

Comments on Climate Action Council Draft Scoping Plan

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I studied energy and environmental policy in graduate school in the late 1970s, worked in the 1980s as a researcher for the Coalition for the Environment in St. Louis and the Environmental Action Foundation in Washington DC, and moved to Albany in December 1985 to work for the state. I stayed here after the first winter only because I already knew then that the climate was warming. I am active in **People of Albany United for Safe Energy (PAUSE)**, the 350.org affiliate here, and serve on the Policy Committee of **NY Renews**. I support the comments of those organizations; below are my own views on the climate emergency, economics and jobs, and key sectors, which I will expand in further comments.

1) New York must act NOW before the climate crisis becomes a catastrophe

1.1 WE ARE IN A CLIMATE EMERGENCY - After decades of delay due to a killer smog of disinformation from dinosaur fossil corporations with trillions of dollars of reserves they want to sell, the climate crisis is a clear and present danger not just for polar bears and future generations, but for all of us NOW. The Intergovernmental Panel of Climate Change (IPCC), the world's climate scientists, issued a new report in April. <https://www.ipcc.ch/report/ar6/wg3/downloads/> which UN Secretary-General Guterres called a "**CODE RED FOR HUMANITY**".

The last 7 years were the hottest on record. Global temperatures have been increasing relentlessly every decade as greenhouse gases accumulate, despite year to year variations. Last summer, extreme weather records were shattered around the world: 121F in Canada. **Smoke from historic firestorms in the western US became unhealthy air pollution in NY and PA.** <https://www.cnn.com/2021/07/21/western-wildfire-smoke-reaches-east-coast-hurts-air-quality.htm>. NYC subways flooded *again* last year - I grew up in NYC, but never heard of flooded subways. Physicist Joe Romm warned that superstorms like Sandy could hit the NYC area repeatedly by midcentury if we keep burning fossil fuels. Puerto Rico still hasn't recovered from the devastation of Hurricane Maria in 2017.

1.2 ENVIRONMENTAL JUSTICE (EJ) MUST BE AT THE CENTER OF THE TRANSITION to a liveable future. People with the least resources, least responsible for emissions, in the US & worldwide are most threatened by both health hazards of local air pollution from fossil combustion, and by extreme weather disasters: firestorms, killer heat waves, floods, droughts, crop failures, and impending famines. Most vulnerable are tropical regions -- eg Africa, the Caribbean, South Asia. According to Oxfam, "**As many as 28 million people across East Africa [are] at risk of extreme hunger if rains fail again**" due to the historic multi-year drought plus reduced food exports from Ukraine and Russia. <https://www.oxfam.org/en/press-releases/many-28-million-people-across-east-africa-risk-extreme-hunger-if-rains-fail-again>

Dr. Robert Bullard, founder of the EJ movement, said that "*Climate is the number one environmental justice issue of the 21st century.*" Sacrificing low income people, especially underpaid, overpolluted, and disrespected communities of color, but also deindustrialized and abandoned largely white working class communities, would lead to social chaos. Everyone must be guaranteed economic security -- **we are all in this together. So the EJ provisions of CLCPA are vital.**

1.3 WE ARE IN A RACE AGAINST TIME. Increasing disasters are already upon us, but the IPCC says it is still technically and economically feasible, **if there is the political will**, to avoid a catastrophe for civilization, unrecoverable even for survivors. In President Obama's words, "*to prevent large parts of this Earth from becoming not only inhospitable but uninhabitable in our lifetimes we're going to have to keep some fossil fuels in the ground rather than burn them.*"

The National Academy of Sciences published the "**Hothouse Earth**" study in 2018, warning that we are approaching the point of no return, when runaway feedbacks would drive the world to a hothouse equilibrium, increasing land temperatures about 16F, polar regions even more. <https://www.pnas.org/doi/10.1073/pnas.1810141115> As Dr. John Holdren, Obama's science advisor put it, "*We're driving in a fog and heading for a cliff. We know for sure now that the cliff is out there, we just don't know exactly where it is. Prudence would suggest putting on the brakes.*"

The Climate Leadership and Community Protection Act (CLCPA) passed into law in 2019 requires that 35-40% of the benefits go to disadvantaged communities and mandates a 40% cut of net greenhouse emissions statewide by 2030. **Those should be floors, not ceilings** - we can and should do better. Per IPCC, the world should get to zero net emissions by 2050, but wealthy countries, which have been the biggest emitters, must go faster. So the US should aim for zero no later than 2035-2040, and New York, a progressive state long a national leader, should be more ambitious, and aim to reduce emissions as fast as possible. **The faster the transition, the less total disruption and suffering.**

State agencies should report annually on their progress in reducing emissions and complying with EJ requirements. CLCPA is an important start. But once the ship of state is moving in the right direction, and everyone can see that the transition from fossil to clean energy **is a jobs bonanza**, not a job killer, and that renewable energy together with energy storage and efficiency gives us reliable energy affordably and improves our health and quality of life, the **political climate would change** enough to speed the transition with more ambitious goals and timetables.

CAC should develop a scenario showing what it would take for NY to get to zero net emissions by 2030.

https://outlookseries.com/A0986/Science/3915_Mark_Jacobson_NY_Renewable_Energy.htm

When John Kennedy set the goal to go to the Moon in 10 years, not all the technology was ready, but it was a top priority - we did it. **This is a mission to Planet Earth**, a rescue mission. As they say at NASA, FAILURE IS NOT AN OPTION.

