

Energy Programs Office: Shared Energy Manager

National Association of State Energy Offices
September 9, 2025





Pennsylvania
Department of
Environmental Protection

Pennsylvania Climate Change Act

Pennsylvania Climate Change Act (Act 70 of 2008)

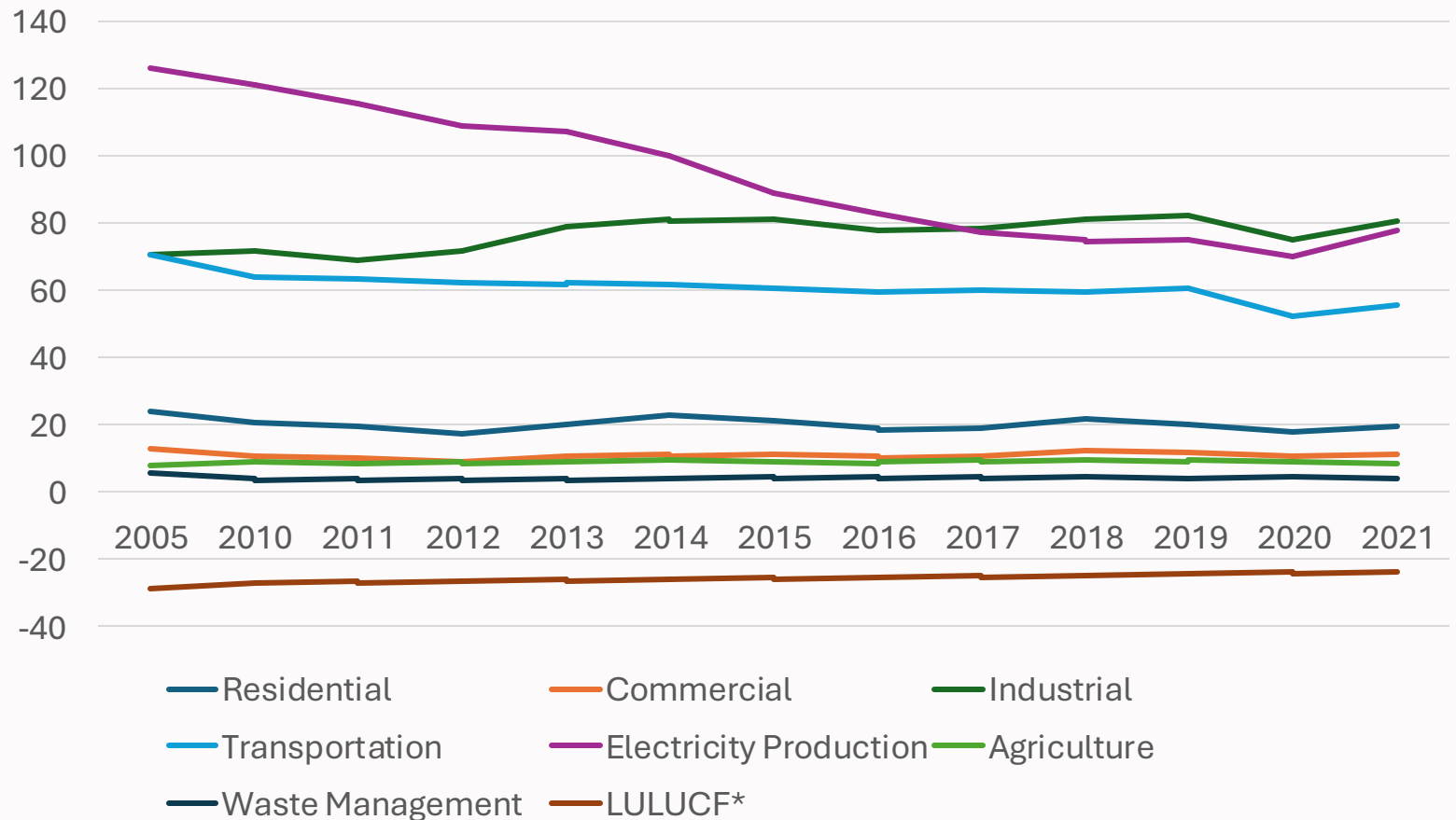
Requires DEP to:

