

York Energy Steering Committee Final Report, November 2023

DRAFT 9-21-23 Rozanna Patane

Introduction

When the current members of the York Energy Steering Committee first started pulling together this final report of the Committee's work over the fifteen years from 2008 to 2023, it was a bit overwhelming. The work spanned changes in Committee membership and Town leadership and staff while volunteer members researched, recommended and managed projects that have made a measurable impact on our community's carbon profile. One of our members has been with the Committee from the start in 2008, (!) but this report also recognizes and thanks the many other volunteers and staff who gave their time and talents and collaborated on the work for periods of time since then. It's been a shining example of citizen-and-municipal-government collaboration that has gotten the attention of other Maine communities and State officials.

The Committee's mission was to reduce the municipal facilities' carbon emissions and to recommend to the Select Board policy decisions that would support the same goal in the overall community. Members' technical knowledge and experience varied from "minimal" to "quite a lot," and there was one ill-fated project (the now infamous pellet stove at the Parks & Rec building), but we all learned as we worked, pulling in experts at every turn. By sharing our insights and information with town leaders and citizens, the Energy Steering Committee has been a catalyst for progress on the climate challenges York faces.

This Final Report of the Energy Steering Committee provides an overview of our journey and an institutional memory of some highlights and stand-outs, and a few insights as our successors, the Climate Action Committee, embrace the next phase of the work.

Executive Summary

The York Energy Steering Committee, a Selectboard-appointed group, actually evolved out of the *York Goes Green* citizen initiative led by Eric Hopkins in 2008. Eric's efforts resulted in a solar panel installation on the York Middle School and a recommendation that the Selectboard create a municipal committee to tackle the job formally. The Selectboard responded in **2009** by making the York Energy Efficiency Committee a reality, later renaming it the *York Energy Steering Committee* (ESC). The mission of the Committee was and is still to recommend energy conservation and alternative energy options that shrink the carbon footprint of the town of York.

Then York citizens did something remarkable. They approved four annual budget of \$100,000 each, giving the Committee the funds they needed to get things done. Added to this \$400,000 was a grant of \$15,497 in 2014 from the Seacoast Energy Initiative (SEI) and Efficiency Maine and a subsequent \$94,758 grant from the same source. All of these funds were dedicated to the ESC's goal of cutting carbon and saving taxpayer money by performing energy efficiency and renewable energy retrofits on municipal properties.

In **2011**, the first task out of the gate, an *energy study of municipal buildings*, identified 50 "Energy Conservation Measures" (ECMs) -- recommendations that the ESC tackled over the next several years. (York's 2022 Climate Action Plan demonstrated that buildings represent 94% of York's carbon emissions, so the 2011 focus on buildings was a good decision in retrospect.)

By **2013**, the *municipal building improvements* included extensive insulation and air-sealing in the Police Station and Senior Center, Village Fire, Beach Fire, Town Hall, Grant House, Public Works Garages, Pubic Library, and the York School Buildings, and replacement of the Grant House boiler with a pellet stove. (In 2015, the pellet stove was discovered to be faulty and required an additional investment; sadly, in 2022 it was replaced with a _____.)

The Committee established a database of energy use in public buildings that has since documented over 10 years of kwh, gallons of oil and other data that provided important information to the Climate Action Plan in 2022. By **2014**, the building improvements allowed the Town to reduce emissions by 17%. These funds were exhausted in 2016 with the completion of LED lighting in municipal buildings and the solar panels and energy retrofit on the York Beach Fire Station; future funding would come from specific Town budget allocations.

The solar system on the York Beach Fire Station (paid for by the large SEI grant) was installed in **2015** by ReVision Energy -- a 28-kw grid-tied system that was shortly followed by a *building energy retrofit* including roof insulation, heat pumps and LED lighting that piggy-backed on a renovation project the Fire Station had planned at the time. The building improvements dramatically cut the energy used, and the solar panels immediately offset the fire station's annual electrical consumption. Fire Chief Dave Bridges was heard at a subsequent Selectboard

meeting to happily assert that his bill had dropped from “about \$300 a month to a small refund.”

No matter how we measure it, and even if we had paid for it without the \$94,758 grant, this project was a winner. Savings over the life of the equipment (approximately 30 years) is projected to be about \$363,000, and the Town’s return on investment (if we had paid the entire cost) is projected to be 11% for the retrofit and 6% for the solar panels, with a simple payback of 8 years and 17 years, respectively. After the 17 years, electricity will be essentially free throughout the panels’ 30+ year lifespan.



Importantly, the solar panels and retrofit together cut an extraordinary 233 tons of CO2 -- the equivalent of the carbon-scrubbing power of 225 acres of Maine forest.

