PROTECT THE ADIRONDACKS!



July 1, 2022

NYSERDA
17 Columbia Circle
Albany, NY 12203

**RE: Comments on NYS Climate Action Council Draft Scoping Draft Scoping Plan**

Dear New York State Climate Action Council:

Protect the Adirondacks has reviewed the 861-page Draft Scoping Plan of the NYS Climate Action Council (NYSCAC), released in December 2021. The Draft Scoping Plan is a "framework for how the State will reduce greenhouse gas emissions and achieve net-zero emissions, increase renewable energy usage, and ensure climate justice." We appreciate the work of the NYSCAC to produce this draft, much of which was undertaken during a difficult period over the last two years during the Covid pandemic.

The NYSCAC's preparation and release of this Draft Scoping Plan is a requirement of the landmark 2019 Climate Leadership and Community Protection Act. This Act requires that New York State reduce "economy wide greenhouse gas emissions by 40% by 2030 and no less than 85% by 2050 from 1990 levels." These are ambitious goals and the Draft Scoping Plan sets out a number of recommendations that will help the state meet these goals.

The Draft Scoping Plan is being used as a strategy document to gather input and ideas from New Yorkers to help the NYSCAC organize and put together a formal draft climate change plan for New York by the end of 2022. While Protect the Adirondacks broadly supports much of the Draft Scoping Plan, there are a number of ways that New York's climate change program can be improved in a formal draft plan. Our comments that follow attempt to highlight the major areas where we support the ideas and recommendations in the Draft Scoping Plan and enumerate areas where a formal draft climate change plan should be much stronger.

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Short-Term Goals

The Draft Scoping Plan sets goals for 2030 and 2050. Protect the Adirondacks believes that there should be short-term goals set for two years and four years after approval of a final New York State climate change plan.

Long-Term Objectives

The Draft Scoping Plan makes recommendations for greenhouse gas emission reductions in two major sections. The first major section "Sector Strategies" set out strategies by industry sector, which include transportation, building, electricity, industry, agriculture and forestry, and waste. The next major section "Statewide and Cross- Sector Polices" sets out policies for a transition away from natural gas, land use, local government, and adaptation and resilience. Protect the Adirondacks offers its ideas and comments for some of these sectors.

**Transportation:** The NYSCAC states that "transportation" was responsible for 28% of the New York's greenhouse gas emissions in 2019. The Draft Scoping Plan calls for transition to three million zero emission vehicles (ZEVs) in the fleet of automobiles in New York by 2030 and 100% by 2050. The Draft Scoping Plan sets out a number of ways that these goals will be attained. In addition to the transition to ZEVs, the Draft Scoping Plan also enumerates possible new state investments in public transit and enumerates a variety of ways to reduce the total "vehicle miles traveled" (VMT) by making communities in New York more hospitable for walking and biking.

Protect the Adirondacks supports a number of the policy recommendations in this section, including adoption of California's Advanced Clean Cars 2 Regulations; Converting New York's trucks, buses, and non-road equipment (including construction and farm equipment) to zero-emissions technologies; prioritizing medium and heavy-duty vehicles that impact disadvantaged communities; expanding options, access, improving reliability, making public transportation more affordable, and focusing on the needs of unserved and underserved communities outside of current public transportation systems; and, changing New York's Smart Growth Public Infrastructure Policy Act (ECL Article 6) to prevent sprawl and build communities focused around climate change mitigation.

Protect the Adirondacks also supports programs highlighted in the Draft Scoping Plan for "variable pricing and parking policies," and "higher registration fees" for carbon intensive vehicles, mileage-based user fees, and other special assessments to finance transportation sector improvements. We agree that there clearly needs to be disincentives for low mileage vehicles as part of New York's climate change program.

While Protect the Adirondacks supports incentives to increase the number ZEVs purchased in New York, these incentives should be higher. Beyond a higher direct rebate, we suggest that there be a sales tax waiver for all ZEVs purchased by New York State residents. New York State will not meet its climate change goals unless we can make ZEVs affordable for working families across the state. Right now, most ZEVs are not affordable for working families in New York.

