

Assessment of Caiazza Comments 6 NYCRR Part 496 Statewide Greenhouse Gas Emission Limits Comments

The New York Department of Environment Conservation (DEC) [Assessment of Public Comments](#) responds to all substantive comments received during the public comment period, including written comments as well as oral statements made at the two virtual public hearings. Comments were compiled, reviewed, and categorized based on their content. This documents the responses to my comments.

The law mandates an [aggressive schedule](#) for developing this inventory but has two conflicting components. The CLCPA 1990 baseline is supposed to be set by the end of 2020 but the first statewide greenhouse gas emissions report isn't due until 2021. The [statewide emissions report](#) is defined as a "comprehensive evaluation of the inventory best available science and methods of analysis, including the comparison and reconciliation of emission estimates from all sources, fuel consumption, field data, and peer-reviewed research". It "shall clearly explain the methodology and analysis used in the department's determination of greenhouse gas emissions and shall include a detailed explanation of any changes in methodology or analysis, adjustments made to prior estimates, as needed, and any other information necessary to establish a scientifically credible account of change". The 1990 baseline for the [statewide GHG emission limits](#) has similar quality requirements: "In order to ensure the most accurate determination feasible, the department shall utilize the best available scientific, technological, and economic information on greenhouse gas emissions and consult with the council, stakeholders, and the public in order to ensure that all emissions are accurately reflected in its determination of 1990 emissions levels".

Emission Limits

Comment 11: Some commenters suggested additional or alternative emission limits, including interim limits to maintain momentum or targets that recognize the long-term impacts of GHGs. Otherwise, the law over-emphasizes the role of methane or under-emphasizes the role of carbon dioxide by applying the 20-year rather than the more standard 100-year GWP. (**Commenters 1**, 5, 29)

Response to Comment 11: DEC appreciates these comments, but is not currently proposing statewide emission limits through this rulemaking other than those required in the CLCPA. The Council may recommend interim emission limits or other measures as part of the Scoping Plan, and the Department may consider enactment of such measures through future regulation. Finally, as described above in Response to Comments 7 and 8, the statute itself established an initial prioritization through the establishment of the GWP20 metric. It is necessary and important to recognize that no one metric, either the 20- or 100-year GWP, fully depicts the impacts from various GHGs.

Reply to Response to Comment 11: *The Climate Leadership and Community Protection Act (CLCPA) mandates the use of the 20-year global warming potential (GWP). I apparently did not make my related point well enough for DEC to understand what I think is appropriate. In particular, this inventory will be the official New York emissions inventory but there are significant differences between the methodology used and the Intergovernmental Panel on Climate Change methodology. In particular, the CLCPA required DEC to consider life-cycle emissions (extraction and transportation emissions) for fuels burned in New York*

and using the 20-year GWP instead of the 100-year GWP everyone else is using. I suggested that in addition to the supporting documentation comparing 20-year and 100-year that DEC included in the Regulatory Impact Statement (RIS) that they also break out the life-cycle emissions so that the New York inventory could be compared to other inventories.

Energy Sector Comments

Comment 30: Additional information is needed to understand the estimation of the 1990 baseline and if the “best available” information was used, such as fuel volumes. Commenters asked why the CLCPA required this rule to be promulgated prior to the full annual report if that report would provide this information (ECL § 75-0105). (Commenters 1, 3, 26)

Response to Comment 30: The RIS provided an explanation of the methods and data sources used in the estimation of the 1990 baseline. The Department agrees that the CLCPA separately calls for additional, detailed information in the annual report, the first of which is due by the end of 2021 pursuant to ECL § 75-0105. For example, the RIS explained that the source of data for fuel volumes is the same as in previous State inventory reports, i.e., federal data reported by NYSERDA in their annual Patterns and Trends report. Any exceptions were explained in the text of the RIS.

