

October 8, 2024

ComEd Energy Efficiency Program Draft Portfolio Plan 2026-2029

Presented to the Illinois Energy Efficiency Stakeholder Advisory Group

Agenda

- 1. Opening Remarks
- 2. Team Overview
- 3. Portfolio Achievements
- 4. Plan 7 Goals
- 5. Strategic Challenges
- 6. The Planning Process
- 7. Potential Study Results & Comparison
- 8. Plan 7 Portfolio Structure
- 9. Closing Remarks

Opening Remarks

Scott Vogt

Vice President, Strategy & Energy Policy

Denise Munoz

Director, Strategy and Innovation

ComEd Clean Energy Solutions

We help customers interact with energy to save money and help the planet.

With a comprehensive suite of demand side management (DSM) solutions, we aim to deliver environmental impact while driving **equitable outcomes** and **seamless customer experience**.



Team Overview

Denise Munoz
Director, Strategy and Innovation

Clean Energy Solutions Structure & Programs: 2024



Director, Clean Energy Solutions Strategy & Implementation Denise Munoz



Director, Clean Energy Solutions Business & Customer Support Nick Bafaloukos



Residential **Implementation** Julie Hollensbe

Direct to Consumers HES

Channels Retail, Product Distribution, **HVAC & NC**

Residential Journey Coordination



C&I **Implementation** Teri Lewand

Business Programs Small Biz, Standard, etc.

Technical Programs Custom, RCx, etc.

Engineering Assessments, PSCFA, VLR, Benchmarking

> **C&I Journey** Coordination



EE Planning & Evaluation

DR/DP Planning PLR/FEJA/NWA

DR/DP Programs PTS, A/C Cycling, Hourly Pricing, TOU Pilot





Innovation & New Programs Brian Kirchman

EE R&D

BE R&D

Customer R&D Energy Ally, EV Companion

New Product Dev. **Technology & Programs**



Beneficial Electrification Cristina Botero

Residential Programs EV Charging, Tech Adoption / Heat Pumps, Infra. Readiness

> **C&I Public Sector** EV Purchases & EV Charging Infrastructure

Customer Education & Awareness: C&I Fleet **Assessments & Campaigns**

Financial Planning & Support Budgeting, Forecasting, Annual Filings

Reporting & Data Mgmt. Compliance Reporting, Data Requests

Business Operations On-Bill Finance, EEUP, EDBE Reports

Customer Support Green Power Connection, Data Services

Definitions (from left to right)

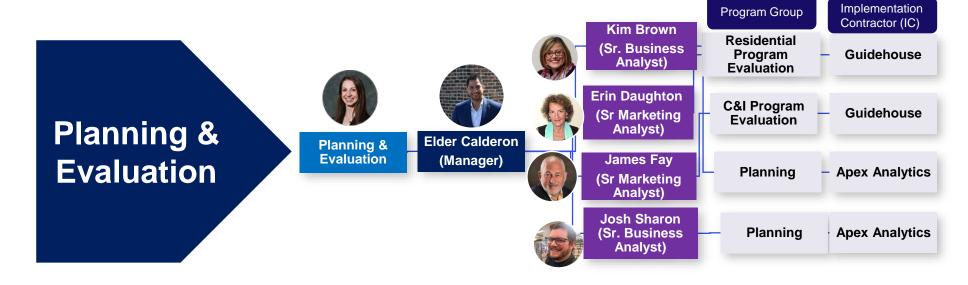
DTC: Direct To Consumer **DSM:** Strategic Demand Side Management

