



CY2022 FIRST QUARTER REPORT



ComEd has received the ENERGY STAR Partner of the Year Award for Sustained Excellence for the 10th consecutive year. ComEd customers have saved more than \$6.7 billion on energy bills and avoided 53 billion pounds of carbon through its energy efficiency programs.

Table of Contents

Residential Direct to Consumer Programs.....	4
Residential Channels Programs	6
Business Programs	8
Technical Programs.....	9
Engineering Programs.....	10
Voltage Optimization.....	11
Emerging Technology and Market Transformation.....	12
Marketing Education and Awareness.....	13
Plan 6 Stipulations	14
Total Resource Cost	18
Appendix	
Program Descriptions.....	19
R&D Summary.....	22

Portfolio Summary

197,292

Actual Net MWh YTD

1,749,060

CY2022 MWh Forecast

1,738,083

CY2022 MWh Filed Goal

\$50,374,694

Actual Spend YTD

\$427,470,991

CY2022 Spending Cap

PORTFOLIO

- Through Q1, the portfolio has achieved 11% of its 2022 forecast of 1,749,060 MWh and 11% of its 2022 filed goal of 1,738,073 MWh.
- Since its inception in 2008, the ComEd Energy Efficiency Program has saved ComEd customers over \$6.7 billion on their electric bills.

RESIDENTIAL IMPLEMENTATION

- Through Q1, residential programs have achieved 9% of its combined 2022 forecast of 460,215 MWh.
- Customers have received over 19,500 incentives, and over 5,700 homeowners and tenants have received free direct install products from assessments through Q1.
- Through Q1, income eligible programs have achieved 6% of their combined 2022 forecast of 215,423 MWh, not including converted therms.
- Over 2,200 income eligible homeowners and tenants have participated through Q1.

C&I IMPLEMENTATION

- Through Q1, business private sector programs have achieved 12% of their combined 2022 forecast of 755,822 MWh
- Business public sector programs have achieved 13% of their combined 2022 forecast of 133,887 MWh.
- Over 1,542 business private sector projects and 253 business public sector projects have been completed through Q1.

Residential Implementation Programs

Residential Direct to Consumer Program Highlights

- **Home Energy Savings - Home Energy Assessment (Market Rate and Income Eligible)** – Beginning this year, the Home Energy Savings program launched a unique offering with the focus of serving income eligible customers. Given this, the program worked to adapt existing enrollment tools to capture income information, which went live in March 2022. Income eligible customers receive all of the direct installation measures that market-rate customers do, in addition to smart thermostats and advanced power strips that are free for the customer. In Q1, the program struggled to fulfill demand based on staff shortages and is focused on hiring and onboarding additional energy advisors. In total, the program served 2,534 customers with assessments. The program struggled to fulfill demand based on staff shortages and is focused on hiring and onboarding additional energy advisors.
- **Home Energy Savings - Income Eligible Retrofits** – Braided Illinois Home Weatherization Assistance Program (IHWAP) projects are ahead of Q1 targets due to the Community and Economic Development Associations' (CEDA) strong start to the program year. In addition to CEDA, community action agencies (CAAs) including Tazwood, WCCCC, and Tri-County also completed braided projects in Q1. Non-braided retrofits had a slower start as the program brought existing and new installation contractor partners up to speed with 2022 program changes.
- **Multi-Family Energy Savings - Income Eligible** – The program had a slow start, with delays in final program applications becoming available and onboarding the Energy Efficiency Service Providers (EESPs) contractor network. There are 68 total registered EESPs, with 41% being diverse-certified. In an effort to increase program awareness, the program exhibited at the 2022 IL Affordable Housing Forum and developed a program overview flyer to explain the program benefits. In total in Q1, the program served 128 income-eligible buildings and 966 tenant units.
- **Multi-Family Energy Savings - Public Housing** – Q1 production consisted of weatherization (AC Covers) and lighting at Joliet Housing Authority, and the first phases of a large AC replacement project (900+ units) at a Chicago Housing Authority family site. The current Public Housing project pipeline totals over \$500K. Pipeline projects are in various stages of conversion, from identified to scheduled. Most pipeline or in-progress projects are capital measures, including AC replacements, heat pumps, and refrigerators.
- **Multi-Family Energy Savings - Market Rate** – The program had a slow start, with delays in final program applications becoming available and onboarding the Energy Efficiency Service Providers (EESPs) contractor network. The majority of Q1 projects were rollover projects from 2021. In total in Q1, the program served 151 market-rate buildings and 1,705 tenant units.
- **Home Energy Reports** – The preliminary report for the Low-to-Moderate Income (LMI) pilot was completed. The pilot ran from January 2021 – February 2022; a group of 228K LMI customers received a Weekly Usage Report, with a subset of reports including bill updates and a subset including bill updates and LMI program opportunities. The pilot resulted in an estimated 2,074 MWhs of total savings and \$228,000 in bill savings across the 14 months, with the report that included bill updates and LMI program opportunities performing the best in terms of savings. Additional analysis and final recommendation are under consideration.

Residential Implementation Programs

Program	Net MWh YTD	% Savings Achieved to Plan Savings Goal	Program Participation YTD	Unit Definition
Home Energy Savings – Market Rate Assessment	1,434	32%	2,094	Homes
Home Energy Savings – Income Eligible Assessment	353	3%	440	Homes
Home Energy Savings – Income Eligible Retrofits	894	7%	513	Homes
Multi-Family Energy Savings – Income Eligible	333	2%	Tenant Unit Direct Installation: 966 Building Upgrades: 30	Projects
Multi-Family Energy Savings – Public Housing	397	12%	Tenant Unit Direct Installation: 0 Building Upgrades: 8	Projects
Multi-Family Energy Savings – Market Rate	331	5%	Tenant Unit Direct Installation: 1,705 Building Upgrades: 17	Projects
Home Energy Report	24,482	27%	Home Energy Reports (print): 1,981,104 Home Energy Reports (email): 2,515,286 High Usage Alerts (unique customers): 478,325 Weekly Usage Reports: 2,436,433	Reports and Alerts