The Draft Scoping Plan tells us that the U.S. Energy Information Administration (EIA) estimates the carbon footprint of the average New Yorker to be 8 metric tons (Mt) per year. This is lower than

most other states because of the high number of people living in New York City, with its multi-family housing, mass transit system, and finance-based economy. Upstate New York is similar to the average Vermont resident at 15.6 Mt per year, relying heavily on single family housing and automobile transportation. The NYSCAC needs to tackle the difficult issue of getting Upstate New Yorkers to put less miles on their vehicles.

**Buildings:** The Draft Scoping Plan states that buildings in New York State, both residential and commercial, produce 32% of greenhouse gas emissions. Buildings, which basically means the way that New Yorkers live and work, are the biggest source of greenhouse gas emissions in the state. To meet this challenge, the Draft Scoping Plan provides an ambitious goal to electrify 85% of homes and commercial building space in New York State by 2050. While Protect the Adirondacks supports that overall goal, we do not believe that the Draft Scoping Plan goes far enough and we urge that the NYSCAC look at other policy options that will help to meet this goal.

As a general approach, Protect the Adirondacks supports a variety of programs and incentives to help "electrify" and make more energy efficient primary residences and long-term rental units. We support ideas highlighted in the Draft Scoping Plan for adopting regulations that prohibit the replacement of fossil fuel equipment at the end of its useful life; adopting new and stronger local and state-wide codes that require highly efficient, zero-emission standards for new residential and commercial buildings; requiring energy benchmarking and disclosure for multifamily and commercial buildings; providing financial incentives and expanding access to public and private low-cost financing for building decarbonization; and expanding the use of high-efficiency heat pumps to retrofit, electrify, and decarbonize existing commercial and residential buildings.

Protect the Adirondacks supports an expansion of tax credits or rebates that incentivize New Yorkers to invest in energy efficiency for their primary residences. Many New Yorkers would rather put money into their homes than send it to the state. The Draft Scoping Plan needs stronger incentives for insulation, window replacement, energy efficient appliances, electrification of heating systems, among other household upgrades. Working families in New York State will only be able to undertake these activities if there is a meaningful immediate, short-term economic benefit. A formal draft plan needs to establish programs and policies that provide a short 5- to 10-year return on investment for New Yorkers to electrify and decarbonize their homes and businesses. The state should get into the loan business. Currently, the loans available are high interest (or low interest require a number of points) and burdensome to working families.

Members of Protect the Adirondacks who want to transition their homes to solar power and heat pumps are reporting that it's a $100,000 financing cost for their 2,000 square foot homes, which grants, tax credits, or other modest incentives can reduce to around $70,000 after the first few years. A $70,000 cost, at today's high interest rates, will take as long to pay down as the useful life of the new climate friendly technology. When they price out their costs, even with fossil fuels rising at a high rate of inflation, there's a financial burden. We have encouraged them to submit their case studies to the NYSCAC. We believe that there needs to be newly imagined ways for helping New Yorkers make these transitions through a state revolving loan fund with a nominal interest rate of 1% or 2%. There also needs to be greater tax incentives through property tax abatements and long-term income tax credits, among other programs.

Protect the Adirondacks also believes that there should be a series of disincentives for second homes (and third homes, and fourth homes, etc.) due to their wasteful energy use and land use. The report does not address a major issue: Upstate New York and many parts of New York City, the lower Hudson Valley, and Long Island have high numbers of buildings and apartments that are not occupied on a year-round basis, and many are owned by non-resident landowners from out of state. The Draft Scoping Plan failed to address this issue either in "Building" section or the "Land Use" sections, and this is a major weakness in the report. This issue must be tackled in the formal draft plan.

