





November 5, 2019

To the Georgetown Climate Center and to member state participants of the Transportation and Climate Initiative (TCI):

Thank you for your efforts to develop a regional policy to support low-carbon transportation. As members of the <u>Electric Vehicle Charging Carbon Coalition</u> (EVCCC), we share the same goal of accelerating the transition to a low-carbon transportation future, and appreciate the opportunity to provide comment on the draft framework for a regional transportation carbon policy. The EVCCC represents a diverse group of equipment manufacturers, electric vehicle (EV) charging companies, financial institutions, utilities and cities, who have worked together to develop a carbon credit business case and credible methodology for supporting transportation electrification through carbon credit revenues. The coalition has fully established a certified methodology¹ for EV charging equipment that meets the rigorous requirements of the third-party certification organization, Verified Carbon Standard (VCS). Multiple partners have projects in development with plans to issue carbon credits in 2019 and 2020, subject to similar VCS certification reviews.

As a result, EV charging equipment can now earn carbon credit revenues from the voluntary carbon market across the US and globally. Our input in this letter is designed to assist TCI states in designing a program that incorporates these complementary sources of revenue for communities in the TCI region, allowing for the incenting of transportation decarbonization beyond what a cap would accomplish alone.

As diverse stakeholders supporting the deployment of electric vehicles (EVs) and charging infrastructure, we write to respectfully urge your consideration of a creative and flexible framework that:

- Provides criteria pollutant and GHG reduction benefits to local communities.
- Furthers the emissions reduction goals of the program by facilitating transportation electrification with ubiquitous charging and widespread EV adoption.
- Recognizes the existence of voluntary market carbon credits within the TCI region, whose incremental value can complement and accelerate additional investment in clean transportation a mainline strategy in attaining emissions reductions.
- Leverages and incorporates emissions reductions already certified through the established VCS methodology in the Northeast.

¹ VM0038 - <u>https://verra.org/methodology/vm0038-methodology-for-electric-vehicle-charging-systems-v1-0/</u>

- Builds upon the potential inclusion of set-aside reserves in TCI's design, without which all such carbon credit value from EV charging would essentially be taken from local EV charging investors who are undertaking complementary activities, and instead be transferred to capped entities (the fossil fuel importers) so as not to double-count credits.
- Preserves the ability of *non-capped* investors to accelerate their deployment of local creditable low-carbon transport technology projects. Through voluntary market investment and following the precedent Washington State pioneered technologies that are mission-critical to TCI's aims can have additional opportunity to succeed in meeting aims of environmental justice and local benefit.

Importance of Electric Vehicles and Charging Infrastructure

The transition to a low-carbon electric transportation system is essential for the TCI region to meet its GHG reduction targets. In the TCI states, many of which have taken steps to reduce the carbon intensity of electricity through RGGI, renewable portfolio standards, and other measures, electric vehicles provide substantial GHG reductions relative to gasoline (See Table 1). EVs are also well-positioned for widespread adoption, having reached commercial maturity with longer ranges, faster charging times, and diverse body styles to meet consumer needs. However, lack of charging infrastructure remains a key barrier that limits EV uptake. Studies have shown that lack of public charging is one of the greatest concerns cited by consumers who are unwilling to purchase an EV.²

Table 1. Well-to-wheels annual average emissions by jurisdiction for gasoline versus all-electric
passenger vehicles (in pounds of CO2 equivalent) ³

Jurisdiction	Gasoline Emissions	ZEV emissions	% GHG Reduction
Connecticut	11,435	2,452	78.6%
Delaware	11,435	4,768	58.3%
Maine	11,435	1,091	90.4%
Maryland	11,435	3,738	67.3%
Massachusetts	11,435	3,180	72.2%
New Hampshire	11,435	1,223	89.3%
New Jersey	11,435	2,536	77.8%
New York	11,435	1,846	83.9%
Pennsylvania	11,435	3,668	67.9%
Rhode Island	11,435	4,275	62.6%
Vermont	11,435	0	100%
Virginia	11,435	3,423	70.1%
Washington, DC	11,435	1,309	88.6%
TCI Unweighted Average	11,435	2,578	77.5%

² National Renewable Energy Laboratory, 2017. "The Barriers to Acceptance of Plug-in Electric Vehicles: 2017 Update." Available at: <u>https://www.nrel.gov/docs/fy18osti/70371.pdf</u>

³ U.S. Department of Energy, Alternative Fuels Data Center, Emissions from Hybrid and Plug-In Electric Vehicles, available at <u>https://afdc.energy.gov/vehicles/electric_emissions.html</u>.

