Comments on the Draft Memorandum of Understanding and Model Results of the Transportation and Climate Initiative (TCI)

I was fortunate to be able to attend the Public Meeting on Climate and Transportation held at the Rochester City Hall on Wednesday 12 February. The presentations and subsequent discussion at this meeting provided a very helpful overview of the TCI cap-and-invest policy design and the likely impacts of the implementation of such a policy.

The cover page distributed with the Draft MOU invites public responses to three questions. My comments will respond primarily to the first question:

> *What factors should TCI jurisdictions consider when setting the starting level and the trajectory for a regional cap on carbon dioxide emissions from transportation fuels?*

My comments also respond to the model results presented at the meeting.

My perspective is colored by my residing in the State of New York, which recently enacted its landmark climate legislation, the Climate Leadership and Community Protection Act (CLCPA). As you know, the CLCPA stipulates that New York greenhouse gas emissions across the entire economy must be reduced by at least 40% relative to 1990 emissions by 2030. Considering that

- The cap-and-invest policy envisioned by the TCI is unlikely to come into effect before 2022; and
- Over the period 1990 to 2016, New York transportation emissions as a fraction of total emissions rose from 25% to almost 36%;[1]

It is clear that most plausible pathways by which New York can comply with its own law, the CLCPA, will require that New York's transportation emissions be reduced by at least 40% over the first ten years in which the TCI cap-and-invest policy will be in effect, and probably substantially more.

The percentage by which the TCI cap-and-invest policy is intended to reduce emissions is nowhere made explicit; however, from the very fact that the other participants in the TCI have not thus far enacted legislation similar to New York's CLCPA, it appears likely that the level of ambition to which other participants will agree will be substantially less than sufficient to meet the reduction targets New York is now legally required to meet. This may mean that the entire TCI cap-and-invest initiative is *moot* as far as New York is concerned. Apart from that, to the extent that New York's representatives in the TCI policy process are there representing the New York state government, they have a clear responsibility to advocate strongly for a level of policy ambition on the part of the TCI that would be consistent with the emissions reductions New York is legally required to meet.

In considering this point we need to remember that, according to the consensus of the scientific community, New York's emission reduction targets are themselves nowhere near sufficiently ambitious.[2]

Considering the reported modeling results in this light, we can observe that

1. The modeling work considers three scenarios in which the emissions cap is reduced over ten years (2022 - 2032) by respectively 20%, 22%, and 25%.
2. In the Reference Case with no cap-and-invest policy at all, transportation emissions decline by 19% (due to existing fuel efficiency and emissions standards and voluntary adoption of ZEVs).
3. In all three scenarios, the effect of the cap-and-invest policy is to *increase* GDP, disposable personal income, and employment while improving public health outcomes, with the 25% case having the greatest benefits *by substantial margins*.

[1] New York State Energy Research and Development Agency, *New York State Greenhouse Gas Inventory: 1990–2016*. July 2019; https://www.nyserda.ny.gov/-/media/Files/EDPPP/Energy-Prices/Energy-Statistics/greenhouse-gas-inventory.pdf accessed 12/21/2019.

[2] The IPCC *Special Report: Global Warming of* 1.5° C indicates that many severe impacts of climate change can be prevented only by sufficiently curtailing global emissions to limit warming to no more than 1.5° C. New York's targeted emission reduction, if matched by all other states in the US (no sign of this happening), would only suffice to meet the US' Paris emissions commitment (from which the US is withdrawing), and nations' Paris commitments are collectively insufficient even to limit warming to 2.0° C.

4. None of the emissions cap reductions would suffice to meet New York's target of a 40% emissions reduction by 2030. Even the 25% case falls far short.

To present only the 20 - 25% cases when it is very likely that greater cap reductions would have still greater economic and public health benefits while potentially meeting New York's emission reduction target seems hard to justify.

Conclusions

1. To limit the range of cap reductions considered in modeling studies to a maximum of 25% makes no sense. Modeling studies should assess the impacts of cap reductions of up to at least 45%. To fail to include this range in published results is misleading: it suggests that cap reductions of more than 25% are infeasible when the data don't support this conclusion.
2. The apparent mismatch in levels of ambition between New York's CLCPA and the policy toward which TCI appears to be headed threatens the integrity of the initiative. New York would be bearing the administrative burden of an emissions policy of questionable relevance to its own climate policy objectives.
3. The scientific understanding of climate change and the outcomes of the modeling studies conducted to date both indicate that the parties should be aiming for much larger emissions reductions in the transportation sector than they seem to be contemplating at present.

Eric Koski
Rochester New York March for Science
Rochester People's Climate Coalition