

Efficiency Smart

More than just energy efficiency

Prepared for Lewes Board of Public Works, Lewes, Delaware

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Agenda

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- Questions?

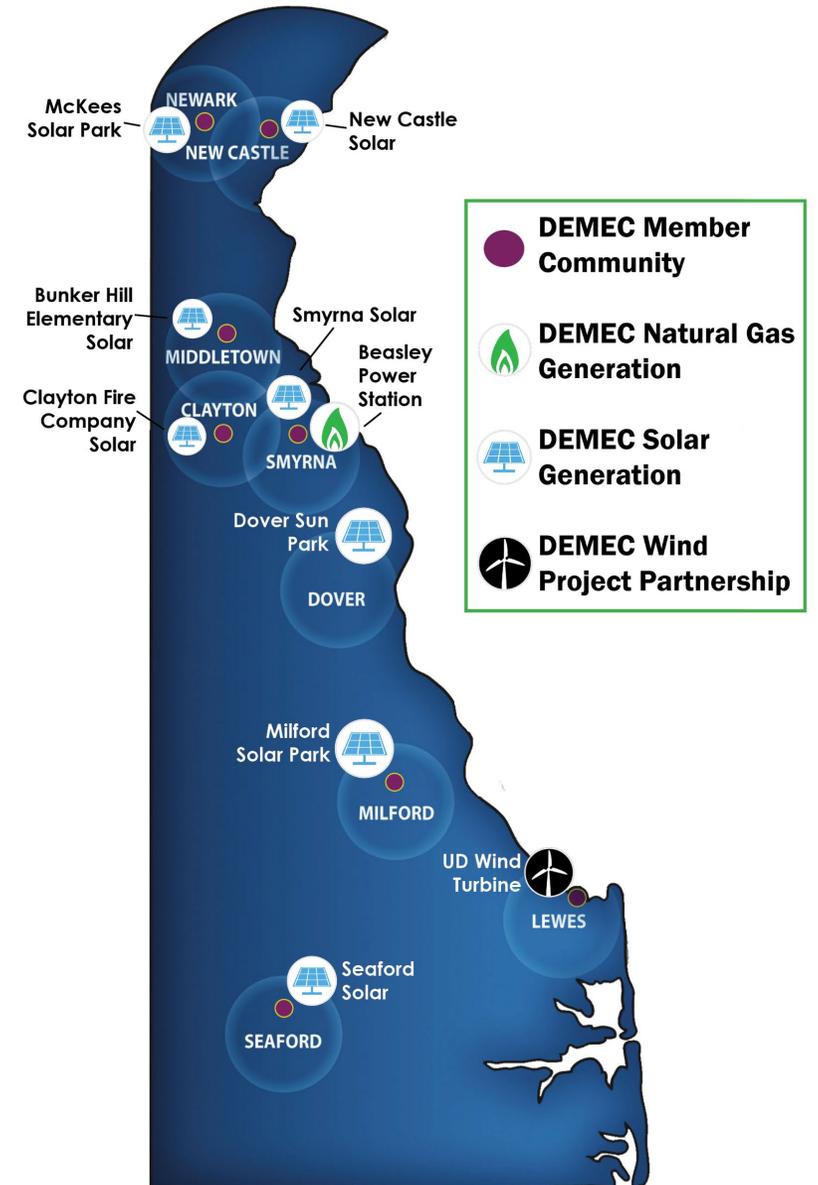


DEMEC Overview

DEMEC's Core Values: *Member Focus, Culture, Operational Excellence, Sustainability, and Education*

DEMEC's members/owners consist of Cities & Towns throughout Delaware that own their electric utilities.

- Incorporated in 1979 → over 40 years of service
- DEMEC provides **reliable, environmentally responsible, low-cost wholesale power supply** and related services to its members.
- As public power communities, **DEMEC members have full control** over their retail electric rates and services to their communities.
- Through active legislative and regulatory representation on both the state and federal levels, DEMEC fights to **protect our members' local decision-making**.
- **DEMEC identifies, develops, builds & operates assets** for our Members' benefit and offers **on-behalf-of financing** for our members investing in their own community infrastructure improvements.