Residential Implementation Programs

Residential Channels Program Highlights

- **Retail - Market Rate** – The program ramped up during Q1 with a new implementation contractor that will continue to offer post purchase rebates, verified instant discounts, and markdowns at retailers across ComEd’s service territory. A new feature for 2022 is the ability to reach customers through Limited Time Offers (LTO’s) sent through email using data to select a target population. LTO’s may include smart thermostats, air purifiers, dehumidifiers, and room air conditioners and can be customized (incentives, quantity, partners, income eligibility, etc.) to create truly unique offers to connect with hard-to-reach or underserved customer segments.
- **Retail - Income Eligible** – ComEd will offer higher incentives for income eligible customers including air purifiers, bathroom fans, dehumidifiers, room air conditioners, smart thermostats, advanced power strips, and water dispensers. Customers will be able to take advantage of markdowns at select retail stores (based on zip codes) as well as targeted Limited Time Offers.
- **Product Distribution (Market Rate and Income Eligible)** –
 - **Food Bank Distribution** – The Food Bank offering partnered with several organizations in Q1 for in-person events such as Voices of Inspiration in Rockford. This event was a huge success, serving over 300 customers with a variety of energy saving products including night lights, bathroom aerators and back-up battery bulbs. This was the first event in Rockford for the Food Bank Program. The Food Bank offering also partnered with Hands of Hope for a community event that served over 300 customers in Romeville on March 19th.
 - **Income Eligible Kits** – Income eligible (IE) kits will be offered jointly in 2022 with the local gas utilities for the first time, with a target of distributing over 70,000 kits in 2022. Kits will include a variety of measures including faucet aerators, switch and outlet gaskets, LEDs, and weatherstripping. Income eligible customers can qualify for an IE kit through a partner Community Action Agency when qualifying for assistance programs.
 - **School Kits** – will be offered at both Market Rate and Income Eligible schools jointly with local gas utilities, with a target for distributing over 60,000 kits. Kits will include a variety of measures including LED light bulbs and night lights, switch and outlet gaskets, a showerhead, shower timer, and kitchen and bathroom aerators.
- **Residential New Construction** – Accepted 29 new applications during Q1 into the Affordable Housing New Construction program. The program team attended a ribbon cutting event for Monteclare Senior Residences of Englewood, a legacy project from 2017 that completed in 2021. The project is a 7-story apartment building with 102 affordable rental units for seniors, including 22 units for seniors making under 30% AMI.
- **Heating and Cooling** – Geo-thermal projects are having a good start to the year with several projects already pre-approved for incentives. In Q1, the program focused on on-boarding contractors and distributors. The program has provided a total of 309 incentives through March for high efficiency Heating and Cooling units.

Residential Implementation Programs

Program	Net MWh YTD	% Savings Achieved to Plan Savings Goal	Program Participation YTD	Unit Definition
Retail – Market Rate	2,135	2%	Home Products: 18,920 Lighting: 5,743	Appliances; Light Bulbs
Retail – Income Eligible	-	0%	0	Units*
Product Distribution – Market Rate	7	1%	312	School Kits
Product Distribution – Income Eligible	10,671	8%	203,664	Bulbs and weatherization measures
Residential New Construction – Affordable Housing	261	14%	3	Projects
Residential New Construction – All Electric	-	0%	0	Homes
Heating and Cooling – Midstream/ Rebates	190	4%	309	Units

* YTD progress for Retail Income Eligible has been slow to report.

C&I Implementation Programs

Business Program Highlights

- **Small Business (Private and Public)** – Q1 started with a slower than expected start due to project delays and lower than expected pipeline. As a way to encourage greater program participation, the program released a successful Q1 Public Early Bird campaign, which resulted in 183 projects forecasted to deliver 22 Net GWh when completed. Additional campaigns targeting private and public customers (schools, libraries, and distressed communities) are launching to market April through August 2022.
- **Standard** – Established a closed network of service providers consisting of 52 companies for increased program partnership. This is in addition to the existing 426 open network service providers. Created campaigns providing higher incentives to increase participation for distressed communities, schools, large projects, and for products made in Illinois.

Program	Net MWh YTD	% Savings Achieved to Plan Goal	Program Participation YTD	Unit Definition
Small Business	24,575	11%	978	Projects
Small Business – Public	5,268	13%	52	Projects
Incentives – Standard	21,475	10%	350	Projects
Incentives – Standard – Public	5,219	12%	161	Projects
Standard – ComEd Streetlights	467	6%	5	Projects

C&I Implementation Programs

Technical Program Highlights

- **Custom** – A new screening process has been developed and applied successfully. The screening form helps customers identify if their projects are a good fit for the Custom or New Construction programs and avoids project scope overlap between these two programs. Once a project is identified as a Custom project through the screening process, the customer will be notified to fill out and submit the Custom application.
- **Retro-Commissioning** – Strong start to the year with participation across all three program tracks (RCx Flex, MBCx, and VCx). The program welcomed two large 10+ MW customers participating in the Monitoring-Based Commissioning (MBCx) offering.
- **Industrial Systems** – A strong Q1 has achieved more than 25% of overall savings goals for 2022 which is ahead of last year's Q1 performance. Also, a digital marketing campaign began in Q1 with higher than expected “click through” to EE Industrial Systems website due to more targeted messaging.
- **Strategic Energy Management** – The SEM team identified returning customers needing a new site survey to identify quick wins and energy saving opportunities, with 42% of those surveys completed in Q1. Recruiting for SEM has been strong with 99 customers participating. Including three 10+MW customers.
- **C&I New Construction** – Completed training with 14 design firms on how to use the new on-line modeling tool (Sketchbox) and received positive feedback on the ease of use and features available with the tool. Currently 6 projects are enrolled under the High Performance Design incentive for meeting a green rating system (e.g., LEED, WELL, Living Building Challenge, Green Globes, Passive House).

Program	Net MWh YTD	% Savings Achieved to Plan Goal	Program Participation YTD	Unit Definition
Incentives – Custom	250	1%	5	Projects
Incentives- Custom – Public	1	<1%	1	Projects
Retro-commissioning – Private	4,185	11%	21	Projects
Retro-commissioning – Public	2,631	20%	11	Projects
Industrial Systems	12,082	27%	95	Projects
Midstream/Upstream – Private	25,688	15%	291,153	Lighting products; battery chargers; HVAC
Midstream/Upstream – Public	4,100	18%	87,233	Lighting products; battery chargers; HVAC
Strategic Energy Management – Private	-	0%	76	Participating Customers
Strategic Energy Management – Public	-	0%	23	Participating Customers
C&I New Construction – Private	381	4%	6	Projects
C&I New Construction – Public	68	5%	5	Projects

C&I Implementation Programs

Engineering Program Highlights

- **Facility Assessments/Operational Measures** – Operational measures are identified as a part of the Facility Assessment effort and are those measures that do not qualify for incentives but result in savings. Have built a 5 GWh pipeline in Q1. Operational measures typically take a few months to be implemented after identification, so the expectation is that we will see an increase in implemented operational projects for the remainder of the year.

Program	Net MWh YTD	% Savings Achieved to Plan Goal	Program Participation YTD	Unit Definition
Assessments – Private	28	1%	6	Projects
Assessments – Public	-	0%	0	Projects

Voltage Optimization

Voltage Optimization Highlights

- Savings below are equivalent to 34 million pounds of carbon dioxide reduction or removing 3,300 passenger vehicles driven each year.

Program	Net MWh YTD	% Savings Achieved to Plan Goal	Program Participation YTD	Unit Definition
Voltage Optimization	20,407 MWh	13%	4 stations; 52 feeders	Stations Activated; Feeders Activated

Emerging Technologies and Market Transformation (“R&D”)

R&D Highlights

The mission of the R&D team is to identify, test, validate, and integrate new energy-saving technologies and program delivery strategies into the ComEd Energy Efficiency Program so that it continues to meet customers’ needs and its energy savings goals cost-effectively.

- Please refer to the *R&D Summary* section in the Appendix for a summary of active Emerging Technologies and Market Transformation projects.

