

**Meeting Minutes**  
**Clean Energy Future Committee**  
**January 25, 2019**

8:00 – 9:00 a.m.

Arlington Town Hall, Lyons Hearing Room

*Approved at the February 22, 2019 meeting*

Members Present: Adam Chapdelaine, Ken Pruitt, Emily Sullivan, Ryan Katofsky, Shelly Dein, Jim DiTullio, Coralie Cooper, Dave Levy, Dan Amstutz, Nellie Aikenhead, Pasi Miettinen, Marc Breslow (by phone).

Members Absent: None.

The meeting convened at **8:00** a.m.

Introductions

Pruitt welcomed everyone to the meeting and noted this meeting would be the first examining methods for achieving Net Zero GHG emissions. This meeting's topic would be street trees and the role they play in sequestering and mitigating GHG emissions for the Town.

Presentation on Street Trees

Presenting to the Committee were Professor Lucy Hutyra and Ph.D. candidate Luca Morreale, both from Boston University's Earth and Environment Department.

Professor Hutyra began her remarks by noting she and Morreale had been working with the Town on mapping and measuring its street trees for over a year. The presentation today would summarize some of their findings as well as recommended next steps.

Hutyra continued by noting that vegetation is not the solution in its own right to substantially reducing Arlington's CO<sub>2</sub> emissions but vegetation is still important, storing CO<sub>2</sub> by holding it in the wood and roots and therefore not in the air. Hutyra continued by noting that composting tree waste such as leaves is critical, noting that aerobic conditions (and not anaerobic conditions) prevent methane from being released when waste decomposes. Trees also benefit the Town of Arlington by reducing wind, creating shade, and creating a natural cooling effect in the summer.

Morreale continued the discussion by noting that the Town had just completed an inventory of all street trees on public and private ways. In 1980, the Town had 10,700 street trees and the Town today has approximately 2,000 fewer street trees. Among the causes of this decline are budget reductions for tree plantings as well as large storms spiking losses in various years.

Morreale noted the inventory consisted of size, species, health and GPS coordinates of each tree. In addition, the inventory recorded approximately 6,400 potential planting sites for new street trees. The Town's tree population is an aging population. And while older trees, given the average mass, store more carbon, there is a risk that a CO<sub>2</sub> release event could occur when older trees are removed and not enough younger trees are planted to consume CO<sub>2</sub>. Hutyra noted that with maintenance of existing

trees and planting of new trees, the Town can control the mortality rate to monitor the ability of the street tree population to act as a net sponge.

Dein asked about the assumption in the calculations when a tree is removed. Hutyra responded that when a tree is removed it is typically converted into firewood or mulch, and the assumption is that its CO2 is released immediately.

Miettinen asked if we are looking to reduce carbon emissions by 80%, can we find a couple of percentage points in street trees? Hutyra responded you could find 2-5% emissions reduction with a proper street tree program. Morreale showed a map noting that the increased tree canopy also reduces the temperature in the air, reducing the need for air conditioning, etc. in the summer.

Morreale noted his next steps would include looking at the planting sites and devising a set of recommendations for the Town.

Morreale also noted that planting just a single species is problematic as it exposes the population to a disease affecting that single species.

DiTullio noted a recent article that caused him concern was about whether the current tree population can survive a climate that is warmer than current conditions. Morreale noted he would be examining this factor as well in his recommendations.

#### EEA Net Zero Planning Grant for Arlington, Melrose & Natick

Pruitt summarized the details of this grant, which will include creation of a greenhouse gas inventory and net zero by 2050 plan for the Town of Arlington (and separate inventories and plans for Melrose and Natick). Work is expected to begin in February, coordinated by the Metropolitan Area Planning Council.

Miettinen asked what the timeline for the inventory would be. Pruitt responded that inventory scoping negotiation would occur through May followed by the actual data collection through June of 2020.

Miettinen responded that Belmont had already concluded its inventory with roughly 40% of its emissions from homes, 40% from transportation and 20% other, and that this breakdown is typical. Pruitt responded that we would work with MAPC to ensure Arlington's inventory did not consume too much of the grant focusing on unnecessarily extreme levels of detail.

Meeting adjourned at 9:05 a.m.

Minutes taken by Dave Levy