

2022-2025 Evaluation Plan

Peoples Gas and North Shore Gas

April 13, 2022



Agenda

- Introduction to 2022-2025 evaluation activities and timeline
 - Key 2022 evaluation activities
- Program-Level Research
 - Impact
 - Net-to-Gross (NTG)
 - Process
 - o Income Eligible / Income Qualified
 - Market Transformation
- Portfolio-Level Research
- Budget Allocation
- Coordination
- Q&A + Feedback





Introduction

2022 to 2025 Portfolio Evaluation

The PGL and NSG Portfolios, 2022

Sector / Program	Peoples (Gas (PGL)	North Shore Gas (NSG)						
	Program Budget	Net Therms	Program Budget	Net Therms					
Income EligibleSingle FamilyMulti-Family	21% 22%	9% 9%	9% 7%	3% 2%					
ResidentialSingle FamilyMulti-Family	9% 13%	12% 23%	31% 5%	31% 5%					
Small / Mid-size Business	10%	17%	11%	11%					
C&I Sector	14%	24%	24%	43%					
Public Sector	10%	6%	11%	3%					
Commercial Food Service	1%	1%	2%	2%					
Program Total	\$23,672,525	9,083,594 Net Therms	\$3,343,155	1,700,096 Net Therms					



Introduction to 2022-2025 Evaluation

Program-Level Research

Gross Impact Research

• Conducted annually, all programs

Net-to-Gross (NTG) Research

 Conducted once per cycle for most programs

Process Research

 Conducted based on program need, cost, and joint opportunities

Market Transformation (MT)

- Advise statewide efforts
- Research and verification of implemented initiatives

Income Eligible

- Explore joint research opportunities targeting program outreach and delivery
- Conduct research

Portfolio-Level Research and Activities

TRM Update Support

- TRM v11, Q1 through Q3
- Prioritize support for future updates
- Refine NTG and MT protocols

Non-Energy Impacts (NEIs)

- Economic impacts model development (joint)
- Joint research on Societal, Utility, and Participant NEIs

Annual Reporting

- Verified savings and TRC
- Economic impacts

Collaboration

- With ComEd on joint programs and research
- Statewide

Key Activities for 2022

Program-Level

- Gross impact on all 2022 programs, starting mid-year, custom sampling 2022 Q3/Q4, End-of Year in 2023 Q1/Q2
- NTG for selected programs starting 2022 Q3
- Small research project for Non-Res New Construction NTG
- Income Eligible survey ongoing

Portfolio-Level/Statewide

- Finish 2021 and 2018-2021 reporting
- 2022-2025 Planning
- TRM v11 update participation
- Other research is under consideration and could begin 2022 Q2, Q3, or Q4



Program-Level Research

Summary of 2022-2025 evaluation activities and timelines

Overview of 2022-2025 Evaluation

Program-Level Research

Gross Impact Evaluation Research

Timing

- End-of-Year on all programs
- Larger programs and new measures receive mid-year review
- Parallel path / early review for large or complex custom projects

Methodology

- TRM-based measures verification
- Custom projects M&V protocols
- Consumption data regression

Approach

- TRM measures: Census review
- <u>Custom Projects</u>: File review on a sample, site M&V for a subset
- Consumption Data Regression: single project or population

NTG Research

Timing

- Once per cycle for most programs
- Change in program or market
- Prioritize need

Methodology

Apply statewide protocol in TRM

Approach

- On-line survey and / or telephone
- Free-Ridership survey close to participation, rolling interviews
- Spillover survey 12+ months after participation to allow for actions

Target

- Participating Customers
- Trade Allies
- Non-Participants

Process and Other Research

Timing

- Conduct based on program need, cost, and joint opportunities
- Can combine with NTG surveys

Methodology

Evaluation best practices

Approach

- Review program materials
- Often use survey research, on-line and / or telephone
- Interviews and focus groups
- Benchmarking
- Secondary research

