## **Green Municipal Aggregation**

Municipal aggregation, first enabled in Massachusetts in 1997, is the bulk purchase of electricity supply by a city or town on behalf of the residential and small business customers. Aggregation offers an alternative to Basic Service – the default electricity supply provided by utilities – or products offered by competitive suppliers. Aggregation is frequently undertaken to stabilize or reduce the cost of electricity for those customers.

An enhancement of the municipal aggregation program is Green Municipal Aggregation (GMA), which has a default option that includes at least 5% more Class I REC content than required by the state's Renewable Portfolio Standard (RPS). GMA empowers cities and towns to choose electricity supply that is significantly greener than their utility's default offering, while also delivering price stability and potential cost-savings to residents and small businesses.

GMA has been successfully implemented in communities across Massachusetts under different program names, but the basic design of the program remains the same in all communities we serve: a base electricity aggregation that includes more Class I REC content than required by state law.



<sup>\*</sup>Depending on the contract with a competitive supplier, the supplier may charge an early termination fee for a customer to leave their program. No penalty is ever applied to customers who choose to leave green municipal aggregation.

## **GMA Greenhouse Gas Reductions and Additionality**

GMA creates *additionality*, which is defined as the result of increased purchases of green power with verifiable GHG emission reductions over and above the state's mandates. When a GMA purchases Class I RECs, it is essentially playing "keepaway" with the electricity suppliers that need Class I RECs to comply with the law. For example, if Somerville's aggregation is fed by wind RECs generated in Plymouth, MA, those RECs are not available for purchase by Eversource, National Grid, or another electricity supplier. Those companies therefore have to work a little bit harder to secure the RECs they need. The increase in demand for RECs then has to be met by supply.

It is crucially important to understand that not all aggregations are created equal, particularly when it comes to leveraging community purchasing power to accelerate adoption of Class I resources. Some community aggregation programs rely on **out of region** RECs or Massachusetts Class II RECs to make their green claims. REC purchases of this sort do nothing to transform the renewable content of the regional electric grid. The programs also do a disservice to consumers within those communities and cause confusion among people who are trying to chart a course to a greener electricity grid.

## Green Municipal Aggregation as a Cost-Saving Alternative

Communities where GMA has been implemented are demonstrating that additional renewable energy can be delivered to Massachusetts residents and businesses affordably. As illustrated in the table below, several Massachusetts communities have leveraged their purchasing power to negotiate an alternative to Basic Service that is less expensive yet delivers more renewable content than the utility's Basic Service.

Adding Class I RECs to the mix does come with an additional cost, but the record shows that even this incremental cost has been less than the incremental savings on electricity that the aggregations have been able to achieve. As a result, the net cost of GMA has been lower than Basic Service: in 2019 alone, with eleven active Green Municipal Aggregation programs under Good Energy's purview (Arlington, Brookline, Dedham, Gloucester, Hamilton, Melrose, Rockland, Stoneham, Somerville, Sudbury, Winchester) the programs saved ratepayers over \$8M dollars.

Town	Contract Length	Default % above requirement	Savings
Arlington	Aug 2017 - Nov 2019	5%	\$2,127,450
Brookline	Jul 2017 – Dec 2019	25%	\$2,978,090
Somerville	Jul 2017 – Dec 2019	5%	\$5,178,628
Sudbury	Aug 2017 - Aug 2020	5%	\$1,566,348
Winchester	Jul 2017 – Dec 2019	5%	\$1,306,555

Savings delivered to customers through green municipal aggregation programs

In contrast to the savings afforded by aggregation programs, the competitive suppliers of electricity who operate in Massachusetts and sign up consumers one at a time, have cost consumers \$253M over the course of three years, between July 2015 and June 2018 according to the report commissioned by Massachusetts Attorney General Maura Healey.<sup>1</sup>

<sup>1</sup> https://www.mass.gov/news/ag-healey-report-massachusetts-residents-who-switched-to-competitive-electric-supplycontinue

## **Growth of Green Municipal Aggregation**

As illustrated in the map below, over 150 cities and towns in the Commonwealth have an approved aggregation program or are in the process of developing an aggregation plan. Not all communities are using their bulk purchasing program to add new local renewable energy. Many of these aggregations have a supply that is the same as Basic Service: "brown power" including the minimal RPS/CES requirements. Some have negotiated an aggregation whose default offers less than or equal to 1% more renewable content than the RPS/CES or whose standard aggregation includes an optional offer to opt up to more Class I RECs. Seventeen of the 150 communities, shown in darker green, have aggregations whose default supply includes five percent or more Class I content, exceeding the minimum required to comply with the state's RPS and creating the additionality needed to change our grid.



Note that we are only counting what we believe to be demand for Class I Renewable Energy Certificates (RECs), which is the proper standard for New England. According to our analysis, in 2022 the aggregation programs in Massachusetts will add well over 500,000 megawatt-hours per year of demand for Class I renewable energy. That's truly remarkable!

Several aggregations are adding five percent Class I green power, but increasingly we are seeing aggregations come in at ten percent additional Class I green power or more. If the trend towards high percentages is sustained, we might see 700,000 megawatt-hours per year of additional renewable energy attributable to municipal aggregation by 2022.

A good-sized, well-sited wind turbine can generate about 3500 megawatt-hours per year, so by 2022 aggregations will be supporting the equivalent of about 200 such wind turbines.