This is my fortnightly summary update of recent posts at <u>Pragmatic Environmentalist of New York</u>. I have been writing about the pragmatic balance of the risks and benefits of environmental initiatives in New York since 2017 with a <u>recent emphasis</u> on New York's <u>Climate Leadership & Community Protection Act</u> (Climate Act). This summary describes each of my recent posts with minimal technical jargon but includes links if you want to read the entire post. If you do not want to be on this mailing list then let me know. Previous updates and a pdf copy of the following information are also <u>available</u>.

#### **New York State Emissions Trends**

There was a milestone for my blog a few days ago. This article was my 400<sup>th</sup> article on the Climate Act net-zero transition. I used the latest emissions data to evaluate where New York stands relative to the Climate Goals.

The following table lists the emissions since 2009 when the Regional Greenhouse Gas Initiative started. Emissions of CO2, SO2, and NOx are down dramatically over this period. The primary reason is that the fracking revolution made the cost of natural gas so cheap relative to other fuels that every facility that could convert to natural gas did so. New York banned the use of coal in 2021 which forced the retirement of the remaining coal plants. The state still has some facilities that primarily burn residual oil but those run infrequently. The takeaway message is that the fuel switching options are no longer available so future reductions will only come as zero-emissions resources displace facilities burning fossil fuels.

NYS Electric Generating Unit Trends - 2009 to 2023

|      | CO2    | SO2    | NOx    | Load       | Heat Input  |
|------|--------|--------|--------|------------|-------------|
| 2009 | 38,295 | 46,344 | 29,665 | 57,738,755 | 562,697,363 |
| 2010 | 42,564 | 49,568 | 30,873 | 64,883,058 | 628,571,790 |
| 2011 | 37,445 | 40,756 | 25,663 | 61,275,085 | 575,801,956 |
| 2012 | 35,800 | 17,637 | 20,875 | 64,017,117 | 584,286,844 |
| 2013 | 33,991 | 16,878 | 21,303 | 59,063,066 | 550,791,111 |
| 2014 | 34,692 | 16,676 | 20,005 | 60,104,983 | 559,286,543 |
| 2015 | 33,272 | 8,777  | 16,013 | 59,385,850 | 554,572,487 |
| 2016 | 31,440 | 4,533  | 14,649 | 56,732,911 | 532,559,836 |
| 2017 | 25,302 | 2,561  | 10,841 | 46,376,239 | 433,710,253 |
| 2018 | 28,026 | 4,889  | 11,209 | 51,100,931 | 474,390,757 |
| 2019 | 24,904 | 1,972  | 7,845  | 46,837,456 | 423,926,803 |
| 2020 | 26,921 | 975    | 7,763  | 51,527,816 | 458,308,103 |
| 2021 | 28,559 | 1,573  | 8,748  | 55,186,772 | 485,442,449 |
| 2022 | 30,819 | 2,662  | 9,584  | 60,359,089 | 521,635,408 |
| 2023 | 28,886 | 645    | 7,488  | 57,597,342 | 496,055,620 |

I also summarized the GHG emissions from the latest <u>Statewide GHG Emissions Inventory</u>. I extracted summary data from the sectoral reports in the inventory to provide some idea of where New York

stands relative to the 2030 targets in the following table. The Part 496 1990 column lists the regulatory baseline numbers. The estimated emissions in the 2023 Statewide GHG Emissions are listed for 1990, 2005, and the last five years. I list the sector 2030 targets (40% of 1990 emissions) and the percentage reduction necessary to meet the targets.

Total Statewide Greenhouse Gas Emissions by IPCC Sector and Gas, in GWP20.