Target

- Program managers, contractors
- Customers and Trade Allies
- Non-Participants

Impact Evaluation Timeline, 2022 Programs

A ativity	Torget		20	22		2023							
Activity	Activity Target		Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Interim Impact Review and	TRM-Based Measures			Interim Data									
Reporting	Sampled Custom Projects			Wave 1	Wave 2								
Annual Impact Evaluation and	Program-Level Impacts					2022 End of Year							
Reporting	Verified Portfolio Cost and Savings Results					20		2022					
Parallel Path Review	Large or Complex Projects in Pre-App Stage	Reviews occur when program brings project to evaluators											



Impact Evaluation

Program / Market Offering	TRM-Based Verification	Custom M&V	Custom Project Parallel Path Review	Interim Review Type
Income Eligible Programs				
Single Family				
SF Retrofits	$\sqrt{}$			TRM
Energy Education Kits	V			TRM
Home Energy Assessment	$\sqrt{}$			TRM
Income Eligible Kits	$\sqrt{}$			TRM
Multi-Family				
MF Retrofits	$\sqrt{}$	$\sqrt{}$	If Requested	TRM
MF Partner Trade Ally (PTA)	$\sqrt{}$			TRM
Income Eligible Kits	$\sqrt{}$			
Residential Programs				
Energy Education & Outreach				
Energy Education Kits	$\sqrt{}$			TRM
Home Energy Jumpstart				
Assessments and DI	$\sqrt{}$			TRM
Advanced Thermostats	$\sqrt{}$			TRM
Home Energy Rebates				
Space & Water Heating Rebates	$\sqrt{}$			TRM
Weatherization Rebates	$\sqrt{}$			TRM
Advanced Thermostats	$\sqrt{}$			TRM
Multi-Family Program				
Assessments and DI	$\sqrt{}$			TRM
Rebates: Prescriptive	$\sqrt{}$			TRM
Rebates: Partner Trade Ally	$\sqrt{}$			TRM
Rebates: Custom		$\sqrt{}$	If Requested	Q3, Q4 Samples
Gas Optimization		√	If Requested	Q3, Q4 Samples

Program / Market Offering	TRM-Based Verification	Custom M&V	Custom Project Parallel Path Review	Interim Review Type
Business and Public Sector Pro	grams			
Small/Mid-Size Business				
Assessments and DI	$\sqrt{}$			TRM
Rebates: Prescriptive/PTA	$\sqrt{}$			TRM
Rebates: Custom		$\sqrt{}$		Q3, Q4 Samples
C&I Programs				
Prescriptive Rebates	$\sqrt{}$			TRM
Custom Rebates		$\sqrt{}$	If Requested	Q3, Q4 Samples
Gas Optimization		$\sqrt{}$	If Requested	Q3, Q4 Samples
Strategic Energy Management		$\sqrt{}$	If Requested	
Coordinated Retro-Commissioning		$\sqrt{}$		Qrtly Sample
Coordinated New Construction		$\sqrt{}$		Q3 Sample
Public Sector Programs				
Prescriptive Rebates	$\sqrt{}$			TRM
Custom Rebates		$\sqrt{}$	If Requested	Q3, Q4 Samples
Gas Optimization		$\sqrt{}$	If Requested	Q3, Q4 Samples
Strategic Energy Management		$\sqrt{}$	If Requested	-
Coordinated Retro-Commissioning		$\sqrt{}$		Quarterly Sample
Coordinated New Construction				Q3 Sample
Commercial Food Service	$\sqrt{}$			TRM
				·



NTG Evaluation Timeline – Wave 1

Activity	Timing	2022						2023														
Interview program staff, design survey instruments	July to September 30	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan		
Prepare survey for fielding and launch. Field data collection lasts 4 weeks up to 5 to 6 months when rolling interviews are employed	October 1 to April 30																					
Evaluators analyze data and report NTG results	May 1 to July 15																					
Finalize all NTG research memos	July 15 to August 31																					
Evaluators present NTG recommendations to SAG and Utilities, best efforts to reach consensus	September 1 to September 30																					
Final consensus NTG ratios deemed	October 1																*					
New consensus NTG ratios in effect	January 1																			*		