What is Efficiency Smart?

Efficiency Smart is a hands-on service that interacts directly with the municipality's electric customers to reduce their usage.

- 1 Provide information and incentives that drive long-term, energy-saving changes
- 2 Quantify the energy savings
- 3 Independent, third-party verifies savings to meet energy reduction goals



Efficiency Smart Overview

Energy efficiency service offered through American Municipal Power (AMP)

- **Delaware Municipal Electric Corporation (DEMEC)** is an AMP member
 - Available to the Lewes Board of Public Works through its DEMEC membership
- **All DEMEC members currently participate in Efficiency Smart**

Program Offerings:

- Dedicated Efficiency Smart staff in Delaware
- Electric Bill Advice
- Residential Product Rebates (ex. Heat Pumps)
- Technical Services for Small to Large C&I Customers
- Incentives for Residents & Businesses



GREENLITE LEDs NOW 99¢

Efficiency Smart provides discounts on LEDs to help you save energy and money on your electric bill.

Available Greenlite ENERGY STAR® Certified Options

- Standard LED Lightbulbs
- LED Globe Lightbulbs
- Dimmable LED Candelabra Lightbulbs
- Dimmable Interior Flood Lightbulbs



EFFICIENCY SMART HOME ENERGY CHALLENGE

SAVE ENERGY. SAVE MONEY. EARN REWARDS.



Appliance Recycling Rewards

Are you upgrading an old appliance? Do you have a secondary fridge or freezer adding to your electric bill and taking up space in your home? Efficiency Smart will pick up and pay you \$50 for each eligible **Refrigerator, Freezer, Dehumidifier, or Window Air Conditioner** responsibly recycled.

In addition to the \$50 reward, not running your old appliance can also reduce your electric bill.

Efficiency Smart Overview (cont.)

Customer - Focused

- **Customer Engagement:** website resources, account managers, and technical engineers
- **Customer Satisfaction:** customers want information and control
- **Customer Connection:** Gain insight into your customers' needs and establish local ambassadors for energy efficiency



Utility - Focused

- **Utility Impact:** Tangible benefits that invest in the longevity of the electric system
- **Customer Impact:** Available to all electric customers with the ability to target customers and business sectors in need
- **Sustainability Impact:** Invests in the cleanest form of energy – avoided energy

Efficiency Smart Overview (cont.)



Economic Development

- **Retention** – Increase cost-savings to retain businesses & help them be more competitive
- **Expansion** – Add opportunities to expand existing facilities, add production lines, etc.
- **Growth** – Attract new businesses to Lewes, DE

Cost - Savings

- **Municipal Cost-Savings:** Reduce energy and infrastructure costs through lower energy usage
- **Customer Cost-Savings:** Lower utility bills for your customers through lower energy usage

Testimonials

Cape Henlopen School District is managing a fast-growing student population, with a district-wide student population over 6,000 students for the first time. The facilities within Lewes BPW's service territory were able to participate in the program.

“ I was skeptical at first, because I didn't think the process could be that easy, but it was. The incentive check was impressive, which I can now use towards future projects. ”

~Cheyenne Rivera, Supervisor of Facilities at Cape Henlopen Schools

Projected Program Results – Lewes BPW

Efficiency Smart Program	Program Cost	Energy Saving Goal*	Expected Energy Savings*	Contract Lifetime Savings	Carbon Reduction	Avoided Wholesale Power Costs
Basic Performance	\$236,916 <i>(INCLUDED w/DEMEC Membership)</i>	658 MWh	538 MWh <i>(82% of goal)</i>	7,084 MWh	3,954 <i>(metric tons CO2e)</i>	\$405,417

*Based on 2018 data reported by DEMEC

DEMEC incorporates the program cost as part of its power supply costs. There is no additional cost to the utility. The avoided wholesale power costs pay for the program.

