

March 7, 2026

Governor Kathy Hochul
Assembly Speaker Carl E. Heastie
Senate Majority Leader Andrea Stewart-Cousins
Senator Pete Harckham
Assemblymember Deborah Glick
Senator Kevin Parker
Assemblymember Didi Barrett

Dear Governor Hochul and Senate and Assembly leaders:

We write to you out of concern that actions may be taken to weaken the Climate Leadership and Community Protection Act (CLCPA) of 2019 based on misinformation. The truth is that the CLCPA's science-based greenhouse gas accounting methodology is not out of line with Intergovernmental Panel on Climate Change (IPCC) standards, is critical to leading the nation to more accurately account for the impacts of burning oil, gas and biofuels on our planet, and should eventually become the federal standard. This is not the time for New York to back down.

If we allow the budget process to relax greenhouse gas accounting for methane to a 100-year time frame, it immediately appears that methane is much less of a problem, and we can move more slowly on our path to a decarbonized economy. This is simply not true. The short-lived greenhouse gases, particularly methane, are the biggest and most important controls we have to turn down the rate at which our planet warms. This is because if we stop allowing them to be released into the atmosphere, then they will be removed by various processes in the next decades – not centuries, as is the case with carbon dioxide (CO₂) – and we will have rapidly slowed the rate of climate change.

A recent [NYSERDA memo](#) argues that the greenhouse gas accounting specified by the Act is incompatible with the approach sanctioned by the IPCC. This is highly misleading. Simply stated, there is no IPCC-approved approach for greenhouse gas accounting. At issue is how one compares the climate consequences of methane to those of carbon

dioxide. Both contribute greatly to global warming, but there are several differences between the gases. Methane is a far more powerful greenhouse gas for the time it remains in the atmosphere, but its consequences are largely limited to the first few decades after emission, while the effects of a release of carbon dioxide last for thousands of years. Commonly, methane emissions are converted to CO₂ equivalents based on a defined period of time after a release of methane and calculated according to a “global warming potential” (GWP).

Greenhouse gases contribute to climate change by trapping heat in the atmosphere. To understand their impact, we need to consider two aspects of greenhouse gases: their ability to trap heat and how long the gases remain in the atmosphere. The total heat trapped by a gas is the product of the heat it traps on a daily basis and the period it remains in the atmosphere. Let’s consider methane, the primary component of natural gas, as an example of a shorter-lived gas relative to carbon dioxide. At the 100-year timescale, a pound of methane is 29.8 (GWP-100) times more potent than a pound of carbon dioxide, but at the 20-year time scale, that same pound of methane is 82.5 (GWP-20) times more potent than a pound of carbon dioxide at trapping heat. Since the early 1990s, the IPCC has given estimates on different time scales for looking at methane, including GWP-20, GWP-100, and GWP-500.

When governments negotiated the Kyoto Protocol in the early 1990s, they specified GWP-100 for methane. The choice of GWP-100 by the Kyoto negotiators was not based on any specific recommendation from the IPCC. At the time in the early 1990s, the role of methane was under-appreciated by both scientists and policymakers, and negotiators chose the middle value from the early IPCC reports (i.e., GWP-100), in part because at that time, catastrophic climate change was a relatively distant reality and most climate projections were looking out to the year 2100 – about 100 years in the future.

However, over the past 10 to 15 years, the science on methane as a driver of climate disruption has become much stronger, and in the IPCC’s 5th Assessment Report, AR5 (2013) synthesis, the IPCC clearly stated that the use of a 100-year time period was “arbitrary.” Since 2013, the IPCC has recommended selecting a time frame for methane appropriate to the concern. The latest IPCC AR6 (2022) has this to say: *“Following AR5, this Report does not recommend an emissions metric because the appropriateness of the choice depends on the purposes for which gases or forcing agents are being compared.*

Emissions metrics can facilitate the comparison of effects of emissions in support of policy goals.”

