:* Los Angeles is committed to fostering the advancement of clean construction equipment and construction sites. LA has already made some purchases of all-electric equipment for city street services and construction ahead of the C40 commitment target date and continues to seek more purchasing opportunities. Furthermore, LA is taking steps to pilot contract language to support the use of all-electric equipment on Public Works projects.
- *Montréal, Canada:* The City of Montréal is already committed on the electrification of its vehicle fleet and building operations, with clear targets in its climate plan. Although there are currently no targets for decarbonizing construction sites, as far as intrinsic carbon is concerned, the city is considering incorporation of criteria to reduce the GHG impact of its supplies chain, for example, with its orders concerning the use of concrete.
- *New York City:* In Executive Order 23 of 2022, NYC Mayor Eric Adams directed capital construction agencies to make best efforts to include specifications in capital project construction contracts for low-emissions vehicles and equipment with a preference for all-electric equipment. NYC also signed on to the C40 Clean Construction Accelerator in September 2023, which commits the city to take actions to lower embodied carbon citywide.
- *Philadelphia, Pennsylvania:* In [2021](#), the City of Philadelphia committed to achieving carbon neutrality by 2050. Effective July 1, 2023, the City operationalized the [Municipal](#)

[LEED ordinance](#), which requires all new municipal buildings and major renovation projects to achieve LEED Gold certification. The City of Philadelphia committed to electrifying and cleaning its municipal fleet in 2021 with the release of the [Municipal Clean Fleet Plan](#), which includes procuring electric vehicles (EVs) and building the proper infrastructure to charge and operate EVs. Philadelphia also promotes low- and no-carbon transportation options through investments in complete streets, bike lanes, and multiuse trails, and is considering an Executive Order for Municipal Departments to make best efforts to reduce the climate impacts of construction projects through procurement and planning efforts. In addition to reducing emissions from City-owned assets, Philadelphia continues to advance the citywide clean energy transition through the development and implementation of policies and plans focused on the decarbonization of buildings. Philadelphia recognizes the importance and complexity of addressing the climate impacts of embodied carbon in privately-owned buildings. Their current decarbonization policies focus on reducing this impact through prioritizing preservation of existing buildings while they continue to explore additional mechanisms to address embodied carbon through collaboration with the building community and deconstruction policies for reuse of construction materials at end of life.

- *San Diego, California:* The City of San Diego's 2022 Climate Action Plan (CAP) sets bold decarbonization targets to achieve net zero emissions by 2035. To achieve this target, the CAP and Implementation Plan identify a number of embodied carbon policies and actions to lower the use of GHG intensive materials and practices including: a transition to EV construction equipment, low-carbon concrete, recycled materials, mass timber, and modular construction. San Diego also has a Zero Emissions Municipal Building Operations Policy that demonstrates the City's commitment to decarbonizing City-owned buildings and is exploring a Building Performance Standard for large buildings citywide.

Although there is a robust market and infrastructure for electric construction equipment in certain cities around the world, the market needs significant growth in North American cities. We want to leverage our role as leaders to build industry partnerships and create opportunities to develop the market for electric construction equipment in North America.

We understand that we need to take aggressive, ambitious, collective action to meet the urgency of the moment and catalyze this market. As suppliers increase market availability, signatories to this letter intend to purchase and/or use electric construction equipment on our projects wherever applicable and also intend to promote and pursue strategies that encourage the increased use of electric construction equipment in our contexts. This commitment is an essential step in responding to the climate crisis, reducing localized air pollution, and improving working and living conditions in our cities.

We call on suppliers to increase the availability of electric construction equipment and its supporting infrastructure and engage with this coalition in a dialogue to discuss:

- The state of the North American market for electric construction equipment;
- The challenges faced in transitioning away from fossil-fuel construction equipment; and

- The solutions to increase the use of cost-effective electric construction equipment in North America.

Sincerely,



Zach Baumer

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Chief Sustainability Officer, City of Austin, Texas



Ashley Stolzmann

Commissioner Ashley Stolzmann
Chairman, on behalf of the Boulder County Board of Commissioners



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And supported by:





Appendix 1: Annual Capital Construction Expenditure from Letter Signatories

| Signatory | Capital Construction Expenditure (2023) |
|-----------------------|---|
| <i>New York City</i> | FY 2024: \$8.8 billion (Capital Budget for agencies subject to NYC Clean Construction Executive Order; all funds including City funds and non-City grants) |
| <i>San Diego</i> | FY 2023: \$27.6 million |
| <i>Los Angeles</i> | FY 2023: \$575.7 million |
| <i>Montreal</i> | FY 2023: \$1.69 million (\$2,300,000 CAD) |
| <i>Boulder County</i> | FY 2023: \$12.5 million |
| <i>Philadelphia</i> | FY 2023: \$3.68 billion |
| <i>Austin</i> | FY 2023: \$1.6 billion |