R&D Portfolio Summary 2022 Q1

Concept	Work Description	Partners	Customer Segment	End Date	Status Update	Web Link
Portfolio Integration and Market Adoption						
Affordable Housing New Construction Passive House	Integration of a PHUS+ incentive tier into the affordable housing new construction offering.	Slipstream	Income Eligible	2022 Q4	The Passive Building Pathway has four active projects enrolled; two are expected to begin construction later this year. The R&D team is providing marketing and incentive funding as well as evaluation support.	Link
Air Source Heat Pump Training	Series of educational activities designed to develop the EESP market for heat pumps.	Slipstream, CEE	Residential	2023 Q2	Hosted two live training webinars in February. Four webinars are now available on demand. The team has started scheduling collaborative train-the-trainer events with distributors and EESPs. An ASHP Contractor Toolkit is under development. Additional classes are being scheduled for 2022, with plans to migrate the offering to the EE portfolio (under the RCx program) mid-year.	Link
Building Operator Certification	Training program to support commercial building staff in identifying operational energy efficiency opportunities.	Midwest Energy Efficiency Alliance	Commercial	2022 Q4		Link
Cooling Tower Opportunities	Follow-on to the Cooling Tower Study with AWE/IPNNL to conduct further research into the market potential for salt-based ion exchange treatment for cooling towers.	TBD	Commercial	2022 Q2	The project team submitted their final report in mid-March and presented results to the R&D team. The next steps for further research and testing are being developed.	Link
Efficient Choice	Integration of new choice engine website into the residential portfolio.	Enervee	Residential	Ongoing	After transferring the website to the Channels team after a successful 2021 pilot, R&D is providing support on evaluation and portfolio integration.	Link
Efficient Elevator Systems	(In development) Modeling and testing energy savings, costs, and customer experience in real-world conditions.	TBD	Commercial	2022 Q2	Developing further analysis of the cost effectiveness calculations delivered earlier in the project to determine potential incentive levels for the measures studied.	Link
Electric Homes New Construction	Integration of all-electric homes standards into residential new construction offering.	Slipstream	Residential	2022 Q4	After transferring the EHNC pilot to the Channels team, this new offering is on track to meet goals for 2022 despite issues with the new housing market regionally. The R&D team is supporting on evaluation needs.	Link
Fan Energy Index Standard	(In development) Integration of savings algorithm to Illinois TRM and new savings opportunity for C&I offering.	TBD	Cross Cutting	TBD	The R&D Team is considering further research into program design approaches for achieving savings from the Fan Energy Index standard.	Link to previous project
Smart Pressure Independent Control Valves	(In development) Integration of new measure into Custom offering.	TBD	Commercial	TBD	The R&D team is considering further research on this measure, including potential additional field monitoring of a retrofit installation.	Link to previous project
Water Savings in Strategic Energy Management	Integration of water savings opportunities into existing SEM offering.	TBD	Commercial	TBD	Guidehouse submitted a draft evaluation report for review. R&D and SEM teams are determining next steps for integrating this concept into the portfolio.	Link

Marketing Education & Awareness

Events Q1

- **In-Person and Virtual Events:** 8
- **Interactions:** 1,320

Stipulations

Plan 6 Stipulations

As part of the Revised 2022-2025 Energy Efficiency & Demand Response Plan (Revised Plan 6), ComEd has agreed to report out on the following stipulations:

§ IV (6B) *Mapping of Assistance Needs and Targeting Delivery of Weatherization Services:* During the Plan 6 Period, ComEd will collect a variety of data for purposes of mapping areas of financial assistance needs and targeting energy efficiency and weatherization efforts. Data will be reported quarterly in the ICC-filed Quarterly Report and updates on targeting efforts will be provided in the ICC-filed Quarterly Report, and at least annually at joint SAG and Committee meetings, with commitment to seek input from interested stakeholders.

Q1 Updates

- During Q1, internal efforts are underway to formalize a lasting framework to improve reporting queries that support the future mapping of financial assistance needs and targeting of energy efficiency offerings, including weatherization. These efforts will build on the work ComEd has done in previous years and will include coordination and feedback from the SAG and LIEEAC (formerly IQAC).

§ IV (6D) *Pilot Connecting Customers with Payment Trouble to Energy Efficiency:* ComEd Energy Efficiency will work directly with relevant ComEd business units to create a pilot or program that recruits customers who are payment troubled (e.g., customers at risk of being disconnected; with high arrears) into its IE energy efficiency programs, with commitment to incorporate ideas and input from interested stakeholders on pilot design and modifications, as practicable. ComEd will direct its independent evaluator to perform an impact and a process evaluation of the pilot. ComEd will provide updates to the SAG and Committee in joint meetings on pilot progress and the evaluation results, and include updates in ICC filed Quarterly Reports, as appropriate.

Q1 Updates

- **Targeted EE Messaging for Customers in Need** – Prior to the launch of ComEd’s Energy Efficiency Plan 6, an initiative was developed to test opportunities to identify and help customers in need with a selection of relevant energy efficiency programs. The selection criteria for this initial group of targeted customers included recent receipt of financial

assistance (‘hardship’), lack of EE participation, and locations (zip codes) with a higher proportion of ‘hardship’ and historically low EE participation. As a result of the selection criteria, over 99k customers received a postcard mailer and/or an email providing details on the Energy Savings Kit, IE Retail Discounts, and Food Bank program offerings. During Q1 2022, a post-campaign analysis was completed which determined engagement rates from the email component with an open rate of 43% and a click-to-open rate of 3.5%. Additionally, over 3,400 targeted customers were recipients of Energy Savings Kits (IE Kits). Learnings from this campaign will be leveraged in future campaigns throughout Plan 6 to better identify, target, and serve customers in need, including payment troubled, with energy efficiency programs and services.

- **Smart Assistance Manager (SAM)** – The Smart Assistance Manager (SAM), launched in October 2021, is a self-service customer-facing digital tool designed to empower customers to take control of their energy decisions through personalized assistance utilizing data & analytics. SAM uses an “Assistance Finder” to collect customer specifics about their circumstances and preferences. Then, in combination with existing customer information and program eligibility requirements, SAM presents the programs and services which are a likely fit for that customer. Currently, SAM includes Financial Assistance, Energy Efficiency, and Demand Response programs within its set of potential recommendations. Since its launch, over 43,000 customers have utilized the tool helping to drive more sustainable customer bills and increased awareness and participation in the energy and financial assistance offerings.

§ IV (7-A,7-B) ComEd will track bill impacts and reduced energy burden based on deemed savings across all IE customers, for each IE offering. ComEd will also pilot ways to track actual bill impacts and reduced energy burden for a portion of IE Single-Family and Multi-Family customers, which will be for the purpose of facilitating follow up with customers to determine if actual savings were in line with projections. This pilot initiative and its associated data are for research and development purposes, and parties acknowledge that the pilot results are not intended or designed to inform changes to the IL-TRM. However, to the extent the pilot results are relevant and applicable, nothing in this Revised Stipulation would preclude consideration of the results in shaping future evaluation activities. ComEd will provide updates on this pilot in its ICC-filed Quarterly Reports, including, but not limited to, an overall comparison of

Stipulations

deemed savings projections with actual bill impacts broken out between Single Family and Multi-Family. ComEd will work with interested stakeholders at the SAG to define energy burden and discuss ideas for piloting the tracking of EE bill impacts and related reduced energy burden. The funds spent on the pilot(s) will be considered IE R&D funds.

