New York Climate Action Council **Draft Scoping Plan Comment** NYSERDA 17 Columbia Circle Albany NY 12203-6399

Re: Detailed Comments on Plan

I have attached both general and detailed comme	ents on the Draft CAC Scoping	g Plan issued
December 2021. I would be happy to discuss and all com	ments with you or anyone or	the DEC staff, as
appropriate. I can be reached via email at	by phone at	or by cell
phone at		

I know the preparation of this draft required a lot of work and I believe the material in it will be of great help in planning the course of New York over the coming decades.

Hugh O. Canham
Emerity 2 Emeritus Professor

Forest and Resource Economics SUNY Coll. of Envir. Sci. & Forestry Comments on CLC Draft Scoping Plan dated December 30, 2021 Hugh Canham

These comments pertain to the document dated December 2021. I have included comments by Chapter and keyed to specific pages. However, some overall comments are given first, as follows:

- 1. Forests are the most widespread resource in New York State. From Long Island to the Canadian border and from East to West, forests and woodlands cover two-thirds of all the land in the State. In addition to the many economic and environmental services that forests provide they can play a major role in climate mitigation in three major ways: Sequestration of carbon dloxlde/production of oxygen, Providing wood products that are locally grown and manufactured thus reducing dependance on imported wood products such as furniture, kitchen cabinets, paper products, building materials, eliminating huge transportation costs with attendant energy consumption, Providing a renewable carbon-neutral energy source to help meet the State's demand for reliable electricity and building heating. New York's forests are a native resource. With careful management they will be sustainable in a manner that continues to provide benefits to all New York's residents. The Climate Action Plan must recognize this asset in a more forceful way and develop strategies to capitalize on the sustainable forests that, through management, will help meet climate amelioration goals for the 21<sup>st</sup> century and beyond.
- The overall coast and financing of this huge plan is not discussed except to some references to existing programs. I understand that cost was not a consideration at this point but that will remain the "Elephant in the Room."
- 3. There is much involvement of state agencies in the plan, especially DEC, NYSERDA, AG&MKS, DOS. However, much of the education and outreach necessary to achieve desired results by target dates will necessitate much involvement by other agencies and private organizations. For forestry outreach the New York Forest Owners Association, New York Society of American Foresters, and Empire State Forest Products Association should be included along with Cornell Cooperative Extension.
- 4. Forest management is in many ways a unique undertaking, compared to other land-use activities. It occurs mainly in rural areas, the forests of New York are held primarily in small parcels (50 acres is the state average), and landowner's objectives are extremely varied. In addition, sustainable timber harvesting, a necessary component of maintaining the excellent carbon sequestering ability of forests, involves heavy machinery operating away from electric power grids.
- 5. Afforestation and reforestation through tree planting is difficult and opportunities for widespread use of this today in New York state are limited. Furthermore, before any widespread tree planting efforts is undertaken, the overpopulation of deer must be controlled otherwise deer will eat and eliminate many trees so planted.
- 6. One of the impacts of Climate Change and shift away from fossil fuels will be more pressure on Natural Resources and Land Use. This section would address things such as the push to do more outdoor activities in the State's parks and other open spaces, and importantly, the possible transfer of agricultural and forest land to wind and solar power generation sites. The loss of both agricultural and forest lands is likely to be more widespread with solar than wind. Indeed, wind power generation might be compatible with open space use by the creation of open corridors that promote "edge effects" and other benefits to wildlife and other uses of the forest such as access roads for fire and insect or disease control and sustainable timber harvesting.

### Chapter 5. Purpose and Objectives of the Plan

p. 27, 5.1. Should add a sentence in New York's Climate Vision of why with just an 85% reduction in GHC by 2050 we still achieve a net-zero emissions.

p. 29. Stakeholder engagement. Could you emphasize the role of NGO's and other private organizations etc. in achieving this plan, especially in education and outreach.

# Chapter 9. Analysis of the Plan

p. 72. It would be very helpful to have another two graphs like Figure 7, showing the effects of Scenario 3, and 4. (Okay, maybe not needed since subsequent sections show all 3 scenarios.) However, I do not see any major differences among the 3 scenarios for indicated outcomes.