Reply to Response to Comment 30: *The referenced NYSERDA reports are not mandated as part of a law that will completely transform New York’s energy system so they do not have the same standard for acceptability as the Part 496 inventory. The RIS does not provide sufficient information for public verification of the numbers that are to determine compliance with CLCPA goals. Without explicit explanations the numbers are subject to change at the whim of the Agency just like the undocumented changes from the draft rule to the baseline 1990 numbers in five tables:*

- *Table 1. Total Statewide Greenhouse Gas Emissions in 1990 - GWP20: 6 changes*
- *Table 2. Total Statewide Greenhouse Gas Emissions in 1990 – GWP100: 6 changes*
- *Table 3. Energy Sector Greenhouse Gas Emissions in 1990: 8 changes*
- *Table 4. Fuel Combustion Greenhouse Gas Emissions in 1990: 4 changes*
- *Table 10. Waste Sector Greenhouse Gas Emissions in 1990: 1 change*

The Climate Act, [§ 75-0107](#) requires that “in order to ensure the most accurate determination feasible, the department shall utilize the best available scientific, technological, and economic information on greenhouse gas emissions and consult with the council, stakeholders, and the public in order to ensure that all emissions are accurately reflected in its determination of 1990 emissions levels”. The only way to meet that requirement is to provide transparent documentation including the emission factor, activity factors, and references for each value used in the CLCPA.

DEC’s response document describes my comments in general terms that do not convey the full scope of my specific recommendation: “DEC has failed to provide sufficient information to document the proposed 1990 inventory and justify the values chosen. In order to be complete, the RIS or another source of documentation must provide for each value listed in the inventory the emission factor, activity factors or throughput and the reference.” Their response describes the source of the data but does not recognize

that the numbers should be provided with the citation for the source of the numbers. Anything less than that is unresponsive to the clear requirement that DEC “shall utilize the best available scientific, technological, and economic information on greenhouse gas emissions and consult with the council, stakeholders, and the public in order to ensure that all emissions are accurately reflected in its determination of 1990 emissions levels”.

In addition, DEC does not address my comment that Patterns and Trends “footnotes 16 and 19 state “To be provided in an updated Patterns and Trends report” but as of the date of these comments that report has not been published.” The promulgated 1990 inventory is not documented to an acceptable technological or scientific threshold much less “best available”.

Comment 31: Commenters did not think that the RIS provided a sufficient summary of the literature regarding top-down and bottom-up GHG emission estimation or cited specific references that they think should have been cited. (Commenters 1, 3)

Response to Comments 31 and 32: DEC agrees that it is important to conduct a thorough review of the scientific literature when evaluating this sector. As stated in the RIS, DEC used the recent NYSERDA Oil and Gas Methane Inventory, which included a review of sources referenced by the commenters, including those related to downstream GHG emissions. In some cases, DEC and NYSERDA consulted with the authors of these papers for technical advice. DEC will continue to critically review the literature and seek technical advice from the scientific community. As described in the RIS and above in Responses to Comments 26-30, DEC does not consider it appropriate at this time to apply results from recent top-down analyses to the 1990 baseline, even if such analyses may be appropriate for estimating emissions for current or future years.

Reply to Response to Comment 31: *This one sentence, 34 word description of my 11 paragraph, 1,368 word comment and 24 page, 8891 word summary of methane references does not portray to the reader of the summary of comments document the scope of my comments. Worse is that the response does not address the main point of my comments that the references and numbers chosen only reflect one side of a controversial topic. The recent NYSERDA Oil and Gas Methane Inventory does not reference all the material included in my summary of methane references and was not subject to the same regulatory mandated public comment opportunity. The 1990 Part 496 inventory and the NYSERDA methane inventory are based on the belief that fugitive methane is a large source but my comments referenced work that stated that these perspectives and calculations are invalid. More importantly the fact that there is a high quality, long-term monitoring network does not show a trend consistent with this presumption I believe unequivocally debunks this belief. DEC’s response does not address this fundamental issue.*

Comment 34: Commenters noted errors in Table 7 or text referring to Table 7. (Commenters 1,3)

Response to Comment 34: A revised RIS has addressed the errors noted. None of the errors noted have a material effect on the substance of the RIS or on the emission limits established in the regulation.

Reply to Response to Comment 31: *Agreed but a thanks for noticing the error comment would have been appreciated.*

Industry Sector Comments

Comment 45: The Industrial Process and Product Use (IPPU values in Table 8 of the RIS do not sum. (Commenter 1)

Response to Comment 45: DEC thanks you for your comment and has made non-substantive edits to the tables in the RIS to fix any errors.