Q1 Updates

- At the end of 2021, ComEd (in partnership with Nicor Gas, Peoples Gas and North Shore Gas) led an RFP to identify the chosen vendor for this research initiative, Resource Innovations. We now have a final scope of work, all the utility sponsors are under contract with Resource Innovations, and a project kickoff meeting is scheduled for late April. This research is expected to take place over Q2 and Q3, with deliverables completed in late Q3 or early Q4.

§ IV (8) Low Income Energy Efficiency Accountability Committee (“LIEEAC” or “Committee”) Facilitator Independence, Budget, and Process a) Section 8-103B(c) provides in part that “(t)he Illinois Commerce Commission shall oversee and have relevant staff participate in the committee”, that the committee shall have a budget of 0.25% of each utility’s entire efficiency portfolio funding for a given year, and that “(t)he budget shall be overseen by the Commission.” ComEd acknowledges that it will be an active participant in the LIEEAC, as required under Section 8-103B(c).

Q1 Updates

- The LIEEAC Statewide Leadership Committee elected to use an independent facilitator and has selected Future Energy Enterprises (FutEE). Throughout Q1, ComEd worked closely with FutEE and ICC Staff to develop the LIEEAC Facilitator draft contract and scope of work. Within the drafted contract is the required language providing the Commission the right to direct ComEd to terminate the LIEEAC Facilitator contract if the Commission determines the LIEEAC Facilitator was not abiding by the requirement in Section 8-103B(c) to be fair and responsive to the needs of all stakeholders involved in the Committee and/or was not acting independently. The draft Facilitator contract also provides the structure for the coordination and deliverables between ComEd and the Facilitator necessary to delivery the committee budget report and the reporting requirements set forth in Section 8-103B(c) of the Public Utilities Act, including new approaches or changes to program

approaches adopted by ComEd pursuant to the recommendations of the LIEEAC in future quarterly reports.

Stipulations

§ V (D-1b) ComEd commits to providing the following IE Multi-Family reporting metrics in its ICC-filed Quarterly Reports:

- Actuals (YTD)
 - 1) Participation – buildings by zip code and apartment units
 - 2) Spending – incentives, non-incentives, total
 - 3) Savings (1st year) – MWh, therms

Q1 Updates

- **Participation – buildings by zip code and apartment units**
 In Q1 of 2022, the Multi-Family Energy Savings program served verified income eligible (IE) and public housing (PH) multi-family properties in 47 unique zip codes throughout ComEd's service territory. In total, 137 IE and PH buildings participated with 966 tenant units receiving free products such as smart thermostats, LEDs, low flow showerheads and faucet aerators. The table on the right is a breakout of the number of buildings and tenant units served, by program component (income eligible, public housing) and by zip code.
 - *# of Building Participants (Income-Eligible & Public Housing):* Assuming each building under an account is participating, including both direct install and rebate projects with a date install of 2022.
 - *# of Apartment Units:* Each project with a project type of Direct Install represents a unit served.

Zip Code	# of Building Participants (Income-Eligible)	# of Apartment Units Served (Income-Eligible)	# of Building Participants (Public Housing)	# of Apartment Units Served (Public Housing)
60067	1	6	0	0
60085	2	10	0	0
60106	1	7	0	0
60131	1	8	0	0
60160	1	11	0	0
60171	3	4	0	0
60201	1	3	0	0
60202	1	2	0	0
60302	1	0	0	0
60406	2	0	0	0
60409	1	0	0	0
60411	1	4	0	0
60419	2	0	0	0
60432	0	0	1	0
60435	0	0	7	0
60438	2	4	0	0
60517	1	7	0	0
60607	1	3	0	0
60608	6	35	0	0
60612	2	6	0	0
60616	2	10	0	0
60617	4	14	0	0
60619	4	12	0	0
60620	7	251	0	0
60623	3	13	0	0
60624	2	6	0	0
60626	2	4	0	0
60628	1	5	1	0
60629	2	10	0	0
60637	2	6	0	0
60638	1	3	0	0
60639	1	10	0	0
60640	1	13	0	0
60644	12	66	0	0
60645	3	6	0	0
60647	1	23	0	0
60649	6	67	0	0
60651	2	12	0	0
60659	2	10	0	0
60660	1	31	0	0
60707	2	69	0	0
61008	8	55	0	0
61107	5	55	0	0
61108	3	19	0	0
61109	13	44	0	0
61111	5	15	0	0
61114	3	27	0	0

Stipulations

- **Spending – Incentives, non-incentives and 1st year savings by MWh and Therms**

In total in Q1, the Multi-Family Energy Savings program allocated \$314,933 in ComEd incentives for efficiency upgrades within income eligible and public housing buildings and achieved 743 net MWhs and 13,365 net therms (to be converted to MWhs). Below is a breakout of savings and spend by program component (income eligible, public housing).

- The incentive and savings data is specific to ComEd and not the full program (the gas incentives and savings have been removed.)

	Incentive Spend (\$)	Non-Incentive Spend	First Year Net MWh Savings Achieved	First Year Net Therms Achieved
Income-Eligible	\$ 230,310.33	\$ 607,402.00	330	13,365
Public Housing	\$ 84,622.71	\$ 138,679.00	413	0

Service Provider information. A landscape assessment of diverse businesses is planned for Q2, and the final roadmap deliverable is expected in Q3.

§ VIII (B-3) ComEd will report to the ICC in its ICC-filed Quarterly Reports on the progress of the Market Development Initiative (MDI) with the ICC-filed Annual Reports summarizing annual progress.

Q1 Updates

- This research will produce a roadmap to inform the launch and execution of ComEd’s Market Development Initiative (MDI) for 2022-2025. The aim of the MDI is to increase EE portfolio contracting opportunities for diverse business enterprises and CBOs and improve the diversity and inclusiveness of ComEd EE supplier workforce. Research vendor Griffin & Strong (with subcontractor Emerald Cities Collaborative) was selected via RFP in late 2021 jointly with Nicor Gas, Peoples Gas and North Shore Gas. In Q1 2022 ComEd and Griffin & Strong finalized their assessment plan and began interviews with internal and external stakeholders to inform a policy analysis. The team also completed necessary data requests on ComEd EE contractor and

Total Resource Cost

CY2022 New Measures

All measures in the table below were launched in CY2022.

