

Testimony on the 2021-22 Executive Budget

Joint Assembly Ways and Means and Senate Finance Committee Hearings on Environmental Conservation Submitted by Mark Schaeffer (markalban1@earthlink.net) January 27, 2021

Chairwomen Liz Krueger and Helene E. Weinstein and Senate Finance and Assembly Ways and Means Committees:

I am a member of the core group of People of Albany United for Safe Energy (PAUSE), the affiliate in the Capital Region of the international movement 350.org¹. Previously I have testified on behalf of PAUSE, and believe that these comments represent the views of PAUSE, but did not have time for the approval process this time, so I am testifying as an individual. I am also a member of the Citizen Action of New York State Board, the Policy Development Committee of the New York Renews coalition, and Sheridan Avenue Alliance for Renewable Energy, and support the testimony of those organizations. I studied energy and environmental policy in graduate school in the 1970s, worked for the Missouri Coalition for the Environment in St. Louis and the Environmental Action Foundation in Washington DC in the 1980s, and moved to Albany in December 1985 to work for the state (now retired). I stayed here past the first winter only because I already knew then that the climate was warming.

The state is deciding on this year's budget at a time of crisis. Over 1.36 million New Yorkers have tested positive for COVID-19, and over 34,000 have died. New York must apply these lessons from the global pandemic to the far greater climate crisis:

- 1) Believe the scientists when they warn of an escalating major danger requiring emergency action on a large scale.
- 2) When a problem is growing exponentially or threatens to cross a tipping point from disaster to catastrophe, an ounce of prevention can be worth a ton of cure.
- 3) A major public health crisis causes extreme economic disruption; recovery should not restore the *status quo ante* but build back better, to prevent future recurrences.
- 4) Business as usual created the problem of inadequate response – government leadership and MASSIVE public investments are necessary.
- 5) People with the least resources, generally voiceless in decisions, are at greatest risk, from economic losses as well as deadly threats, should be in the front of the line for jobs and community investments.
- 6) To avoid political backlash, everyone must be guaranteed economic security during the inevitably disruptive crisis and transition. We need sustainable jobs for all in the new economy.
- 7) DELAY = DEATH

I greatly appreciate the legislature's initiative in passing the Climate Leadership and Community Protection Act into law. CLCPA requires that all relevant state decisions follow the two legal mandate to reduce net emissions in New York to zero by 2050, and at least 40% by 2030, and also ensure environmental justice for overpolluted and underpaid communities and impacted workers. But to meet that timetable requires a MAJOR commitment of funds multi-billions annually. A 2017 study for NY Renews by Prof. Robert Pollin of PERI found that will require New York to invest \$31 Billion annually, including public investments of some \$7 billion leveraging the rest in the private sector.

For comparison, New York now spends some \$35 Billion annually importing fossil fuel from out of state. Avoided fuel costs should be credited to renewable energy and would more than pay for the energy transition over the life of the investments. And accounting for total real costs and benefits must include the social costs of "carbon" - ie fossil fuel combustion -- which are already comparable to the direct cost of fossil energy. But four years have passed since the PERI study, investments have been far short of that level, and the climate crisis has accelerated, so we must plan to invest more and move faster.

In his 2021 State of the State message, Gov. Cuomo said "***We will ... launch the most aggressive green economy program in the country. COVID is the existing threat, but climate change is the existential threat.*** New York will be the green energy capital of the world." The governor is talking the talk about the climate, **but we need to do much more to deal with the climate crisis with the urgency and scale necessary** for New York, as an affluent and progressive state, to do our part to head off the impending global catastrophe that the scientific community has been warning about.

The Governor's budget briefing proposed to "create a total 12,400 megawatts of green energy to power 6 million homes, directly create more than 50,000 jobs, and spur more than \$29 billion in public and private investment all across the state " He called for "a \$26 Billion Investment in large scale renewable projects will ensure that New York remains a leader in transitioning to a green economy and fighting climate change Those numbers are substantial, but the summary of all funds spending for total environment, energy and agriculture programs show only \$2,390 million proposed via 8 departments, agencies and authorities. That is just a 7% increase in funding from last year, closer to business as usual than to an all out emergency program.

1) The climate crisis is an EMERGENCY requiring major public action now

A political climate change has begun, as the public recognizes that global overheating is a threat not only to polar bears, Pacific islanders, and future generations, but a clear and present danger everywhere right now. A UN poll on climate this week of 1.2 million people in 50 countries found that 64% think it is a "global emergency". Even when climate action required significant changes in their own country, majorities still backed the measures. 65% of people in the US, where fossil fuels are a major source of emissions, strongly supported renewable energy.

Climate disruption, driven by greenhouse gas emissions gravely threatens the quality of life and even survival of people and other living things in New York and around the world. Communities have already suffered superstorms and floods from New York and New Orleans to Puerto Rico, Pakistan, and the Philippines, as well as extreme droughts, killer heat waves, crop failures and wildfires far outside the normal range. **(see attached images) Paradise California became an Inferno** -- Dante must be rolling in his grave. Extraordinary droughts in Central America and North Africa have been driving people from their homes; the global numbers of climate refugees could explode by midcentury to 100 million or more. Destruction is accelerating, sea levels are rising, and we are approaching the point of no return at which large areas of the Earth would become, in President Obama's words, "not only inhospitable but uninhabitable."

