

Solarize Aquidneck!



www.SolarizeRI.com/Aquidneck

FINAL REPORT

SEPTEMBER, 2016



Aquidneck Island
PLANNING COMMISSION



We are in the midst of a revolution.

Worldwide, solar energy is becoming more popular, more affordable, and more accessible each year.

Harvesting the immense power of the sun to fuel our homes, businesses, and municipal spaces has a broad range of benefits – from economic and employment opportunities to environmental and public health improvements. Solar panels can fit a variety of buildings – such as small businesses, homes, schools, hotels, and office parks. Ground installations can take advantage of municipal rights-of-way and other undevelopable lands. In Rhode Island, users have the choice of saving on their electricity bill (net metering), or selling their kilowatts back into the grid (tariff).

In Rhode Island, our solar economy is growing at lightning speed. According to the state's 2016 Industry Report, the solar sector has grown nearly 50% since 2015, now employing more than 1,400 workers. And those who install a panel on their home or business can see savings or income of \$3,000 in the first year alone.

Investing in solar increases Rhode Island's energy independence in a state that is vulnerable to power outages and climate change. Property owners utilizing solar energy are doing their part to reduce our carbon footprint, as each kilowatt generated by solar panels replaces one produced from traditional sources like oil, natural gas, or coal.

Solarize Aquidneck

The Aquidneck Island Planning Commission (AIPC) is on a mission to bring the benefits of solar to our Island home, and in June 2015, AIPC began the Solarize Aquidneck project. The project was the brainchild of AIPC Board member Dick Adams of Middletown. Our goal was to forge a partnership among the three municipalities – Newport, Middletown, and Portsmouth – to allow for a quick, efficient surge in home and small business solar panel installations. By providing technical support, staff capacity and project management, AIPC enabled an effective collaboration among the three Island communities.

We developed Solarize Aquidneck under the state's Solarize Rhode Island program, which encourages installation of residential solar systems through a time limited, community-based program. The goal was to make the process simple for homeowners through the use of pre-selected installers who explain all options clearly – including tiered pricing, flexible financing and metering options. It was designed to be a "turnkey" operation for property owners, and most solar arrays are installed in a day or less, the entire process, from contracting through connection, takes longer.



Solarize Aquidneck resulted in 159 solar energy contracts, \$4.3 million dollars in economic activity, and installed capacity of 1.14 solar megawatts on Aquidneck Island.

All three Island councils passed resolutions in support of the partnership. Although each community presented different strengths and challenges for solar installation (the number of historic homes in Newport, for instance) this was a perfect example of inter-community collaboration, as coordinated by AIPC.

Solarize Aquidneck benefitted Island communities in several important ways:

- Saving money for Aquidneck Island property owners by utilizing solar energy. Depending on the type of metering, homeowners receive savings off their bill (net metering) or receive income from National Grid based on energy produced (tariffs). Participating homeowners also received Federal tax credits.
- Boosting Aquidneck Island's economy through contracts and payrolls. Some homes and businesses require roofing services before a panel can be installed, which leads to additional local spending.
- Developing more diverse energy sources on an island that is vulnerable to storm-caused power outages.
- Helping our municipalities administer a valued program, while helping to streamline the processes for homeowners and local officials.

Once we received approval from the state in October 2015, AIPC and its municipal partners issued a Request for Proposals through Commerce RI. Through a competitive process, three installers were selected to participate in Solarize Aquidneck: RGS Solar (Middletown), Newport Solar (Newport) and Direct Energy Solar (Portsmouth.) Although installers were assigned primarily to one community, participants were free to select any of the three installers. Residents signed up through the online portal for a free consultation.

We carefully selected installers for their ability to support the homeowner throughout at all phases in the process. Installers needed to carefully consider each house on its own merits, and help homeowners determine whether their house was suitable for solar, and which metering system was best. Pricing was tiered during the program period: the more contracts on the Island, the lower the price per house. Installers also recommended outside financing options, completed the permitting process with the towns, and eventually, arranged for the connection to National Grid.

