To the Transportation and Climate Initiative (TCI) Leadership:

Subject: GM Comments on the Transportation and Climate Initiative’s Framework for a Draft Regional Policy Proposal

General Motors LLC (GM) appreciates TCI’s efforts to design a cap-and-invest program to reduce emissions from the transportation sector in the Northeast and Mid-Atlantic states and Washington, DC. We value the opportunity to provide comments herein on the Framework for a Draft Regional Policy Proposal.

GM takes the challenge of climate change seriously and recognizes the role of the transportation sector in contributing to global greenhouse gas emissions. This is a driving force behind our vision of a future with zero crashes, zero emissions, and zero congestion. Addressing climate change in an effective and sustainable manner requires a clear, stable, economy-wide approach. The best policies are broadly applied and incentivize economic actors to respond in ways that achieve emissions reductions at the lowest societal cost. GM agrees with the consensus opinion of most economists that predictable policies that place a monetary value on carbon dioxide emissions—including cap-and-invest systems—are the most cost-effective policy options. To achieve the greatest reductions and maximize efficiency, we believe such policies should be applied economy wide on a national basis.

As we work toward the longer-term goal of a single, nationwide market-based policy to reduce emissions, GM takes this opportunity to express support for the concepts underpinning TCI’s regional framework. We applaud TCI’s focus from the outset on designing a policy to reduce carbon emissions from the transportation sector through a pricing mechanism. And we believe the proposed cap-and-invest program would create opportunities for participating jurisdictions to invest in critical complementary policies to catalyze the transition to an all-electric future.¹

GM has made significant investments in vehicle electrification and leads the way among full-line automakers in advancing clean energy technology through our products, plants, and actions. The Chevrolet Bolt EV is a prime example of our unwavering commitment: we were the first automaker to invest in and launch a truly affordable, mass-market, long-range electric vehicle.

¹ [https://www.georgetownclimate.org/files/Final_TCI-statement_20181218_formatted.pdf]
(EV). It has been widely praised and represents just the first step on our path to an all-electric future, with more EV models to debut in the coming years including entries into the truck segment.

However, automaker investments and EV model availability are just two of several critical factors that must play a role in transforming and ultimately decarbonizing the transportation sector. Currently the market for EVs remains relatively small, with high battery costs driving up retail vehicle prices and inconsistent charging availability undermining consumer confidence in the utility of EVs. Therefore, there is an urgent need for public policies that support the growth of a profitable EV market. TCI’s proposed regional policy proposal would generate new revenues for participating jurisdictions to do just that.

GM encourages TCI, and participants in the program, to invest the program’s proceeds in funding for critical complementary policies:

- **EV Purchase Incentives.** Because EVs are still as much as a decade away from true cost parity with conventional vehicles, EV purchase incentives are crucial. Participating jurisdictions should fund robust purchase incentives—for example, rebates or tax credits—available at the point of sale to put EVs within reach for more consumers.

- **Public Charging Infrastructure.** While the majority of EV charging today is done at home, the full range of travel, lifestyles, and vehicle use-cases cannot be accounted for by home charging alone. Moreover, the visible presence of public charging infrastructure inspires consumer confidence that EVs can take them everywhere they need to go. Participating jurisdictions should, in coordination with utilities, strategically invest in public charging stations at key locations across communities, as well as along highway corridors. States should also consider providing incentives such as rebates or tax credits for private entities to construct charging infrastructure.

While each participating jurisdiction would decide independently how to invest their share of the program revenues, TCI suggests that jurisdictions could identify “shared priorities for investment” to more efficiently deliver greater benefits. GM supports this approach and recommends that participants work together toward shared goals.

GM commends TCI for proposing a market-based policy for reducing emissions from the transportation sector. We believe this can be an effective and efficient approach, reducing the societal cost of achieving emissions reductions, especially when applied on a national basis. We also encourage TCI and participating jurisdictions to use this opportunity to direct additional funding toward critical complementary policies in support of vehicle electrification as the nascent

---

but critical EV industry continues to mature. We appreciate this opportunity to provide comments and look forward to the outcome of the remainder of the policy design process.

