

Comments on Transportation Climate Initiative Draft Framework

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Summary

I am writing in response to the October 1, 2019 Georgetown Climate Center announcement that the framework for a draft regional Transportation Climate Initiative (TCI) policy to reduce greenhouse gas pollution from the transportation sector was available and requested all interested parties to provide input and feedback on the draft framework. I am commenting because I do not believe that the general public is aware of this process so I want there to be at least one voice that has concerns about this draft framework.

I am a retired air quality meteorologist with extensive relevant experience. I became familiar with transportation planning and modeling when I modeled the air quality impacts of transportation projects including the Ted Williams tunnel in Boston. I have extensive experience with air pollution control theory and implementation having worked every cap and trade program affecting electric generating facilities in New York including the Acid Rain Program, Regional Greenhouse Gas Initiative and several Nitrogen Oxide programs. The opinions in these comments do not reflect the position of any of my previous employers or any other company I have been associated with, these comments are mine alone.

I have provided [separate comments](#) on the technical question whether the cap-and-invest approach is the best alternative. These comments address multiple other concerns. I believe that costs must be addressed before any jurisdiction can decide whether to join the TCI. Contrary to the statements saying that there has been “extensive” public input to this process I show that the only segment of the public that is even aware of this process has some sort of vested interest in transportation and climate planning. I addressed each of the components of the framework and finally discuss some implementation issues based on my extensive background in cap and trade programs.

Costs

The reality is that Roger Pielke Jr.'s [Iron Law of Climate Policy](#) is an inevitable outcome for the changes envisioned for the TCI. His "iron law" simply states that “while people are often willing to pay some price for achieving environmental objectives, that willingness has its limits”. I have been unable to find any mention of costs in the publications and I am unaware that costs were presented at any meetings. I suspect that the added fuel costs alone will be on the order of dollars and not cents. I have discussed this with others and “not cheap” was the consensus.

The first priority for the draft memorandum of understanding should be cost estimates. It is inappropriate to ask jurisdictions to decide whether to sign the final MOU and participate in the regional program without that information. If values are presented in the draft then the jurisdictions will be able to see if the numbers are acceptable. I predict that failure to do so will create the TCI region's own version of the French [“Yellow Vest” movement](#).

As a reminder the Yellow Vest movement sprang up spontaneously in November 2018 against hikes in French car fuel taxes, with supporters donning the fluorescent safety vests that French law requires all motorists to carry. Prices had already risen to record levels and when President Macron announced further taxes on fuel he said were necessary to combat climate change and protect the environment spontaneous protests broke out. For at least [22 weeks](#) there were weekly Yellow Vest demonstrations which had started peacefully but unfortunately turned violent and included vandalism. I do not believe that price hikes to fuel taxes that incite this kind of response are in the best interest of society even if those prices combat climate change.

The draft Memorandum of Understanding promised by the end of the year must include an estimate of the cost increase per gallon of fuel.

Public Input

The email that I received announcing the framework stated: “This high-level framework represents an important milestone in the jurisdictions’ bipartisan regional collaboration this year, and reflects extensive public engagement, technical analysis and consultation. I disagree with this characterization because my definition of “public” refers to society as a whole. Engagement on this topic has been confined to a limited and biased subset of the people as whole if my experience in New York is typical.

I went to the [Georgetown Climate Center](#) listening session in Albany, NY on April 9, 2018. I don’t believe that there was public notice of the meeting because I got a call from NYS Department of Environmental Conservation (DEC) Deputy Commissioner Jared Snyder asking why I wanted to attend. He was clearly surprised that I knew about the meeting. After assuring him that I would behave, I was allowed to attend. When I showed up at the meeting, where I expected to be the only member of the public, I was surprised how many members of environmental organizations were present in addition to the regulatory agency people. Whatever the motivation to check my rationale to participate, this was not an event that the general public knew about.