Sector	Program	Measure	IL TRC	Justification for TRC < 1.00
Business	Standard	High Efficiency Hand Dryer	2.03	
Business	Standard	Ag Fan Thermostat Controller	26.24	
Business	Standard	Ag LED Indoor Grow for Light	6.01	
Business	Standard	Grocer Automatic Door Closer	2.74	
Business	Standard	Grocer VFD for Condenser Fans	0.87	This measure was brought over from the previous grocery program in order to provide customers and service providers with continuity of incentive opportunities.
Business	Standard	Switch Peripheral Equipment Consolidation	2.28	
Business	Standard	Chiller with integrated VSD	18.66	
Business	Standard	Oil-free Bearing Chiller	36.69	
Business	Small Business	Energy Efficient Hand Dryer	3.10	
Business	Small Business	Low/No Anti-Sweat Heaters for Coolers	0.24	This measure comes from the Standard offering, and the Small Business offering is testing if small business customers would also consider this measure when offered. Prior to offering this measure, service provider feedback indicated it could be a viable measure.
Business	Small Business	Low/No Anti-Sweat Heaters for Freezers	0.78	Same as above
Business	Small Business	Insulation of Bare Refrigeration Lines	3.92	
Business	Small Business	Beverage & Snack Machine Controls	0.44	This measure is newly created; however, it is a combination of three previously offered Small Business offering measures [Direct Install Reach-in (Novelty) Cooler Controls, Snack Machine Controls, and Beverage Machine Controls] which had to be merged into a single measure in 2022 to align with TRM v10.0. This is expected to be a viable measure for small business customers.

Appendix: Program Descriptions

Program Descriptions

Home Energy Savings (Single-Family Upgrades)

Home Energy Assessments (Market Rate & Income Eligible), Retrofits (Income Eligible)

Overview: Under the Home Energy Savings program, ComEd provides three offerings for single family residential customers: Home Energy Assessments (HEA) - Market Rate, HEA – Income Eligible, and Income Eligible Retrofits. These offerings are closely linked through a centralized intake process and coordinated customer journey. Single family includes single family detached, vintage homes (30+years), manufactured homes, condo units, townhomes, two-flats, and duplex. The program offers free assessments and installation of energy savings products such as LEDs, water-saving devices, water heater pipe wrap, advanced power strips and thermostats with income eligible customers receiving all products installed for free. Certain income-eligible customers also receive comprehensive weatherization services. The program is delivered jointly with the Northern Illinois Gas Utilities (Nicor Gas, People Gas and North Shore Gas).

Multi-Family Energy Savings (Multi-Family Upgrades)

Market Rate, Income Eligible, Public Housing

Overview: The Multi-Family Energy Savings (MFES) program is a single comprehensive program offering that provides a full range of multi-family energy efficiency services. The MFES program consists of three offerings for 2022: Income Eligible, Public Housing, and Market Rate. This program offers efficiency upgrades for multi-family properties, including gas and electric measures for tenant units and common areas. This program offering is delivered jointly with the Northern Illinois Gas Utilities (Nicor Gas, Peoples Gas, and North Shore Gas). Income Eligible, Public Housing, and Market Rate Property owners/managers who complete weatherization and other energy efficiency improvements enjoy reduced operating costs, increased comfort in tenant spaces, increased occupancy rates, and improved property value. Additionally, building tenants experience increased comfort and reduced energy costs.

Home Energy Reports

Overview: The Home Energy Report provides select residential customers with information on how they use energy within their households. Reports and the online portal include usage comparison to that of similar, nearby households, personalized energy efficiency advice, program promotions, and application of behavioral principles and social norms to drive adoption of energy efficient behaviors.

Retail

Market Rate, Income Eligible

Overview: ComEd offers residential delivery customers rebates on select ENERGY STAR® certified appliance, home products and lighting products. Deeper discounts are available to income eligible customers on select products via instant discount at retail locations within zip codes where at least 60% or more of the households are at or below 80% Area Median Income (AMI) or through customized discount channels to pre-qualified income eligible customers, like Limited Time Offers (LTOs)

Product Distribution

Food Bank (Income Eligible), IE Kits (Income Eligible), School Kits (Market Rate and Income Eligible)

Overview: Product Distribution includes kits (Market Rate and Income Eligible school kits and Income Eligible kits distributed through Community Action Agencies and other partners) and distribution of products through Food Banks, Food pantries and other partners. By providing free energy efficiency products and education distributed through trusted channels, ComEd can reach more customers, particularly those most in need and introduce them to the wide-ranging benefits of energy efficiency including reduced energy usage, reduced energy costs, improved their quality of life and reduced environmental impacts.

Residential New Construction

Affordable Housing New Construction, Electric Home New Construction

Overview: Residential New Construction consists of two offerings for 2022: Affordable Housing New Construction (AHNC) and Electric Homes New Construction (EHNC). The AHNC Program offering provides technical support and incentives for whole-building energy efficiency for new construction and major renovation projects to reduce the energy burden for income eligible households by lowering their potential monthly energy costs. The program supports developers building or providing major renovation to affordable housing buildings, including both single and multi-family projects. The program offering's incentives are based on the square footage of the areas serving income eligible tenants, while upgrade requirements apply to the full building. The Affordable Housing New Construction offering is delivered in partnership with Nicor Gas. The EHNC Program promotes high performance all-electric homes that allow ComEd customers to stack the benefits of all-electric energy efficiency, demand-response, electric vehicles, solar, and new rate structures. Program works with local builders and Home Energy Rating System (HERS) raters to ensure that new homes exceed the requirements of the state's energy code for increased energy savings.

Appendix: Program Descriptions

Heating and Cooling

Overview: ComEd offers Heating & Cooling incentives to ComEd residential delivery customers that replace existing heating and cooling equipment with qualifying, high-efficiency central air conditioners, air source heat pumps, ductless mini-split heat pumps, geothermal (ground source) heat pumps, furnace blower motors (ECMs), or smart thermostats. Measures including central air conditioning (CAC), air source heat pump, and ductless mini-split heat pumps, are offered through a distributor (midstream channel). Measures including furnace blower motors (ECMs), smart thermostats, duct sealing, CAC tune ups, air source heat pump tune ups, and geothermal heat pumps, are offered by Energy Efficiency Service Providers (contractors) to residential customers and are downstream measures (incentives paid to customers through the participating EESP). Also offered downstream are incentives for new and replacement geothermal heat pumps that involve full loop systems.

Small Business

Private, Public

Overview: Offers private and public sector small business customers cost-effective turn-key energy efficiency retrofit and replacement services. These customers are typically underrepresented in energy efficiency programs due to limited staff and resources, lack of capital, and leased instead of owned facilities. For 2022, the former stand-alone Small Business Kits and Public Buildings in Distressed Communities offerings have now been incorporated into the Small Business offering. 2022 promotional incentives for specific projects are offered in the following categories: Public sector Early Bird bonus, 100-200 kW peak demand, Virtual Energy Consultations, Public Libraries, Distressed Communities, Public schools, and Non-Lighting. Incentives are calculated based on a per unit basis.

Standard Incentives

Private, Public, ComEd Streetlights

Overview: The Standard Program provides monetary incentives to customers on a "Standard" fixed or per-unit basis. Standard offers incentives for common energy-efficiency improvements including: Indoor and outdoor lighting equipment (including networked lighting and LED streetlights), HVAC equipment (e.g., variable speed drives, chillers, roof-top units), commercial appliances including industrial and laboratory equipment, compressed air equipment, and Energy Management Systems (EMS).

Custom Incentives

Private, Public

Overview: The Custom Program identifies and implements site-specific and unique cost-effective energy efficiency opportunities that are not available via the Standard program.