Sincerely,

Barbara Kiss, Director
Energy and Environment
Global Public Policy
Comments on the Transportation and Climate Initiative Framework for a Draft Regional Policy Proposal  
November 5, 2019

National Grid appreciates the opportunity to comment on the Transportation and Climate Initiative (TCI) Framework for a Draft Regional Policy Proposal (Framework). We commend the leadership of the TCI states and the progress that TCI has made over the last year in working to develop a regional policy to reduce transportation CO₂ emissions.

National Grid is an electricity, natural gas, and clean energy delivery company serving more than 20 million people through our networks in New York, Massachusetts, and Rhode Island. National Grid also operates the systems that deliver gas and electricity across Great Britain, National Grid is transforming our electricity and natural gas networks with smarter, cleaner, and more resilient energy solutions to meet the goal of reducing greenhouse gas emissions by 80 percent by 2050. Our Northeast 80x50 Pathway is an industry-leading analysis for how to reach that goal in the states we serve, focusing on the power generation, heat, and transportation sectors.

National Grid is committed to achieving deep decarbonization across the Northeast. The transportation sector, which is currently the largest emitter of greenhouse gases, is poised for meaningful and necessary reductions. As outlined in our Northeast 80x50 Pathway, we support an economy-wide price on carbon. We commend the inclusion of a market-based, cap-and-invest construct in the Framework as an important contribution to our collective decarbonization efforts. This approach will encourage cost-effective emission reductions in the sector while raising revenues to fund publicly beneficially investments to support transformation of the transportation sector.

Aggressive action to reduce transportation CO₂ emissions is necessary if our states are to achieve their 80x50 objectives and meet their 2025 targets under the Zero Emission Vehicle Memorandum of Understanding.¹ Emissions from the transportation sector currently account for more than 40% of the Northeast’s CO₂ emissions. Electrification of transportation is critical to transportation decarbonization. As our Pathway analysis notes, achieving an interim 2030 goal of 40% reductions by 2030 will require adoption of 10 million electric light duty vehicles in the region (equivalent to 50% electrification), far in excess of forecast adoption rates.

Achieving the necessary degree of transportation electrification to meet 80x50 goals will require substantial investments in the near term – a recent study by MJ Bradley and Associates estimated that investments of $12-$25 billion over the next 10-12 years would be needed.² However, the potential benefits to our customers and our region as a whole are large, with economic and environmental benefits estimated at over $300 billion between now and 2050.³ In addition to significant CO₂ reductions, electrification of transportation will lead to meaningful reductions of nitrogen oxide, volatile organic compounds, particulate matter emissions from vehicle tailpipes, all

¹ On October 24, 2013, the eight governors of California, Connecticut, Maryland, Massachusetts, New York, Oregon, Rhode Island, and Vermont signed a Zero Emissions Vehicle Memorandum of Understanding (ZEV MOU) with a goal of reducing greenhouse gas and smog-causing emissions. Under the ZEV MOU, the signatory states collectively committed to having at least 3.3 million ZEVs on our roads by 2025, along with the infrastructure to support these vehicles.
³ Ibid.
of which have more local effects. Utility customers will benefit from downward pressure on rates that results from increased revenue due to higher usage and more efficient utilization of distribution system assets. Vehicle owners will benefit from reduced fuel and vehicle maintenance costs. In addition, the region will benefit from the economic development associated with the construction, operation, and maintenance of EV-related infrastructure, and would retain the economic benefits of regionally-produced transportation energy.

National Grid is committed to leading by example on the electrification of the transportation sector:

- National Grid will be implementing nearly $35 million in electric transport related initiatives - such as charging infrastructure, customer outreach/education, and grid integration - over the next three years in all our jurisdictions;
- Launched an electric vehicle (EV) adoption program for employees, facilitating the sale/lease of more than 350 EVs since the program launch in 2018;
- Installed over 100 charging ports at 20 of our facilities to date, with more planned soon;
- Committed to investing 5% of corporate fleet budget to EVs;
- Owns and manages 150 Level 2 stations across our jurisdictions and have installed three DC fast charging stations in the Commonwealth with state grant funding; and
- National Grid played a leadership role in the national Alliance to Save Energy’s “50x50 Commission,” a diverse group of stakeholders working to reduce energy use in the transportation sector by 50% by 2050 while also meeting future mobility needs.