DR & DP: Demand Response & Dynamic Pricing FPC: Financial Planning & Controls

Eng: Engineering **GPC**: Green Power Connection



Clean Energy Solutions: Energy Efficiency Planning & Evaluation









ComEd Energy Efficiency Portfolio Achievements

Denise Munoz
Director, Strategy and Innovation

Portfolio Lifetime Achievements



159.2

million efficient bulbs sold

\$10.10

billion on customer bills saved

89.09

million Net MWh saved

6.65

million cars off the road for a year

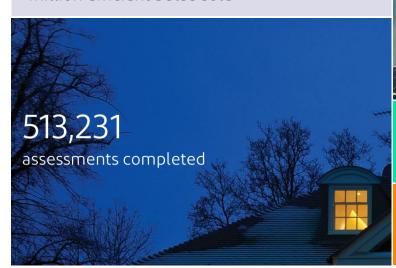
35.53

million acres of trees planted



\$2.25

billion in incentives provided to customers*



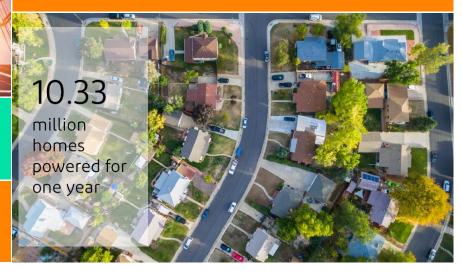


170,049

business projects completed

7,426,871

rebates & incentives provided



^{*}Based on lifetime net MWH savings realized through CY2023. Incentives for the ongoing year is based on applied percentage of about 65%.

Portfolio Plan 6 Achievements



Provided over **1,870 local schools** with e-learning activities, take-home energy-saving kits and an educational online tools



7 New Electrification Measures

New Industrial Offerings:

- Industrial Energy Management systems
- Advanced Refrigeration Controls



Energy Efficiency

Over **7,100** IE Single-Family comprehensive home upgrades

Over \$5.6 million in incentives to assist in the development of over **2,100** affordable housing units



New Commercial Offerings:

- Building Operator Certification
- Commercial Food Service Joint Offering



Plan 7 Goals

Kim Swan

Sr Manager, Strategic Planning and Portfolio Management

Plan 7 Goals

Savings & Spend Goals:

	2026	2027	2028	2029
Legislated AAIG (GWh)	747	747	747	747
AATS Goal (GWh)	1,402			
, ,				
IE Spend Requirement	\$40M			
Public Spend Requirement	10%	10%	10%	10%
IE Electrification Savings	25%	25%	25%	25%

Legislative Goals:

- "It is the policy of the State that electric utilities are required to use cost-effective energy efficiency and demand-response measures to reduce delivery load." 220 ILCS 5/16-103B(a).
- "Energy efficiency . . . should be used . . . to reduce costs to consumers, improve reliability, and improve environmental quality and public health." 20 ILCS 3855/1.5(9).

Strategic Challenges

Kim Swan

Sr Manager, Strategic Planning and Portfolio Management

Portfolio Challenges: Reaching Savings Goal

Plan 7 presents difficult challenges to ComEd's ability to reach statutory goals

Market Considerations

- Plan 7 includes no Residential & Street Lighting LEDs
- Increasingly efficient codes for commercial buildings

Program Considerations

- Inflationary program cost pressures are expected to continue in Plan 7
- High cost of delivering programs to hard-to-reach customers has proven persistent

Technology Considerations

- EEE is still cost prohibitive and in early adoption stages
- There is no known technology that can replace the lost LED savings

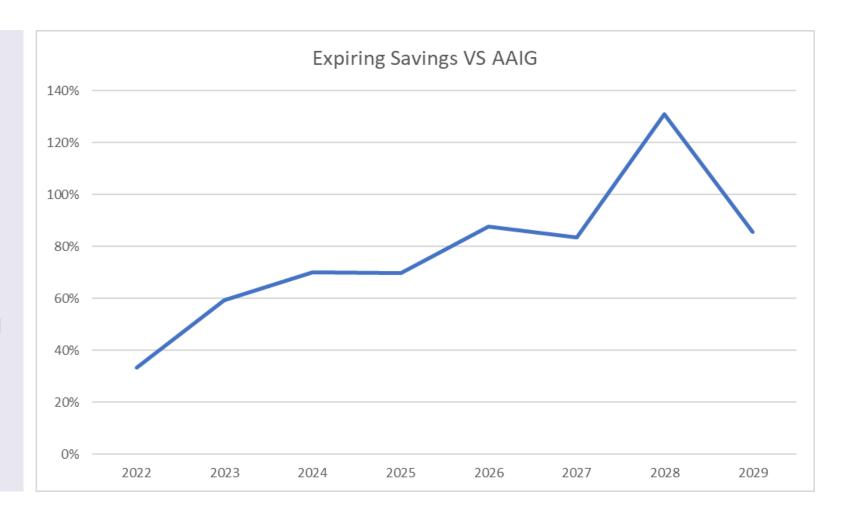
New Program Designs

- Business Energy Analyzer (BEA)
- Market Transformation

In response to these challenges, Plan 7 is carefully crafted to attempt to meet statutory goals; nonetheless, we face increased risk and uncertainty

