

To the Bar Harbor Town Council,

Thank you for the opportunity to make a recommendation regarding how to proceed with the Higgins Pit Solar Project and whether or not to sell the Renewable Energy Credits (RECs) that it creates.

The Task Force on the Climate Emergency (CETF) thoroughly supports the continued pursuit of this solar array and the retention of any RECs it generates. We have carefully considered the challenges and benefits of this project, and sought advice from local experts including David Gibson, Director of Energy at College of the Atlantic, and Ken Colburn, former state regulator and retired U.S. Program Director of the Regulatory Assistance Project. While we recognize there have been changes to the initial cost and savings estimates for this project, we continue to believe that its financial, environmental, and leadership benefits far outweigh its costs, making it a sound investment for the Town.

The Project benefits:

- 1) The carbon emissions reductions are substantial. The Higgins Pit Solar Array is currently estimated to produce 1,399 MWh per year, or 67% of the Town's estimated 2,100 MWh annual usage. According to [Maine electricity production data from 2022](#), this single project would **prevent 305 metric tons** of carbon dioxide from being released per year. The [US EPA Greenhouse Equivalencies calculator](#) estimates this to be equivalent to the carbon emitted by burning 34,320 gallons of gas, or to the carbon sequestered by over 5,043 tree seedlings grown for 10 years.
- 2) Electricity represents a large percentage of the carbon emissions of Bar Harbor's municipal operations; about 36%, according to our 2019-2020 emissions audit. Cutting our electricity emissions by 67% would thus result in a **24.4% overall reduction in town emissions**. This is a massive reduction in one fell swoop and it is difficult to conceive of an alternative simple, time-sensitive project that could accomplish this feat with greater life-cycle savings to the town.
- 3) Local generation has many benefits over purchasing electricity made elsewhere.
 - a) Local production greatly reduces transmission and distribution losses, which are typically 5.5% in Maine, but can reach up to 20% on peak demand days, when large loads of electricity are being pushed through our lines. ([InsideEnergy.com](#))
 - b) Local production is an essential component of building our state's resilience to the impacts of climate change. Large, centralized electricity production facilities mean that it only takes one severe storm or accident to vastly decrease production in the state. Furthermore, the closer to home electricity production is, the more reliable and resilient our electricity will be.

- c) Local production is also key to developing a local microgrid, a project that is being actively pursued on Mount Desert Island. A microgrid would vastly improve the resiliency of both MDI and the state's electrical grid. A microgrid improves the larger state grid by balancing local demand and supply of electricity to reduce peak demand, high associated costs, and line losses. It improves local resilience by providing multiple sources of electricity and targeting it to critical loads (police, fire, rescue, hospitals, etc).
- 4) Higgins Pit represents the only large solar option we will likely have on town property. As a brownfields site known to contain arsenic, there are few other appropriate uses of this land.
- 5) This project is time-sensitive and should be pursued with haste. If the town does not complete the project and begin producing power by 2025, we will lose our net energy billing contract and it is unlikely that such advantageous contracts will be available in the future.
- 6) Time is also of the essence due to uncertainties associated with recent federal legislation providing "direct-pay" benefits of 30% of the cost. This incentive may not be available indefinitely due to changing federal policies.
- 7) The estimate of an annual 2% increase in electricity rates, while consistent with historical averages, is likely an underestimate for future increases due to increasing demands for electricity combined with the impacts of climate change on grid costs and maintenance. It is therefore likely that this project will save more than currently projected.
- 8) The construction of a road to the solar array, while an initially large expense, may prove to have value for additional uses of the site, such as for equipment storage or as a location for batteries.

Why we support retaining RECs;

- The Town of Bar Harbor has declared a climate emergency and a goal of reducing town carbon emissions to zero by 2030. The Task Force on the Climate Emergency has been tasked with identifying how to achieve this goal. Selling the RECs for this project will nullify the emissions benefits as we will be selling our rights to the renewable designation of our energy. We therefore strongly recommend retaining the RECs. If the town should decide otherwise, we would like to be consulted again on the best ways to go about this to continue to meet our emissions goals.

To address recent concerns;

- It is easy to imagine theoretical projects that might use similar funds to save more money or emissions. The reality is that this project, which might have seemed simple at the outset, has required many years of diligent effort. We are concerned that a change in course would result in a similarly lengthy development process with benefits that do not end up exceeding those achievable through this project. We are dealing with an

emergency-level climate crisis where mitigation actions taken earlier have a much greater impact than those taken later.

- The idea has come up to replace the large array project with distributed solar and apply the “direct-pay” mechanism that has recently become available from the Federal government. Pursuing distributed generation is a great idea, but rooftop solar alone will likely not meet the ultimate electrical needs of the town, especially as those needs increase due to vehicle and heating electrification. We certainly would like to pursue distributed generation in addition to the large ground-mounted array, but we will likely need both to meet all of our electricity needs. A large array is an important part of the solution.
- The project is still within budget despite the adjusted costs and savings estimates. There is no need for the project to request further funds from the town beyond what has already been approved.
- The bond that voters passed did not specify a size, amount of production, or cost-savings of the project and therefore the current plan is still covered by the bond.
- Voters passed this bond by a 79% vote showing strong support for a solar array project. It is fair to assume that voters may have been influenced by earlier, more optimistic estimates of the array benefits, but all projects have contingencies and we believe the majority of Bar Harbor citizens continue to support the construction of a solar array that will both save carbon emissions and cost over its lifetime.

In conclusion, the Task Force on the Climate Emergency strongly recommends the urgent pursuit of the Higgins Pit Solar Project and the retention of any RECs generated from this project.