Customized incentives based on per kWh basis and calculated for specific customer projects are offered. Measures include process efficiency improvements, IT equipment upgrades, process cooling, compressed air, VFDs on large motors, free cooling systems, refrigeration improvements, wastewater treatment plants, combined heat and power, and other measures not covered in the Standard offering.

Retro-Commissioning (RCx)

Private, Public

Overview: The RCx program provides customers with a fully funded engineering study to help business and public-sector customers optimize operations of existing building systems to reduce energy usage while continuing to maintain desired environmental conditions. Common energy conservation measures focus on control of HVAC and lighting using building automation systems. Typical participants include commercial office buildings, hospitals/health care facilities, and higher education buildings. RCx options include RCx Flex and a Monitoring-Based Commissioning. Each conduct an engineering study identifying ECMs.

Industrial Systems

Overview: The Industrial Systems program assists industrial customers to optimize and/or identify energy efficiency measures to improve the performance of the following systems or processes: Compressed air, process cooling, industrial refrigeration, water and wastewater treatment plant, process efficiency for heating and cooling in production.

Midstream/Upstream

Private, Public

Overview: ComEd provides point-of-sale discounts on commercial LED lighting and HVAC equipment, as well as industrial forklift battery chargers. Purchasers can verify customer and product eligibility through participating distributors using a full-service webtool, which reimburses distributors for incentives instantly provided to eligible purchasers.

Strategic Energy Management (SEM)

Private, Public

Overview: SEM helps organizations embed energy efficiency into their operations and company culture. Efforts ultimately allow for organizations to establish energy policies, improve operating efficiencies, and build budgets for energy efficiency efforts. SEM provides tools, coaching, and technical resources to support customers' energy goals through a year-long series of workshops and one-on-one coaching. It draws on principles of continuous improvement and organizational change and integrates Lean, Six Sigma, and

Appendix: Program Descriptions

other cost savings and operational excellence initiatives. SEM provides incentives for behavioral energy savings as well as operational measures.

C&I New Construction

Private, Public

Overview: The New Construction Program offering provides technical assistance, support for the Leadership in Energy and Environmental Design (LEED) rating system, and incentives for whole-building energy efficiency for new construction and major renovation projects to influence building design practices during the design and construction of new buildings, major renovations of existing buildings, and tenant build-outs in the C&I market. The program serves private commercial and industrial buildings (CINC) as well as public sector buildings (PSNC) through a combined offering. The New Construction Program offering is delivered in partnership with all the northern Illinois gas utilities.

Assessments

Private, Public

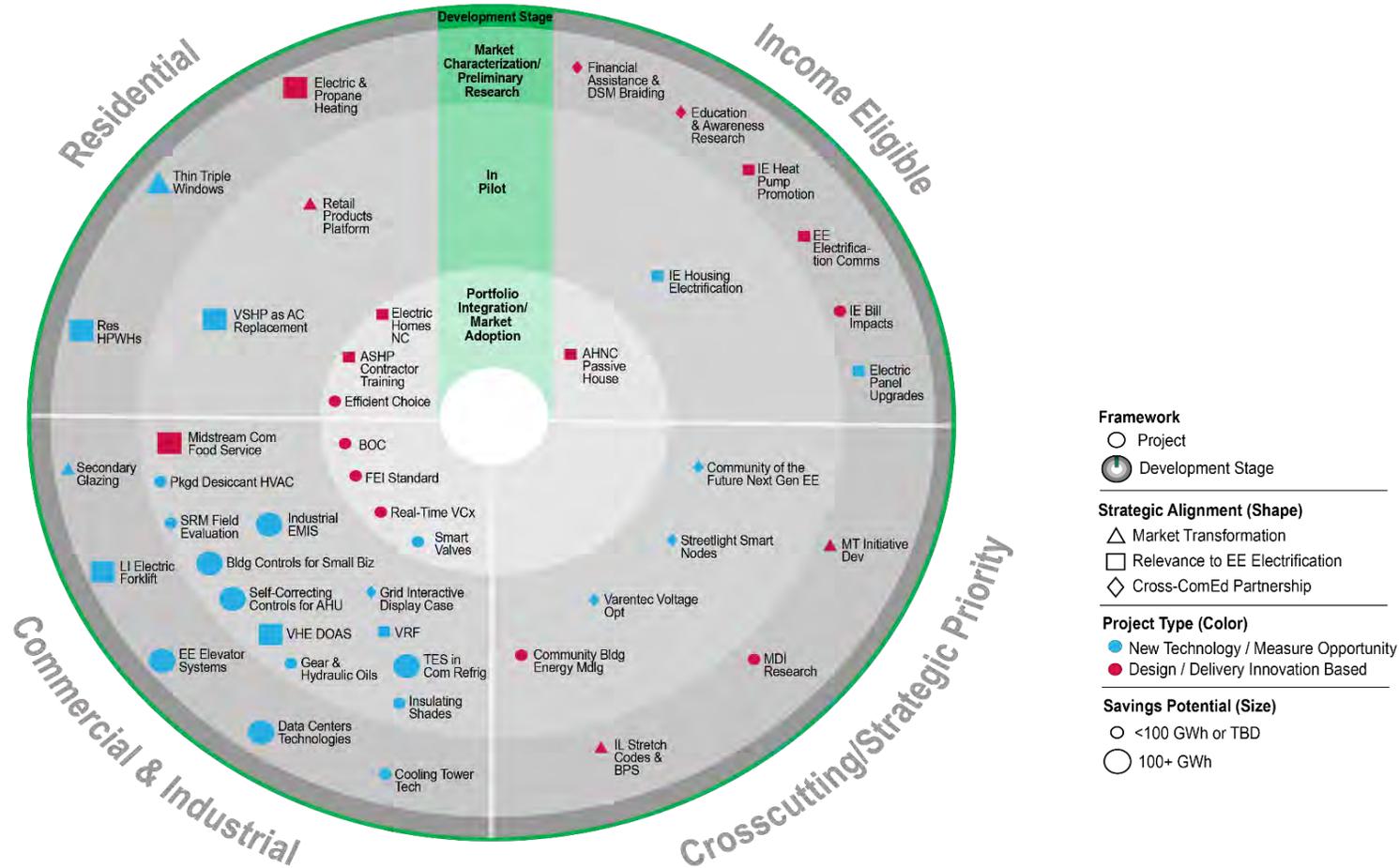
Overview: Assessments identify energy saving measures (capital cost and operational) and provide information on available financial incentives for energy efficient equipment upgrades and retrofits. Assessments save energy annually and lower operating expenses through implementation of recommended measures. The free Facility Assessment is a tool that helps customers take the first step toward making their facility more efficient by identifying opportunities to participate in the various programs within the EE portfolio. The assessments involve an initial site visit (in-person or virtual) where an engineer collects data regarding a facility. After the site visit, the engineer compiles all the opportunities with their estimated savings, costs, incentives, and simple paybacks into a report that is presented to the customer. Customers >10 MW (except for private commercial accounts that have opted out) are now eligible to have a free assessment and for the portfolio to claim operational savings measures.