The Town’s decision in **2015** to **install LED streetlights** was another big pay-off for energy reduction and citizen tax savings for York. The ESC, in partnership with Public Works Director Dean Lessard, gained the Selectboard’s approval and voters endorsed the project in 2016. The project was complex and it took a second approval from both the Selectboard and voters, but in 2020 we finally installed the lights.



The project immediately achieved the projected 67% cut in energy consumption and it has exceeded the projected cost savings of approximately \$120,000 a year. After three full years of operating, FY2022 savings to taxpayers was over \$128,000 and FY2023 was over \$133,000.

Summary	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2022</u>	<u>FY2023</u>
					(FC 7-13-22)
Baseline (2019 + 3%/yr)	\$ 148,554	\$ 153,011	\$ 157,601	\$ 162,329	\$ 167,199
Actual Operating Cost	\$ 147,447	\$ 111,804	\$ 37,754	\$ 26,069	\$ 26,851
Interest on Debt	\$ ---	\$ ---	\$ 8,932	\$ 7,600	\$ 7,000
Savings	\$ 1,107	\$ 41,207	\$ 110,915	\$ 128,660	\$ 133,348
Cumulative Savings	\$ 1,107	\$ 42,314	\$ 153,229	\$ 281,889	\$ 415,237
Average Savings (3 yrs)				\$ 93,963	

While the ESC navigated the streetlight journey, we multi-tasked. In **2016**, at the request of the Planning Board, the ESC drafted an ***Energy Chapter for York's Comprehensive Plan*** and voters approved it in **2017** with an 86% vote.

In **2016 through 2018**, **LED lighting upgrades** were installed in municipal buildings and at the Route One maintenance facility the Town acquired from the State. These projects cut 33 tons of carbon dioxide per year and delivered a payback time under 4 years and a projected savings of over \$60,000 to York voters on the municipal building lighting alone, a return on investment of 185%.

Insert logos of YCSA, Habitat, Rotary, EM

The **2016-2017 Keep York Warm** weatherization project formed a partnership with York Community Services (YCSA), Habitat, York Rotary and Efficiency Maine to bring weatherization services to our low-income families, helping them to save on energy bills and creating safer and healthier homes.



Efficiency Maine's Low Income Energy Savings Program (LIHESP) helped to pay energy auditors and transformed our \$7,300 Rotary grant into over \$20,000 of weatherization work for homeowners. Volunteer students, Rotary members, Yankee Thermal and STP Home Performance employees, Selectboard members and many others worked alongside ESC members to build window inserts at the York Masonic Hall. The program was recognized for excellence in innovation as the only one of its kind in Maine at Efficiency Maine's annual program review in January, 2017.



In **2018** the ESC held an **Energy Fair** at the newly renovated Beach Fire Station with vendor exhibits, raffles, games, food, music and electric car displays to introduce York residents to vendors and demonstrate practical ways to benefit from energy efficiency and clean energy.



2018 was the year York Ready for Climate Action sprang into being – at the YES Fair. Founder Mac McAbee set up a table and the YRCA was born. Mac’s vision was of a citizen-led group that did not have the bureaucratic constraints of a Town-appointed committee and that could help move the Town toward a specific commitment to cut greenhouse gas emissions by a certain date. That goal was realized in 2019...but more on that later.

2018 was a pivotal year in several other ways. Much of the ESC’s work from 2018 through 2022 focused on making the case to the Selectboard for a specific commitment to address climate change. The ESC has been the champion and moving force behind the development and adoption of York’s Climate Action Plan and the succeeding Climate Action Committee charged with leading its implementation.

In 2018 the ESC hired its first Americorps-Vista Volunteer. In all, four outstanding VISTA (Volunteers in Service to America) served York’s Energy Steering and Recycling Committees¹, an arrangement with benefits all around. VISTA members receive valuable experience, and in some cases have gone on to careers in climate-related fields. And they greatly enhanced the capacity of the ESC.

Our first Vista member spent the year producing the first **GHG emissions inventory** of the whole community. Lucy Brennan presented her work to the Selectboard in late 2018 and in 2019 the ESC recommended to the Selectboard that they:

- Join the Global Covenant of Mayors (GCOM)
- Commit to reducing GHG emissions by 50% by 2030 and entirely by 2050.
- Create a community-driven, inclusive Climate Action Plan that identifies measurable strategies to achieve the emissions reductions

In 2019 the Selectboard resolved to accept these recommendations and authorized Town Manager Steve Burns to sign the GCOM Agreement.



With strong community support such as members of York Ready for Climate Action and the York Land Trust, **in 2020 the Selectboard approved a budget for a consultant to help the Town**

¹ Lucy Brennan 2018-2019, Christine Siebert 2019-2020, Erin Ferrell 2020-2022, and AJ Barthel 2022-2023.

create a Climate Action Plan. The ESC worked with the consultant and led many of the working groups throughout 2021 who produced the plan. The plan was approved by almost 70% of voters in 2022.