NTG Evaluation Draft Timeline

PSO = Participant Spillover

NPSO=Non-Participant Spillover

			2022 2023							20	24			20		2026			
Program (s)	Target/Measures	Research	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Home Energy Jumpstart	Direct Install	FR, PSO									EFF								
Home Energy Rebates	Weatherization	FR, PSO									EFF								
Residential	Advanced Thermostats	FR, PSO									EFF								
Multi-Family	Partner Trade Allies	FR, PSO									EFF								
Comm. Food Service	Rebates	FR, PSO									EFF								
Non-Res New Constr.	All C&I and Public Sector	FR, PSO									EFF								
Home Energy Rebates	HVAC, Water Htg	FR, PSO													EFF				
Multi-Family	Prescr./Custom Rebates	FR, PSO													EFF				
C&I Programs	Custom Rebates	FR, PSO													EFF				
Strategic Energy Mgt	All C&I and Public Sector	FR, PSO													EFF				
Coordinated RCx	All C&I and Public Sector	FR, PSO													EFF				
Small/Mid-Size Bus.	Rebates	FR, PSO																	EFF
C&I Programs	Prescriptive/PTA Rebates	FR, PSO																	EFF
Public Sector	Prescriptive/Custom Rebates	FR, PSO																	EFF
Gas Optimization	All C&I and Public Sector	FR, PSO																	EFF
	Not to Cross Koy	Survey Desig	n/Sampl	le Prep															
	Net-to-Gross Key FR= Free-rideship	Fie	lding																



EFF

NTG Analysis and Reporting

Year NTG Effective

Market Transformation

1. The Evaluator's role in MT depends on the maturity of the initiative and the Companies' involvement

- Company and stakeholders are engaged in MT concept and strategy development of an initiative
 - Evaluators provide "as needed" support to the effort
 - Evaluators advise on key elements of the MT savings protocol of promising initiatives
 - Program Theory and Logic Model, Natural Market Baseline, Savings per Unit / Gross Market Potential, Market Progress Indicators,
 Data Collection, Attribution and Allocation
- Company implements an initiative and expects to claim savings
 - Evaluators conduct research and verification to estimate savings attributable to the Company following IL TRM
 Attachment C

2. PGL and NSG are engaged in

- Building Performance Standards
- Energy Code Advancement

3. MT is coordinated with Nicor Gas, ComEd, Ameren Illinois, Third-Parties, SAG

- Other initiatives are being developed, led by other parties
- Coordination is within Illinois and Nationally
- Evaluation for PGL and NSG will be coordinated with other evaluation teams.





Portfolio-Level Topics

Research, Budget, Coordination

Overview of 2022-2025 Evaluation

Portfolio-Level Topics

TRM Support and Research

TRM Update Support

- TRM v11, Q1 through Q3 2022
- Submit / review workpapers
- Participate in subcommittees
- Participate in late October "Evaluation Priorities" discussion led by TRM Administrator
- Refine NTG and MT protocols via Working Groups

TRM Research

- Prioritize by need, impact, and cost
- Several evaluation priorities identified in October 2021 are being considered: modest scope and budget, meaningful impact

Other Research Under Consideration

Opportunities to conduct joint research with ComEd, Ameren, Nicor Gas

- Income Eligible: Explore joint research opportunities targeting program outreach and delivery
- NEIs: Economic impacts model development
- <u>NEIs</u>: Research on Societal, Utility, and Participant NEIs
- Non-Participant Spillover: Residential, Non-Residential
- Program-Specific Topics

If non-joint, ensure that natural gas related topics are considered, if appropriate

Annual Reporting

Annual Reporting

- Verified savings and program costs
- Water savings, CO₂ reduction
- · High Impact Measures for TRM
- Cost-effectiveness TRC / PACT
- Joint-program TRC
- Economic impacts