| Sector | Part 496 | Statewide GHG Inventory 2023 |        |        |        |        |        |        | Part 496 | Reduction |
|--------|----------|------------------------------|--------|--------|--------|--------|--------|--------|----------|-----------|
| Sector | 1990     | 1990                         | 2005   | 2017   | 2018   | 2019   | 2020   | 2021   | Target   | Needed    |
| Energy | 337.04   | 344.48                       | 390.56 | 286.25 | 299.83 | 290.82 | 258.36 | 279.30 | 202.22   | -28%      |
| IPPU   | 2.72     | 2.99                         | 9.17   | 22.92  | 21.96  | 23.41  | 23.55  | 24.11  | 1.63     | -93%      |
| AFOLU  | 17.13    | 15.65                        | 17.18  | 20.42  | 21.95  | 21.59  | 21.99  | 22.15  | 10.28    | -54%      |
| Waste  | 52.88    | 40.81                        | 44.39  | 42.06  | 41.39  | 41.62  | 41.83  | 42.13  | 31.73    | -25%      |
| Total  | 409.77   | 403.93                       | 461.30 | 371.65 | 385.13 | 377.44 | 345.73 | 367.69 | 245.87   | -33%      |

The state does not provide a readily available status report nor does the inventory data lend itself to extracting data to address feasibility. However, when you look at the numbers as shown above, the enormity of the challenge is clear. Paraphrasing Francis Menton:

No person looking at the emissions data would ever conclude that New York has spent the past five years embarked on a crash program to replace fossil fuels with wind and solar. That process is going absolutely nowhere.

#### Cap and Invest

My primary emphasis the last couple of weeks has been New York State Department of Environmental Conservation (DEC) and the New York Energy Research & Development Authority (NYSERDA) webinars associated with this year's <a href="New York Cap-and-Invest">New York Cap-and-Invest</a> (NYCI) <a href="Program">Program</a> stakeholder engagement process. I published two articles on the stakeholder process and another on problems associated with implementation.

## New York Cap and Invest - The Role of Cap-and-Invest

My first article on the webinar series addressed the overview of the program. If you are interested in the program and its goals this was the webinar for you (<u>slides</u> and <u>video</u>). My article summarized the narrative of the plan.

I was worried because environmental activists want to remove certain components that have made similar trading programs work in the past. The DEC and NYSERDA proposal confronts that line of reasoning in order to preserve the expectations that NYCI will work as well as previous programs. That is a good thing.

On the other hand, there is an enormous effort necessary to get this program in place and operational by the end of the year. I don't think it is possible and I suspect that there are insufficient resources at the state agencies to make it even close. Unfortunately, the likely outcome is a poorly designed and implemented program. Worse it could end up causing more problems than solving problems and adding costs.

#### NYCI Webinar Preliminary Scenario Analyses – Cost Projections

My second article on the webinar series addressed the cost projections presented in the third webinar (<u>slides</u> and <u>recording</u>). The Climate Action Council's Scoping Plan <u>has been described</u> as a "true masterpiece in how to hide what is important under an avalanche of words designed to make people never want to read it." Similarly, the modeling analysis portrayal in this webinar uses an avalanche of technical jargon and impressive sounding phrases to suggest credibility and discourage questions. Numbers are presented but I explained why I had trouble interpreting the results offered and have serious reservations about the estimates.

The webinar claims that millions will break even due to NYCI because of rebates included in the Consumer Climate Action Account (CCAA). The webinar script states that "Depending on the household income level and the part of the state, the cost may range from as little as \$12 a year to up to \$180." I could not reproduce those numbers and without complete documentation I do not think that the results are credible, so I am reserving judgement on these claims. The script also claims that there are "surplus benefits in nearly every region and income level analyzed" but that ignores the fact that the 1.6 million households with incomes lower than the no-benefit threshold and above the middle-income \$75K threshold are not addressed in their presentation.

The webinar only addressed costs due to NYCI and the estimates relied on rebates from the CCAA. Those rebates are subject to the whim of Albany politicians, so the rebate amounts are not guaranteed. In addition, the electric bill supply costs are not included in these modeled costs. I recently discussed the Central Hudson gas and electric delivery rate cases in an article described below. The proposed double-digit increases has created a <u>public outcry</u> and the NYCI costs described here are in addition to the rate case costs. There is insufficient documentation available to determine exactly what costs were included in the heat pump and electric vehicle examples given.

I maintain that the Hochul Administration has deliberately hid the total costs of Climate Act implementation. I included results from a <u>poll in early 2023</u> by the Energy Policy Institute at the University of Chicago with the Associated Press–NORC Center for Public Affairs Research, shown below. The poll found that less than a third of respondents were willing to pay even \$10 a month. Little wonder that the Climate Act costs are a closely guarded secret.