New York had its own [listening sessions](#) to help advance a cleaner, safer, and more reliable low-carbon transportation future in the summer of 2018. While those sessions may not have been part of the TCI process, I believe that the attendees were similar to the TCI public engagement meetings. I attended the Central New York session on August 21, 2018. The meeting was “designed to engage stakeholders with diverse interests and concerns in discussion of the economic and social considerations for deploying clean transportation options, opportunities to enhance environmental and public health benefits through a modernized transportation system, how innovative, low-carbon transportation can enhance quality of life and boost economic competitiveness, and what policies and programs may help advance a clean transportation future”. Notice for this meeting was provided in the NYS DEC e-mail distribution system and there was a press release, so the general public as a whole might have had the opportunity to hear about the meeting. However, attendance at the meeting was limited to members of environmental organizations, staff from transit agencies in the region, other people with a vested interest in a clean transportation future, and me.

On October 28, 2019 [I attended](#) the Buffalo NYS Public Participation Workshop on Regional Approaches to Climate and Transportation. Because the Buffalo meeting did not include an opportunity to formally meet people and the attendance list was not published, I don't know the background of the attendees. However, the people I did know there were mostly agency staff so at least a third were there as part of their job. The meeting was hosted by PUSH Buffalo whose mission is "to mobilize residents to create strong neighborhoods with quality, affordable housing; to expand local hiring opportunities; and to advance economic and environmental justice in Buffalo". As a result, I think that the majority of the rest of the audience were social justice or environmental organizations. I do believe that there were some industry people in attendance but did not hear from any of them while I was at the meeting.

The meeting summary "[What we have heard so far](#)" (hereinafter "TCI Meeting Summary") documents the results of all the meetings. For example: "In general, submissions from individuals, organizations, and coalitions expressed support for the goals of TCI's regional policy development effort to reduce emissions of greenhouse gases from the transportation sector." To this point the TCI process has only considered opinions from individuals, organizations, and coalitions that have a vested interest in those goals somehow assuming that their opinions are representative of the public as a whole.

Based on my meeting experience, I think it is presumptuous to say that these meetings provide engagement from the public, which I define as including anyone outside the wonky world of future transportation policy especially as it pertains to environmental justice. Moreover, the format of these meetings was more about "what are the things we can do for clean transportation options" than "how can we implement these options and at what cost?". None of the meetings I attended addressed implementation issues, feasibility concerns, or potential costs.

Framework Contents

There are six program design elements: equity; applicability; compliance and enforcement; flexibility, allowance allocation, and stringency; regional program administration; and additional program design elements. I will address each below.

Equity is a common element in all recent environmental initiatives. According to the framework draft: "TCI jurisdictions embrace the goals of equity, environmental justice, non-discrimination and meaningful public participation. TCI jurisdictions have committed to working with people and communities to develop and implement a regional policy that addresses the urgent need to reduce greenhouse gas (GHG) emissions and other harmful pollutants generated by the transportation system, while seeking to improve equity, mobility and community engagement." Is there anyone who disagrees with those goals? Cynic that I am, I suspect they are prominently included to cater to a particular demographic who might, upon serious review of the plan, realize that this kind of program will impact those who can least afford the inevitable extra costs and become opponents.

There are two components to the applicability design element: affected fuels and emissions and regulated entities. The proposed program would "cap emissions of carbon dioxide from the combustion of the fossil component of finished motor gasoline and on-road diesel fuel in the region". The regulated

entities would include “owners of fuel at terminals within the TCI jurisdictions and owners of fuel delivered into the jurisdiction for final sale or consumption in the state from a facility in another jurisdiction. Owners and operators of fuel supply infrastructure (terminals, pipelines, distributors, etc.) may also have reporting or recordkeeping obligations.” One of my big concerns about this program is that it is flying under the radar of all but a few. I have been active in RGGI since its inception and was part of an organized industry response that had extensive experience with this kind of pollution control program. We had infrastructure in place to provide the detailed information necessary for a cap and trade pollution control program and had been doing the detailed reporting necessary for years. I suspect that the proposed regulated entities for the TCI are not nearly as experienced or organized and may not be able to provide meaningful comments on the plan relative to monitoring and reporting the necessary information.

