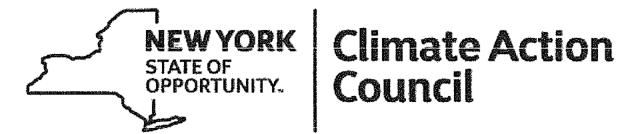
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Public Comment Form

Climate Action Council Draft Scoping Plan



If you are unable to submit your comments or documents electronically, or prefer to mail your comments, complete the form below and mail to:

Draft Scoping Plan Comments NYSERDA 17 Columbia Circle Albany, NY 12203-6399

Please consider that all comments or any additional documents submitted will be made public and posted to the New York State Climate Act website.

Fields marked with an asterisk (*) are required.

Prefix Mr.

Full Name

First Name

James

Last Name

Raiston

Suffix P.E.

Organization/Company Name

Email

Address

Address or Location

Zip 12134

County Saratoga

Check all topics to which your comments apply

- Chapter 2. The Time is Now to Decarbonize Our Economy
- Chapter 3. New York's Climate Leadership
 - Chapter 4. Current Emissions
 - Chapter 5. Overarching Purpose and Objectives of the Scoping Plan
 - ✓ Chapter 6. Achieving Climate Justice Chapter
 - √7. Just Transition Chapter
 - √8. Public Health
 - Chapter 9. Analysis of the Plan
 - Chapter 10. Benefits of the Plan
- √ Chapter 11. Transportation Chapter
- √12. Buildings
- √Chapter 13. Electricity
- √ Chapter 14. Industry
- ✓ Chapter 15. Agriculture and Forestry Chapter
- √16. Waste Chapter
- √ 17. Economy-wide Strategies Chapter
 - √18. Gas System Transition Chapter
 - √19. Land Use Chapter
 - 20. Local Government
 - Chapter 21. Adaptation and Resilience
 - Chapter 22. Essential Elements
 - √Chapter 23. Reporting
 - Chapter 24. Future Work

Re: Draft Climate Action Council Scoping Plan viz. NY CLCPA; Comments by James Ralston, P.E. dated 6/27/2022

Dear Ms. Hagel,

Thank you and the team at NYSDEC who have presented this plan for public review and comment. I was particularly interested in the presentation you made to the ATMOSphere Summit recently. I found the slides very useful in preparing these comments.

I have listed my Chapter specific technical comments as an appendix to this cover letter. Please see this attachment for my explicit remarks. These are organized by Chapter as indicated by the cover sheet supplied on the NYSERDA website which I have check marked.

I am a retired NYSDEC air quality engineer who has had the benefit of a 34 year government career involved in all regulatory aspects of the profession while working for the EPA and DEC. My experience includes support and evaluation of numerous early state and local air pollution programs, field inspections and permitting a large array of differing stationary sources, supervising criteria air quality monitoring, supervising the formulation and writing of NY State Implementation Plans for criteria air pollutants, and managing the Bureau of Planning within the Division of Air as Director. Most pertinent to the subject of our current climate problems, the 1988 testimony before Congress by Dr. James Hansen of the US Geologic Survey got my attention. At that time I and my technicians were monitoring Carbon Monoxide with an infrared (IR) instrument that was also used to measure Carbon Dioxide. Because water vapor present in the sampled air would also be strongly absorbed by this IR radiation it was first removed by an air dryer. The upshot is that, just like the humid air in the irradiated sample cell, the IR portion of incoming sunlight heats the CO2 and humidity in our ambient air.

Global warming caused by greenhouse gases became real to me then. The birth of my two grandchildren early this century emphasizes the need for my action. My retirement from NYSDEC Division of Air Resources in 2006 has freed me to act on this concern.

In the meantime New York, California, and Washington State have become notable examples of emerging global leadership to effectuate the 2015 Paris Accord. I encourage the DEC to continue to collaborate with regional and national organizations acting together for this purpose. Regarding the draft scoping document now proposed by the Climate Action Council (CAC Scope) I endorse these points advocated by New

York Renews which additionally include implementing suggestions of my own.

Disadvantaged Communities (DC)

These communal needs include a just transition to improved public health and well living as an early priority. Training which includes paid apprenticeships for green jobs opened up by implementing this scoping plan are needed. Substantial NY State money to incentivize installing heat pumps serving residents in DC communities needs to become available as soon as possible. I urge passage of supplemental funding legislation as was offered by the proposed Climate Community Investment Act. Rooftop solar installations which also offer beneficial shade are a worthy investment. As these DC communities continue warming they offer reduced heat stress and decentralized electricity. Eliminating food desserts and provide subsidized, better availability of very good fresh fruit and vegetable offerings will encourage better dietary practices. Please make sure public pools, cooling centers, and community centers offer added environmental, social, and government services that are accessible, friendly, and safe. Eliminate municipal Incineration. Further, require the natural gas industry to cap abandoned wells at their expense. This could be funded by taxing current natural gas sales through a program similar to the NYS Superfund whenever liable parties cannot be secured.

