100% Renewable MV - FAQs

Are many other communities doing this?

About two dozen communities in Massachusetts have already adopted 100% Renewable goals.

Exactly what are the state requirements today?

The <u>Global Warming Solutions Act of 2008</u> requires a 25% reduction in GHG emissions (from 1990 levels) by 2020, and an 80% reduction by 2050. By 2018, a 21% reduction was verified, and the 2020 goal is within reach.

New legislation (<u>The 100% Renewable Energy Act</u> (H.2836, S.1958)) would require 100% renewable electricity by 2035, and a phase out of fossil fuels for heating and transportation by 2045.

Can our goals be achieved with current technology?

Yes! A technology breakthrough is not required; on current trajectories, offshore wind, solar and hydroelectric electricity along with battery and hydroelectric storage, can meet our needs.

Has anyone actually achieved 100% renewable?

Almost. The island of Samsø in Denmark has achieved 100% renewable electricity, and is on track to eliminate all fossil fuel use by 2030. The island is comparable to Martha's Vineyard (44 square miles in area with a population of about 4000). The ferry transport to the island is still fossil-fueled, but all-electric ferries are rapidly being adopted in the region.

Are the towns required to meet these goals?

No, the warrant article is non-binding and represents the sense of the voters.

Since the arrant article is non-binding, why is this being brought forward?

The goals in the warrant article are indeed aspirational and non-binding. If adopted, they will guide both regional and town-level planning, and they are complementary to our climate change adaptation efforts. Our success in meeting these goals will reflect the values we share and the leadership that we can demonstrate.

How do we measure progress?

VSEC and the MVC Task Force have established a 2019 Energy and GHG Baseline. Each year, we will follow the same procedure to measure progress towards our goals.

How will this impact the average citizen?

There may be policy changes, for example in building codes, adopted by the towns. Obviously, personal choice in purchasing decisions for HVAC systems and vehicles will be key. Community buying programs for on-Island solar power generation, electric heating and cooling (heat pumps), and electric vehicles and charging stations will smooth the way for the needed energy transition.

How much energy (fossil and otherwise) does the Island use today?

Our energy baseline indicates that we use the electrical equivalent of about 1000 MWh of energy each year. At this point, approximately 94% of this energy is derived from combustion of fossil fuels.

Do we generate significant amounts of renewable energy on-Island?

Yes, today about 7.7% of our electricity is homegrown solar energy.

What will the impact of 100% Renewable have on local jobs and the local economy?

Prediction is difficult, especially about the future! However, there will be many jobs created as we transition our energy infrastructure (for example, the offshore wind jobs being developed as we speak, and new HVAC and electrical jobs). There will certainly be impacts on some local businesses, mostly for those involved with fossil fuel distribution, but these impacts will occur over a relatively lengthy time period. All major technology switches involve impacts on existing businesses.