I want to address two components in the compliance and enforcement design element: emissions reporting requirements and monitoring and verification. Fuel suppliers would be required to “report emissions to TCI jurisdictions, plus supporting information” and compliance obligations would be calculated based on the emissions that occur when the affected fuel is combusted, using standard emission factors developed by the United State Environmental Protection Agency (US EPA), California, or other similar sources”. Based on my experience with electric generating sector [emissions reporting](#) it would be much easier for the affected sources to report fuel quantities and let the jurisdictions calculate the emissions. The EPA emission monitoring reporting and verification requirements for its emission trading programs were a significant burden for the regulated industry and they had most of the infrastructure in place. This would not be the case for this program. Moreover, the draft framework proposes that TCI jurisdictions would “establish an electronic emissions reporting system informed by existing reporting requirements for fuel suppliers”. I worry that the pre-disposition of the developers of the framework to require reporting emissions rather than simply using existing reporting requirements for fuel suppliers will unnecessarily complicate reporting.

Understanding the flexibility, allowance allocation, and stringency design element is a specialized niche expertise. As is the case with [RGGI](#) and [New York’s carbon pricing initiative](#) for the electric sector, the authors of the draft framework rely heavily on economic theory. However, in my opinion, [reality is different](#) for these programs. The draft says that the program will incorporate “allowance banking and multi-year compliance periods and include price-based mechanisms for cap flexibility and cost containment based on examples from RGGI.” This approach is based on the premise that the affected sources will somehow treat the allowances as a commodity and make long-term plans for complying with the rules to efficiently reduce emissions. In reality, the affected electric generating sources in RGGI and, I can almost guarantee the state fuel suppliers in this program, will treat this added expense just like a tax. It is just an added cost to doing business and the planning horizon for costs is the compliance period. I explained in my other comments to the TCI (available [here](#)) that setting up a tax and investing the proceeds as suggested is a better alternative if something has to be done.

Implementation

To date the TCI stakeholder meetings have only gathered information. While the organizers can point to a list of ideas or concepts, the reality is that no one has yet evaluated them for feasibility. I believe that there are at least four critical feasibility issues to address before any state should consider joining the program: cost, population density considerations, infrastructure, and leakage.

Because it is the most important, I addressed cost in my first section of these comments. Any future meetings with stakeholders should get the general public involved and find out how much they are willing to pay. It must be kept in mind that people have a tendency to promise more than they actually end up paying. A [recent poll](#) asked the public how much they were willing to pay to combat climate change. The poll found that “To combat climate change, 57 percent of Americans are willing to pay a \$1 monthly fee and 23 percent are willing to pay a monthly fee of \$40.”

In order to reduce emissions from automobiles mass transit improvements are a big component of the initiative. However, there are population density requirements for a viable mass transit system. There is no question that mass transit works well when the population density is high but what about when it isn't? While many planners decry suburban sprawl and design because it makes walking and transit less effective, the fact is that is what we have to work with and, like it or not, people seemed to want it. While those planners may don't like their decision to live that way the fact is that is what we have to work with. Bottom line is that mass transit may not be a solution in many suburban neighborhoods and cannot be a sustainable solution in most rural areas simply because there aren't enough riders.

There also is a social justice issue related to population density. New York State has established an aspirational goal to eliminate carbon emissions by 2050. In order to meet that goal, all CO₂-emitting vehicles have to be replaced including those in rural areas. Many of the rural poor live out in the “boondocks” because housing there is cheap. No transit system is ever going to be able to provide adequate service for the rural poor and be financially sustainable. The alternative is for the rural poor is to get non-emitting vehicles but those folks may only be able to afford third-hand vehicles. It is unreasonable to expect that they could afford a non-emitting vehicle and the infrastructure necessary to operate it. Unless rural poverty is confronted early in the project I fear that those least able to afford increased energy costs will be hard hit.