This CAC Scope contains some false solutions
We have neither time nor energy for distractions in pursuit of false
solutions. Many notable examples include manufactured biofuels such as:
Crop based ethanol production for combustion. This never has been a
useful carbon emission control option.

Biomass combustion. The fuel supplied diminishes carbon sequestration by trees and plants amid continuing emissions of carbon dioxide. Hydrogen production by electrolysis of water. Our surface and ground water is a precious resource which is increasingly diminishing with time. This method of producing hydrogen from a water molecule with strong polar bonds is inordinately energy wasteful. It also requires too much water per fuel heat of energy produced.

Carbon capture technology is the subject of a recent article in the NY Times.¹ This interview with Dr. Jennifer Wilcox, Director of the US DOE Office of Fossil Energy and Carbon Management, presents convincing arguments for their current initiatives. I suggest that the DEC keep alert to

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^{1 &}lt; https://www.nytimes.com/2022/06/13/climate/capture-capture-storage-jennifer-wilcox.html>

this initiative for future strategic application. That said, I would not focus NY's limited resources in this direction now.

We have lost so much time that NYSERDA must focus on programs to generate enough electricity exclusively from proven renewable sources like solar and wind. We also need to advance conservation efforts through continuing improvements to our building code requirements. As well, energy wasteful society fads and scams like crypto currency need to be laid down². Further, NY State must resist calls from open space advocates to prevent siting renewable energy installations needed to speed a transition away from electricity produced by burning fossil fuels. NY should also quickly ban plastic incineration for immediate health, malodor, and comfortable enjoyment of life benefits to CJ communities.

Fund the CLCPA

New York must establish a dedicated funding mechanism—by legislation if necessary—to ensure reductions of both greenhouse gas and co-pollutant emissions and to begin the state's large-scale transition to an equitable renewable energy economy. An upstream fee on carbon emitted from a fuel with all collected fee revenue distributed uniformly per capita to all NYS adults is likely the best approach to generate the necessary funds in a just manner. The more fossil fuel one uses the more expensive that lifestyle becomes. This method supplies the largest percentage income increase to low income households while being politically recognized as fair and equitable. Fossil fuel costs and fee revenue distributed should increase stepwise with time consistent with CLCPA milestones and annual needs assessments.

New York Needs "Scenario Three"

The Climate Action Council presents three scenarios for our climate future. Of the three, I join NY Renews in advocating for scenario three: low-to-no bioenergy nor hydrogen combustion and the simultaneous acceleration of electrification of both buildings and transportation to ensure clean air and a healthy environment. In order to reach a zero-emissions power sector by

²< https://www.nytimes.com/interactive/2021/09/03/climate/bitcoin-carbon-footprint-electricity.html>

2040, New York needs a rapid, large-scale transition away from fossil and carbon based fuels.

The CLCPA Is Law

The Scoping Plan must ensure that the mandates put forth by the Climate Action Council become legally enforceable against industrial, commercial, and residential source owners. Compliance agreements must include appropriate timelines for the reduction of emissions by sector. Provisions for climate justice and GHG emissions reduction are meaningless if they cannot be enforced or if there aren't strictures in place for what happens when this law is broken.

I have also participated in CAC Scoping Plan relevant discussions with the NGO New Yorkers for Cool Refrigerant Management. Their ideas which I particularly agree with follow:

Prevent End of Life Emissions

Systems need to be in place to capture refrigerants from appliances and equipment at the end of life so they will be properly reclaimed or destroyed. Extended End of Life requirements for manufactures' is one approach.

We need to become better informed about recycling the refrigerants in appliances, like window air conditioners and refrigerators. Beyond education, establish Incentives and policies so that HVAC technicians will put the time and effort into properly capturing used refrigerants from central air systems and institutional refrigeration/chilling systems. Also, offer a finders fee of perhaps \$10/unit for closed refrigerant systems when returned to equipped refrigerant collection depots. This will ensure refrigerants are properly treated for appropriate disposal or reuse.