Portfolio Challenges: Required Savings

- Plan 7 has the highest amount of expiring savings so far, so the savings required to meet the goal is increasing.
- This issue is compounded with previously stated challenges related to achieving savings.
- Controlling cost per kWh of savings will be critical to achieving goals.



Planning Process

Elder Calderon

Manager, Energy Efficiency Strategic Planning and Evaluation

External Inputs:

- **Stakeholder Recommendations**
- **IC Inputs**





Starting Point: 2024 Base Year Program **Projections**

Input from internal/external stakeholders

Optimize portfolio & Internal Potential Study

Joint Utility Potential Study Calibration

Today: Deliver Plan to Stakeholders

Internal Inputs

- **PM Interviews**
- **Measure Mix Optimization**
- TRM Updates
- 2025 NTG Values



ComEd Potential Study Results & Comparison

Elder Calderon

Manager, Energy Efficiency Strategic Planning and Evaluation

Potential Study: Scenarios

MAP

Maximum Available Potential

- Assumes 100% incentive for incremental or full cost
- Budgets include non-incentive costs based on historical non-incentive cost per unit of savings by program type
- Adoption curves influence the timing
- No statutory limits
- Savings and TRC influenced by NTG in MAP and below

RAP

Realistic Available Potential

- Applies historical/ typical incentives to measures
- Budgets include non-incentive costs based on historical non-incentive cost per unit of savings

SMAP

Statutory Maximum Potential

- Statutory limits applied to RAP
- Electrification capped at 10% savings for 2026-2029 and 15% 2030+ (but never exceeds 3% because electrification budget capped at 20% of IE budget)
- Budgets capped at \$133M for 4 years, then increase by inflation
- \$40M to IE



STIP

Stipulated Available Potential

- Stipulation limits applied to RAP
- Electrification
 capped at 5%
 savings for 2026
 and allowed to
 grow to 15% by
 2040 (but never
 exceeds 6%
 because
 electrification
 budget capped at
 20% of IE budget)
- Budgets capped at \$1,714M for 4 years
- \$100M to IE



STIP+

Stipulated+ Available Potential

- Stipulation limits applied to RAP
- Electrification capped at 5% savings for 2026 and allowed to grow to 15% by 2040
- Budgets capped at \$1,714M for 4 years
- \$100M to IE
- 80% of spending towards cheapest measures; 20% towards all other measures



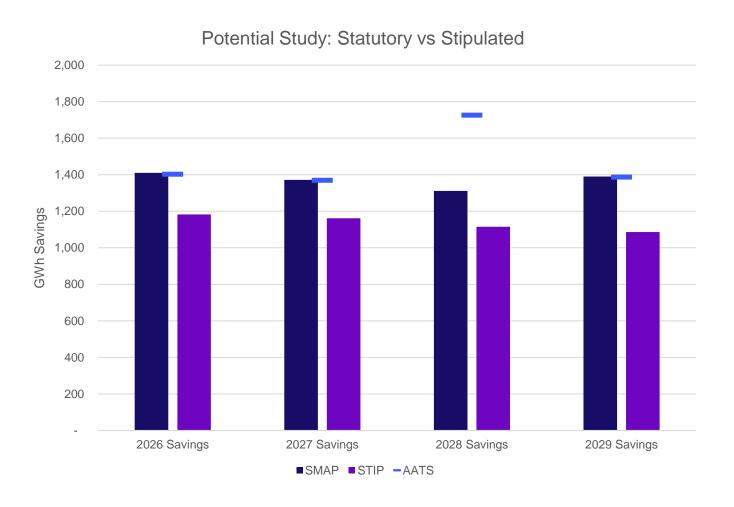
STIPWx

Stipulated with Weatherization

- Residential Only
- Stipulation limits applied to RAP
- Electrification capped at 5% savings for 2026 and allowed to grow to 15% by 2040
- Budgets capped at \$1,714M for 4 years
- \$100M to IE
- Shell measures are prioritized