An analysis by Protect the Adirondacks shows that in many towns in the Adirondack Park have high rates of non-resident home ownership. Here's our analysis of non-resident home ownership in Essex County towns: Chesterfield, 38%; Crown Point, 25%; Elizabethtown, 39%; Essex, 46%; Jay, 56%; Keene, 54%; Lewis, 54%; Minerva, 52%; Moriah, 45%; Newcomb, 66%; North Elba, 34%; North Hudson, 57%; St. Armand, 56%; Schroon, 66%; Ticonderoga, 25%; Westport, 36%; Willsboro, 44%; Wilmington, 41%. That's a lot of buildings that are wasting energy. This story is the same throughout the Hudson Valley, Catskills, Finger Lakes, eastern Long Island, St. Lawrence River, along Lake Ontario, and many other places. The NYSCAC needs to look at taxes on non-resident buildings as a way to raise funds to help with New York State's transition to a fossil free economy.

In his book *Climate Change in the Adirondacks* (2010) noted Adirondack scientist Jerry Jenkins calculated that construction of a new 2,060-square-foot house creates a four ton carbon debt. (p 139). Even more important is the carbon debt that Jenkins calculates from the clearing of forest land for a building lot. Jenkins assessed the loss of carbon storage and the release of carbon into the atmosphere from forest clearing for a single family home. Jenkins wrote "Clearing an acre of forest creates a debt of 257 tons." This type of forest clearing for a residence, other buildings, yard, and road/driveway is typical across Upstate New York. No amount of climate change technology to power a second home, which just wastes energy plain and simple, will ever offset or replace the lost climate mitigation capacity of cleared forest land.

The NYSCAC needs to place an emphasis on transitioning our building trades industry away from building high-end second homes (or third homes, or fourth homes) and focus on retrofitting existing residential and commercial buildings for energy efficiency.

The NYSCAC also needs to explore electricity bill surcharges or higher rates for buildings that are not owner-occupied or under lease as a long-term rental.

**Electricity:** The Draft Scoping Plan states that electricity generation in New York State, both residential and commercial, is responsible for 13% of greenhouse gas emissions. According to the Draft Scoping Plan, fossil fuel generation—including natural gas, oil, and dual-fuel generation—produces more than 43% of statewide electricity. Wind produces just 3%, solar produces less than 1%, hydro-power produces around 20%, and nuclear around 33% (but nuclear will see reductions as more plants are closed). In order to achieve electricity system decarbonization by 2040, the state proposes to continue expansion of land-based and offshore wind and solar.

Protect the Adirondacks supports recommended strategies to accelerate growth of large-scale renewable energy generation by facilitating transmission and distribution upgrades and the Draft Scoping Plan's support for the expansion of clean distributed energy generation and distributed

energy resources. We also support "Community Choice Aggregation" programs such as community solar projects.

Protect the Adirondacks calls on the NSYCAC to adopt a formal goal of putting solar units on two million rooftops across the state. The formal draft plan needs to detail how an average household across New York can afford to install rooftop solar at an rate affordable for working families. Right now, rooftop solar is a financial burden. The formal plan must include detailed planning for how to make rooftop solar for residences and businesses affordable for working families.

Protect the Adirondacks is at a loss as to why the role of the New York Power Authority is minimized for the development of either onshore or offshore wind farms or solar farms. It seems that a strategy for the NYSCAC to endorse is for New York State to make new investments to expand the capacity of the New York Power Authority to undertake these kinds of projects. The investments that New York State made decades ago to build a series of public hydro-power facilities should be replicated with public wind and solar power projects today. In the long run public ownership of these facilities will make these projects more affordable and profitable for the state.

**Forestry:** The Draft Scoping Plan states that agriculture and forestry in New York State are responsible for 6% of greenhouse gas emissions. The Draft Scoping Plan lays out strategies for reducing emissions in agriculture and forestry, focusing heavily on methane and nitrous oxide. The Draft Scoping Plan also discusses how agricultural and forestry can produce more goods for local use, thus reducing demand for imported goods, and provides strategies for carbon sequestration.

The Draft Scoping Plan's statements on forestry and carbon sequestration and its recommendations around forest management are inadequate and represent some of its greatest weaknesses. The Draft Scoping Plan appears to have largely allowed the forest products industry, those with a vested interest in maximizing the trees they can cut down, to draft and shape this part of the report. The NYSCAC appears to rely on a narrow review of the scientific literature on forest carbon sequestration, to use cherry-picked forest carbon sequestration data, and to ignore the importance of mature and old growth forests in long-term carbon storage.