## Willingness to Pay

| \$/r | nonth | % Willing |
|------|-------|-----------|
| \$   | 1     | 38%       |
| \$   | 10    | 31%       |
| \$   | 20    | 29%       |
| \$   | 40    | 27%       |
| \$   | 75    | 22%       |
| \$   | 100   | 21%       |

#### Howarth's Adverse Impact on New York Cap-and-Invest

In January 2023 I wrote an <u>article</u> describing <u>Dr. Robert Howarth's statement</u> supporting his vote to approve the Climate Act Scoping Plan. Roger Pielke, Jr. recently did an <u>interesting piece</u> on the Biden Administration decision to halt the permitting of the continued expansion of U.S. liquified natural gas (LNG) export capacity that featured a link to Howarth and his position on methane. It provides more evidence that a "Professor of Ecology & Environmental Biology" is unqualified to be considered an expert on methane emissions. His misleading guidance adversely impacts NYCI implementation.

Roger Pielke, Jr <u>described the Biden Administration decision</u> to halt the permitting of the continued expansion of U.S. liquified natural gas (LNG) export capacity. He explains that this policy decision raises three concerns.

- 1. "The Biden Administration made a decision before producing the evidence on which such a decision is supposed to be based.
- 2. The Biden Administration decision ignores the "geopolitical and security implications of the decision".
- 3. Finally, there appears to be no consideration of the economic impacts of the decision. I recommend reading the article in its entirety.

What caught my attention was his reference to a <u>letter</u> to President Biden from a group of activists that referenced work by Howarth. Pielke, Jr. notes that the activist letter mentions a forthcoming study by Howarth:

The <u>study referenced above</u> suggesting that LNG is worse than coal in terms of greenhouse gas emissions is by Robert Howarth of Cornell University, and is both contrary to a broad <u>scientific</u> <u>consensus</u> on this issue and a lone outlier.

Of particular interest is the footnote associated with the "lone outlier" label. Pielke, Jt. states:

The story behind the new Howarth study is for another day. I'll just note here that in 2012 Howarth told a reporter that he was performing anti-fracking research for hire — The reporter explained: "In an interview, Howarth told me his goal was to make the anti-fracking movement mainstream and fashionable. He said he met with the Ithaca-based [Park] foundation two years ago, agreeing to produce a study challenging the conventional wisdom that shale gas is comparatively clean...Howarth hired an aggressive PR firm, the Hastings Group, to promote his politicized viewpoint."

This is smoking gun evidence that New York's unique characterization of methane and Climate Act policy requirements is based on the politicized and financially advantageous work of a biased "for hire" scientist. As a result, I showed NYCI has an affordability issue and the different accounting methodology makes it unlikely that other jurisdictions will agree to link to New York's cap-and-invest program.

## Opinion Letter Cap-and-Invest Will be too Costly for Consumers

I recently had a <u>letter to the editor</u> of the Albany Times Union published asking readers how much they would be willing to pay for NYCI. There is a word limit on submittals, so this post provides supporting information for the following letter that was published before the webinars:

The article "State's Cap and Invest program unveiled," Dec. 22, explained that it is intended to fund the transition to zero-emissions energy alternatives. The Hochul administration claims that the costs of inaction are more than the costs of action, but this is just a soundbite slogan. Most benefits are to society, so they do not directly offset the costs of electrification for consumers.

The question New Yorkers want to know is: How much will this cost me? Wind and solar costs increased sharply in 2023 due to changes in commercial conditions driven by inflation, interest rates and supply chain disruptions. Cap-and-invest will add even more costs. Last year, Washington state started a similar program. At the beginning of 2023, gasoline prices in Washington were 72 cents higher than the national average. By October, prices were \$1.25 higher. The cost differential relative to the national average increased 88 percent because of the cost of their cap- and-invest program. A similar spike in gas prices will occur here. New York's program covers all energy sectors, so all energy costs will necessarily increase.

New York greenhouse gas emissions are less than one-half of one percent of global emissions, and global emissions have been increasing by more than one-half of one percent per year since 1990. Therefore, anything New York does will be supplanted by emissions elsewhere in less than a year. That doesn't mean we should not do something, but it does mean the state should document expected future costs to consumers.