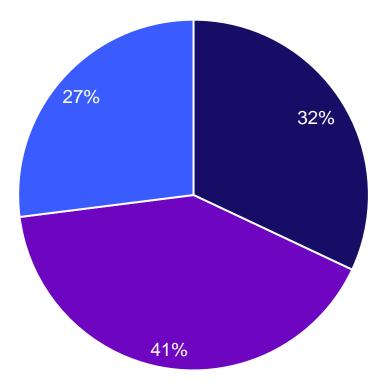


Is there enough Market Potential?



- Plan 6 stipulated requirements would provide significant savings barriers to achieving savings goals.
- Potential study prioritizes measure selection based on TRC cost effectiveness rather than a more accurate measure: acquisition (\$/kWh savings) costs.
- Acquisition cost-based measure ranking approach increases potential in SMAP.

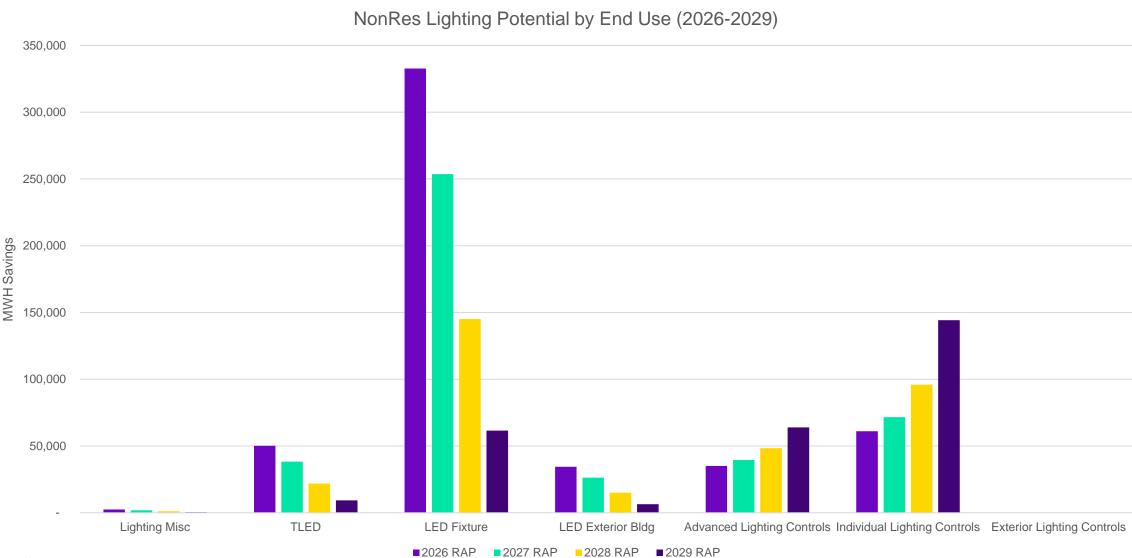
Key Methodological Assumption: Lighting Potential



- Remaning Int Lighting Long Term Adoption Opportunity (Lamps/Fix)
- Avg, Int existing EE Saturation
- Unattainable EE

- Potential study finds that lighting is only
 41% saturated.
- Lighting potential incorporated achieving savings from only the 32% sector.
- Clean Lighting Act will have significant impact on lighting market.
- Changes in market will open the remaining 27% of lighting potential.
- Midstream programs are best positioned to help capture changes in lighting market.