Protect the Adirondacks believes that forests are vital for carbon sequestration and long-term storage. According to the US Forest Service, U.S. forests sequester 866 million tons of carbon a year, which is roughly 16% of the US annual emissions. This carbon is sequestered primarily in trees and soil.

One of the most important things we can do to combat global climate change is to protect intact mature forests and expand preserved forests. It's important that we allow forests that exist now, that are growing now, to continue to mature and age, which maximizes carbon storage. The preservation of mature forests will have a much greater impact on slowing global change than simply planting small trees, though reforestation and tree planting remain important long-term strategies.

There are the basic concepts that help to understand carbon and forests that the formal draft report should elucidate:

**Carbon capture** is the process by which carbon is removed from the atmosphere and incorporated into plant tissues through the process of photosynthesis. Photosynthetic cells in plants split atmospheric carbon dioxide ($CO_2$) molecules, and combine the carbon with water ($H_2O$) to create glucose ($C_6H_{12}O_6$), a basic building block of life. The byproduct of photosynthesis is oxygen ($O_2$). Photosynthesis is responsible for the vast majority of carbon capture that has occurred on planet earth over the past billion years. Fossils fuels are simply ancient plants that partially decomposed and became trapped in rock millions of years ago.

**Carbon emission** is the process by which stored carbon is returned to the atmosphere. In contrast to carbon capture, which is almost solely the result of photosynthesis, carbon emission occurs through many processes including respiration, decomposition, and combustion. Respiration is the process by which living cells generate energy by using oxygen ($O_2$) to crack stored carbon in molecules such as glucose, $C_6H_{12}O_6$. The byproducts of respiration are carbon dioxide ($CO_2$) and water. Like most living cells, plant and tree cells must respire to survive, and are thus emitting carbon dioxide day and night, all year long. Combustion is another process that returns stored carbon to the atmosphere.

**Carbon flux** is a measurement of relative carbon emission versus capture. To calculate carbon flux, one simply subtracts the amount of carbon captured from the amount of carbon emitted. A negative carbon flux means that carbon is being captured at a higher rate than it is being emitted. This is called a **carbon sink**. If more carbon is being emitted than stored, the flux is positive and this is called a **carbon source**. Carbon flux can be measured at a variety of scales, from single cells to organisms, ecosystems or the entire planet. Carbon flux can also be measured at a variety of time scales from milliseconds to days, years, centuries or millennia.

On a landscape scale, carbon flux varies widely with land-use, with forests generally serving as carbon sinks, and developed areas serving as carbon sources. However, forests can also be carbon sources. For example, many forests in the western U.S. are considered carbon sources due to the release of massive amounts of carbon through the process of wildfire-induced combustion.

**Carbon sequestration** is the process of capturing *and storing* atmospheric carbon dioxide. Areas where the net carbon flux remains negative over a period of time are sequestering carbon. In forests, carbon is primarily sequestered in the trunk, limbs and roots of trees.

**Carbon storage** is the total amount of carbon that has been pulled from the atmosphere and is held in the forest in trees, both living and dead, and soils. Half of the dry weight of a tree is carbon. The bigger the tree, the more carbon is stored. Carbon storage increases when carbon capture exceeds emission over a long period of time. An older forest, generally, sees greater levels of long-term carbon storage.

As a forest grows and ages the amount of biomass grows dramatically. Biomass is all plant materials, both dead and alive. The bigger the tree, the bigger the biomass. It's important to note that as a tree grows, its root structure also grows, which means that its below ground biomass greatly expands.

There are a number of studies that found that it's the biggest trees in a forest that contain the most carbon. In this way 2% or 3% of trees in a forest, depending on species, age, and forest type, can contain more than half of the carbon in the forest.

