Pragmatic Environmentalist of New York Summary Update December 1 – December 14, 2025

This is a summary update of posts at Pragmatic Environmentalist of New York for the last two weeks. I have been writing about the pragmatic balance of the risks and benefits of environmental initiatives in New York since 2017 with a recent emphasis on New York's Climate Leadership & Community Protection Act (Climate Act). If you do not want to be on this mailing list, then let me know. A pdf copy of the following information and previous summaries are also available. The opinions expressed in these articles do not reflect the position of any of my previous employers or any other organization I have been associated with, these comments are mine alone.

New York State Energy Plan

Most of the articles the past two weeks addressed the New York State Energy Plan which is a "comprehensive roadmap to build a clean, resilient, and affordable energy system for all New Yorkers". I have provided background information and a list of relevant articles including summaries of recent meetings on my Energy Plan page. My latest articles discussed presentations of findings from analyses completed since last summer (presentation and recording) at the December 1 meeting.

NYSERDA presentations and documentation are carefully curated to amplify the political messaging of the Hochul Administration, so it is necessary to read between the lines and carefully check all the statements that are made. The most important finding in the presentation is what I think is a clear admission of expected costs necessary for New York household to achieve the Climate Act mandates for zero emissions.

The State Energy Plan analysis of total monthly household energy costs estimates that the capital costs to install replacement appliances and vehicles that can meet the Climate Act zero-emissions mandate is **nearly $600 a month more** than replacement with conventional household appliances and vehicles even when the savings of more efficient equipment are considered.

This information is not explicitly mentioned in the Energy Affordability Fact Sheet (Fact Sheet). I recognize that this is an extraordinary claim so I prepared two articles focusing just on the calculation of that estimate. The Energy Affordability Initial Thoughts at SEP Board Meeting on 12/1/2025 article was my first attempt to document this finding. My latest article specifically addressed the claims in the Fact Sheet but also documented the location of every value in the Energy Affordability Data Annex spreadsheet published on 4 December 2025 after my first article on this topic.

These two articles describe the energy cost projection methodology. NYSERDA and their contractor considered energy costs for four scenarios: a starting point using average existing equipment, replacing existing equipment with conventional but higher efficiency equipment, and two electrification scenarios: moderate efficient electrification and high efficient electrification. To simulate the range of households in New York they considered eleven household typess using categories based on location, income levels which affects energy use, and energy equipment.

The $600 a month cost of the Climate Act infrastructure estimate used categories based on a moderate-income, single-family home in Upstate household that uses natural gas. For that household the starting

point assumes gas space heating with central AC, gas water heating, has two average gasoline vehicles, uses a gas clothes dryer and stove, and has a mixture of incandescent/CFL/LED lighting. Conventional replacement for that household replaces all these systems with more efficient models. In the "Highly Efficient Electrification" scenario existing systems are replaced with a medium building shell, ducted air source heat pump, heat pump water heating, one plugin hybrid electric vehicle and one battery electric vehicle, efficient electric clothes dryer, induction stove, and LED lighting. Nowhere did I see an admission that this does not completely fulfill the Climate Act zero-emission mandate because plugin hybrid electric vehicles are not good enough.

My articles discuss the data in Table 1 in excruciating detail, but I will only hit the highlights here. Rows 1-5 refer to the energy monthly energy costs for home and vehicle. Note that when investments are made in more efficient equipment the monthly energy costs go down and that point is featured in the Fact Sheet. However, the modelers included a sensitivity where they added the capital expenses necessary to purchase the replacement equipment (rows 6-8). It is concerning that even conventional replacement more than doubles total expenses (Row 9). The Climate Act affordability problem is that the difference between conventional and high-efficient scenarios is what is needed to achieve the Climate Act goals. That adds $594 a month to expected monthly energy costs (row 10).

Table 1: Upstate New York Moderate Income Household That Uses Natural Gas Projected Monthly Energy Costs and levelized Capital Costs Necessary to Comply with the Climate Act

		2031 Projection			
		Starting Point	Conventional	Moderate	High Efficient
Row		Base	Replacement	Electrification	Electrification
1	**Total Monthly Energy Costs**	$ 506	$ 361	$ 404	$ 336
2	**Natural Gas**	$ 121	$ 104	$ 51	$ -
3	**Household Electricity**	$ 101	$ 85	$ 195	$ 210
4	**Vehicle Electricity**	$ -	$ -	$ 56	$ 109
5	**Gasoline**	$ 285	$ 172	$ 102	$ 16
6	**Total Monthly Levelized Capital Costs**		$ 1,013	$ 1,446	$ 1,632
7	**Levelized CapEx - Home**		$ 211	$ 530	$ 660
8	**Levelized CapEx - Vehicle**		$ 802	$ 916	$ 972
9	**Total Including Levelized Equipment Costs**	$ 506	$ 1,374	$ 1,850	$ 1,968
10	**Added Cost for Climate Act Compliance**	*Difference between conventional and high efficient*			$ 594
11	**% Increase for Climate Act Compliance**				43%

The State Energy Planning Board will meet on December 16, 2025 to "consider and act upon a resolution to adopt the State Energy Plan". How can the Energy Planning Board members vote to approve something that will increase monthly energy costs nearly $600 a month and claim any credibility for an affordable energy system? The lack of credibility lies with NYERDA because this information was not included in the Fact Sheet, in the Volume I: Summary for Policymakers or in the Energy Affordability Impacts Analysis chapter. It was described in a 41 second segment of the December 1 Energy Affordability presentation (Page 8 in the annotated transcript): "What we can take away is that the net costs for efficient electrification journeys could be thirty five to forty percent higher than conventional replacement when accounting for equipment, reinforcing the importance of action to address upfront equipment costs so that households are able to access the benefits of these systems." This is a coverup of the true costs of the Climate Act and destroys the credibility of the Energy Plan.

