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Resources:

2024 Utility 2.0 Plan Update (dps.ny.gov): Matter 14-01299
PSEG Long Island Home Comfort + Efficiency Programs (www.psegliny.com)

Agenda

Update on PSEG Long Island's 2024 Utility 2.0 Plan and Energy Efficiency Plan

- 01 Utility 2.0 and EE Plan Align to New York State Priorities
- **O2** PSEG Long Island's Progress towards State Goals
- O3 PSEG Long Island's 2025 Focus: EVs & Energy Efficiency
- **O4** Utility 2.0 and EE Plan Five-Year Plan Summaries
- **05** 2025 Utility 2.0 Total Funding Request
- **06** 2025 EE Plan Proposed Programs and Budgets





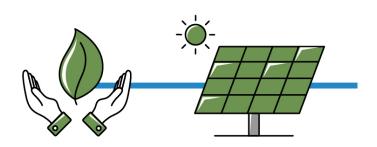
Utility 2.0 and EE Plan Align to New York State Priorities

PSEG Long Island supports New York State goals as detailed in the Climate Leadership and Community Protection Act (CLCPA or Climate Act).

Solar PV

NYS 2025 Goal: 6,000 MW

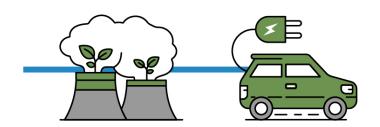
Zero-emission energy resources that deliver safe and reliable electricity and reduce vulnerability to fossil fuel disruptions and energy price volatility



New York
State
Strategic
Priorities

Energy Storage NYS 2025 Goal: 1,500 MW

Storage solutions, including
Behind-the-Meter and
utility-scale storage, that enable
a more flexible grid that can
accommodate increased load
and renewable resources



Energy Efficiency and Heat Pumps

NYS 2025 Goal for EE: 185 TBtu NYS 2030 Goal for HP: 1 Million Electrified Dwellings

> Including the wide selection of incentives, rebates, and programs available to customers presented in the Energy Efficiency Plan

Transportation Electrification NYS 2025 Goal: 850,000 EVs¹

Pilots and programs that encourage wider adoption of electric vehicles like Make-Ready and utility Fleet electrification

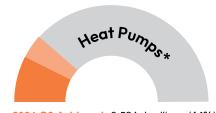


PSEG Long Island's Progress towards 2025* State Goals

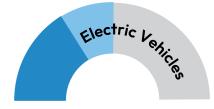
Utility 2.0 initiatives directly contribute to the achievement of clean energy goals aligned to the New York State Strategic Priorities.



2024 Q2 Achieved: 5.80 TBtu (74%) 2025 Targeted Achievement: 7.45 TBtu (95%) 2025 Target: 7.85 TBtu



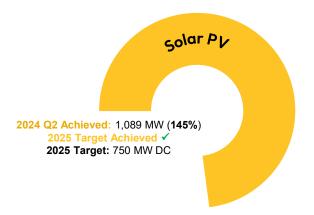
2024 Q2 Achieved: 9,524 dwellings (14%)
2025 Targeted Achievement: 16,372 dwellings (24%)
2030 Target: 67.769 dwellings



2024 Q2 Achieved: 59,265 EVs (33%) 2025 Targeted Achievement: 89,749 EVs (50%) 2025 Target: 178,500 EVs



2024 Q2 Achieved: 42 MW (22%) 2025 Targeted Achievement: 42.6 MW (23%) 2025 Target: 188 MW



*The 2030 Heat Pump CLCPA Goal is represented here, instead of the 2025 Heat Pump CLCPA Goal. New York State has emphasized a 2030 target on dwellings, which is a shift from the historical focus on heat pump installations.



EE Savings reflects savings since 2019. Heat pump installations reflect dwellings since 2020. The Solar PV Goal for 2025 has already been accomplished. The Energy Storage 2025 Targeted Achievement is based on Actuals to-date since the 179 MW BESS in-service date was pushed back from 2025 to 2028 due to procurement delays. Values have been updated since the submission of the 2024 Utility 2.0 Filing and are current as of Q2 2024, based on data availability. Cumulative achievement values are reflected in the dials.

2025 Utility 2.0 and EE Projects aligned with New York State Priorities

A total of six Utility 2.0 and seven Energy Efficiency projects will be active in 2025.