One installer, Newport Solar, doubled in size to keep up with Solarize installations.

A Community Approach

In partnership with the installers, we promoted Solarize Aquidneck at an Island-wide forum, held Nov. 12 at CCRI in Newport and attended by about 150 residents. Throughout the winter we also worked with each municipality to hold its own local workshops with assigned installers,

We advertised the program in a variety of print and electronic news sources, including op-ed pieces, letters to the editor, news articles, event calendars, and electronic media such as our web site, email blasts and newsletters. With our volunteers, we reached out to our working relationships and partnerships with nonprofits, government, educational, corporate, and private institutions to promote the Solarize Aquidneck program.

We purchased a table at the Aquidneck Growers market for the last seven weeks of the program. The table, open each Saturday morning, was staffed by installers and generated about 10 orders per week.

Results: Energy and Economic Impact

When Solarize Aquidneck closed out its orders in February 2016, there were 159 solar energy contracts in place, generating over \$4.3 million dollars in economic activity on the island and producing an installed capacity of 1.14 solar megawatts. One installer, Newport Solar, reported that this local firm had to double in size to keep up with installations.

The contracts broke down as follows:

ECONOMIC IMPACT OF SOLAR CONTRACTS	# of Contracts	Total \$ Value of contracts
Newport	35	\$828,894
Middletown	56	\$1,458,022
Portsmouth	68	\$2,038,738
TOTAL AQUIDNECK ISLAND	159	\$4,325,654

There were two types of metering systems offered:

- 1) Net Metering – where the electricity generated is taken off the National Grid bill all the way down to zero, and
- 2) Tariff – where National Grid pays the homeowner for all electricity generated.

Depending on the type of house, one system may be more advantageous than the other. Also, federal tax credits (see below) are available to homeowners for solar installations; which total **\$1,156,173**.

Annual Value Produced:

Community	Net meter Savings	Tariff Income	TOTAL Value All Installations (Net meter + tariff values)	Total Federal Tax Credits
Newport	\$18,519.35	\$65,693.62	\$84,212.96	\$219,089.99
Middletown	\$46,495.91	\$85,580.57	\$130,076.48	\$363,153.87
Portsmouth	\$23,600.71	\$212,001.69	\$235,602.41	\$573,929.29
TOTAL:	\$88,615.97	\$361,275.88	\$449,891.85	\$1,156,173.15

These figures show the tangible financial incentives to property owners and to the local economy through the Solarize program, but there are also benefits that are more difficult to quantify. Utilization of solar energy is a step toward energy independence for the Island and every bit of clean energy used instead of a fossil fuel makes for a healthier and more resilient environment. **One participant from Portsmouth shared the August 2016 energy report she received from her installer: in one month her solar panel produced 1.03MWh (megawatt hours), offsetting 1,655 lbs of carbon, or the carbon-absorbing capability of about 18 trees.**



Conclusion

Solarize Aquidneck provided significant benefits for Aquidneck Island – generating more than \$4 million in economic activity; producing nearly \$450,000 in annual value for homeowners; securing more than \$1 million in federal tax credits; and creating a cleaner, more diverse, and more resilient energy system for our communities. It's a good example of the way that the Aquidneck Island Planning Commission provides value for Island residents and municipalities -- building partnerships, providing support, and securing funding to accomplish projects and achieve results. Following the success of Solarize Aquidneck, AIPC will continue to partner with Island communities toward a cleaner, more affordable energy network – one of many ways in which AIPC is working to preserve and improve Aquidneck Island's environment, economy and quality of life.



(l-r: Marion Gold, Commissioner of Public Utilities; Tom Ardito, AIPC; Brigid Ryan, Newport Energy & Environment Committee; Jeanne Marie Napolitano, Mayor of Newport; Rocky Kempenaar, Middletown Town Council; Keith Hamilton, President, Portsmouth Town Council; Karen Stewart, SmartPower)

Thanks To Our Partners



and AIPC's Board and Staff

A special thank you to AIPC Board member Dick Adams, without whose dedication the project would not have been possible!

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