## Chapter 10. Benefits of the Plan

Again, I do not see many major differences among scenarios.

I like the summaries of each indicator in the subsections of this chapter.

p. 91. I do not follow the discussion here. Is increased wood combustion beneficial or not? It appears from the maps and charts it is but not clear. The issue of particulate matter and other chemicals being released by wood stoves and wood furnaces can be easily solved by having catalytic converters on each device. Most new stoves and furnaces now sold already contain those. They capture and reburn many so-called carcinogens, resulting in less air pollution, and cleaner chimneys.

## Chapter 11. Transportation

p. 104, T2. Mention should be made of the necessity of transport vehicles in sustainable forest management such as skidders, tractors, trucks, and loaders. These operate in rural off-road conditions where electric power is usually not available. Special provisions need to be made to ensure that the ability of forests to sequester carbon, which is enhanced by sustainable harvesting, is not compromised.

# Chapter 12. Buildings

Many non-residential buildings (hospitals, schools, municipal offices, etc.) in the State use wood chips for heating fuel. What is the outlook for these facilities? The plan should be encouraging more use of wood as a renewable energy source. Also, the carbon released by burning wood is not fossil carbon but will be recycled. It is in effect, carbon neutral.

#### Chapter 13. Electricity

p. 149. In the introductory paragraph there is no mention of wood fueled electric power generation in the state. Any data available on this renewable resource use for wood? Is this embodied in Figure 23?

p. 154. Transforming Power Generation. Need to include wood-fired electricity generation since wood is a renewable resource.

Somewhere in this chapter (maybe on p.162 E4, Energy Siting and Community Acceptance) mention must be made of current objections to conversion of farm and forest land to solar and wind "farms." Need to show the possibilities of complementary use of land for both farming or forest uses and power generation.

p. 168. E7 Transmission and Distribution Infrastructure. Especially important in rural areas where many of our forest resources and manufacturing plants are located. Without availability of higher voltage and dependable power it will not be feasible to transform to electric-powered facilities such as heat pumps, off-road vehicles, etc.

### Chapter 14. Industry

p. 185. I2. Low carbon procurement. The use of concrete, steel and aluminum all contain much embedded carbon. Need to stress the use of wood-based materials that embed less carbon and are recyclable. In addition, use of local wood products reduces the transportation cost with its high carbon uses.

Need to include the use of byproducts produced in wood products manufacturing and their use as feedstock for energy production in manufacturing facilities such as sawmills, furniture, and cabinet plants, etc.

## Chapter 15. Agriculture and Forestry

p. 194, under Existing Sector Mitigation Practices, farmers and foresters. Suggest adding forest owners since most forest owners are not foresters.

Also add another bullet, Education efforts by public agencies DEC and Ag & Mkts, and private organizations, for example, New York Forest Owners Association and Empire State Forest Products Association.

- p. 196, under Key Stakeholders, the New York Forest Owners Association (NYFOA) does not own any land, move NYFOA to stakeholders involved in education, outreach etc.
- p. 197 15.2 Key Sector Strategies, --long term integrated approaches, add after creation of wood products, "maintenance of vital wildlife habitat and other forest and farmland amenities."
- p. 199 AF1, another big factor in finding forests where Management would Provide the Greatest Benefit is finding landowners most willing and able to implement desired practices. This goes beyond the ESF/DEC efforts to identify biophysical forest areas and will require the involvement of organizations such as NYFOA, consulting forests, and others.
- p.200, under Invasive Species, suggest adding Gypsy Moth t the list of examples since many political leaders may not identify with the more recent invasives but most people recognize Gypsy Moth.

