



# NORTHAMPTON ENERGY AND SUSTAINABILITY COMMISSION

## APPROVED MINUTES

June 24, 2020  
4:00 PM – 6:00 PM

**Location:** Virtual meeting

---

**Members present:** Wayne Feiden, Chair, David Pomerantz, Vice Chair, Jonathan Flagg, Alex Jarrett, Rachel Maiore, Gordon Meadows, Ashley Muspratt, Richard Parasiliti, and Ben Weil. Adin Maynard, Tim Smith, and Chris Mason (non-voting) could not attend.

Wayne Feiden opened the meeting and announced that the meeting was being recorded.

The Commission welcomed Jonathan Flagg, the City's new Building Commissioner and member of the commission, and everyone introduced themselves.

**Public comment period:** Lilly Lombard comments that Covid has highlighted both the power of the community and the need to apply a racial lens to sustainability work.

**Approve minutes of 2/13/20:** Action on the 2/13/20 minutes was delayed until a meeting when Chris Mason could be present.

**Climate Resilience and Regeneration Plan:** The Commission reached consensus that the overarching vision for the plan should include community-wide carbon neutrality by 2050 and neutrality for city operations or at least building operations (which is what David Pomerantz could speak to and support) by 2030. Wayne Feiden said that the goal is to have a revised draft of the plan by the next meeting, but that Covid-19 projects could delay that.

Ashley Muspratt introduced her research (see attached memo) on carbon offsets and accounting methods to calculate those carbon credits. She raised the open question of whether the City would sell carbon credits, providing funding to add to its carbon neutrality, or retire those credits so that the city could claim offsetting credits. Adele Franks spoke for not calculating, claiming, or selling carbon offsets to require the City to be even more aggressive to meet its carbon neutrality goals and provide more of a carbon drawdown. Lilly Lombard advocated for prioritizing urban trees which not only provide carbon but other climate mitigation and adaptation benefits. Adele Franks spoke for not selling or using credits.

Alex Jarrett presented the waste subcommittee's minutes and net zero waste goals. He pointed out that although actual waste is a very small part of the city's greenhouse gas emissions, the entire lifecycle of items that are disposed of has a much higher carbon footprint. (The subcommittee, Alex Jarrett and Ashley Muspratt, then convened for the purpose of approving the minutes of their last meeting. Upon motion by Jarrett and second by Muspratt, they approved the minutes on a 2-0 vote.)

Rachel Maiore discussed the need for a community outreach effort. Wayne Feiden introduced the resilience dashboard project being created by KLA, a sub-contractor who worked on the resilience and

---

**Voting Members:** Wayne Feiden, Chair • David Pomerantz, Vice Chair • Jonathan Flagg • Alex Jarrett • Rachel Maiore • Adin Maynard • Gordon Meadows • Ashley Muspratt • Richard Parasiliti • Tim Smith • Ben Weil

**Ex-officio, non voting:** Chris Mason

regeneration plan, as the final deliverable of that project, to provide a one-year web landing page (to be at [www.DesignResiliency.com](http://www.DesignResiliency.com)) to inform and engage the community.

Wayne Feiden shared that the city is looking into what requirements to use for affordable housing projects with substantial city grant funds, Net Zero Energy (when possible), passive solar, or no fossil fuels. Jonathan Flagg pointed out that under the building code, all new structures need to have solar-ready roofs and that many buildings are coming in with far lower carbon footprints than required by building code and zoning.

**Thermal Utility:** Ben Weil summarize his past presentation on creating a thermal utility and discussed the next steps of creating a utility. Wayne Feiden asked if a feasibility study would be the next step to create a path forward.

Adele Franks asked that the next meeting include an update on the status of solar photovoltaics at the Roundhouse and Fire Station parking lots and the microgrid at Cooley Dickinson/Smith Voc/DPW. David Pomerantz provided a quick update on the status that all three projects are moving along.

The Committee adjourned at 6:00 PM.