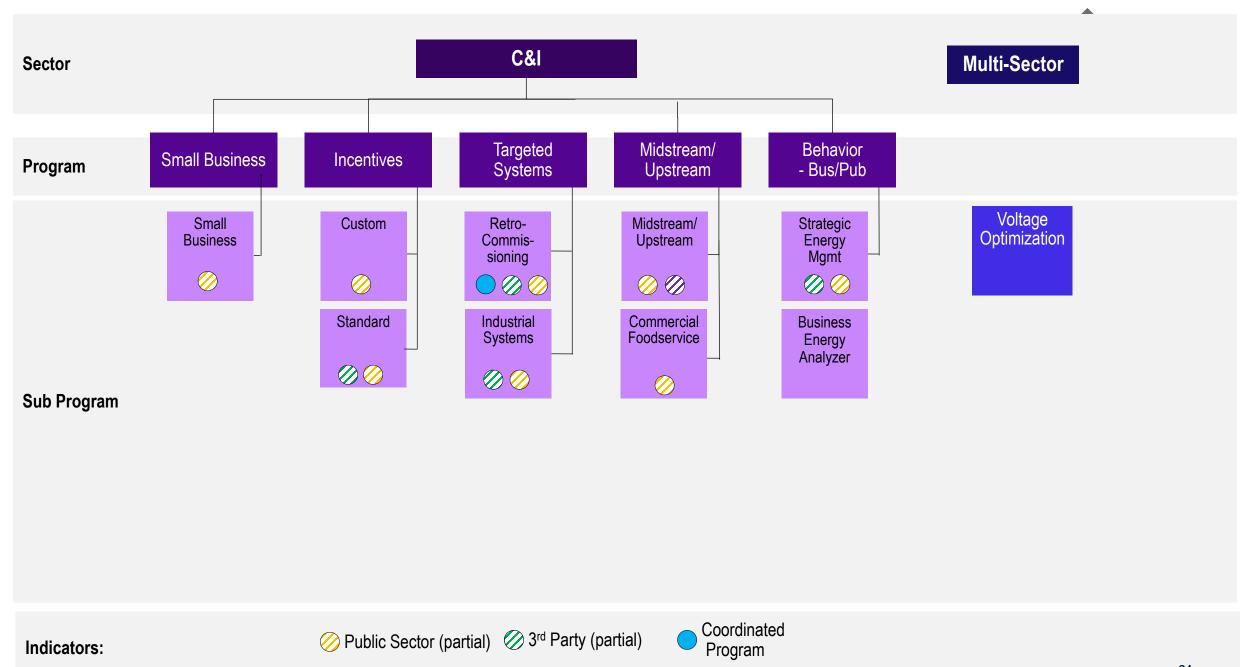
Lighting Potential: Fixtures, TLEDS and Controls