Enhance Leak Detection

The larger, older, and/or more complex a refrigeration or cooling system is, the more likely it is the system will leak. Effective system monitoring and leak sequestration is an important investment that all businesses and institutions should be making and public policies should be supporting. This is especially important in Disadvantaged Communities where Food Deserts are all too common. Small grocers there are likely to need help. This is also true of many rural communities beyond those designated DC; e.g. throughout the Adirondack Park.

Transition to New Refrigerants

Beyond giving regulatory approval to new, climate-friendly refrigerants and phasing out the old ones, incentivizing the use of new refrigerants would benefit everyone by hastening their adoption. We would do well to adopt

a refrigerant management program that implicitly promotes low GHG potential refrigerants similar to that used by the California Air Resources Board (CARB).

Lastly I urge that Governor Hochul sign the Crypto Currency Moratorium Act passed recently by the legislature. The Governor should do so by November 30, 2022 at the latest. This shadow "proof of work" currency is a profligate energy hog without a redeeming social value. It should become banned permanently.

I appreciate having this opportunity to comment about this urgently needed CLCPA initiative. The CAC needs to follow this with a rapid final Scoping Plan so the earnest work of all involved NYS agencies, authorities, and local governments can then be integrated into an effective regulatory structure.

Respectfully submitted,

James E. Ralston, P.E.

Edinburg, NY 12134

w/encls.

Appendix: Climate Action Council Scoping Draft

NYSERDA Cover sheet completed

ames E. Puttin, P.E.

J. Ralston's remarks viz. the draft Climate Action Council Scoping Plan proposed 1/1/2022

I have one minor remark which is that neither the <u>Draft Scoping Plan Overview</u> nor the <u>Draft CAC Scoping Plan</u> defines these particular acronyms/abbreviations which appear on page 5 of the Overview: CCS, CEF, CES, and DAC.

Remarks about Chapters 3, 6, 7, 8 are embedded in the cover letter to this appendix.

Chapter 11 Transportation

The absence of Aviation GHG strategies is notable; saving a glancing mention of bio-jet fuel and ground equipment. While this is a hard nut a majority of all commercial passenger flights are taken by very frequent business flyers. Can we incentivize those frequent flyer folks to surface travel; perhaps to less distant locations? How about a carbon tax on aviation fuels? Any potential for electrifying to eliminate use of Auxiliary Power Units which are fossil fueled gas turbines?

Please do enhance ZEV purchase incentives! The fee-bate program proposed seems a good way to finance that.

Also, enacting electric utility rates to maximize the value of ZEVs as grid interactive assets and storage devices makes sense. That said, as an owner, I would look for some compensation for the reduced battery life and/or reduced use of the vehicle.

The changes to 6NYCRR Parts 200 and 218 proposed 9/8/2021 should be adopted as soon as possible.

The mass transportation strategies included appear viable; although I am very hesitant to ride in a self driving AV.

Chapter 12 Buildings

This chapter present an expansive scope of strategies. This sector necessitates a focus on timely integration with responsible state offices.

I agree with the Building Code changes to phase out space heating with fossil fuels and to enhance building envelopes. LMT households will need supplemental resources in order to manage this transition in the time needed. As heat pumps are installed those must use low GWP refrigerants; preferably natural.

Strategy B11 must incorporate end of life producer responsibility. Better knowledge of leakage rates is important and stand alone A/C units should be included. These A/Cs have already become very important in managing heat stress among humans throughout NYS.

I agree with zero emissions requirements to phase out fossil fuel combustion equipment. That said public financial incentives are important. Also, rural areas will need to be provided with need based help.

Chapter 13 Electricity

Page 152 viz. Subpart 227-3 re: Peaker NOx. Does not the GWP of NOx emitted further increase the "...less than 3% CO2 GHG..." concern? Pages 154-155 I particularly support the CJWG call for a moratorium of new fossil fuel plants. Their other suggestions I also endorse.

Page 156 I support annual tracking of renewables and the collaborative process with all NYS agency stakeholders. DEC promulgation of effective regulations is necessary to achieve the emissions reductions on a meaningful schedule.

Page 157 Re: The CJWG call for funds and technical help to develop behind the meter micro grids in DCs. This appears very worthy of consideration for early implementation amongst strategies.

Pages 162-164 Re: E4. I like the Clean Energy Development Strategy identified. Page 166 Re: E6. Please do update the energy storage needs as soon as possible. I would think this needs to be integrated in the modeling for managing demand and supply.

Page 167-169 Re: E7. I understand that Denmark had employed a thermal fuse/magnetic breaker set up to obviate SF6 emissions from fire suppression on wind generation platforms there.