Time to Reconsider the Climate Act Press Release
Watts Up With That: New York Must Reconsider the Climate Act
The second key finding at the December 1 Energy Planning Board meeting was that neither the 2030 Climate Act 40% emission reduction target nor the 2030 70% renewable energy in the electric system mandate will be achieved on time. The first article backs up my claims in detail and the second is more of a summary.

This is especially pertinent because of the Oct. 24, 2025 Albany County New York Supreme Court decision ordering the Department of Environmental Conservation (DEC) to issue final Climate Act implementing regulations establishing economy-wide greenhouse gas emission (GHG) limits on or before Feb. 6, 2026 or go to the Legislature and get the Climate Act 2030 GHG reduction mandate schedule changed.

During the legal proceeding the State Attorney General submitted a letter that argued that it was inappropriate to implement regulations that would ensure compliance with the 2030 40% reduction in GHG emissions Climate Act mandate because meeting the target is "currently infeasible" due to the high costs. The letter referred to the Energy Plan analysis for this claim. Both of my articles argue that it is time to reconsider the law itself because the Energy Plan admits that we are well beyond schedule and the Attorney General's Office says it is unaffordable.

Nonetheless, the Hochul Administration and DEC appealed the decision on November 25, 2025 claiming that "it is impossible for the Department to simultaneously comply with both the Court's order and its substantive statutory obligations." I think this just postponed the inevitable reckoning that the schedule in the law must be changed until after the election next November.

December 2025 New York Cap and Invest Program Update December 2, 2025
There have been a couple of developments since my last status update on June 13, 2025 regarding the New York Cap and Invest (NYCI) Program. I previously described the first, the decision issued on Oct. 24, 2025 by the Albany New York Supreme Court. Last week DEC issued the final rule that establishes mandatory greenhouse gas (GHG) emission reporting requirements.

The court decision ordered DEC to issue final Climate Act implementing regulations establishing economy-wide greenhouse gas emission (GHG) limits on or before Feb. 6, 2026, or go to the Legislature and get the Climate Act 2030 GHG reduction mandate schedule changed. The recently released final rule is one component of the three necessary to establish those limits. It is clear that the plaintiffs, the Judge, and the Hochul Administration do not understand the complexities involved with an economy-wide cap-and-invest emission control program. Reporting emissions has the fewest policy implications of the components but arguably the most implementation considerations. This post describes the logistical need to submit a detailed plan how the emissions will be calculated, the necessity for DEC to approve those plans, and then the requirement for affected sources to implement the infrastructure to submit emissions data in six months that presently takes the State 22 months to prepare.

I need to follow up on this update because I did not adequately address my biggest concern. From 1993 to 2010 my primary responsibility was to submit power plant emissions data to regulatory agencies. I worry that the Final Rule mandates small businesses to do similar reporting without adequate resources. My employers could dedicate staff to this requirement because of their size, and this was appropriate because the emissions were so large. The requirement for retail fuel oil supply companies to report emissions is inappropriate because the distributors who provide them with their fuel also must report. The other point is that emissions from all the fuel oil suppliers is small relative to the size of the inventory.

Implications of New York State 2025 GHG Emissions Inventory

This post describes the latest New York State (NYS) GHG emission inventory report that provides data through 2023. GHG emissions through 2023 are 14% less than the 1990 baseline, emissions are basically unchanged since 2022, and that makes meeting 2030 GHG emission reduction target of a 40% reduction impossible.

Table 2 compares the current GHG inventories performance relative to th4 40% reduction mandate. At the end of 2023 the reductions since 1990 using the Part 496 state limit were only 14% lower.

Table 2: Statewide GHG Emission Inventory Report Emissions Relative to Climate Act 2030 Mandate (mmt CO2e GWP20)

Status Relative to the 2030 Mandate	Statewide GHG Report - Data Ending Year				
	2019	2020	2021	2022	2023
Sum Current Gross Total	367.25	326.42	345.96	353.71	353.85
Part 496 1990	409.78	409.78	409.78	409.78	409.78
Part 496 2030 Limit	245.87	245.87	245.87	245.87	245.87
Delta Annual to 1990	-42.53	-83.36	-63.82	-56.07	-55.93
% Annual to Limit	-10%	-20%	-16%	-14%	-14%

There is another consideration. The emission report for 2023 was issued 22 months after the end of that year. This is because the emissions are not directly measured. Instead, they are calculated using activity levels and emissions factors that convert the activity information and fuel characteristics to emissions. New York's unique emission accounting requirements end up causing the State to take 22 months However, the NYCI final rule requires the data within six months. This program is more challenging than anyone in the Hochul Administration has realized, and final rule does not recognize the implications.