Major scientific reports^{2,3,4} warn that further delay in transitioning from fossil fuels to clean renewable energy threatens irreversible catastrophic consequences in the next few decades. "Every extra bit of warming matters," as IPCC's Hans-Otto Portner said. Nobody knows exactly where the threshold is to trigger one of about a dozen runaway amplifying feedbacks⁴ that could cascade, shifting the Earth's climate into a new "Hothouse Earth" equilibrium. So as John Holdren, President Obama's science advisor, explained: *when you are driving in a fog toward a cliff you can't see, the wise course is to stop as fast as you can without crashing.*

It is important to appreciate the effective temperature increase: 2 degrees C doesn't seem very dramatic, but the recent IPCC SR-15 report² (B1.2) states that increases over land are twice the global average increase, and Americans use the Fahrenheit scale. So for a +2C global increase, doubling to +4C and converting, land temperatures would increase by **7.2F**, while a hothouse global rise by +5C would mean **+18F** over land, quite possible this century if feedbacks are triggered.

Decades of disinformation and delay have made the climate crisis an immediate threat to human life around the world, and an existential threat to civilization as we know it, unless an economy-wide transition to net zero greenhouse emissions is accomplished in the next few decades, along with a drawdown of GHGs already in the atmosphere². Just as the Big Lie that the Presidential election was stolen by imaginary vote fraud concealed the reality that millions of voters of color are systematically disfranchised by voter suppression, the *Even Bigger Lie* by fossil corporations and their paid shills -- that clean energy would be a job killer, is unaffordable and unreliable, and we would freeze in the dark -- obscures the reality that renewable energy, efficiency and storage would create more jobs than fossil per million dollars invested and per KWh delivered, and are already cost competitive for electric generation.

As clean technology costs continue to decline, investments would more than pay for themselves over the lifetime of the new systems. The market now thinks that electric vehicles are going to dominate the future -- Tesla's market cap exceeded Ford and GM combined a year ago and is continuing upward. The same logic applies in other sectors - buildings, manufacturing, even agriculture: if front end costs are adequately financed, annual fuel costs are zero and long term total costs are negative compared to fossil systems.

2) **The Climate and Community Investment Act (CCIA)** should be passed this year to fully fund New York's transition to sustainable energy throughout the state economy. CCIA would levy fees on fossil energy as it enters the NY economy to pay for its real social costs of global overheating and local toxic pollution. The bill would to raise some \$15 billion per year to transition our economy to 100% renewable energy, invest in communities most impacted by pollution and climate change, create 150,000 good jobs, especially for workers from overpolluted communities and displaced workers, and help reduce utility costs to New York families

Programs to deploy clean energy statewide should take into account these key points:

- > Investments in energy efficiency are generally the most cost effective -- done first they reduce the need for energy supply;
- > Sufficient energy storage is necessary to ensure a reliable continuous supply of energy when the sun isn't shining.
- > The cost of renewable energy systems is concentrated at the front end, installing systems, but the saving from avoided fuel costs enables them to pay for themselves over time, so accessible, affordable financing for all users is key to broad adoption

3) In addition to passing CCIA, New York should **halt all new investments in fossil infrastructure**, and reverse all direct and indirect subsidies to fossil fuel use, except for programs like LIHEAP which help low income people afford necessities.

4) **New York should aim to complete the transition to a sustainable economy sooner than the CLCPA timetable.** The target for 2030, unlike 2050, is within the range of practical planning. IPCC set the global target as net zero by 2050 to avoid risking runaway feedbacks, but affluent countries, which have already used more than our entire share of IPCC's global carbon budget, are morally obliged to get to zero sooner. New York has long been a leader and should set a high standard. New York's CLCPA has been a significant influence on the climate initiatives proposed by President Biden. **To actually achieve a just transition in time globally, the United States must lead, and New York should lead federal policy.** In particular, the economy-wide target for reducing greenhouse emissions by year 2030 should be more ambitious - more like 80 - 100% renewable energy than 40%.

When JFK announced the Apollo program to put an American on the Moon in 10Y, we didn't know how to get there. But it was a major national priority, so we invented the means. This is a **mission to planet Earth, a rescue mission.** As they say at NASA, **Failure is not an option.**

1 "350" refers to 350ppm, the maximum safe level of CO2 according to James Hansen of NASA (ret.), long America's leading climate scientist. PAUSE is one of over 250 organizations in the NY Renews coalition; I am speaking as a member of PAUSE, not necessarily for NY Renews. PAUSE is also working to promote composting of food waste, to avoid emissions of methane, a very powerful greenhouse gas.

2 Highlights of Intergovernmental Panel on Climate Change (IPCC) **Special Report on Global Warming of 1.5°C** <https://www.ipcc.ch/sr15/>

3 Highlights of National Climate Assessment (NCA4) for Northeast United States <https://nca2018.globalchange.gov/chapter/northeast>

4 "Hothouse Earth" study **Trajectories of the Earth System in the Anthropocene** from Proceedings of the National Academy of Sciences <https://www.pnas.org/content/115/33/8252>

5 www.drawdown.org and the book Drawdown edited by Paul Hawken.