## MEMO

### Carbon Offset Sales by Cities and Towns

**Prepared for:** Northampton Energy & Sustainability Commission

**By:** Ashley Muspratt, murray.ash@gmail.com

**Date:** March 12, 2020

#### Background

- Mature tree can absorb 48 lb CO<sub>2</sub>/year (McAliney 1993) – 1000x saplings
- Afforestation – planting on lands not previously in forestry. C sequestration rate: 0.6-2.6 t/acre/year for 90-120+ years (ranges are species dependent)
- Reforestation – planting on lands that in more recent past were in forestry. C sequestration rate: 0.3-2.1 t/acre/year for 90-120+ years (ranges are species dependent)
- According to a study by [Fargione et al. \(2018\)](#), forests offset 13% of U.S. emissions but could account for 21% with improved conservation, land management, and restoration.
- A study by ICLEI found that 60% of community respondents left forests and trees out of their GHG inventories. This inspired ICLEI to develop the Forest and Land Use Appendix for their *U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions*. Download the full protocol [here](#).

#### City Forest Credits, Seattle-based non-profit

- Concept: Means for cities to generate funding to plant trees. Recent study by U.S. Forest Service found that cities are losing 36 M trees per year.
- What they quantify: carbon, rainfall, energy savings from cooling and heating effects, air quality benefits.
- Eligibility: Cities must follow protocols for [tree planting](#) or [tree preservation](#). Projects must be ≥1,000 trees and ≥ 20 acres; selling price \$20-30/credit; commit to 25-year project duration
  - [Tree Planting Summary](#)
  - [Preservation Summary](#)
- Verification: Normally 3<sup>rd</sup>-party verified; can be CFC for small projects.
- Sample projects:
  - Austin, Tx: Local non-profit TreeFolks has two projects for which the city is buying carbon credits through CFC
  - King County, WA: Department of Natural Resources & Parks is selling credits to protect 1500 acres of unprotected, threatened tree canopy
- Credit price: Urban forestry credits are a lot more expensive than the price of commodity credits. But urban land is expensive, urban trees more costly to plant and maintain, and benefits beyond sequestration are significant.

#### Process for registering a project with City Forest Credits

1. Pre-application: Discussion between Project Operator and CFC
  - Determine eligibility; make estimates of total carbon credits (based on # trees, species, planting method (single tree, riparian, canopy))
2. Application: Submit application for review by CFC; once approved, pay application fee
3. Project Commencement: Submit project documents (templates) within 6 months of project approval; CFC has documents approved by 3<sup>rd</sup>-party verifier

4. **Credit Issuance:** Operator opens a credit account; CFC issues credits; Operator sells credits to a Buyer (i.e., CFC does not play role in marketing or sales).
  - 10% issued after planting
  - 40% projected credits after Year 3
  - 30% after Year 5
  - Remainder issued based on quantification of CO<sub>2</sub> stored after 25 years

#### Next Steps

If Northampton is interested in exploring carbon credits for the golf course reforestation project, CFC Director, Liz Johnson has offered to schedule a call:

**Liz Johnston**, Director, City Forest Credits

Phone: 206-909-1740

Email: [liz@cityforestcredits.org](mailto:liz@cityforestcredits.org)

Web: [www.cityforestcredits.org](http://www.cityforestcredits.org)

#### **BMPs for Including Carbon Sinks in GHG Inventories**

There are two primary types of offset methodologies: 1) Avoided conversion that prevent removal of forest land through a conservation easement or transfer to public ownership; and 2) Improved forest management that increase carbon stocks relative to a baseline level.

- ICLEI Guidance – tailored for cities. Accounting includes sequestration as well as indirect impacts from climate effects from shade, solar energy reflection, and transpiration. Borrows heavily from the IPCC guidance with modifications for city-scale accounting.
- Climate Action Reserve's Forest Project Protocol
- California Air Resources Board Compliance Offset Protocol for U.S. Forest ProjectsClimate Action Registry – accepts three types of forestry projects: including conservation-based forest management, reforestation, and conservation, or preventing the loss of forests to land use changes
- IPCC Guidance – provide framework for *land use, land use change, and forestry*. Intended for national registries can be applied at organizational or muni level. Assessments based on broad land use categories
- American Carbon Registry's Improved Forest Management Methodology

#### **Trends in Forest Carbon Finance**

##### **Compliance Carbon Markets**

- Australia government's Emissions Reduction Fund – contracted 68.8 M tons
- California Cap-and-Trade
- 

##### **Resources**

- Cascadia Consulting Group (2016). *GHG Emissions Inventory Methodology Review*, King County, Department of Natura Resources and Parks. Available at: <https://www.kingcounty.gov/~media/services/environment/climate/documents/DNRP-GHG-Methodology-Review.ashx?la=en>.