I am fascinated with transportation history particularly regarding railroads. A major problem with mass transit in all but the largest cities is that traveling is inconvenient. I have heard planners suggest that we develop more light rail transit in Upstate New York but students of history can tell you that in the early 1900's there was an extensive interurban trolley system in Upstate New York. In Syracuse you could go to Utica, Rochester, and Oswego on those systems. They all failed by the 1930's because even though folks had to drive on dirt roads with little heat in the winter and no cooling in the summer it was more convenient than taking a ride on a trolley. To dream that people will give up that convenience when many have remote car starters is magical thinking.

Another issue is infrastructure. Mandated electric vehicle use requires charging infrastructure. When you start thinking about all the places where cars are parked overnight it becomes obvious that hotels, apartment buildings, and camp grounds will need to install charging facilities. That is a massive amount of charging stations. Today it is relatively easy to stick some charging stations on the perimeter of a parking lot but when the majority of the parking spots have to have charging stations that means the lot will have to be torn up to get to the middle. However, that is still comparatively easy to address as opposed to providing infrastructure to anyone who parks overnight on the street in a city. My point is that few if any of the participants in the TCI meetings to date are in this situation. I expect that their reaction to a requirement for electric vehicles would not be as positive as has been suggested in the framework announcement.

The final big issue is leakage. Leakage refers to effects at the boundary when one jurisdiction has rules that another does not. For example, if the TCI raises taxes on fuels to discourage use then there is an incentive for folks near the boundary to get their fuel outside the TCI jurisdiction. In that case the emissions still occur and there are no investments with proceeds from the TCI taxes. This problem is exacerbated for mobile sources because not only do you have people within the jurisdiction leaking outside but you also have to provide for those from outside the jurisdiction coming in. The New York 100% goal illustrates this problem. Do you really think that the tourist industry is going to say that they don't need visitors who drive in from outside New York? In order to provide for them existing gas stations will have to be maintained but if there are many fewer gas automobiles then they may only be able to stay in business if they are subsidized. This is an issue with not only the tourist industry but anything that has to be shipped. At least tourism is an option but truck deliveries of food and merchandise are not. How can the TCI handle trucking industry leakage?

Summary

This initiative has operated without general public knowledge for several years. Although the advocates for this program probably believe that they are doing the will of the people, I think the limited audience involved so far has biased the approach. For starters the basis of the program is "the urgent need to reduce GHG emissions and other harmful pollutants generated by the transportation system". Most people who have bothered to wade through the documents believe that and so are ready for this kind of program. For those who don't accept that as an urgent need then this program is not a high priority.

The reality is that Roger Pielke Jr.'s [Iron Law of Climate Policy](#) is an inevitable outcome for the changes envisioned for the TCI. His "iron law" simply states that "while people are often willing to pay some price for achieving environmental objectives, that willingness has its limits". I have been unable to find any mention of costs in the publications and never heard any mention of costs at the meetings I attended. I cannot imagine how this could be implemented with price shocks. The first priority of the TCI must be to develop a range of costs to determine if this is politically feasible.

Implementation of this framework has far too many unintended consequences and likely unanticipated negative outcomes. This effort should be stopped now before any more resources are squandered on it. Ultimately, the question that needs to be addressed at this time is whether any emissions marketing

scheme can be successful if the ultimate goal is a significant reduction in emissions. Because CO2 from fossil fuels is such an integral part of our lifestyles a large reduction in emissions is going to have to require changes in lifestyles. Therefore, the question becomes will people accept lifestyle changes such as giving up the gas automobile with all its current advantages over any alternative as a result of indirect CO2 pricing? Personally, I think that is a tough sell.

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