A typical forest sequesters and stores carbon at different rates depending on the average age and abundance of its trees. Young, new forests have high numbers of small trees and sequester carbon at high rates. While young trees grow quickly, not every small seedling grows into a sapling and becomes a large tree due to fierce competition for light, moisture, nutrients, and space in the forest. Though these trees grow rapidly they are relatively small diameter trees for years or decades, hence they store low levels of carbon long-term because they don't possess much biomass. These trees also experience high mortality, but when they die and decay there's relatively little carbon to be re-emitted due to their small diameter size.

As the forest matures, the trees that survive continue to grow and sequester higher rates of carbon. In the Adirondacks, a white pine or sugar maple can live for 250-350 years. After several decades, these "mature" forests are comprised of medium-aged trees that are medium to large in size, healthy, and have large root systems. These mature trees grow more slowly than young trees, but while the rate of carbon sequestration slows, the *amount* of stored carbon continues to grow. While some mature trees die, the remaining trees form a high, thick canopy forest. In these mature forests, roots continue to grow below ground and stores carbon in forest soils grow as decayed leaf litter and other forest matter decay. In the Adirondacks, mature forests start to form around 75 to 125 years in age.

The value of an old growth forest for carbon storage goes beyond its dominant big, old trees. Root systems can be massive underground and store carbon. Soils build up decade after decade and hold vast amounts of carbon. Carbon is also held in dead trees that fall and these downed trees create openings in the canopy that allow new trees to grow. Old growth trees are taller and bigger in diameter, which means they possess far more biomass than mature or small trees, which means that they store high amounts of carbon. While the overall productivity of an old growth tree limits its annual sequestration of carbon due to age, vast amounts of carbon are well contained within the old growth forest in big trees, slowly rotting dead trees, deep leaf litter and soil.

In the Adirondacks, the role of the Forest Preserve is vital. We have hundreds of thousands of acres of mature forests that are heading towards old growth. On newly purchased lands, we have young forests that will be allowed to grow into mature, closed-canopy forests in the decades ahead.

These are tragic times in the U.S. The last decade of drought and invasive species have transformed huge swaths of forests in the west and center of the country into carbon sources. These forests, due to fires and tree mortality from pests and diseases, now emit more carbon into the atmosphere that they sequester. This is heartbreaking.

In New York and the northeast in general, which have seen tremendous forest recovery over the last 100 years, our forests act as net carbon sinks, effectively capturing and storing far more carbon than they emit. The most beneficial forest management policy in the future in New York to combat climate change is to let existing intact forests continue to grow and to reforest other areas.

Here is a list of specific ideas for consideration in a formal draft plan:

1. New York's 18.6 million acres of forests are important to help meet climate change goals, but not as important as ending use of fossil fuels and conservation and energy efficiency in buildings and transportation.

2. While the role of New York's forests in an overall climate change mitigation plan is not as big as ending fossil fuel use or conservation/energy efficiency, a new comprehensive forest protection program for New York will be less expensive to design and implement than these other incredibly difficult and challenging goals. We need to let the trees we have in New York right now keep growing and to find places where new trees can be planted and grow. The Draft Scoping Plan states that New York has lost 10% of its forests in the last decade. That means we're going the wrong way. The formal draft plan needs to set a short-term goal of no net loss of existing forests and for significant expansion of forests in New York by 2050.

   The Draft Scoping Plan talks about managing forests as "offsets" to other carbon emitting activities. There are not enough forests in New York to offset New Yorkers' carbon pollution. The U.S. Energy Information Administration (EIA) estimates the carbon footprint of the average New Yorker to be 8 metric tons (Mt) per year. This is lower than most other states because of the high number of people living in New York City, with its multi-family housing, mass transit system, and finance-based economy. Upstate New York is similar to the average Vermont resident at 15.6 Mt per year. The State of Vermont estimates an acre of northeastern forest sequesters carbon at a rate of ~1.3Mt/year. This means it would take about 6 acres of forest to offset the annual emission from the average New Yorker. That means we'd need 120 million acres of forests in New York to offset these impacts, which is impossible because we'd need to triple the size of the state. New York's forests will play an important, but limited role in changing the state's climate future. Programs to enhance forest protection on private lands could be very cost effective when compared with other expensive items such as changing household heating systems.

