Rockport Net Zero

current status and near-term options

We are already 18% fossil free.

Our data in the state MassEnergyInsight database shows that in FY21 electricity was 37% of our energy use, which includes fuel oil, propane, gasoline, diesel, and a small amount of natural gas. Although 70% of our electricity is attributed to a solar project in Methuen, we should not count this as fossil free because our contract includes selling the renewable energy credits, so it would be double counting with whoever buys those credits. So, the current fossil-free content of our electricity is the state mandated clean/renewable minimum, which is 51% in 2022. 51% of 37% is 18%.

We could reach 25% fossil free by changing our electricity contract.

Contracting for an additional 17% clean/renewable content would bring our electricity to 68% fossil free. 68% of 37% is 25%. To estimate the cost, current data on energyswitch.gov for the same supplier (Constellation) show an additional 1.15¢/kWh for 100% clean/renewable electricity. By interpolation (or blending two contracts), the additional cost for 68% fossil-free electricity would be about 0.40¢/kWh. In FY21 we used 3,211,537 kWh, so the additional cost would be about \$13,000.

Two of our buildings are already 51% fossil free.

Town Hall Annex has a rooftop air-source heat pump. The old firehouse also has electric heat. The proposed renovations to the old firehouse would use heat pumps.

The new DPW facility will increase the fossil-free percentage.

The new design uses heat pumps for one part of the building and propane for another part of the building. We do not have estimates for these energy usages, but the new building will have a higher proportion of electrical energy than the current oil-heated building, and therefore will be a higher percentage fossil free.

We expect future renovations will move toward net zero.

Unlike municipalities that have natural gas available, heat pumps compete with more expensive fuel oil and propane in Rockport. This provides an economic incentive to electrify, especially as the cost of oil and propane increases.

Our fossil-free percentage will automatically increase somewhat.

Every year the state mandate for clean/renewable electricity adds another 2%. This will add to the fossil-free content of our energy mix.

Potential renewable-energy projects in town would be fossil free.

Our current grant-funded contract with Cadmus is studying the options for solar projects near the Park and Ride and possibly floating on Cape Pond. Although there was opposition to wind turbines in the past, having seen the turbines in Gloucester might make a turbine project more acceptable now.