In AR6, the IPCC also calls for extremely urgent action to reduce greenhouse gas emissions, and specifies that the next one to two decades are critical. On this time scale, GWP-100 does a terrible job of representing the climatic damage caused by methane. GWP-20, endorsed in the CLCPA for methane, is far preferable. For example, IPCC’s AR6 synthesis report states: *“By comparison expressing methane emissions as CO₂ equivalent emissions using GWP-100 overstates the effect of constant methane emissions on global surface temperature by a factor of 3–4 (Lynch et al., 2020, their Figure 5), while understating the effect of any new methane emission source by a factor of 4–5 over the 20 years following the introduction of the new source (Lynch et al., 2020, their Figure 4).”*

Of note, the latest IPCC report states that methane has contributed 0.5 °C (0.9 °F) of all warming and carbon dioxide 0.75 °C (1.4 °F) of all warming since the 1800s. That is, methane's contribution to global warming is equal to 67% of that of carbon dioxide since the start of the Industrial Revolution. If we brought the human-caused methane emissions rate to zero today, in less than 20 years, we would have reduced global warming from methane and CO₂ emissions by 40% – it would take over 100 years to do the same with an equivalent decrease in CO₂ emissions. The use of GWP-100 hugely underestimates this impact and suggests far less urgency to reduce methane emissions. GWP-20 far more effectively represents the historical importance of methane to global warming documented in the IPCC AR6 synthesis. On the significance of methane emissions, AR6 states: *“Over time scales of 10 to 20 years, the global temperature response to a year’s worth of current emissions of SLCFs [Short-Lived Climate Forcers] is at least as large as that due to a year’s worth of CO₂ emissions (high confidence). Sectors producing the largest SLCF-induced warming are those dominated by methane emissions: fossil fuel production and distribution, agriculture and waste management (high confidence).”* The use of GWP-100 by federal agencies in greenhouse gas accounting is out of touch with current science, which is how the oil, gas and biofuel industries want things to stay. Hopefully, over time, federal policy will catch up with the CLCPA.

The NYSERDA memo also objects to CLCPA’s inclusion of upstream methane emissions – the leaks that occur when oil and gas are drilled, processed, and transported to New

York from other states. NYSERDA calls this inconsistent with how the IPCC structures national inventories. But this conflates two different accounting purposes. Jurisdictional inventories track emissions *where they physically occur* – a framework designed for country-level reporting under the Paris Agreement. The CLCPA accounts for emissions attributable to New York’s consumption – a consumption-based framework that asks a different question that is more relevant in the context at hand: what warming does New York’s energy use actually cause? These upstream emissions are real. They would not occur if New York did not consume those fossil fuels. Excluding them doesn’t make them disappear from the atmosphere; it simply removes New York’s incentive to reduce them.

Finally, the NYSERDA memo cites the treatment of the “short carbon cycle” by scientists and the IPCC to object to CLCPA’s attribution of bioenergy’s combustion emissions to it. However, the IPCC does not disregard combustion emissions from bioenergy, either. IPCC reports all CO₂ emissions and removals associated with the harvesting, combustion and growth of biomass in the “Agriculture, Forestry, and Other Land Uses” sector. Therefore, CO₂ emissions from biomass combustion used for energy are only recorded as a memo item in the Energy sector. This approach of not including these emissions in the Energy Sector total is to avoid double counting and should not be interpreted as a conclusion about the sustainability or carbon neutrality of bioenergy. Thus, the IPCC Guidelines do not automatically consider or assume biomass used for energy to be "carbon neutral," even when the biomass is thought to be produced sustainably. The IPCC Task Force on National Greenhouse Gas Inventories clarifies this in their response to Q2-10 in their frequently asked questions (<https://www.ipcc-nggip.iges.or.jp/faq/faq.html>).

We ask that you actively resist efforts to weaken the CLCPA. Many of us would be pleased to talk with you further about the CLCPA’s greenhouse gas accounting methodology. The views we express here are our best professional judgment and are based on a large body of peer-reviewed science. As a group, we represent some of the leading national and international thinkers in climate science and sustainability engineering.

The following individuals endorse and sign-on to this letter. Their Institutional affiliations are listed for identification purposes and should not be construed as endorsements by their institutions.

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