Page 170 Please do support the CJWG call for improving reliability and resiliency of electric supplied to DCs as a high priority.

Page 177 I agree with the CJWG opposition to so called 'green' hydrogen, RNG, bio-fuels, and waste-to-energy resources. Please refer to my cover letter wihich is attached. Further, methane should be captured and utilized from landfills and used to supply energy needed there.

Chapter 14 Industry

Other: Increasing demand to power crypto currency mining has a negative social and environmental impact. Governor Hochul should sign the recently enacted Crypto Currency Moratorium soon. Data centers with significant demand must invest early in Solar/Wind/Low Head Hydro generated power. Chapter 15 Agriculture and Forests

Yes to more and better tree growing and maintaining existing agricultural land. Others that are strategized do not appear to offer much. As to bio-char I think clearing some deadfall in our forested lands is a useful conservation measure. I suspect the pyrolysis process of creating bio-char has some environmental negatives.

Chapter 16 Waste Chapter

Page 240 Do focus on water reduction, reuse, and recycling. Establish End of Life responsibility of producers especially for hard to recycle plastic products. The DEC regulation of electronic-waste must be effective and continued. Regarding trash management in Disadvantaged Communities capturing evolved mercaptans and methane are important to mitigate malodors as well as GWP gases. As the built environment warms this problem will worsen. I agree with

the CJWG remarks at p. 241and DECs path to minimize organic waste; principally from food and yards.

I certainly support research for difficult to handle materials; e.g., waste solar panels and fiber glass turbine blades. Perhaps an affiliation with SUNY? Pages 244-245 Water Resource Recovery Facilities (WRRF) - Strategy W4. I support the CJWG remark concerning converting WRRF to produce beneficial use products such as biogas.

Pages 244-245 Strategy W5. In regard to Refrigerant diverson, provide cash incentives for turning in old refrigerant containing devices at equipped recycling depots. Like the earlier implementation of the Montreal Protocol the value of collected and recycled refrigerants will partially offset costs as will the metal scrap collected. Meanwhile programs like those proscribed under an expanded version of 6NYCRR Part 494 will curtail new use of these potent greenhouse gases.

Pages 246-247 Strategy W6. I agree with all these points with support to locals for financing more gas capture, monitoring, and beneficial reuse. Pricing carbon emissions realistically in terms of avoided social costs will provide a necessary incentive.

Page 248 Strategy W7. "Where density and local conditions allow, septic tanks...". I presume this rules out most of the rural communities like those in the Adirondack Park? I strongly suggest that owners proof of septic tank pumping at a reasonable frequency, say every 5 years, be exempted from contractural maintenance. Many of these residential and commercial establishments and their neighbors are served by on site well water. Such a requirement should be politically feasible in our rural areas as an acute health as well as a climate preservation measure.

Chapter 17 Economy wide Strategies

I greatly prefer economy wide carbon pricing which NYS should monitor and increase as needed to meet these GHG emission reduction goals. Global economists agree if this price is sufficiently high it will undoubtedly work. start low and increase annually. In directing 40% to DCs NY might include fee-bates to encourage multi-unit buildings to convert quickly to heat pumps with renewable energy.

The clear price signal, lack of leakage, and flexibility of valuing social costs offered by carbon pricing is a distinct advantage. Some of this energy would be supplied from micro grids advocated by the CJWG in Chapter 13. Pricing should be upstream of retail consumers. Rebates or fee dividends to customers and tenants should be frequent to avoid overly burdensome household budgeting. Little of the fee revenue should be retained. Make the payments uniform for all DC residents. Perhaps by paying 1 share monthly to every adult and 1/2 share for all under 18 year old in a household.

A tax specifically on high GWP refrigerants used for heating and/or cooling systems will reduce leaks and support recycling efforts. I understand that about

one half of all residential and commercial cooling systems use R-410a which exhibits a high GWP. This should be an early focus for recycling.

<u>Chapter 18 Gas System Transition</u> Is propane heating at rural residences being considered? Please do not encourage increased use of wood stoves or outside wood boilers as replacement heating.

<u>Chapter 19 Land Use</u> I agree with all these. Please offer adequate support! We need a lot of viable sequestration. Forests, afforestation, grasslands and marshes too. As mentioned in my cover letter the research into viable carbon capture and storage is best left to the federal government and researchers for now.

Chapter 23 Reporting Re: Page 327. I trust DEC will track implementation internally on a much tighter schedule than the proscribed first report on 1/1/2028 and every four years thereafter.