Developing a robust regional charging network to support electric vehicle travel will increase range confidence, eliminate charging anxiety, and create the conditions necessary for EVs to achieve widespread adoption, thus achieving transportation GHG emissions reductions. Developing ubiquitous EV charging is also a necessary near-term feature for rapidly growing EV deployments to meet the targets many TCI states already collectively committed to through the Zero Emission Vehicles Memorandum of Understanding.

Set-Aside Reserve for EV Charging Projects

A set-aside reserve has been called out as a possibility in the draft framework. Recognizing the likelihood of this feature being left to individual states' prerogatives, we advocate that the framework incorporate a model rule that interested states may incorporate or adjust into state regulations at their discretion.

We believe a set-aside reserve is a necessary mechanism to ensure that in-sector GHG reductions when capitalized as carbon credits - such as those delivered by charging equipment - are recognized in the TCI program. A set-aside reserve allows for a limited amount of cap allowances to be accessed by projects generating carbon credits in the voluntary carbon trading market. Without such a mechanism, EV charging projects would have greater difficulty accessing carbon market revenues – certainly within the TCI program but also in the voluntary offset market - due to double counting considerations that are built into the EV charging VCS certification methodology.

These carbon credit revenues are vital to support EV charging investment for many reasons. TCI's goals will require healthy, sustainable operation of robust EV charging infrastructure. Companies in this space are working to scale deployment over time while still overcoming utilization-based challenges to near-term profitability, which could be supported through the sort of additional incremental operating revenues now available with access to carbon markets. Carbon credit revenues provide complementary sources of capital for TCI states which have considerable impact on additional EV charging investment; EVCCC estimates that over a 10-year period, credit revenues can provide a 5-10% return on capital, greater than many incentives for charging equipment. By allowing for offset credits for EV charging – which are essentially a performance-based incentive - TCI could help to improve the financial viability of additional charging stations during early market development. This structure facilitates the crowding-in of private market investment, which can be leveraged to support additional investments in the region to the furtherance of TCI's objectives.

TCI states could choose to provide even greater support for clean transportation investment by allowing EV charging providers who generate offset credits from the use of their stations to sell them to regulated entities for compliance purposes. This option, which Washington State included in its recently considered cap-and-invest program, would increase the value of monetized GHG reductions due to the typically higher value of compliance credits relative to those sold in voluntary markets. Under the Washington framework, offset credits could be created inside a state for technologies and projects in covered sectors that it deems mission critical, without double-counting by applying the set-aside reserve. Therefore, TCI may look to the Washington design as a precedent which accelerates the transportation decarbonization impact of the program while maximizing local benefits within TCI communities.

Providing Benefits to Local Communities

Stakeholder feedback to TCI has already emphasized the importance of the ability for communities to themselves access sources of capital, and direct investment in ways that support local interests and deliver benefits within the community. With a set-aside reserve, an additional layer of beyond-business-as-usual carbon credit value can be realized by local stakeholders investing in EV charging, including residents, community groups and workplaces. Without the application of a set-aside reserve, this existing value would be taken away from these "non-capped" local entities and transferred, in the cap design, to the capped fossil fuel importers. This would undermine both TCI's diversity, equity and inclusion goals as well as its interests to accelerate local investment in low carbon transportation technology.

The higher upfront retail costs of electric vehicles are offset by the money they save their owners on a cost-per-mile basis (i.e., in avoided maintenance and fuel costs). Those economics support transportation electrification use cases that maximize all-electric miles driven, becoming conducive for transit buses, school buses, and rideshare chauffeurs. Such vehicles powered by fossil fuels account for a substantial amount of road activity and associated emissions in population centers, allowing electrification to be put into the service of equity considerations. Low income communities have historically been subjected at higher rates to negative air quality effects due to transportation. Thus ensuring that all stakeholders have access to the complementary capital provided by the voluntary carbon markets is essential if TCI is to optimize both the benefits that electrified transportation will provide across adversely impacted communities and simultaneously preserve their ability to use these additional credit revenues to accelerate EV charging investment in their local communities.

Conclusion

Mainline GHG emission reduction strategies like transport electrification can deliver major environmental benefits to TCI communities. Carve-out provisions like set aside reserves can leverage the existence of developed methodologies to drive further infrastructure investment. Stakeholder feedback to TCI has already emphasized the importance of the ability for communities to themselves access sources of capital, and to direct investment in ways that support local interests and deliver local benefits. By ensuring instead that communities retain access to complementary capital, the TCI states can help to drive additional investment in technologies these states deem mission critical.

EVCCC members appreciate the opportunity to provide feedback on the draft regional framework, and look forward to continuing to work together towards a final program.

Sincerely,

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