- Develop a [climate impacts assessment](#) (3 yrs.)
- Prepare and update a [climate action plan](#) (3 yrs.)
- Develop an [inventory of greenhouse gases](#) (GHGs) (update annually)
- Administer a [climate change advisory committee](#) (CCAC) (bimonthly)
- Set up a voluntary registry of GHG emissions ([The Climate Registry](#) fulfills this requirement)

2024 GHG Inventory Report

- Data years 2005-2021
- 2021 shows a net emissions increase from 2020, as anticipated with COVID-19 recovery.
- Emissions increased across most sectors, except agriculture and waste management.
- State emissions decreased 19.0 percent from the 2005 baseline.

GHG Emissions by Sector (MMTCO₂e)





2024 Pennsylvania Climate Action Plan

Pennsylvania's pathway to 2050

Figure 17. Sector Share of Total GHG Reductions in 2050 Achieved Through Strategy Implementation (MMTCO₂e)

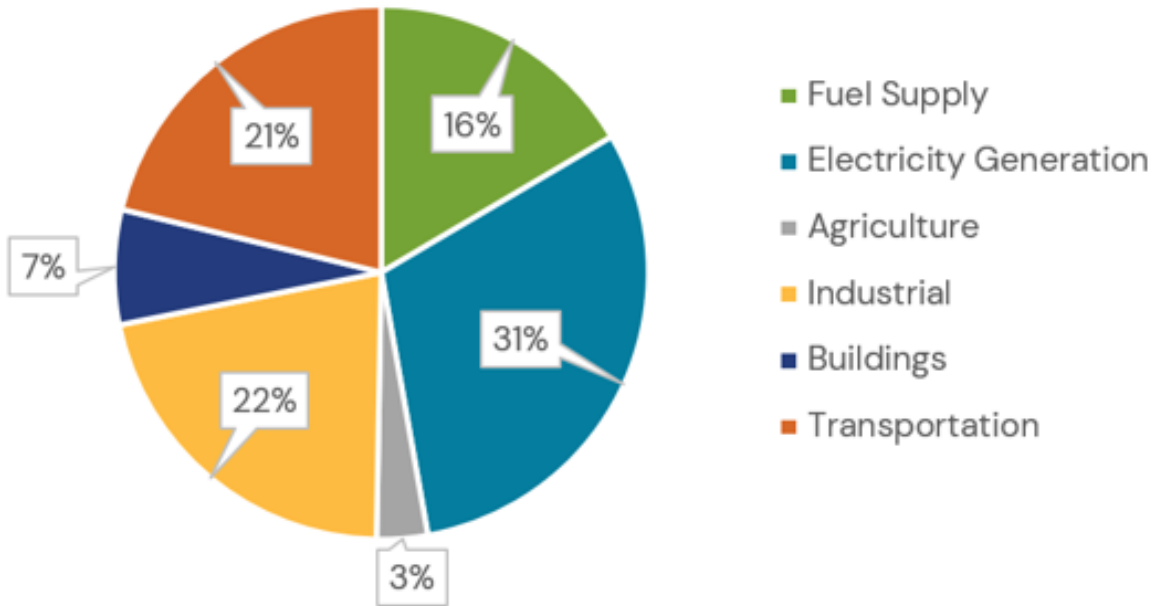
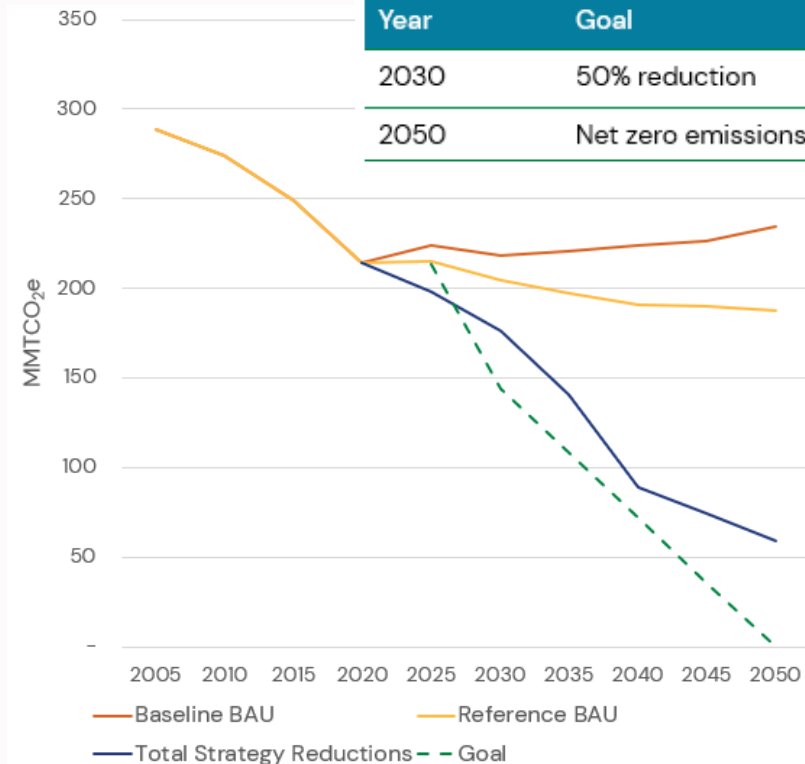