- Results as of September 30, 2022: 509 MWh (77% of contractual goal)
- 4 projects in pipeline (totaling 128 megawatt-hour (MWh)) remain to achieve the expected energy savings
- Lifetime Customer Savings as of September 30 (based on customer retail rates): \$864,056
 - 249 total completed residential transactions
 - 13 total completed business projects
- 70% of the goal is guaranteed
- Estimated average Cost per MWh saved: \$33.44 (less than half the average cost of solar energy)
- Benefits such as MWh savings and avoided costs accrue over average project life of ~13 years (based upon Expected Energy Savings)

Projected Program CO2e Savings

Equal to removing 852 passenger vehicles off the road for a year



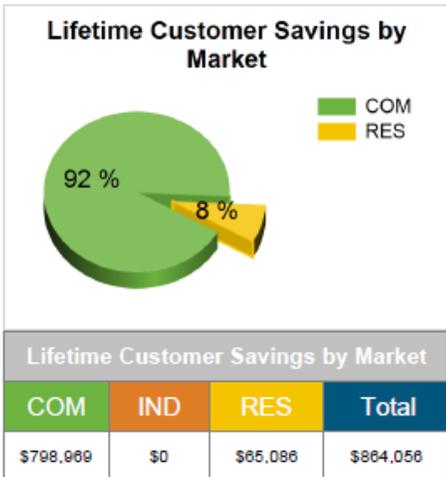
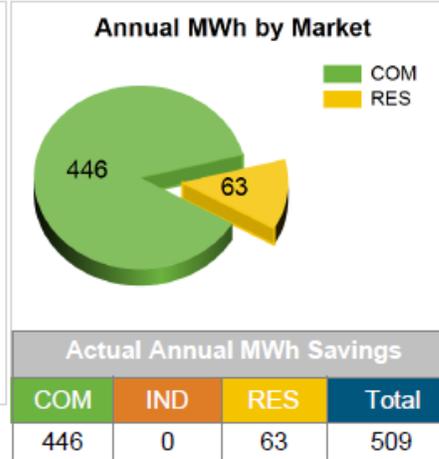
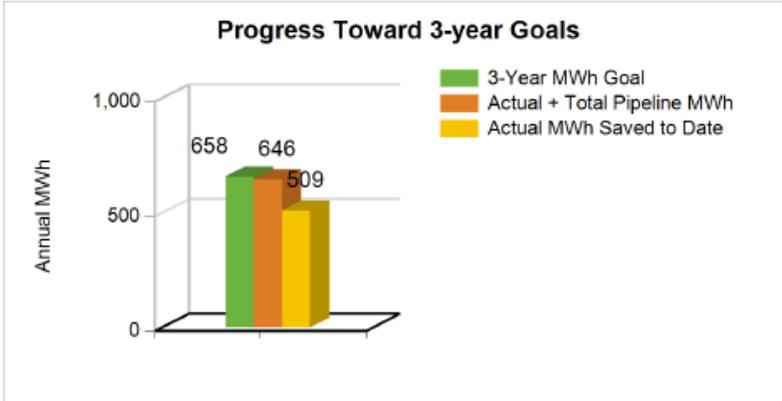
Efficiency Smart

