#### 100% Renewable MV - FAQs

# What does this warrant article seek to accomplish?

Climate change will bring very serious challenges to our community. Our response must include both short- and long-term plans and actions both for *adaptation* to the changing world and *transformation of our energy system* to avoid making the climate change crisis worse for future generations. This warrant article is focused on the latter.

### Are many other communities doing this?

Over 140 cities and towns in the US, as well as at least 9 states have already adopted similar 100% Renewable goals. In Massachusetts, about two dozen communities have done so.

#### Has the Commonwealth mandated renewable energy goals?

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.

Proposed legislation (The 100% Renewable Energy Act (H.2836, S.1958)) would require 100% renewable electricity by 2035, and a phase out of fossil fuels for heating and transportation by 2045. Recent statements by both House and Senate leaders indicate that some form of legislation similar to this proposal will be enacted in 2020.

#### 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 – and do so economically. Prices for renewable energy are competitive, and sometimes lower than, fossil fuel derived energy.

#### Will our towns be legally required to meet the goals in this article?

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

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

About 7.7% of our electricity is homegrown solar energy!

#### How will we measure progress?

The Vineyard Sustainable Energy Committee and the MVC Climate Change Task Force have established a 2018 Energy and Greenhouse Gas Emissions Baseline. Each year, we will follow the same procedure to measure progress towards our goals.

# How will pursuing the 100% Renewable goals impact the average citizen?

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.

In addition, there may be town policy changes, for example in building codes and the choices we make in municipal energy supplies, and infrastructure upgrades such as electric vehicle charging stations.

# 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 a significant number of 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.