Table 10. Modeled GHG Reduction Results Compared to Set Goals

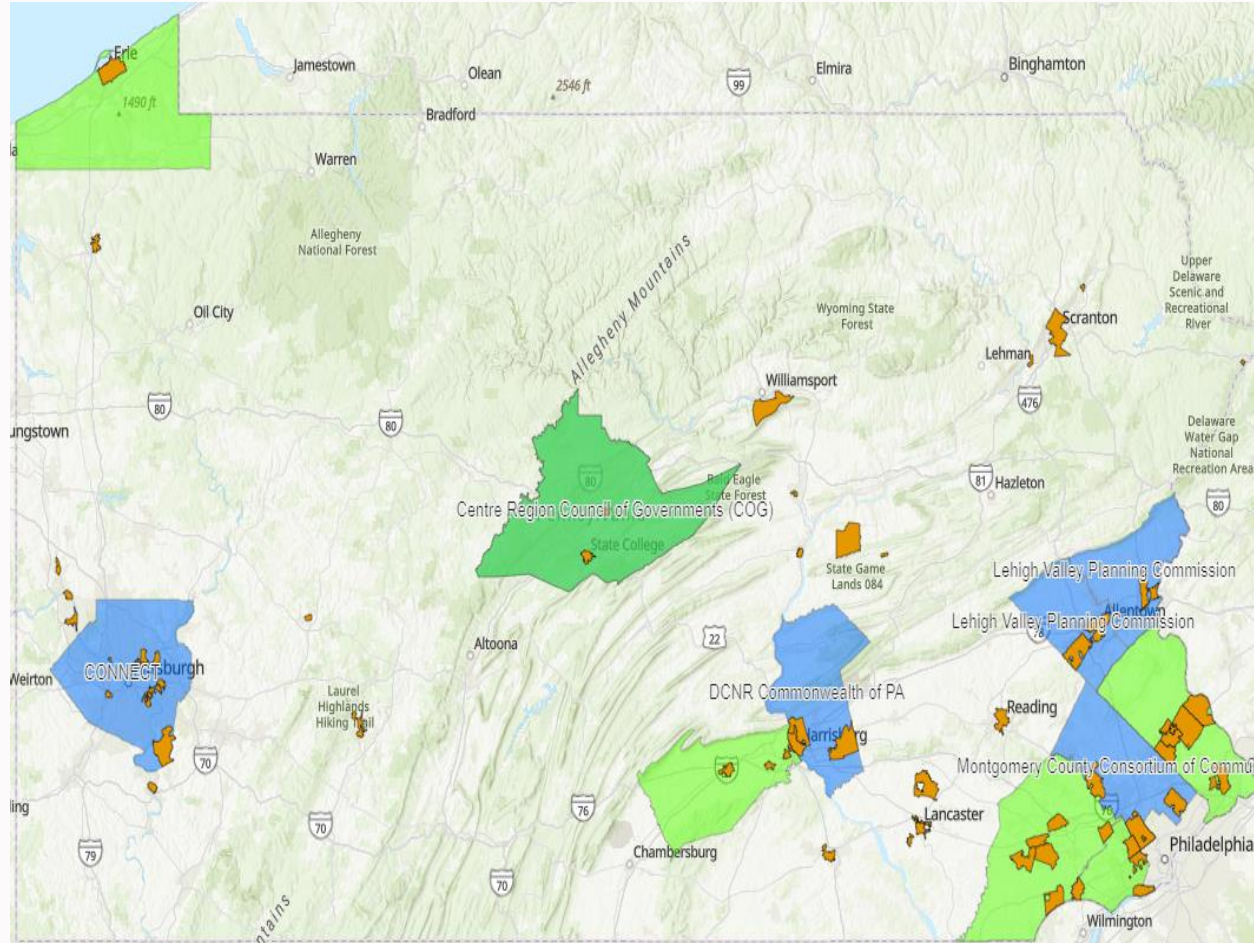
Year	Goal	Results
2030	50% reduction	40%
2050	Net zero emissions	80%