3. The "Forestry" section footnotes shows forest coverage data and landowner attitude data, but no source materials for scientific and peer-reviewed articles about the role of forests in carbon storage and the best ways to use forests for long-term carbon storage. There is lots of information about this. We've provided a short bibliography below.

4. The Draft Scoping Plan states that more forest cover data is needed and that conservation models must be created and tested. (p 199-200) We do not have to reinvent the wheel on these issues. Please don't waste time and effort doing so. There is plenty of science about role of forests in carbon storage and the best ways to use forests for long-term carbon storage. Use the existing science.

5. The Draft Scoping Plan relies heavily on the same tried and true public policies that have been in place for 50 years for the purpose of ensuring a constant timber products supply, programs that morphed without serious changes 25 years ago into sustainable forestry programs. Forest management Draft Scoping Plans, BMPs, tax incentive programs, certification, landowner education, equipment sharing, guidance and support, and 480a. It's the same stuff that we've always done as a state, but the job in front of us now is very different. Long-term carbon storage in New York's forests is a very different objective than a

constant timber products supply or sustainable forestry.

6. The Draft Scoping Plan calls for more research for maximizing carbon storage in forests, but that misses the big point. The Draft Scoping Plan looks at a 30-year time frame, from now until 2050. Any tree planted today is not going to help us much in total carbon storage in the next 30 years. That tree will grow in 30 years to 8, 10, or 12 inches in diameter if we're lucky. This Draft Scoping Plan needs to prioritize new investments to preserve intact forests in public ownership and to incentivize forever-wild privately owned forests throughout New York through new state programs and easements that will keep these established forests intact and growing.

7. The Draft Scoping Plan fails to recognize that the science is clear that mature forests, those 50 to 125 years old, which is much of the Forest Preserve, and much of the private forests in the state, are the forests that will sequester and store the most carbon in the future. A 20" diameter tree stores 4 times the carbon as a 10" diameter tree.

8. On the state's 5.8 million acres of public lands, we should set goals for long-term carbon storage over the next 100 years as many of these forests are now around 75 to 100 years old and in their peaks for carbon storage. Half of a tree's dry biomass is carbon. Tree size matters and the biggest trees in New York are growing on our public forestlands.

9. Think big. Let's stop logging our 700,000 acres of State Forests and convert their management to prioritizing long-term carbon storage in the forests and soils. These unlogged forests will also be better for recreation.

10. On the state's 13.7 million acres of existing privately owned forests, we need to change the state's focus from sustainable timber management to long-term carbon storage. We need to set a goal for a significant acreage of the state's private forests to be managed as forever-wild forests for long-term carbon storage. We need a new program that allows for no timber harvesting to maximize carbon storage with a minimum of five acres. We need to enroll millions of acres of private forest lands into such a new program. You don't want to cut your trees – that's great, we just want you to let your forest grow. Think big. Think 5 million acres in forever-wild easements for long-term carbon storage in the state's private forests. This also dovetails with New York's 30 by 30 legislation to protect 30% of New York State as natural habitat by 2030.

11. Just as the EPF has farmlands easements, we need a new section for forever-wild forestland easements for long-term carbon sequestration.

12. New ideas for 480b and 480c programs in the Draft Scoping Plan seem poorly conceived, and they put up barriers to participation. As stated before we need a state program that will reward private landowners who manage their lands in a forever wild state for carbon storage.

13. With only 9% of New York's private forests in 480a, we'd have to say that that program hasn't had the impact we need. Create 480b or 480c to provide tax benefits for forever wild forestry.

14. Though the benefits between now and 2050 will be modest in terms of long-term carbon storage from new forests on any lands that reforest between now and 2050, the draft plan should set an ambitious goal of something like two million acres or more to reforest through state acquisition and private land incentives. Reforestation will provide greater carbon storage in the decades after 2050, but will have other short-term benefits for habitat protection, limiting fragmentation, wildlife, wildlife corridors, etc.

15. We don't see the benefit of a carbon bank. It sounds like a gimmick. Buy the land, pay the local taxes. The state should buy two million acres to protect existing forests or for reforestation and the state should buy 5 million acres of forever wild easements.