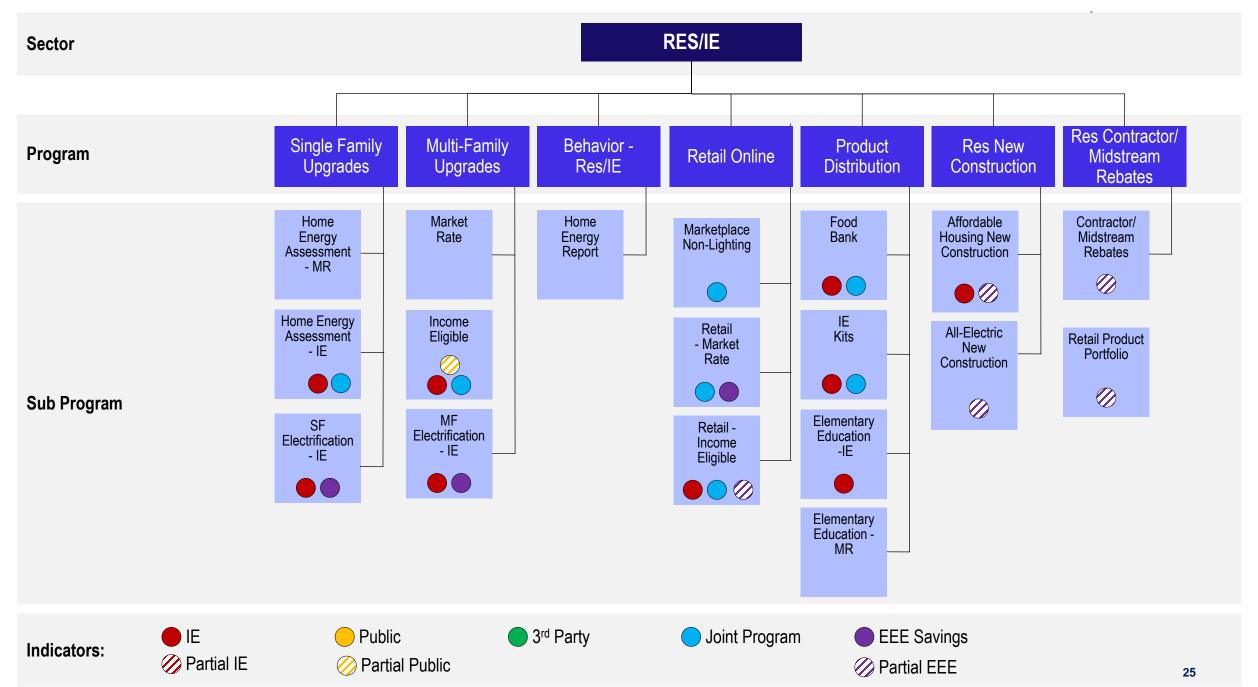


Plan 7 Portfolio Structure

Elder Calderon

Manager, Energy Efficiency Strategic Planning and Evaluation





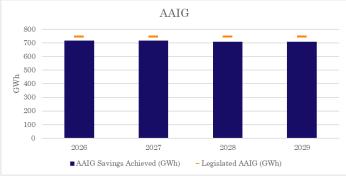
Portfolio Overview

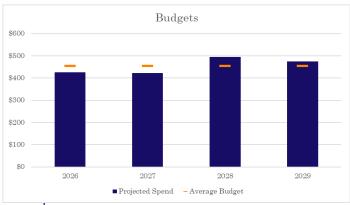
Elder Calderon

Manager, Energy Efficiency Strategic Planning and Evaluation

Portfolio Summary







	Plan 7			
	2026	2027	2028	2029
Savings Required CPAS (GWh)	14,857	15,604	16,351	17,098
Savings Achieved Toward CPAS (GWh)	14,989	15,706	16,416	17,126
CPAS Achievement (Achieved as % of Goal)	99%	99%	99%	99%
Legislated AAIG (GWh)	747	747	747	747
AAIG Savings Achieved (GWh)	718	718	710	710
AAIG Achievement (Achieved as % of Goal)	96%	96%	95%	95%
Average Budget	\$454M	\$454M	\$454M	\$454M
Projected Spend	\$426M	\$422M	\$495M	\$474M
\$ % of Average Spend	94%	94%	110%	104%
IE Spend Total	\$60M	\$60M	\$60M	\$60M
Total Expiring Savings (GWh)	-655	-622	-979	-640
WAML (Years)	13.2	13.2	13.3	13.2
Therms Claimed (% of Allowable)	100%	100%	100%	100%
EEE Savings (% of Allowable)	60%	58%	41%	41%
IE EEE Savings (% of EEE)	25%	25%	25%	25%

Program Summary: Savings

Savings (GWh)	Plan 7				
	2026	2027	2028	2029	
Residential and Income Eligible					
Additional Joint Program	9	9	9	9	
Behavior - Res/IE	89	81	89	74	
Contractor/Midstream Rebates	70	70	70	58	
Multifamily Upgrades	74	73	73	73	
New Construction	8	5	3	-	
Product Distribution	34	34	34	34	
Retail/Online	102	100	96	113	
Single-Family Upgrades	2	2	2	2	
Res/IE Total	386	375	376	363	
Business and Public Sector					
Behavior - Bus/Pub	45	45	45	45	
Commercial Food Service	2	2	2	2	
Incentives	264	226	305	232	
Midstream/Upstream	205	202	228	219	
Small Business	229	202	237	207	
Targeted Systems	104	105	106	107	
BEA	46	55	58	50	
Third Party	31	69	243	124	
Bus/Pub Total	927	907	1,223	987	
Multi-Segment					
Voltage Optimization	61	58	89	-	
ComEd EE Portfolio					
Portfolio Total*	1,374	1,340	1,688	1,350	