Dashboard through 09/30/2022

Prepared for Lewes Board of Public Works



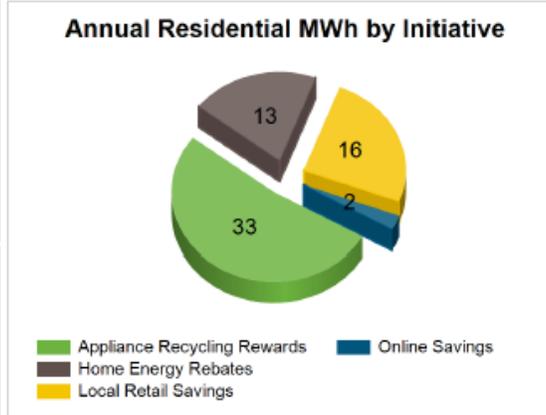
Actuals



Achieved

77%
Percent of
3-Year
MWh Goal

509
MWh Saved



\$864,056
Lifetime Customer Savings for
Lewes BPW

249 Completed Residential Transactions

13 Completed C & I Projects

Total Pipeline

Planned Residential Initiatives	
2 Projects	6 MWh
Active C&I Projects	
Agreement Signed	
1 Projects	7 MWh
Agreement Sent	
2 Projects	3 MWh
Analysis Underway	
5 Projects	47 Estimated MWh
Project Leads	
5 Projects	73 MWh
Total in Pipeline	
15 Projects	137 MWh

All savings are reported in Gross throughout this report.



Efficiency Smart 2019 Contract Cumulative to Date Summary Report for Lewes BPW

Reporting Period: 11/1/2019 through 9/30/2022

Summary of All Sectors Installed Efficiency Measures (Residential, Commercial, & Industrial)

Sector	Quantity of Measures	MWh Savings	Lifetime MWh Savings	Annual Customer Savings	Lifetime Customer Savings
Large Business Solutions	330	389	5,826	\$49,869	\$746,440
Residential	847	63	507	\$8,023	\$65,086
Small Business Solutions	477	57	489	\$5,805	\$52,530
Total	1,654	509	6,822	\$63,698	\$864,056

Currently:

- 13 C&I projects (with 12 companies) have or will have completed projects in the last three years with Efficiency Smart
- Another 10 companies considered projects but did move forward for a variety of reasons

Projections:

- ~14 new companies have already engaged with Efficiency Smart about potential projects coming in the next 3 years
- This is NOT the number of companies Efficiency Smart has talked to so far, just the ones who engaged about potential projects

Summary of Residential Installed Efficiency Measures

Measure Desc	Qty of Measure	MWh Savings	Annual Customer Savings
Advanced Thermostat	12	4	\$728
Dehumidifier Recycling	13	16	\$2,069
Ductless single-head variable speed heat pump	4	6	\$800
Energy Star Clothes Dryer	7	1	\$156
Energy Star Clothes Washer	6	1	\$87
Energy Star clothes washer CEE Tier 2	1	0	\$25
Energy Star Dehumidifier	1	0	\$13
Energy star refrigerator	9	1	\$67
Freezer early retirement program, secondary	3	2	\$273
Heat Pump Water Heater	1	1	\$150
Heat pump, air source	1	0	\$45
LED Screw Base Lamp	769	16	\$1,759
Refrigerator early retirement program, secondary	11	12	\$1,504
Room Air Conditioner Recycling	9	3	\$346
Total	847	63	\$8,023

New Program Option – Lewes BPW

Efficiency Smart Program Options	Program Cost	Energy Saving Goal*	Contract Lifetime Savings	Carbon Reduction	Avoided Wholesale Power Costs
Basic Performance	\$229,489 <i>(INCLUDED w/DEMEC Membership)</i>	637.5 MWh	8,287.5 MWh	4,674 <i>(metric tons CO2e)</i>	\$443,344

*Based on 2021 data reported by DEMEC

DEMEC incorporates the program cost as part of its power supply costs. There is no additional cost to the utility. The avoided wholesale power costs pay for the program.

Option Details:

- 70% of the goal is guaranteed
- Savings will only include projects completed during the *new* 3-year contract period.
- Program goals and costs occur over the course of 3 years (*beginning November 2022*)
- Benefits such as megawatt-hour (MWh) savings and avoided costs accrue over average project life of ~13 years (*projected using Energy Saving Goal*)
- Average cost per MWh saved is \$27.69

**Projected Program
CO2e Savings**

Equal to removing 1,007 passenger vehicles off the road for a year



DEMEC recommends the Lewes BPW re-enroll in Efficiency Smart for another 3 years. DEMEC is seeking approval to continue the program in the Lewes BPW service area as a savings tool and needs approval to offer the program to your customers.

For more information and questions:



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