Reply to Response to Comment 31: *Agreed and you are welcome for thanking for noticing.*

Requests for Additional Reporting

Comment 50: In addition to the tables providing 100-year GWP total emissions, there should be a table that shows the in-state only values using the 100-year GWP so these can be compared with other jurisdictions. (Commenter 1)

Response to Comment 50 and 51: The RIS is intended to support the public review of the regulation, but it is not a regulation itself. The RIS is also not intended or required to provide information regarding the design of other policies or programs. For the proposed regulation, the RIS is intended to explain how the statewide emission limit was derived, per the statutory requirements. ECL § 75-0107. DEC agrees that there are many other types of information that could be helpful in the design of policies and programs to address GHGs and co-pollutants, and to compare the CLCPA with other models. However, these policies and programs will be implemented separately as part of the State's overall implementation of the CLCPA, and the RIS provided for this regulation is not the appropriate source for this information.

Reply to Response to Comment 50: *Previously I noted that I has suggested that in addition to the supporting documentation comparing 20-year and 100-year that DEC included in the RIS that they also break out the life-cycle emissions so that the New York inventory could be compared to other inventories. This appears to be the ultimate rationale for blowing off the comments requesting more information.*

In order to explain how the statewide emission limit was derived each of the emissions numbers comprising the limit the RIS or a supporting document has to provide the emission factor, activity factors or throughput, and references for the source of the data used to calculate the number. DEC says they used NYSEDA reports but those do not have the same level of public scrutiny that are mandated for regulations. The policies and programs implemented separately have to be consistent with the Part 496 regulation. Neither the NYSEDA reports or the Part 496 regulation reconcile the fact that there is a high quality, long-term monitoring network does not show a trend consistent with the presumption that upstream methane emissions and methane leaks within New York are as large as suggested. DEC's response does not address this fundamental issue.

Finally, note that my comments did not just say that the references cited were inadequate. I spent a lot of time researching the current literature and prepared a [summary of methane references](#) that show that this is a controversial topic and that DEC chose to report on a single side of the issue. DEC claimed that more documentation was available in the [NYSEDA NYS Oil and Gas Sector Methane Emissions Inventory](#) but a quick review of that document indicates it also over-emphasizes one side of the issue.

List of Commenters

#	Name, Organization
1	Roger Caiazza
2	David Stout
3	Sandra Meier, Environmental Energy Alliance of New York
4	Robert Howarth, Cornell University
5	John Rath, NY Geothermal Energy Organization
6	Linda Bunde, Islip Resource Recovery Agency
7	Eric Weltman, Food and Water Action
8	John Bartow, Empire State Forest Products Association
9	Michael Helme, NYers for Cool Refrigerant Management
10	Tara Vamos, NYers for Cool Refrigerant Management
11	Bill Novak, NY Geothermal Energy Organization
12	Kevin Schwab, CenterState Center for Economic Development
13	Charles Niebling, Lignetics Inc
14	Alli Lemieux, Wheelabrator Technologies
15	Brian Paganini, Quantum Biopower
16	Phil Vos, Energy Vision
17	Rebecca Spector, Earth Justice and undersigned
18	Same Wade, Coalition for Renewable Natural Gas
19	Barry Malmberg, National Council for Air and Stream Improvement, Inc
20	Richard Murphy, NY Assembly - Englebright and Quart
21	Raya Salter, NY Renews
22	Christina Starr, Environmental Investigation Agency and undersigned
23	Will Barclay, NY Assembly
24	Ray Albrecht , National Biodiesel Board
25	Robert Malmshaimer, SUNY Environmental Science and Forestry
26	Randy Rucinski, National Fuel Gas Distribution Corporation
27	Russell King, City of New York / Couch White
28	Samuel Nicolai, Cassella Waste Systems Inc
29	Erin Murphy, Environmental Defense Fund
30	Michael vanBrunt, Covanta
31	Abigail Turner Sztejn, American Forest & Paper Association and American Wood Council