Energy Efficiency and Heat Pumps*	Transportation Electrification	Energy Storage	Solar PV	
Energy Efficient Products	Make-Ready Programs	Connected Buildings Pilot		
Home Comfort	EV Make-Ready Program	Residential Energy Storage Program	PSEG Long Island Solar Initiatives are outside of the	
Residential Energy Affordability Partnership (Low-Income)	Fleet Make-Ready Program		scope of Utility 2.0	
Home Performance	Electric Vehicle Programs			
Multifamily	Demand Charge Rebate			
Commercial Efficiency	EV Phase-In Rate			
Home Energy Management	Residential Charger Rebate Program		Other Programs	
	Suffolk County Bus Make- Ready		Integrated Energy Data Resource (IEDR) Platform	



2024 Filing + Five-Year Plan - Overview

Per commitments made in past Utility 2.0 Filings, PSEG-LI has developed an outlook on strategy / action plans to achieve state goals and regulatory requirements by 2030.

2024 Utility 2.0 Filing	Five-Year Plan		
• <u>Period:</u> 2025	• <u>Period:</u> 2026 – 2030		
 Purpose: Report U2.0 Project Accomplishments / Plans for 2024 and Budget Requests for 2025 Scope: Primarily the same as past U2.0 Filings 	 Purpose: Develop a five-year plan (2026 – 2030) for Utility 2.0/EE to achieve statewide CLCPA goals by 2030 		
• Deliverables:	Scope: Develop forecasts and projections for a five-year path aligned to the key CLCPA goals		
 2025 Scope and Schedule Updates / Proposals (Active + Proposed U2.0 Project(s)) 	• <u>Deliverables:</u>		
 Identification of Operationalized* Projects for 2025 	Current State AnalysisFuture State Analysis		
 2025 Budget <u>Requests</u> (Active + Proposed U2.0 Project(s)) Energy Efficiency (EE) Plan 	 Gaps Analysis Five-Year Plan Financial Impact (where applicable) 		
Ellergy Elliciency (EE) Flair	applicable)		

^{*}The Utility 2.0 project status term 'Operationalized' refers to a project that has accomplished its Utility 2.0 project scope but may require ongoing budget outside of the Utility 2.0 Program (i.e., PSEG LI Core base budget) to maintain, support, improve, and/or continue to operate the services provided by the project. No Utility 2.0 Projects have been identified as 'Operational' for 2025.



PSEG Long Island's 2025 Focus: Energy Efficiency



- The 2025 Energy Efficiency (EE) plan continues to target **heat pump dwelling** achievement; the 2025 target of **5,330 dwellings** significantly exceeds the 2024 target **of 3,600 dwellings**.
- Weatherization implementation and spending increases to begin shifting the focus of portfolio savings towards weatherization measures, as reflected in ~10% increase in weatherization spending in 2025 compared to 2024.
- Focus on **Low and Moderate Income (LMI)** engagement and spending; the 2025 rebates/service budget of \$20.0M increasing by 58% compared to the 2024 budget of \$12.7M.
- Focus on **Disadvantaged Community (DAC)** engagement and reporting to support New York goals of 35% of overall spending benefitting DAC's.
- 2025 Energy Efficiency plan intends to coordinate PSEG-LI programs with NYSERDA programs and implementation of IRA funds.
- Funding to support the tariff-based Dynamic Load Management offerings as well as some remaining supplementary support for Community Based Solar.*



PSEG Long Island's 2025 Focus: Electric Vehicles



Make-Ready Program

- The **EV Make-Ready Program** provides Utility-side and Customer-side Make Ready (USMR and CSMR) incentives to public, workplace and multi-unit dwelling charging. PSEG-LI proposes to extend program timeline to 2030 and increase overall port targets.
- The **Fleet Make-Ready Program** will provide USMR and CSMR incentives to eligible public fleet customers operating Light-duty (LDVs) and Medium-to-Heavy duty vehicles (MHDVs) from the third quarter of 2024.
- The **Fleet Advisory Service** has been available to customers since the third quarter of 2023 and will continue to provide services to both public and private fleet customers in 2025. Current service offerings include the Fleet Advisory Online Tool and a Fleet Advisor.

