# Renewable Energy Options in Community Electricity Aggregation

Good Energy can help your CEA include options for more new, local renewable energy, called MA Class I, in the electricity supply than required by State law. Expand access to the benefits of clean energy in your community while also supporting the growth of new renewables in our region!

#### **Product Options**

By offering optional products, you can provide choices to suit the range of interests of your residents and businesses. All products must at least meet the State's minimum requirement for MA Class I renewable energy. In 2021, it is 18% and increases annually, reaching 35% in 2030.

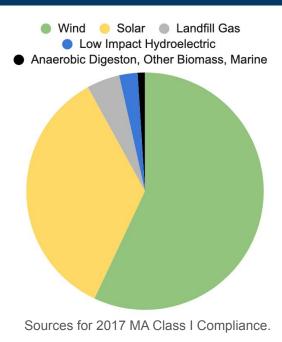
- Standard Product No Additional Renewable Energy: All current participants will remain enrolled in the standard product.
- **50% Green Optional Product:** Adds 50% additional MA Class I renewable energy in addition to the State's minimum.
- 100% Green Optional Product: Adds 100% additional MA Class I renewable energy in addition to the state minimum.

## **Monthly & Annual Costs**

A typical Massachusetts residential customer uses 7,500 kWh per year. The chart below illustrates the typical monthly and annual costs of the optional products compared to the standard product.

Standard -		2021 18% Min.		
50% Option	\$11 per month \$127 per year	2021 18% Min.	Extra 50%	
100% Option	\$22 per month \$225 per year	2021 18% Min.	Extra 100%	

#### **Sources of Renewable Energy**



MA Class I is the State of Massachusetts' term for new, local renewable energy. The renewable energy can come from the sources shown at left and it must:

- Have started operation after 1997
- Be located within New England, New York or Eastern Canada

The State requires that every electricity supply must have a minimum percentage of MA Class I renewable energy, and that percentage increases every year. This requirement, called the Renewable Portfolio Standard, has been a major driver of the growth of renewable energy in our region. CEAs can accelerate this growth by purchasing extra MA Class I renewable energy.

### **Impact of Renewable Energy**

By voluntarily purchasing extra renewable energy, the CEA can stimulate demand for the construction of new renewable energy sources. New renewable energy displaces existing fossil fuel resources, reducing GHG emissions, as well as emissions of sulfur-dioxide - an ingredient for acid rain - and nitrous oxide - an ingredient for smog.

Participation in green optional products typically ranges between 1% and 5% of residential accounts. Commercial accounts may participate too, but it is primarily residential.



If all 25 of the municipalities participating in the April 2020 group offered both a 50% and 100% optional products and realized participation of roughly 2% of residential households in each product, this would result in extra demand equivalent to more than 10 typical onshore wind turbines (1.5 MW each)

Those 10 wind turbines would displace over 45,000 MWh of clean electricity, which would avoid:

- 29 million pounds of carbon dioxide, equivalent to taking over 2,800 vehicles off the road for one year
- 3,600 pounds of sulfur dioxide
- 6,750 pounds of nitrous oxide

Calculations based on ISO-New England emissions factors for 2017.