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Local Climate Action Program





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Energy. Environment. Enterprise

Wilson Engineering Services, PC (WES) partners with clients to develop economically, environmentally, and socially sustainable projects and programs. Each project provides its own unique set of challenges and opportunities, and we take pride in collaborating with our clients to ensure they are able to meet the challenges and capitalize on the opportunities.

WHAT WE DO



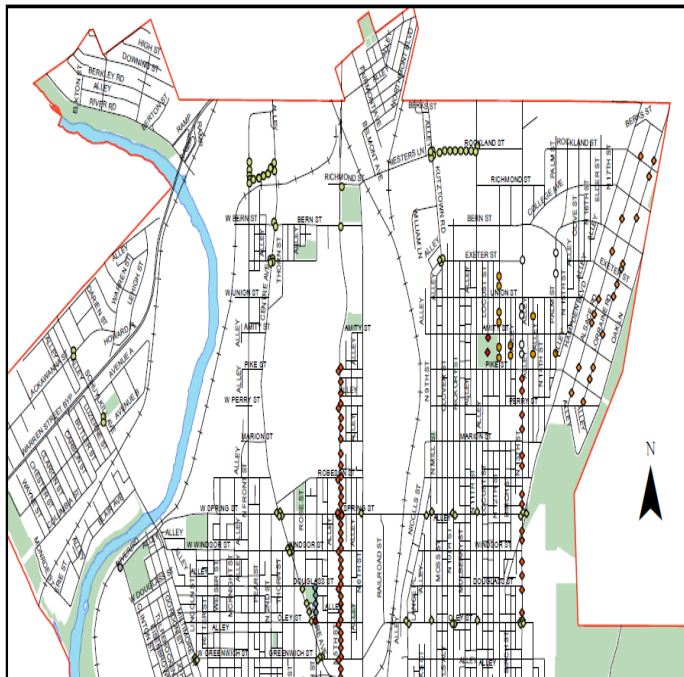
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Municipalities and Scope of Work

LED Street Light Upgrade Locations

Estimated 1300 total City-owned street lights. Estimated 715 poles with 752 fixtures to be upgraded to LED. Estimated , of which estimated 408 are eligible for CDBG funding (Residential, LowMod, not Flood Plain). Currently, fixtures are a mix of High-Pressure Sodium Vapor, Mercury Vapor and Metal Halide.