- Continued focus on comprehensive offerings within Multi and Single-family homes
- Novel third party idea to help fill in gaps for comprehensive C&I offerings
- Expanded lighting control savings through standard and small business programs
- Subsuming of New Construction C&I offering
- TLED offerings within midstream through 2029

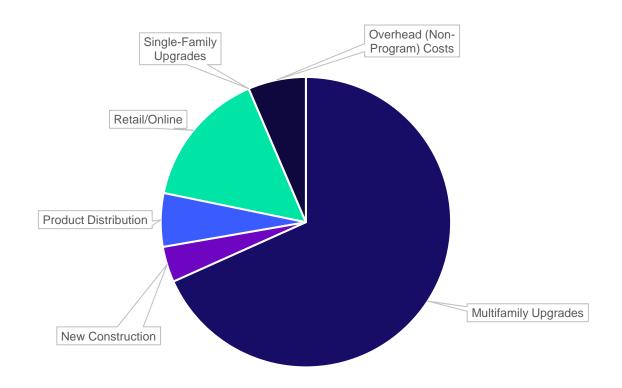
Program Summary: Spend

Spend (\$M)	Spending				
	2026	2027	2028	2029	
Residential and Income Eligible					
Additional Joint Program	\$0	\$0	\$0	\$0	
Behavior - Res/IE	\$6	\$6	\$6	\$6	
Contractor/Midstream Rebates	\$13	\$14	\$14	\$13	
Multifamily Upgrades	\$42	\$43	\$44	\$45	
New Construction	\$5	\$3	\$2	\$0	
Product Distribution	\$3	\$4	\$4	\$4	
Retail/Online	\$19	\$19	\$19	\$27	
Single-Family Upgrades	\$1	\$1	\$1	\$1	
Overhead (Non-Program) Costs	\$10	\$10	\$10	\$11	
Res/IE Total	\$99	\$100	\$100	\$106	
Business and Public Sector					
Behavior - Bus/Pub	\$10	\$10	\$11	\$11	
Commercial Food Service	\$1	\$1	\$1	\$1	
Incentives	\$85	\$72	\$92	\$77	
Midstream/Upstream	\$43	\$44	\$53	\$52	
Small Business	\$91	\$79	\$97	\$84	
Targeted Systems	\$35	\$36	\$38	\$39	
BEA	\$1	\$1	\$1	\$1	
Third Party	\$12	\$28	\$52	\$52	
Overhead (Non-Program) Costs	\$16	\$17	\$17	\$17	
Bus/Pub Total	\$294	\$288	\$361	\$334	
Portfolio Level Costs	\$2,026	\$2,027	\$2,028	\$2,029	
EE Reg Asset Labor - Portfolio	\$5	\$5	\$5	\$5	
Evaluation, Measurement & Verificatio	\$10	\$10	\$10	\$11	
Facility Assessment	\$1	\$1	\$2	\$2	
Market Development Initiative	\$2	\$2	\$2	\$2	
Portfolio Administration	\$8	\$8	\$9	\$9	
R&D Costs - Market Rate	\$6	\$6	\$7	\$7	
Total Portfolio	\$33	\$33	\$34	\$35	
ComEd EE Portfolio					
Portfolio Total	\$426	\$422	\$495	\$474	

- Increased funding in C&I programs to support comprehensive business offerings
- New C&I program offering: Business Energy Analyzer
- Continued focus on comprehensive offerings through Small Business program
- Balancing funding of electrification within high-cost Income Eligible programs to increase potential of lowcost market-rate offerings

Income Eligible Programs

Plan 7 IE Spending by Program (\$M)



- We must reduce spend on IE Programs.
- Lower-cost measures have been prioritized to extent possible.
- Remaining IE funding primarily focuses on comprehensive offerings.
- Cost can not be reduced within:
 - EESP Labor
 - Materials