EV Programs

- The **Residential Charger Rebate Program** became available in February 2024 and offers cash rebates for Energy Star rated Level 2 chargers, and higher rebates for DAC/LMI customers.
- The existing **DCFC Incentive Program** offers **Demand Charge Rebate** in 2024 and will continue to offer the rebate until the EV Phase-In Rate becomes available in the second half of 2025.



Energy Efficiency & Heat Pumps Five-Year Plan Summary

CURRENT STATE ANALYSIS

Heat Pumps

- New York State modeling defines the Long Island share of the CLCPA heat pump goal to be 67,769 dwellings. Current achievement towards goal is 9,524 dwellings.
- Current active projects that include heat pump implementation will be additionally supported by PSEG-LI heat pump initiatives developed to address the Long Island specific barriers to adoption.

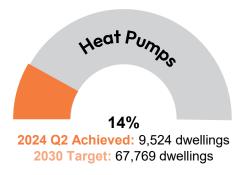
Energy Efficiency

 The 2030 CLCPA Statewide target for energy efficiency has not yet been published by New York State. The current 2025 plan targets 774,188 MMBtu of programmatic savings, as the portfolio transitions from high-impact, low-cost measures to high-cost, lowimpact measures.

FUTURE STATE ANALYSIS

Heat Pumps

Future State analysis was conducted via a potential model to forecast dwelling towards the 2030 goal. Model outputs project potential Long Island heat pump penetration to be ~61k dwellings. Code and standards are expected to contribute an additional 10,000-12,000 dwellings, exceeding the Long Island portion of the goal. Future annual plans are updated yearly and subject to board approval.



Energy Efficiency

 The Energy Efficiency portfolio will transition towards emphasizing space heating electrification and away from diminishing energy efficiency measures, as much of the low hanging energy efficiency measures have already been captured.

- → The **funding requirement** to meet the dwellings and savings outputs of the potential model require large incremental budget increases, resulting in a potential future funding gap. The model indicates that the 2025 budget **of \$93.7M** will need to increase **to \$159M** in 2030, in order to capture potential heat pump dwelling implementation targets.
- → In the PSEG Long Island service territory, more than 50% of space heating is hydronic radiant baseboard heating, for which there is not an easily available direct replacement currently commercially available. The emergence of a commercially available direct bolt-on replacement technology would close some of the customer adoption gaps that exist due to **technological constraints**.
- > Continuing to grow the qualified workforce will be critical to capture the weatherization savings potential at the scale proposed in the potential model.



Transportation Electrification Five-Year Plan Summary

CURRENT STATE ANALYSIS (2025)

Туре	Initiative Name	Program Name	Customer Segment	DAC Support
	Make-ready	EV Make Ready	Com	\square
	(MR)	Fleet Make Ready	Com	\square
	Program	Fleet Advisory Service	Com	
Programs	Programs Electric	Residential Charger Rebate Program	Res	☑
and Rates Vehicle (EV) Program	DCFC Incentive Program (Demand Charge Rebate)	Com		
	Suffolk County Bus Make-Ready Pilot EV Phase-in Rate		Com	\square
			Com	
	Time-of-Day Rates		Res	
	Hosting Capacity Map		Com	
	Customer Engagement Contractor Outreach Stakeholder Partnership		All	
J. J.			All	
Internal	Dedicated EV Team		All	
Processes Internal Employee Trainings		All		

FUTURE STATE ANALYSIS (2025 – 2030)

- Enhance engagement and outreach efforts to residential and commercial customers, with an emphasis on DAC customers, to increase EV adoption and program enrollment, and encourage off-peak charging with TOD rates.
- **Increase overall port targets** under the EV MR Program from 2025 and extend the program till 2030 with strategic prioritization of participation in DACs.
- Expand customer segment eligibility and project targets under the Fleet MR Program beyond public fleets and public transportation to increase electrification opportunities for a broader MHD fleet customer base.
- Develop Managed charging offerings that encourage charging behavior that benefits the grid and the environment, while reducing energy bill impacts for commercial and residential customers.

NOTE: As there is not a statewide 2030 light-duty EV goal at the time of this filing, PSEG Long Island will continue to work towards the 2025 target until a statewide 2030 goal is available.