National Grid offers specific comments on the following elements of Framework:

**Emissions cap and trajectory:** The TCI cap and emissions trajectory should be ambitious, and set at levels that that will ensure meaningful emissions reductions from the program in support of state decarbonization goals, while also raising sufficient revenue to fund investments that advance states’ clean transportation objectives and create affordable and clean transportation options. National Grid expects that TCI’s modeling of various policy and investment scenarios will provide important insights into appropriate cap levels. Sensitivity analysis of key but uncertain variables such technology costs, federal climate policy, and fuel prices, will also be important to ensuring a robust program design that can remain impactful under multiple versions of the future.

**Allowance auctions and investment of proceeds:** National Grid supports the Framework position that nearly 100% of allowances will be auctioned. Auctions provide a fair and transparent mechanism to distribute emissions allowances. National Grid supports the inclusion of a minimum reserve price to ensure that a meaningful price signal is provided to the market and that states will be able to depend on a minimum level of revenue for investment.

Given the substantial near term investments that will be required to achieve decarbonization goals, effective use of auction revenues in support of these investment needs will be critical to TCI’s success. We support the Framework’s position that each state would determine how to invest revenues in manners consistent with its transportation policy priorities, but suggest that how to most effectively and equitably advance transportation electrification be a foremost consideration as states evaluate how to invest proceeds. Potential high-impact uses of proceeds include:

- Providing a sustainable source of funding for consumer rebates for EV purchases;
- Funding the build-out of publicly accessible charging infrastructure with a mix of high-speed DCFC and moderate speed “level 2” chargers; and
- Increasing availability of public transportation, especially low-carbon and clean public transport options including electric buses.
We also commend the Framework for recognizing that there may be efficiencies to gain from cross-state collaboration in making investments.

**Equity:** National Grid agrees that equity must be a foundational objective of TCI. The program should be designed and implemented in a manner that ensures the benefits and burdens of the program are shared equitably across communities, and access to clean transportation options for underserved and overburdened populations is expanded.

**Containment of emissions and costs:** There is significant uncertainty involved in the setting of an emissions cap and what that might mean for allowance prices under the program. Allowance prices that are significantly above or below expected levels can threaten program goals and undermine stakeholder support. RGGI contains two important mechanisms that alleviate some of the risk associated with uncertain cap levels:
- Emissions containment reserve, which automatically decreases the cap levels in a controlled manner, if allowance prices fail to shift the marketplace as needed;
- Cost containment reserve, which injects additional allowances if prices become too high and exceed a certain threshold.

National Grid believes that both of these mechanisms, when set at appropriate trigger levels, can provide additional cost and benefit certainty to participants and stakeholders, and help support the effectiveness of TCI.

**Flexibility and linkage:** Flexibility is important to maximize the cost-effectiveness of TCI. Banking and multiyear compliance periods enable affected entities to smooth compliance costs over time, and help to minimize volatility in allowance prices. The ability to bank allowances for future use can also help to accelerate emissions reductions in early years of the program. National Grid agrees with the intention expressed in the Framework to incorporate these mechanisms and draw upon examples from RGGI, which pioneered a three year compliance period, as well as other programs.

As the Framework discusses, linkage to other programs such as RGGI is another means of providing flexibility and limiting costs. Linkage provides an avenue to maximize efficiency across separate emissions trading programs such that overall emissions reduction costs are lower. Linkage with RGGI, for example, would establish a multi-sector framework that would drive the most cost effective emissions reductions across the two sectors, and lower the overall cost of emissions reductions to the region. However, the decision on whether to link programs is a nuanced one, requiring consideration of cost shifts and distributional impacts among the linked programs, as well as implications for allowance values and auction proceeds, and warrants thoughtful analysis. National Grid believes that the potential benefits of linkage are sufficient to advise that TCI be designed in a manner that does not preclude or impede the ability to link with programs such as RGGI (i.e., “linking ready” as described in the Framework).

National Grid appreciates the opportunity to provide input on the Framework. We look forward to supporting the next phase of the development of this important regional effort.