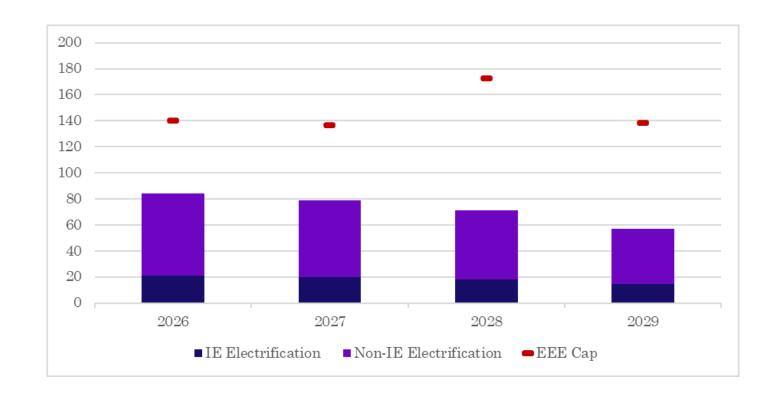
Portfolio Costs

	Spending (\$M)				
			4	Avg.	
Portfolio Level Costs	\mathbf{P}	lan 7	A	nnual	
EE Reg Asset Labor - Portfolio	\$	20	\$	5.0	
Evaluation, Measurement & Verification	\$	38	\$	9.5	
Facility Assessment	\$	8	\$	1.9	
Market Development Initiative	\$	7	\$	1.7	
Portfolio Administration	\$	34	\$	8.6	
R&D Costs - Market Rate	\$	28	\$	7.0	
Total Portfolio	\$	135	\$	34	

- Portfolio admin costs have been minimized to support increased program and incentive spend.
- Focus spend to producing savings to the extent possible.
- There is little to no margin within portfolio costs.
- R&D is critical to identify gap fillers for Plan 8.

Electrification

- Market Rate electrification has significant potential but is limited by the IE savings requirements.
- Income Eligible electrification is increasingly cost-prohibited with uncertain bill impacts to customers.
- As a result, the portfolio has limited electrification potential in Plan 7 and will not plan on reaching statute cap in any year.



Plan 7 Coordination: Inflation Reduction Act (IRA)

- The ComEd planning team has dedicated extensive hours to understand IRA funding structures and coordinating with the implementing team at the IEPA
- ComEd agrees that IRA funds present an additional opportunity for project funding to customers and IRA rebates should be leveraged to the maximum extent possible
- Current rebate structure and IEPA timeline make braiding impossible
- Unknown attribution for Utilities limit resources for braiding efforts
- IEPA Request for Proposal (RFP) administration requirements limit utility involvement in implementation
- Plan 7 assumes IRA funds will supplement gas utility weatherization measures, reducing ComEd only spend in joint programs
- ComEd will continue to work with IEPA to identify funding leveraging opportunities

Inflation Reduction Act (IRA)

- IRA EE as ComEd Peak Load Reduction (PLR) resource.
- The ICC includes any energy efficiency measure not paid through the 8-103B portfolio to be included in the PLR portfolio.
 - ComEd must achieve incremental MW reduction goals for PLR as one of its performance metrics.
 - In order to avoid penalty, ComEd must achieve 50 MW incremental reduction potential annually.
 - Still significant uncertainty in the PLR space with an Order expected in December.
- Conceptually, believe ComEd could provide a higher incentive to IEPA after the fact for achieved savings than we could provide through braiding EE 8-103B funds.

Closing Remarks

Kim Swan

Sr Manager, Strategic Planning and Portfolio Management

Summary & Next Steps

- Draft Plan 7 gets ComEd close to statutory goals while taking on larger risks than previous plans. Key elements include:
 - CPAS goals close to being met (within acceptable risk levels to not seek reduction in goals)
 - Consolidated programs, to reduce customer confusion and administrative burden
 - Continued commitment to income eligible support, including in comprehensive programs and for multifamily customers
 - Movement of measures upstream and new savings opportunities
- Portfolio has risks Lighting, MT Savings, Balancing Electrification savings, Novel Third Party Approach, TRM changes
- Getting here has not been easy and margins are minimal; there is a narrow band in which goals can be within reach
- We look forward to hearing feedback from Stakeholders, and in the meantime, please do not hesitate to reach out with questions



Thank you