## Dutchess County Comments on the Central Hudson Climate Act Implementation Plan

I published another article on the theme of Climate Act costs. The post highlights some commonsense issues related to the effects of Climate Act implementation related to the Central Hudson rate case, CASE 23-E-0418.

My article described the rate case and the dynamics for the utility company. In order to get the case approved they have to at least pretend that the Climate Act is necessary and in the best interests of consumers. The purpose of the article was to highlight the <u>Direct Testimony of Allan R. Page</u> on behalf of Dutchess County New York: The primary purpose of his testimony is to "express the concerns of Dutchess County as the concerns relate to how climate is being addressed in these rate cases."

In the testimony, Dutchess County gave reasons why "Central Hudson should not pursue any emissions reduction initiatives beyond what is required by state regulation" as proposed by its Climate Leadership and Sustainability Panel. The testimony expressed "concern about the overall cost of achieving state clean energy policy objectives and the impact such costs will have on customers", stated that "emissions reduction efforts within New York State will have little impact on the global climate and that New Yorkers, including those residing in disadvantaged communities ("DACs"), may not directly benefit. For these reasons".

I concluded that low cost and reliability are overarching concerns for electric and gas ratepayers. The Hochul Administration has been hiding the total costs of the transition throughout the process. The other missing piece is an energy plan feasibility study that would enable utilities like Central Hudson to determine what aspects of the transition they will be expected to implement. This uncertainty and the desire to placate the political aspirations of the Administration to improve the chances for a favorable rate case outcome ultimately impacts ratepayers negatively. The double-digit rate increases for this

Central Hudson rate case will become the norm across the state until New Yorke voters demand the politicians change direction with the net-zero transition.

#### Climate and Energy Fantasy and Tyranny

Paul Driessen recently wrote an <u>article explaining</u> that "Models, myths and misinformation on climate drive models, myths and misinformation on energy". It is a good summary of the overarching issues associated with the Climate Act, so I presented it with commentary.

In his article Driessen writes that "It's mystifying and terrifying that our lives, livelihoods and living standards are increasingly dictated by activist, political, bureaucratic, academic and media ruling elites, who disseminate theoretical nonsense, calculated myths and outright disinformation." He describes the existential threat rationale and the disconnect between the narrative and historical climate change before human effects and the actual recent data since the alleged human effects started. He goes on to point out that fear mongering about climate change is not the only flawed story. The idea that there is a renewable solution that is simple and cost-effective is equally unsound. Driessen does a good explaining the qualities that make fossil and nuclear generating the best choice for providing power to society. Finally, he writes that the public will balk at the transition when the costs become clear. His arguments summarize why I think New York's net-zero transition is going to cause more harm than good.

## Articles of Note February 4, 2024

My fortnightly list of articles that I think will be of interest to my readers briefly includes the following.

I highly recommend a five-part documentary video series called <u>Juice: How Electricity Explains</u> the World because it does a good job describing the electric system and the threats of the net-zero transition.

I have been meaning to write status articles on offshore wind development. Bud's Offshore Energy (BOE) <u>recently reviewed</u> the Bureau of Ocean Energy Management and National Oceanic and Atmospheric Administration Fisheries <u>North Atlantic Right Whale and Offshore Wind</u>

Strategy. His description of the threats to the North Atlantic Right Whale (NARW) is alarming:

- Roughly 237 NARWs have died since the population peaked at 481 in 2011, exceeding the potential biological removal (PBR) level on average by more than 40 times for the past 5 years (Pace III et al. 2021).
- Human-caused mortality is so high that no adult NARW has been confirmed to have died from natural causes in several decades (Hayes et al. 2023).
- Most NARWs have a low probability of surviving past 40 years even though the NARW can live up to a century.
- There were no first-time mothers in 2022.
- About 42% of the population is known to be in reduced health (Hamilton et al. 2021)
- A NASEM study confirmed that offshore wind has the potential to alter local and regional hydrodynamics
- "Effects to NARWs could result from stressors generated from a single project; there is potential for these effects to be compounded by exposure to multiple projects." (p. 14)

I cannot imagine any scenario where a species this stressed will survive when hundreds of massive wind turbines are built across the migration routes as shown in the following figure.