- Approach: The current state of Transportation Electrification programs was assessed to identify gaps and opportunities to expand efforts from 2025 and beyond in five strategic pillars infrastructure support, O&M support, outreach and partnerships, marketing and education, and planning and analysis.
- → **Key Takeaways:** Additional Transportation Electrification initiatives will be proposed, developed and/or expanded to fill in gaps and address barriers to EV adoption and charging infrastructure deployment, enabling PSEG-LI to achieve the 2030 LDV target and enable MHD electrification:
 - Expand commercial make-ready and managed charging programs, especially for fleets & DAC, to increase infrastructure support while managing load
 - Expand and strengthen marketing, education and outreach efforts to residential customer segment, especially those residing in DACs to increase participation



Energy Storage Five-Year Plan Summary

Energy Storage enables the future of renewable energy by providing a pathway to supplant fossil-fueled generators that disproportionately affect disadvantaged communities, while ensuring a clean, reliable, and resilient electric grid.¹

CURRENT STATE ANALYSIS

Initiative Name	Expected Achievement by 2030
Residential Energy Storage System Incentive Program	2.8 MW (555 systems)
Solar Plus Battery Storage Program (Residential BTM)	31 MW*
Bulk Energy Storage System (BESS) RFP	179 MW
FTM: East Hampton and Montauk	10 MW

- Currently, the largest contributions to PSEG-LI's achievement of the 2025 Energy Storage CLCPA Load Share Ratio are from projects outside of Utility 2.0
- Residential and Utility-Scale Energy Storage applications have been the <u>focus</u> and will remain the focus for PSEG-LI's contributions to the 2025 CLCPA Load Share Ratio
- PSEG-LI's 2025 Energy Storage CLCPA Load Share Ratio (188 MW) is <u>expected to</u> <u>be achieved</u> in 2028 when the 179 MW of Bulk Energy Storage is in-service

FUTURE STATE ANALYSIS

- The Residential Energy Storage System Incentive Program could expand in future years to include incentives for BTM EV Energy Storage applications
- Over the next five years, Index Storage Credit (ISC)² purchases from NYSERDA will be considered

- → High implementation costs for large-scale battery storage systems and slow customer uptake may pose constraints for achieving the statewide goals
 - Alternative funding sources, enhanced marketing, required rate enrollments, and ISC purchases (if approved) could help mitigate these potential constraints
 - → For all battery storage incentive programs, higher incentives and/or system enrollment opportunities are/will be available for LMI/DAC customers
- → PSEG Long Island achieving the load-share-ratio of 750 MW of Energy Storage on Long Island by the end of 2030 is dependent on the level of energy storage procured by the state and what share is contracted to PSEG Long Island
- PSEG Long Island is committed to contributing to the overall 2030 statewide energy storage CLCPA goal, but the achievement of this goal is reliant on the progress of the state



Solar PV Five-Year Plan Summary

Solar and other zero-emission resources, combined with energy storage, will deliver safe and reliable electricity over the next decade and beyond, which will put an end to New Yorkers' vulnerability to fossil fuel disruptions and energy price volatility.¹

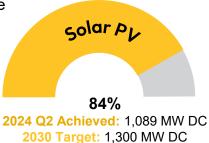
CURRENT STATE ANALYSIS

The current Solar PV portfolio is estimated to grow to 1,414.8 MW by early 2030s¹.

Project / Initiative Name	Size (MW)	In-Service (Est./Act.)
In-service Projects to-date	115	
Solar Feed-in Tariffs I-III	87.8	2025
Solar Communities (FIT V)	12	2025
Behind-the-Meter	1,200	2030
Tot	al 1,414.8	

FUTURE STATE ANALYSIS

- The 2030 CLCPA Statewide target for solar is 10,000 MW. Of that, Long Island's portion of the 2030 goal is **1,310 MW**².
- Solar PV will continue to be connected to the PSEG-LI system by one of three ways:
 - 1. LIPA's electric rate tariff
 - 2. RFPs to construct utility-scale resources
 - Purchasing a share of RECs from wind and solar projects
- By 2030, Long Island and the Rockaways are expected to have 1,200 MW of rooftop solar, and 1.415 MW overall¹.



- → By 2030, PSEG-LI is expected to achieve 1,414.8 MW of Solar PV by 2030 which exceeds its portion of the Statewide 2030 target (1,310 MW).
- → The Utility 2.0 Portfolio can continue to support the Behind-the-Meter Solar PV by planning for increased grid flexibility and increasing accommodation for two-way connectivity over the next 5 years.