16. We need to incentivize forest products that lock up carbon in wood products like tables, chairs, desks, buildings, and anything else. We need to disincentivize wood products that simply re-emit carbon to atmosphere quickly like burning wood chips for power or single-use, throw-away paper.

17. Invasive species protection efforts are vital to preserving intact forests and the state's efforts should be continued and expanded.

The Draft Scoping Plan includes footnotes in the "forestry" section for various issues, but is light on scientific papers about the role of mature and old growth forests in long-term carbon storage. The articles below provide a good overview of issues relating to forests and carbon sequestration, including some regional knowledge about urban and rural forests in New York and New England. Each article contains numerous references to other works if readers seek more information.

Waring Bonnie, Neumann Mathias, Prentice Iain Colin, Adams Mark, Smith Pete, Siegert Martin, Forests and Decarbonization – Roles of Natural and Draft Scoping Planted Forests, Frontiers in Forests and Global Change, Vol 3, 2020

Kosiba, AM. What is Forest Carbon?, Vermont Department of Public Health, 2021

Pugh, Tom. Are young trees or old forests more important for slowing climate change? The Conversation, July 30, 2020

Pukkala, T. Carbon forestry is surprising. Forest Ecosystems. 5, 11 (2018)

Pregitzer, C.C., Hana, C., Charlop-Powers, S, M.A. Bradford. 2020. Carbon Accounting for New York City's Natural Area Forests. Natural Areas Conservancy Report

Todd A Ontl, Maria K Janowiak, Christopher W Swanston, Jad Daley, Stephen Handler, Meredith Cornett, Steve Hagenbuch, Cathy Handrick, Liza Mccarthy, Nancy Patch, Forest Management for Carbon Sequestration and Climate Adaptation, *Journal of Forestry*, Volume 118, Issue 1, January 2020, Pages 86–101

**Waste:** The Draft Scoping Plan states that waste in New York State is responsible for 12% of greenhouse gas emissions. In the emissions from waste across the state 78% are methane gas, emitted from landfills as garbage decomposes. Long-term strategies to reduce packaging need to be redoubled in New York's climate change Draft Scoping Planning. The tried and true solid waste management strategies of "reduction, reuse, and recycling" need a fundamental reboot.

Across New York, 18% of the waste stream is food scraps. The Draft Scoping Plan needs stronger programs that emphasize the distribution and consumption of extra food as well as widescale composting. In essence, we need to generate far less trash and compost much more.

Protect the Adirondacks supports packaging legislation reforms, stronger reduction, reuse, and recycling programs, and stronger food use and composting programs.

**Greenhouse Gas Pricing:** The Draft Scoping Plan states calls for a new program for pricing greenhouse gas emissions that is "designed to bring about change in the market and promote equity." These are the three main ideas the Draft Scoping Plan puts forward for greenhouse gas pricing that are designed to reduce emissions.

- A tax or fee establishing a carbon price referred to as a carbon pricing.
- A program that caps emissions across the economy or within particular sectors and allocates emissions primarily through an auction mechanism that provide revenues for investment, known as cap-and-invest.
- A clean energy supply standard, which would require providers of liquid and gaseous fuels across the economy to reduce the carbon intensity of fuels they introduce into commerce.
- Gasoline taxes to disincentive low mileage vehicles and raise funds for decarbonization programs.

Protect the Adirondacks supports these concepts.

**Managed Transition from Fossil Fuels:** The Draft Scoping Plan is centered around decarbonizing the way New York State generates electricity and decarbonizing New York's economy. The Draft Scoping Plan's focus is on electrifying 85% of New York's residential households and moving them off of fossil fuels. The Draft Scoping Plan acknowledges that this huge task will not be easy and calls for a "managed transition," though its states it will seek "the most equitable and effective strategy for transitioning from fossil gas while maintaining affordable, safe, and reliable service."