- p. 203, AF4, in addition to DEC efforts add education and outreach by Cornell Cooperative Extension, New York Forest Owners Association. Add wood-industry foresters and private consulting foresters. They reach many landowners and could have a greater impact with training and incentives.
- p. 207, AF8, Conduct Education and Outreach on Forest Management. Need to emphasize the role that private organizations play here, including mention of NYFOA, Land Trusts, etc.
- p. 213, under Soil Health, Nutrient Management ..., Agroforestry practices, add that certain tree species can also improve soil health.
- p. 218, AF13, Increase Adoption of Agroforestry, add that certain species, well adapted to agroforestry including black locust, *Robinia pseudoacacia*, which is a nitrogen-fixing legume tree, withstands animal pressures, and produces a valuable wood product including fence posts, outside decking, etc. Also include NYFOA here which can also work to educate farmers.
- p. 222, AF17, Bolster Local Agricultural Economies, somewhere in here Christmas tree production should be mentioned. Even though trees are usually grown for only 10-15 years they do tie up carbon and produce oxygen and after harvest, in cooperation with local municipalities, trees can be ground up for mulch etc. thus continuing to tie up carbon.
- p. 223, Climate-Focused Economy, I would like to see a citation of the Just the Facts publication— Canham, H.O., Just the Facts: The past, present, and future of New York's forest & forest products. Empire State Forest Products Association, Albany New York, 2020.
- p. 224, AF18 Develop Forest Training Programs, Empire State Forest Products Association (ESFPA) has a major role to play here and should be mentioned.
- p. 227, AF19 Expand Markets. Under Components of the Strategy, add, Department of State Office of Local Government should work with local governments; Building departments, Planning and Zoning Boards to develop codes and standards that specify the use of wood products etc.
- p. 230, AF23 Advance Bio-based R&D, under components add work with ESFPA and others to develop demonstration projects.

## Chapter 19. Land Use

- p. 273, under Existing Strategies, should clearly define natural lands and working lands in a way that does not disparage against sustainable forest management and sustainable farming.
- p. 27, Key Stakeholders. Same comment as above on p. 203. Under Key Stakeholders, the New York Forest Owners Association (NYFOA) does not own any land, move NYFOA to stakeholders involved in education, outreach etc.
- p. 275, Protection, Restoration and Monitoring of Natural and Working Lands. Again, as per comment re p. 223 I recommend the following reference be shown since it is particular to New York and might excite legislators more than national studies: Canham, H.O., Just the Facts: The past, present, and future of New York's forest & forest products. Empire State Forest Products Association, Albany New York, 2020.

- p. 277, LU2 Afforestation and Reforestation, should define marginal lands. These are lands that are not well suited to agriculture. Might also include abandoned gravel pits, garbage landfill areas, etc. and lands not well suited to development.
- p. 278, Figure 28. I strongly recommend going back to colonial times to show the long-term changes in New York's forest land. See my graph in Just the Facts publication cited above. I can give you the Excel file for the graph.
- p. 279, Components of the Strategy. Must give a very high priority strategy to reducing and controlling the white tail deer population in New York State before undertaking any widespread tree planting. Deer pressure across the state is very high. Deer will completely ruin most tree planting efforts. Deer have always had an impact on reforestation efforts but in recent decades the increased size of the deer h=population and reduced young forest vegetation habitat, tree all tree survival is in jeopardy.
- p. 281, Avoid Agricultural and Forested Land Conversion. Perhaps the biggest problem in conversion of both forest and agricultural lands to other uses is the higher return a landowner gets by selling to a developer, (residential or commercial) than the low return from farming or forest management, given the high property taxes even on forest and farmlands. As in the chapter on agriculture and forestry, must stress the need for revision of property taxation and adoption of programs such as 480. a,b,c.
- p. 284 second paragraph. This paragraph should be moved to the beginning of the land use chapter. The resistance by landowners, municipalities etc. can be very severe.
- p. 290, LU6, Component of the Strategy, include New York Forest Owners Association as an important education effort to show landowners how to correctly engage in reforestation.

# Chapter 21. Adaptation and Resilience

- p. 311, Does Table 17 include property loss in forests and agriculture lands? If not, then the text should so indicate and include a recommendation to monitor forest (i.e., timber) loss and crop loss on agricultural lands.
- p. 315, AR6, Future Climate Conditions in Land Use Planning. An important aspect is reduction of vegetation, especially large conifers (white pine mainly) that are growing close to residential structures. As the climate warms and droughts occur more frequently, these trees will become more flammable and even here in New York State there can be devastating property losses due to fires in the urban-wildland interface.
- p. 320, Ability of forest ecosystems to sequester carbon. Add another strategy: Develop a mapping system that incorporates existing methods of measuring resilience of forest ecosystems and develop local area specific maps for woodlands.