2025 Utility 2.0 Total Funding Request

PSEG Long Island requests a total \$27.60 million in Utility 2.0 funding (\$13.24 million in Capital and \$14.36 million in Operations and Maintenance (O&M)) for active initiatives in 2025. No new initiatives are proposed for the Utility 2.0 Program for 2025.

Initiative	Capital 2025 (\$M)	O&M 2025 (\$M)	Total 2025 (\$M)
Make-Ready Programs	7.83	10.34	18.17
EV Make-Ready Program	6.27	9.28	15.55
Fleet Make-Ready Program	1.56	1.06	2.62
Electric Vehicle Programs	2.01	2.82	4.83
Demand Charge Rebate	-	1.00	1.00
EV Phase-In Rate	2.01	0.19	2.20
Residential Charger Rebate Program	-	1.38	1.38
Suffolk County Bus Make-Ready	-	0.31	0.31
Connected Buildings Pilot	-	0.04	0.04
Residential Energy Storage Program	<u>-</u>	0.65	0.65
IEDR Platform	3.40	0.20	3.60
Total U2.0 Funding Request	13.24	14.36	27.60



2025 EE Plan Proposed Programs and Budgets

PSEG Long Island's proposed 2025 EE Plan requests a total of \$93.71 million in funding with an estimated overall savings of 110,059 MWh (774,188 MMBtu) across 8 programs.

Program	Sector	Savings (MMBtu)	Savings (MWh)	Program Budget (\$M)
Home Comfort	Residential	182,387	3,570	26.96
Commercial Efficiency	Commercial	185,171	49,896	23.59
Home Performance	Residential	39,595	2,418	10.93
Energy Efficient Products	Residential	155,564	8,887	8.11
Multifamily	Commercial	64,882	5,108	6.60
Residential Energy Affordability Partnership (Low-Income)	Residential	13,588	1,201	3.37
Home Energy Management	Residential	133,000	38,980	2.19
All Electric Homes	Residential			0
Total, Budget Components with Programmatic Savings		774,188	110,059	81.73
Total, Budget Components Not Associated with Programmatic Savings		-	-	11.98
Total EE Savings and	Funding Request	774,188	110,059	93.71



2025 EE Plan Income Qualified Spending

PSEG Long Island's 2025 EE Plan identifies opportunities to advance energy affordability for LMI consumers such as heat pump rebates and programmatic changes designed to enhance programs that will total about \$20.01 million in spending in 2025.

Program	Savings (MMBtu)	Participation (Units)	Rebates & Incentives Budget (\$M)
Home Comfort – Whole House LMI	58,084	2,669	9.48
REAP	13,588	18,185	3.37
Home Performance - LMI	17,813	1,052	5.96
Marketing & Outreach	-	-	1.20
Total	89,485	21,906	20.01



Public Comments

The New York State Department of Public Service (DPS) is seeking your public comment on PSEG Long Island's Utility 2.0 Plan and Energy Efficiency Plan.



Online Comments Form

Comments may be entered directly into the case via the www.dps.ny.gov website, by entering the associated matter number (14-01299) in the search option found on the homepage. After opening the case, enter comments in the "Post Comments" tab located at the top of the page.



First Class Mail

Your comments should refer to "Matter Number 14-01299 – PSEG LI's Utility 2.0 and Energy Efficiency Plan". Comments may be mailed and delivered to: Hon. Michelle L. Phillips, Secretary to the Commission New York State Public Service, Three Empire State Plaza, Albany, New York 12223-1350.



Email the DPS Secretary

Comments may be sent electronically to the DPS secretary at secretary@dps.ny.gov



Toll-free Opinion Line

Comments may also be submitted through the Department of Public Service's Opinion Line at **1-800-335-2120**. The number is designed to take comments about pending cases from in-state callers, 24 hours a day. Callers should press "2" to leave comments, mentioning PSEG Long Island's Utility 2.0 Plan.

Submit your comments by <u>08/21/2024</u> and reply comments by <u>09/06/2024</u>.

For more details, visit https://www.dps.ny.gov/LongIsland





08/21/2024 09/06/2024 By EOY 2024 Public Comments Due Reply Comments Due DPS Final Recommendation Letter issued to LIPA





Thank you

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