The Draft Scoping Plan lists some rather monumental challenges. Here are some of its major aims: 1) Utilities need to transform their business models away from fossil fuels; 2) Local governments need to consider a broad range of building code upgrades and changes; 3) Commercial and industrial gas customers need to electrify their business establishments and operations; 4) Residential and commercial gas and oil utility customers need to retrofit heating, hot water, and cooking appliances in homes and businesses; 5) State regulators will need to somehow "equitably and legally" balance shareholder and customer interests in this massive transition.

Protect the Adirondacks agrees that New York's transition away from fossil fuels will be a massive undertaking, which we support, though we recognize how difficult it will be. We support a variety of programs and policies to try and facilitate this fundamental reforms.

**Land Use:** The patterns of land use and development across New York directly impact carbon emissions. Across New York, we need to revitalize communities, large and small, around climate change mitigation strategies and Draft Scoping Planning. The Draft Scoping Plan includes a standard list of buzz words and programs that need to be utilized and strengthened, including the "Protection, Restoration, and Monitoring of Natural and Working Lands, new efforts around "Forests and Farmland in Municipal Land Use Policies" and, of course, "Smart Growth."

Under the CLCPA, state agencies are mandated to weigh the impact of climate change in their decisions. Section 7(2) of CLCPA requires all State agencies to determine whether their administrative approvals are consistent with the attainment of, or will interfere with the attainment of, the statewide greenhouse gas emission limits in ECL Article 75. If inconsistent, they are required to explain why, and to identify alternatives or mitigation measures.

Protect the Adirondacks is concerned about compliance with the CLCPA by the Department of Environmental Conservation and Adirondack Park Agency. We strongly recommend that the Draft Scoping Plan enumerate how these agencies, and all other state agencies, will include the impact of climate change in their statutory and regulatory responsibilities and decisions. Section 7(2) of CLCPA requires all State agencies to determine whether their administrative approvals are consistent with the attainment of, or will interfere with the attainment of, the statewide greenhouse gas emission limits in ECL Article 75.

To date, both the DEC and APA have failed to do this work, and are violating ECL Article 75. To date, the DEC and APA have failed to take into consideration long-term carbon pollution in its review of major projects. Land clearing for roads, buildings for vacation homes, or industrial facilities are not addressed by these agencies during regulatory reviews for their long-term carbon pollution impacts. How is it that the APA can review a 120-lot subdivision of seasonal residences and never assess the climate change impacts from the land clearing, forest removal, impervious road systems, building materials, projected energy use?

This year, New York State Legislature passed the "30 by 30" act that set goals for the protection of 30% of New York State as intact protected forestland. This goal (though it should be 50%) should be part of the regulatory framework for all state agencies. A formal draft plan needs to include a requirement, with draft language, that the Legislature amend all laws of state agencies to require all state agencies to include climate change impacts and mitigation in their regulatory and statutory responsibilities. Currently, at least in the Adirondack Park, the DEC and APA are ignoring the Climate Leadership and Community Protection Act.

**Local Government:** The Draft Scoping Plan emphasizes the critical role of local government in the state's planning for climate change mitigation. The Draft Scoping Plan details five strategies to encourage and support "local climate action" by the state's local governments: 1) A statewide "dashboard" of greenhouse gas emission data community by community; 2) Draft Scoping Planning where local governments take the lead on conservation and energy efficiency efforts in their local building codes; 3) Model laws for siting clean energy facilities; 4) Assistance, support, and guidance,

for incentives, technical assistance, and centralized procurement services, and more; and 5) State support for local community green power clean energy initiatives. These are all programs and policies that Protect the Adirondacks supports.

Protect the Adirondacks sees these strategies as reasonable.

**Adaptation and Resilience:** The Draft Scoping Plan is realistic about the ecological and public health damage that New York is likely to experience in the decades ahead between now and 2050. The Draft Scoping Plan includes strategies for adaptation and resilience in three areas -- building capacity, communities and Infrastructure, and living systems. This is a complete list and this type of planning will be necessary in the future.

Protect the Adirondacks looks forward to reviewing the formal draft plan at the end of 2022. On behalf of the Board of Directors of Protect the Adirondacks, please let me express our gratitude for the opportunity to make these comments.

Sincerely,

Peter Bauer
Executive Director