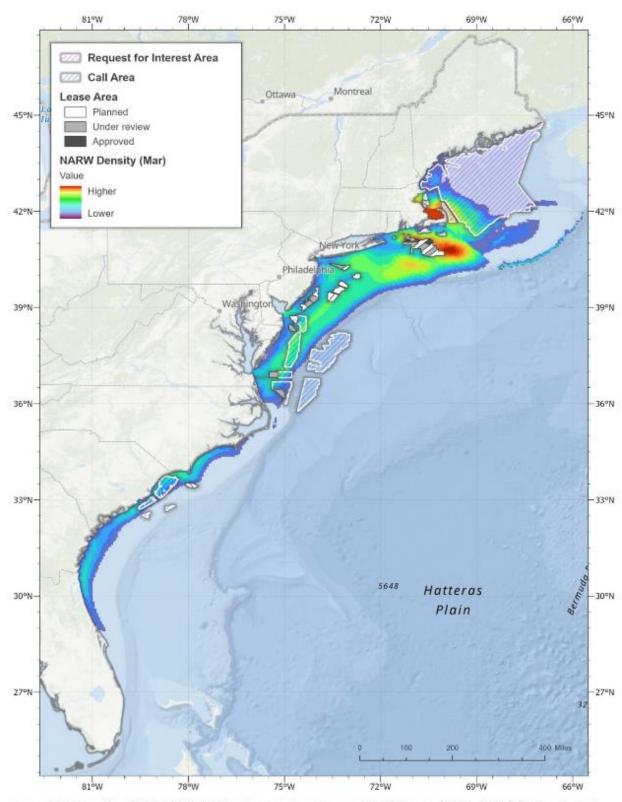


Figure C-3. Density of NARWs in U.S. waters during the month of March (2010–2019) (Roberts et al. 2016; Roberts and Halpin 2022)

Other offshore wind articles highlighted included David Wojick describing three events affecting offshore wind development and Craig Rucker describing the stress on commercial fisherman.

Another topic that has been ripe for comment is the status of electric vehicles. A <u>post at Irina Slav's substack</u> summarizes most of the points I wanted to cover. She sums up the issues:

In a <u>commentary piece</u> for MarketWatch earlier this month, former White House director of economic policy Todd G. Buchholz compared EVs to electric bread makers, arguing that, just like bread makers, EVs are a fad that will eventually fade.

"The 1990s bread-machine fad never benefited from public subsidies, government mandates or furious discounting to gain market share. If it had, perhaps it would have continued for a few more years," Buchholz wrote, going on to quote President Dwight Eisenhower as saying that "you don't lead by hitting people over the head: That's assault, not leadership."

I also highlighted another article describing problems in the EV industry.

# New York State Climate Impacts Assessment: Understanding and Preparing for Our Changing Climate

This assessment deserves more attention and when the Climate Act implementation issues settle down, I will return to this "scientific investigation into how climate change is affecting the communities, ecosystems, infrastructure, and industries of the Empire State." In the meantime, do not take anything claimed too seriously.

For example, Summary Finding 4 claims wea level along New York State's coastline has risen almost 1 foot in the past century and is projected to increase by another 1 to 2 feet by midcentury. They say that one foot in the past century has been observed. They are claiming that 1 to 2 feet additional sea-level rise will occur in half a century. For that to happen the sea level rise rate must at least double. There is no indication of such an accelerated sea-level rise rate. They have no shame hyping the most extreme estimates for climate models.

#### Fraudulent Fantasy

Ed Reid, Jr. writing at Right Insight does a nice job summarizing reasons why the fantasy that "intermittent renewable generation combined with electricity storage provides a reliable energy system at lower energy cost than the predominantly fossil fueled energy system it would replace."

## Response to Environmental Justice Concerns

Alex Epstein argues that this aspect of the anti-fossil-fuel movement ignores the benefits of fossil fuels and overstates their negative side-effects.

## The Campaign to Shut Down Discussion

Jo Nova brings it all together in an excellent post at her site titled <u>"One third of UK teenagers think climate change is deliberately exaggerated."</u>