Timing

- Q3 each year, when final data is available
- Q2 / Q3 2026 four-year summary

Ad Hoc Reporting

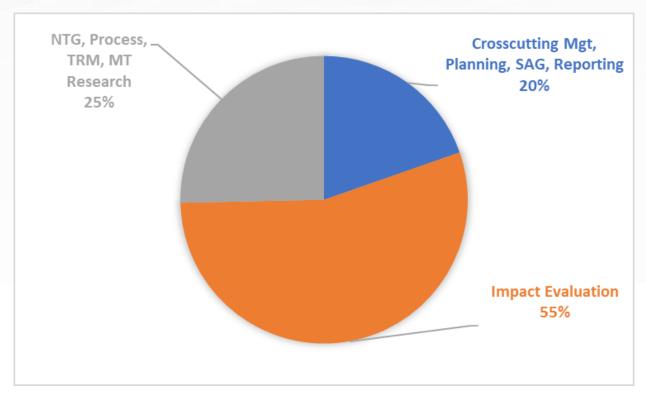
Evaluation Budget

1. Overall Budget is split between

- Impact Evaluation
- Crosscutting Activities (Management, Planning, and Reporting)
- Research (NTG, Process, MT, Other)

2. Prioritizing Resources

- Meet requirements for savings verification and reporting
- ICC Orders and SAG input
- Program contribution to portfolio net savings
- Program / Implementer needs and effectiveness
- Opportunities to leverage joint research with other utilities



Evaluation Budget - 4 Year: \$3,777,716

Per Program Year: \$944,429



Evaluation Coordination

1. Guidehouse coordinates with the other utilities and their evaluation teams on an ongoing basis – this includes Ameren, ComEd, and Nicor Gas

2. Gas / Electric Joint Program Evaluations

- Some jointly delivered programs are evaluated by a single-team, producing a single report
- Joint or coordinated programs and measures are evaluated separately in some cases
- Evaluators calculate and report joint TRCs

3. Coordination on Process and TRM Research Studies

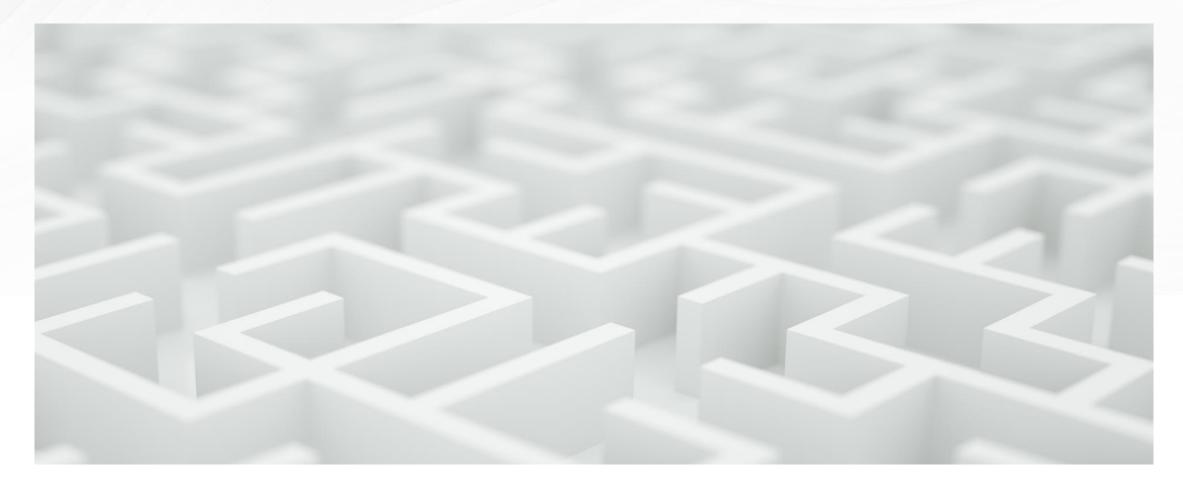
- TRM measure research considered on a case-by-case basis
- Process research is done jointly when it is beneficial to do so
- Statewide research

4. Coordination beyond specific programs occurs as follows

- SAG meetings, Illinois-wide issues
- Illinois NTG Framework and Protocol Working Group
- Illinois TRM Technical Advisory Committee
- Evaluator coordination calls (monthly)



Questions, Feedback



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