Prepared: 8/27/2020
by Kevin Lugo, SSW Manager



Easton Wastewater Treatment Plant RNG Opportunity

PATRICK MARTIN & MICHAEL STAHLY
WILSON ENGINEERING SERVICES, PC

This presentation is provided through support and funding from the U.S. Department of Energy's State Energy Program and the Pennsylvania Department of Environmental Protection.



Table 7 – SUV Replacement Options Economic Comparison

Parameter	Toyota Rav4 (ICE)	Toyota Rav4 Prime (PHEV)	Hyundai Ioniq 5 (BEV)	Chevy Bolt EUV (BEV)
Dealer Price	\$28,190	\$41,015	\$41,245	\$34,495
Gov. Incentives	\$0	\$0	\$7,500	\$7,500
Purchase Price	\$28,190	\$41,015	\$33,745	\$26,995
Annual Maintenance	\$1,000	\$800	\$500	\$500
Annual Fuel	\$981	\$297	\$210	\$210
Total Annual Cost	\$1,981	\$1,097	\$710	\$710
5-year Cost	\$38,097	\$46,502	\$37,294	\$30,543
10-year Cost	\$48,004	\$51,990	\$40,843	\$34,091
Annual CO2e (metric ton)	2.1	1.0	0.6	0.6



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Shared Energy Manager Program Results

Year 1

Table 1: Quantitative Totals for Identified Energy Management Opportunities¹

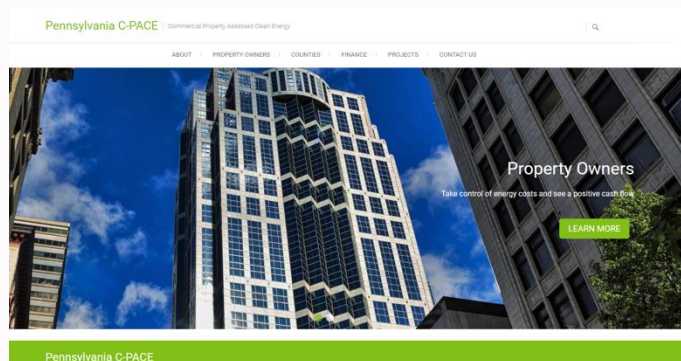
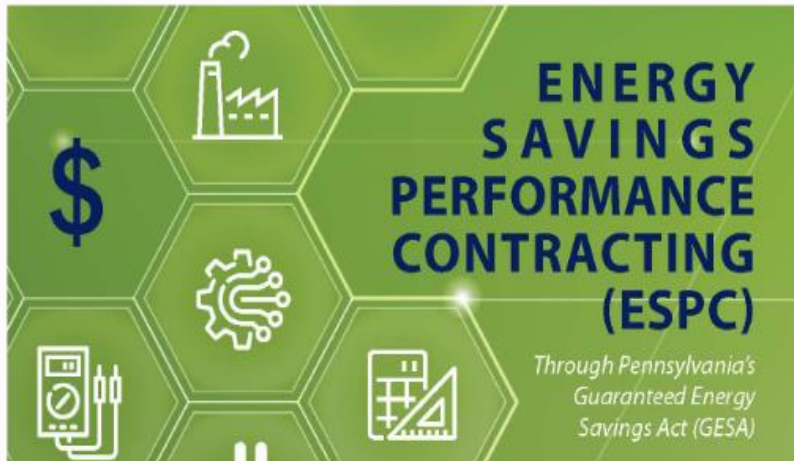
Municipality	Annual Cost Savings (\$)	Incentive Funding Potential ² (\$)	Electric Savings (kWh)	Natural Gas Savings (MCF)	Annual GHG Emissions Reduction (MT CO ₂ e) ³
Bellefonte Borough	\$141,097	\$106,310	2,359,715	0	857
Chester County	\$82,210	\$57,381	1,426,581	0	272
City of Reading	\$17,378	\$16,949	182,783	632	34
Elizabeth Township	\$26,054	\$148,265	129,770	101	22
Indiana Borough	\$158,933	\$398,530	1,089,564	710	275