2) Costs, benefits, and jobs

New York State spends about \$39B per year on fossil energy, mostly out of state, per the federal Energy Information Administration (EIA). <https://www.eia.gov/state/data.php?sid=NY>. Real indirect health and economic costs are far greater. All sectors of the economy must change their technologies and business models. Because the market undervalues everyone downstream and in the future – the mother of all market failures – **the public sector must lead**. New York should pass the **Climate and Community Investment Act (CCIA)**, to make polluters pay for a just transition, invest billions in clean energy and EJ, and reimburse low and middle income New Yorkers to offset costs passed along.

Prof. Robert Pollin estimated in a report for NY Renewables that to cut emissions 50% in a decade, total annual investments in New York, including both the public and private sectors, would be around \$30B/Y, mostly private investment leveraged by public investments such as CCIA. Ramping down 50% over ten years would **avoid direct fossil costs around \$100B**, saving New Yorkers some \$20B in the tenth year. Direct savings would continue increasing as fossil fuels are phased out. The faster we complete the transition, the greater the total savings, direct and indirect, and the better the quality of life.

Dr. Pollin also projected that those investments would generate some **150,000 net new jobs annually** (job-years per year), after subtracting lost fossil-dependent jobs. The **new jobs must be good jobs**, at prevailing wages. People from vulnerable frontline and EJ communities should be **at the front of the line for hiring and on the job training**, along with workers displaced from fossil dependent jobs whose living standards should be protected. **Employers receiving state funds for clean energy deployment must not interfere with union organizing**, and must bargain in good faith.

3) Key Sectors:

3.1 Buildings account for the largest share of greenhouse emissions in New York

New buildings should be fossil free ASAP – NYC now bans new gas hookups. New buildings must be heated and cooled by electric heat pumps preferably combined with district heating, and/or solar heating (active or passive). Since the private sector won't build sufficient affordable housing, a new zero-emission social housing program should fill the gap. **Building codes should require high efficiency** and good ventilation. "Negawatts" are the cleanest energy source. <https://www.theguardian.com/environment/2022/mar/26/amory-lovins-energy-efficiency-interview-cheapest-safest-cleanest-crisis>

Most buildings for the crucial decades already exist, so retrofits are even more important and must be done right: **first optimize efficiency** <https://medium.com/solutions-journal-spring-2019/the-invisible-energy-bonanza-1e06301c83a5> to reduce energy losses from heating and cooling and minimize energy inputs needed, **then** install renewable supply. Retrofitting every building in the state would create many jobs, which must be good union jobs paying prevailing wages. CLCPA's requirement that **a fair share of benefits go to disadvantaged communities** must apply to such jobs.

Cost of both retrofits and clean energy are concentrated at the front end: purchase and installation, but operating costs are much lower since ongoing fuel costs are avoided. Electricity for heat pumps will cost much less than gas. So **"pay as you save" full financing is essential** for home owners, also technical support. **Landlords must be required to retrofit units;** the state should provide full front-end financing, in return for binding commitments not to hike rents.

3.2 The Transportation sector is the second largest emitter

All forms of transportation should convert to zero emission vehicles (ZEVs), especially battery electric, as fast as feasible, starting with public fleets. The state must ensure that enough charging infrastructure is available to everyone.

Expanding, electrifying and improving public transportation must be a top priority, to reduce emissions, improve access and convenience especially for disadvantaged communities, and improve public safety.

Express bus systems, on the model of Curitiba Brazil, should be created or expanded in all metro areas.

Zoning should favor mixed use, walkable neighborhoods and transit-oriented development.

Subsidies now going to sprawl development should be redirected to communities where people already live.

Major investments to **electrify, expand, and improve intercity rail transportation** of both people and freight would reduce emissions, improve access, and create many good jobs.

High-Speed or Very High Speed Rail could replace energy-intensive air travel for distances up to a few hundred miles. Saved travel time would be greater for VHSR but investment costs would also be greater. New York should make a detailed cost/benefit study comparing HSR and VHSR for a line from Buffalo to Montauk with an Albany to Montreal branch, taking into account total life cycle costs and benefits (including fewer flights), pick one and complete it by 2030.

Full low cost financing should be available to cover the full front end costs of new and used electric cars, especially for working people struggling to make ends meet. **"Fee-bates"** – fees on gas-guzzling vehicles with the money rebated to subsidize purchase of clean energy vehicles as the draft plan indicates – would encourage sustainable choices.

A new "cash for clunkers" program, using the money only for purchase of ZEVs would be a further incentive.

A similar program should be used to ensure that **old appliances** be returned to prevent release of super-polluting HFCs.

3.3 Industry

Use of hydrogen must be limited to green hydrogen from electrolysis of water, without carbon emissions, **not hydrogen from methane as at present, nor used to greenwash continuing use of fossil gas** by blending as industry proposes. Green hydrogen may play a future role as a storage medium for renewable energy, to use in non-polluting fuel cells, or to avoid greenhouse emissions in hard to decarbonize industrial sectors such as steel and cement making.

<https://www.climateadvocacylab.org/resource/false-solutions-gas-and-trash-how-fossil-fuel-industry-holding-back-just-transition>