In 2022 the Climate Action Plan was presented to the community.

York happened to be one of the first towns in Maine to develop their own climate plan following the publication of the State's *Maine Won't Wait* in December 2020. **York's ESC participated in developing the State plan** – an ESC member was appointed to the Maine Climate Council Buildings Working Group to contribute an “on-the-ground” perspective to the process. York's experience with the Vista program prepared us to recommend that the State establish a climate corps statewide of Vista-Americorps members; the recommendation was accepted, and a program was created and is managed by the State Volunteer Office.

The Climate Action Plan expanded on our first Vista member's GHG emissions assessment and calls for evaluating half of our homes by 2030 for energy upgrades and upgrading 25% of existing homes, including low- and moderate-income homes (CAP Section 7 p 84).

York also developed a new Comprehensive Plan at the same time (guided by the same consultant), so we had the unusual opportunity to integrate the two plans from the ground up.



In 2023, the ESC submitted its first annual report to the Global Covenant of Mayors. Under the management of the ESC, York has not missed an interim or an annual report to GCOM and grades and badges awarded have improved each year.

In 2023, the Selectboard launched the Climate Action Committee, a key strategy of the Climate Action Plan. The ESC worked closely with the Selectboard to develop the Committee's charter that recognizes needed staff support from the Environmental Planner and balances the Selectboard's need to avoid surprises with the Committee's need for autonomy. The Committee will work with Town staff, community members and businesses, nonprofits and other interests. As this report goes to publication, the Selectboard are appointing members to the Committee and expect it will begin meeting toward the end of the calendar year.

In 2022, while the Climate Action Plan moved forward, the ESC again multi-tasked:

The ESC provided important information to the Town Hall Building Committee on energy efficiency and financial incentives. Their input resulted in an air-to-air heat pump system that saved money and obtained a \$40,000 contribution from Efficiency Maine. This effort ties directly to the Climate Action Plan Goal 1, Building.

The ESC and Planning Board gained voter approval to require the “Stretch Code” for municipal buildings, new construction and major renovations. This rule should be extended to all buildings in the community to address the Climate Plan Goal 1.

The ESC acted as liaison with the York Public Library Energy Committee on the planned energy retrofit. We recommended using an ESCO – Energy Services Company – and as an ex-officio member of the Library Committee, participated in developing the project scope and selecting the ESCO. As of this report date, the ESCO’s proposal is being reviewed and work should begin before the end of 2023.

In 2023 an environmental planner position was approved in the budget process. The position will focus on issues of climate and sustainability as well as obtaining funding through the many opportunities from federal, state and other sources now available. The ESC had recommended a similar position for a number of years but it had failed to win voter approval. This position is critical to the effectiveness of the new Climate Action Committee.

In 2023, the ESC participated in the York Beach Greenway planning process by recommending a micro-grid and a transportation hub be included in the project design.

In 2022 and 2023, the ESC supported York Ready for Climate Action’s application for Maine Community Resilience Grant. This \$50,000 grant goes to the Town of York to be further distributed to YRCA for their Energy Coach program delivered on behalf of the Town to York residents. It required Selectboard approval, which was received the second time we asked. In September 2023 we were informed that we had earned the grant from the State.

Pending

The model **Electric Vehicle (EV) ordinance** approved by the Planning Board in 2022 with the ESC’s support but it lacked support of the Selectboard. This ordinance supports Goal 5 of the Climate Action Plan.

The **“Stretch Code”** requiring more climate-conscious choices in new construction and major renovations, should be extended to the entire community.

The **solar farm on Witchtrot** that didn’t succeed in 2017 should be restarted, and some part of its energy production should be allocated to York’s low- and moderate-income households, both homeowners and renters.

The Climate Action Committee should have a major influence on the design of the **York Beach Greenway** project.

Meeting the goals of the Climate Action Plan will take significant **funding**. The Committee should draft a multi-year financial plan that will strengthen York's chances of meeting these goals.

Observations and tips for the new Climate Action Committee

Over the 15 years of operating, several values have emerged that account for the extraordinary success of the York Energy Steering Committee, which has been recognized by the State and other Maine communities for its outstanding contributions to climate action.

- Persistence. The slow pace at times was discouraging but it's good to realize it just takes time for people to understand and get on board.
- Collaboration, within our community and across the state.
- No one is an expert...sometimes, not even the experts. But a group of dedicated citizens who are willing to reach out to the experts can get a lot done.
- Think big. That's what it will take. And, amazingly, others are thinking big in Maine, so we have partners in the effort.
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