Table 1 - Quantitative Totals for Identified Energy Management Opportunities

Municipality	Estimated Savings (\$/yr)	Estimated Incentive Potential (\$)	Estimated Electric Savings (kWh/yr)	Estimated NG Savings (mmBtu/yr)	Estimated Gasoline/Diesel Savings (gal/yr)	Estimated GHG Emissions Reduction (MT CO ₂ e/yr)
Abington Township	\$16,863	\$21,451	-139,126	23,764	-	136
Ben Avon Borough	\$13,711	\$2,514	-101,220	2,030	-	54
Cumberland County	\$31,792	\$266,070	258,102	-	2,428	98
City of Easton	\$379,596	-	116,992	528	-	64
City of Shamokin	-	-	-	-	-	-

Year 2

SEM Expanded Scope & Size

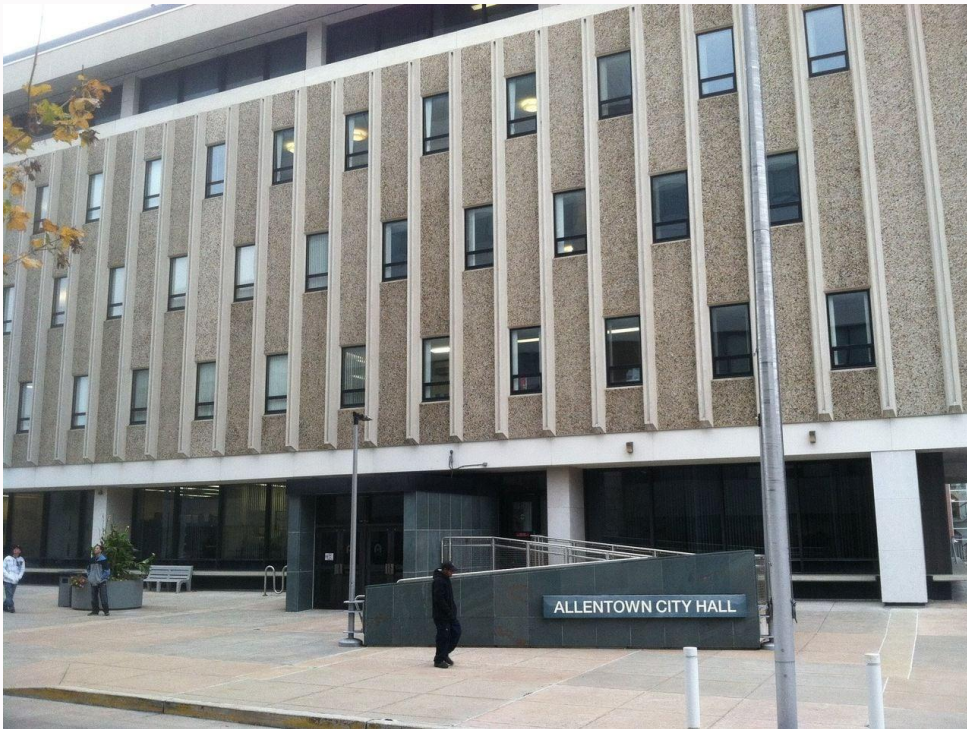


Energy Efficiency and Conservation Block Grant Program

Overview

OFFICE: State and Community Energy Program	NEW PROGRAM: No
FUNDING AMOUNT: \$550,000,000	FUNDING MECHANISM: Formula and Competitive Grants
RECIPIENTS: State/Local Government/Tribes	PERIOD OF AVAILABILITY: Available until expended

City of Allentown



- EECBG Application
- AFIG Application
- Pilot EV/Charging Project Scope & Funding Guidance
- Public Works Solar Array Review
- EVSE Charging RFP
- GESA/Audit Guidance



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Centre County Council of Governments



- EV Charging siting and feasibility
- EV Fleet Assistance
- Benchmarking Assistance

Chester County



- EECBG Application Technical Assistance
- Solar feasibility analysis for 313 & WWTP
- Pocopson Home Energy Benchmarking/GESA review
- Solar RFP Scope Assistance
- Energy Action Plan Scoping Assistance