Voltage Optimization

Overview: The Voltage Optimization Program deploys circuit voltage detectors and control equipment that will effectively assess and adapt the amount of voltage traveling across a power line at any given time. Once in place, these devices will allow ComEd to more precisely monitor, manage and deliver the voltage customers need. No additional effort by consumers will be required as the control equipment will automatically adjust to consistently deliver only the voltage each customer requires while providing energy savings.

R&D Summary

ComEd Energy Efficiency Program R&D Portfolio Summary 2022 Q1



This visualization provides an overview of the R&D Team's selected research concepts for 2022, organized by stage of research and relevant customer segment. Further information about each concept may be found in the following table.

R&D Portfolio Summary 2022 Q1

Concept	Work Description	Partners	Customer Segment	End Date	Status Update	Web Link
Portfolio Integration and Market Adoption						
Affordable Housing New Construction Passive House	Integration of a PHIUS+ incentive tier into the affordable housing new construction offering.	Slipstream	Income Eligible	2022 Q4	The Passive Building Pathway has four active projects enrolled; two are expected to begin construction later this year. The R&D team is providing marketing and incentive funding as well as evaluation support.	Link
Air Source Heat Pump Training	Series of educational activities designed to develop the EESP market for heat pumps.	Slipstream, CEE	Residential	2023 Q2	Hosted two live training webinars in February. Four webinars are now available on demand. The team has started scheduling collaborative train-the-trainer events with distributors and EESPs. An ASHP Contractor Toolkit is under development.	Link
Building Operator Certification	Training program to support commercial building staff in identifying operational energy efficiency opportunities.	Midwest Energy Efficiency Alliance	Commercial	2022 Q4	Additional classes are being scheduled for 2022, with plans to migrate the offering to the EE portfolio (under the RCx program) mid-year.	Link
Cooling Tower Opportunities	Follow-on to the Cooling Tower Study with AWE/PNNL to conduct further research into the market potential for salt-based ion exchange treatment for cooling towers.	TBD	Commercial	2022 Q2	The project team submitted their final report in mid-March and presented results to the R&D team. The Next steps for further research and testing are being developed.	Link
Efficient Choice	Integration of new choice engine website into the residential portfolio.	Enervee	Residential	Ongoing	After transferring the website to the Channels team after a successful 2021 pilot, R&D is providing support on evaluation and portfolio integration.	Link
Efficient Elevator Systems	(In development) Modeling and testing energy savings, costs, and customer experience in real-world conditions.	TBD	Commercial	2022 Q2	Developing further analysis of the cost effectiveness calculations delivered earlier in the project to determine potential incentive levels for the measures studied.	Link
Electric Homes New Construction	Integration of all-electric homes standards into residential new construction offering.	Slipstream	Residential	2022 Q4	After transferring the EHNC pilot to the Channels team, this new offering is on track to meet goals for 2022 despite issues with the new housing market regionally. The R&D team is supporting on evaluation needs.	Link
Fan Energy Index Standard	(In development) Integration of savings algorithm to Illinois TRM and new savings opportunity for C&I offering.	TBD	Cross Cutting	TBD	The R&D Team is considering further research into program design approaches for achieving savings from the Fan Energy Index standard.	Link to previous project
Smart Pressure Independent Control Valves	(In development) Integration of new measure into Custom offering.	TBD	Commercial	TBD	The R&D team is considering further research on this measure, including potential additional field monitoring of a retrofit installation.	Link to previous project
Water Savings in Strategic Energy Management	Integration of water savings opportunities into existing SEM offering.	TBD	Commercial	TBD	Guidehouse submitted a draft evaluation report for review. R&D and SEM teams are determining next steps for integrating this concept into the portfolio.	Link

R&D Portfolio Summary 2022 Q1

Concept	Work Description	Partners	Customer Segment	End Date	Status Update	Web Link
In Pilot						
Commercial Interior Insulating Shades	Testing energy savings and customer experience in real-world conditions.	IIT, Parata Solutions, Amatis Controls	Commercial	2022 Q1	The project team submitted their final report at the end of March. The R&D Team is reviewing their findings and determining next steps for the technology.	Link
Communities of the Future Next Generation HVAC Demonstration	Testing energy savings and customer experience in real-world conditions.	Slipstream	Commercial	2023 Q4	An installation of next-gen HVAC technology at a church in the Bronzeville neighborhood has been scheduled for this summer. Additional buildings in Bronzeville and in Rockford are in the design consultation phase.	Link
Community Building Energy Modeling	Testing applicability of software to support customer targeting.	Palmetto	Cross Cutting	Q2 2022	In Q1 the pilot team delivered efficiency upgrade scores for buildings in the study area (Rockford) along four upgrade dimensions: lighting, air leakage, wall insulation, and windows.	Link
Gear and Hydraulic Oils	Testing energy savings and customer experience in real-world conditions.	Leidos, ExxonMobil	Industrial	2022 Q4	Due to supply chain issues, accessing the necessary products to conduct the field evaluation has been a challenge. As a result, pilot recruitment has been paused until the issues are resolved. This will likely cause a delay in the pilot timeline.	Link
Grid Interactive Display Case	Testing energy savings and customer experience in real-world conditions.	National Renewable Energy Laboratory (NREL)	Commercial	2022 Q3	Results from laboratory evaluation are scheduled for delivery at the end of Q2.	Link
Income Eligible Housing Electrification	Testing energy savings, costs, and customer experience in real-world conditions.	Elevate and Slipstream	Income Eligible	2022 Q2	Pre-retrofit monitoring is complete and the project team has started to prepare the buildings for electrification retrofits. Shipment of the heat pumps was delayed due to supply chain issues, but full installation is expected to be complete in Q2.	Link
Industrial Energy Management Information System (EMIS)	Testing energy savings and customer experience in real-world conditions.	Leidos, EPS Energie	Industrial	2022 Q4	Installation is underway at 4 locations with an estimated completion date at the end of Q2. As equipment is installed, the project team is developing energy savings solutions for relevant facility components.	Link
Lithium Ion Electric Forklift	(In development) Testing energy savings and customer experience in real-world conditions and developing a scalable program design.	TBD	Commercial	TBD	The R&D team is currently working on updating the existing IL TRM forklift measure to allow for fuel switching. A customer demonstration site is planned for Q3 2022.	TBD
Midstream Commercial Food Service	Testing of the midstream program design for increasing participation in food service measures.	GTI, Frontier Energy	Commercial	2022 Q4	The pilot sponsors updated the implementation plan in Q4 2021 based on performance to date. Some incentives are being updated to accommodate electrification opportunities.	Link
Packaged Desiccant HVAC	(In development) Testing energy savings and customer experience in real-world conditions.	National Renewable Energy Laboratory (NREL)	Commercial	2022 Q2	Results from laboratory evaluation are scheduled for delivery at the end of Q2, at which point the team will determine a design for real-world testing.	TBD
Real-Time Virtual Commissioning (VCx)	Testing energy savings and customer experience in real-world conditions.	Power TakeOff	Commercial, Public Sector	2022 Q2	The project team has completed all real-time installations and additional controls, and are now compiling data on savings results.	Link
Retail Products Platform	Testing of a national Market Transformation program delivery model.	NEEA	Residential	2022 Q4	The project team continues to participate in ongoing discussions with Guidehouse and the SAG Market Transformation Working Group on details of the 2021 evaluation plan.	Link