Cumberland County



- Solar Project Scoping and RFP
- Cumberland County Fleet Study

Doylestown Township



- Energy Benchmarking and Assessment of Admin Office and Police Station
- Fleet review
- Solar Feasibility Review

City of Easton



- Solar RFP Scope Assistance
- Solar PV Feasibility Assessment
- EV Community Charging Plan
- Lafayette College Energy Plan Review



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East Pikeland Township



- Solar Ready and EV Ready Best Practices and Ordinances
- Solar PV Case Study Educational Material Development
- Electric Lawn Equipment Information



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Forest Hills Borough



- GESA Review and Assistance
- Incentive Identification and Application Assistance

City of Meadville



- Solar Financing Options Evaluation and Feasibility
- MORE application assistance



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Sharpsburg Borough



- DLC Funding/Mosites Solar Project Technical Support
- Solar PV Site Selection Evaluation
- Solar Alternative Energy Credit Monetization Information
- AQD Application
- Benchmarking



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Shared Energy Manager Program Results

Year 3

		\$ Savings Identified		NG Savings Identified (therms)		Electric Savings Identified (kWh)		GHG Emissions Reductions Identified (MTCO2e)		Incentive Funding Identified	
Code	Municipalities	EJ	Tot	EJ	Tot	EJ	Tot	EJ	Tot	EJ	Tot
ABT	Abington Township	-	\$12,129	-	-	-	-	-	405	-	\$223,250
AT	Allentown	\$19,889	\$30,257	122,980	122,980	(1,425,513)	(1,310,313)	4,122	4,158	\$336,324	\$336,324
AB	Ambridge Borough	-	-	-	-	-	-	-	-	\$15,000	\$15,000
BC	Bucks County	-	-	-	-	-	-	-	-	-	\$515,880
CHB	Camp Hill Borough	-	\$26,921	-	2,056	-	236,711	-	85	-	\$192,012
CLB	Carlisle Borough	\$789,155	\$789,155	90,614	90,614	5,404,042	5,404,042	2,184	2,184	\$14,976,498	\$14,976,498
CNB	Carnegie Borough	\$2,209	\$2,209	-	-	24,542	24,542	11	11	\$4,360	\$4,360
CR	Centre Region	-	\$29,084	-	-	-	-	-	57	-	\$540,450
CC	Chester County	-	\$23,723	-	-	-	244,571	-	77	-	\$478,705
CBC	Cumberland County	-	\$1,738,160	-	2,575	-	8,860,150	-	2,851	-	\$4,336,712
DT	Doylestown Township	-	\$5,910	-	3,871	-	20,886	-	27	-	-
EPT	East Pikeland Township	-	-	-	-	-	-	-	-	-	-
EC	Easton City	\$15,597	\$15,597	-	-	113,256	113,256	36	36	\$65,663	\$65,663
FHB	Forest Hills Borough	-	\$18,451	-	-	-	-	-	-	-	\$316,676
HB	Hatboro	-	\$4,753	-	-	-	-	-	4	-	\$45,000
LB	Lewisburg	-	\$5,646	-	209	-	48,479	-	16	-	\$100,000
LMT	Lower Merion Township	-	\$57,877	-	-	-	-	-	177	-	\$142,500
MC	Meadville City	\$17,488	\$17,488	-	-	180,200	180,200	57	57	\$216,800	\$216,800
MV	Millvale	-	-	-	-	-	-	-	-	-	-
SB	Sharpsburg	\$92,029	\$92,029	-	-	747,750	747,750	274	274	\$1,362,250	\$1,362,250
Total		\$2,869,389		222,305		14,570,274		10,420		\$23,868,080	
EJ Total		\$936,366		213,594		5,044,277		6,683		\$16,976,895	



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Thank you!

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The Department of Environmental Protection's mission is to protect Pennsylvania's air, land and water resources and to provide for the health and safety of its residents and visitors, consistent with the rights and duties established under the Environmental Rights Amendment (Article 1, Section 27 of the Pennsylvania Constitution).