R&D Portfolio Summary 2022 Q1

Concept	Work Description	Partners	Customer Segment	End Date	Status Update	Web Link
Self-Correcting Controls for Air Handling Units	(In development) Testing energy savings and customer experience in real-world conditions.	TBD	Commercial	TBD	The R&D team is currently scouting large commercial real estate owners for a potential field study using AHU controls.	TBD
Smart Controls for Small and Medium Commercial Buildings	Testing a two-tiered energy management system offering for small business customers.	Resource Innovations	Commercial	TBD	Determining next steps for a pilot to test new energy management systems measures through the Small Business offering.	Link to previous project
Smart Nodes	(In development) Testing energy savings in real-world conditions.	TBD	Public	TBD	The R&D team is working with the ComEd Smart Grid team to finalize the pilot plan and cost estimates.	TBD
Switched Reluctance Motors	Testing energy savings and customer experience in real-world conditions.	Slipstream, Turntide	Commercial	2022 Q1	The project team submitted their final report at the end of March. The R&D Team is determining next steps for the technology.	Link
Thermal Energy Storage in Commercial Refrigeration	Testing energy savings and customer experience in real-world conditions.	Slipstream	Commercial	2022 Q3	The project team is discussing installations with a few potential site owners and aiming for at least one installation in Q2.	Link
Variable Refrigerant Flow HVAC	Testing energy savings and customer experience in real-world conditions.	Slipstream	Commercial	2022 Q3	The project team completed initial research on savings drivers and market potential. Monitoring at several test sites began in Q1, and more are expected to come online in Q2.	Link
Variable Speed Heat Pump as AC Replacement	Testing energy savings and customer experience in real-world conditions.	Center for Energy and Environment	Residential	2023 Q1	The project team has developed participation materials is now conducting contractor and customer recruitment. A small number of pilot installations have taken place.	Link
Very High Efficiency Dedicated Outdoor Air System	Testing energy savings and customer experience in real-world conditions.	IMT, Slipstream, Ventacity	Cross cutting	2023 Q4	Customer sites are in the process of design and modeling for eventual installations and monitoring, and agreements have been reached with several participants for installations in 2022. As these are whole system replacements at larger buildings, the recruitment and installation timeline is longer than usual.	Link
Voltage Optimization (Varentec/Sentient)	Testing installation needs and energy savings in real-world conditions.	Sentient Energy (formerly Varentec)	Cross cutting	2022 Q4	All hardware units were successfully installed by early Q1 (Crystal Lake, Chicago South and Bolingbrook). Monitoring and testing will take place through at least Q3 2022.	Link

R&D Portfolio Summary 2022 Q1

Concept	Work Description	Partners	Customer Segment	End Date	Status Update	Web Link
Market Characterization and Preliminary Research						
Income Eligible Customer Education & Awareness Research	(In development) Research best practices for increasing inclusiveness of EE programs.	TBD	Income Eligible	TBD	The R&D team plans to launch this research in Q2.	TBD
Electric & Propane Heating	(In development) Market characterization of ComEd's residential electric and propane heating customers.	TBD	Residential	2022 Q3	The R&D team plans to launch this research in Q2.	TBD
Energy Efficient Electrification Customer Communication Best Practices	Research of outreach tactics to provide customers with savings information.	ILLUME Advising	Income Eligible	2022 Q3	This project kicked off in March. The project team is obtaining necessary program information from ComEd and beginning to schedule interviews.	Link
Income Eligible Customer Financial Assistance & DSM Braiding	(In development) Assessment of financing and funding tools that may be available to support IE customers in participating in EE programs.	TBD	Income Eligible	TBD	The R&D team plans to launch this research in Q2.	TBD
Heat Pump Rating Representativeness	Research partnership to refine savings calculations for heat pumps.	NEEP	Residential, Commercial	2023 Q2	Project kicked off in February and the project team began testing at three residential field test sites.	Link
Home Electrical Panel Upgrades	Research on delivery models for a program regarding electrical panel upgrades.	Slipstream	Residential	2022 Q3	Finalized SOW for contracting.	Link
Illinois Stretch Codes & Building Performance Standard	Research to establish applicability and savings potential.	Slipstream, MEEA	Cross Cutting	2022 Q4	The research team continued outreach to municipalities across northern IL about long-term savings potential from stretch codes and building performance standards. They also continue to make progress on developing an attribution model to enable the measurement of savings.	TBD
Income Eligible Bill Impacts	Analysis of bill impacts of energy efficiency measures for income eligible customers.	Resource Innovations, Nicor, Peoples Gas/North Shore Gas	Income Eligible	2022 Q3	Finalized SOW for IE Bill Impacts Analysis project to be led by Resource Innovations in partnership with Nicor Gas, Peoples Gas and North Shore Gas. Project to kickoff in mid-April.	TBD
Income Eligible Heat Pump Promotion	(In development) Integration of new heat pump promotion strategies into existing income eligible and heat pump programs	Resource Innovations	Income Eligible	TBD	After delivering final report, the project team will continue working with ComEd and IHWAP to apply recommendations from study.	Link
Liquid Cooling in Data Centers	(In development) Characterization of data centers market and assessment of applicable measures.	TBD	Commercial	2022 Q4	An RFP for this research was released in February, and a project team will be selected in April.	TBD
Market Transformation Initiative Development	(In development) Identification and development of new market transformation initiatives.	TBD	TBD	2022 Q4	The R&D team is working internally and holding periodic discussions with partners such as Nicor Gas, Ameren, NEEA, Illume Advising, and Apex Analytics on new market transformation initiative concepts.	TBD
Market Development Initiative Research	Research to support development of a broad set of initiatives aimed at increasing diverse supplier utilization and associated workforce training.	Griffin & Strong P.C., Emerald Cities	Cross Cutting	2022 Q2	Finalized the study assessment plan in Q1 and the vendor has begun interviews with identified stakeholders. The diverse business landscape assessment is planned for Q2.	Link
Residential Heat Pump Water Heaters	Ongoing concept development to assess opportunities and barriers presented by heat pump water heaters.	TBD	Residential	TBD	The R&D Team is working with the Channels Team to finalize a strategy for integrating HPWHs into the residential portfolio starting in 2022 or 2023.	TBD
Secondary Glazing Systems	Research to establish savings potential and appropriateness for a Market Transformation program approach.	Slipstream, Nicor	Commercial	2022 Q1	The project team delivered a final report with qualitative insights into the state of the market. The R&D team is working with the gas utilities to determine whether to move forward with additional research.	Link

R&D Portfolio Summary 2022 Q1

Concept	Work Description	Partners	Customer Segment	End Date	Status Update	Web Link
Thin Triple Windows	Research to establish savings potential and appropriateness for a Market Transformation program approach.	Resource Innovations, Nicor	Residential, Commercial	2022 Q1	The project team delivered a final report with qualitative insights into the state of the market. The R&D team is working with the gas utilities to determine whether to move forward with additional research.	Link