



## Memorandum

**To:** Nicor Gas

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**CC:** Elizabeth Horne, David Brightwell, ICC Staff; Celia Johnson, Illinois Stakeholder Advisory Group

**Date:** November 4, 2022

**Re:** Nicor Gas 2021 Energy Efficiency Portfolio Economic Impact Reporting

## INTRODUCTION

This memo presents results of the Guidehouse analysis of the 2021 economic and employment impacts produced by the 2021 Nicor Gas energy efficiency portfolio. This analysis was conducted in alignment with the Illinois Energy Efficiency Policy Manual (“the Policy Manual”) Version 2.0's requirement that each program administrator in Illinois must annually report estimates of the economic development and employment impacts of its energy efficiency programs.

The methodology used in this analysis is consistent with the methodology developed by the Illinois Stakeholder Advisory Group Non-Energy Impacts Working Group and used in the previously prepared 2018, 2019, and 2020 analyses.

## RESULTS

### Summary of Input Data

Table 1 presents a summary of input data used for the 2021 economic and employment impact analysis. All data was sourced from the evaluation team's 2021 evaluation of the Nicor Gas energy efficiency portfolio.

**Table 1. Summary of Economic and Employment Impact Analysis Input Data**

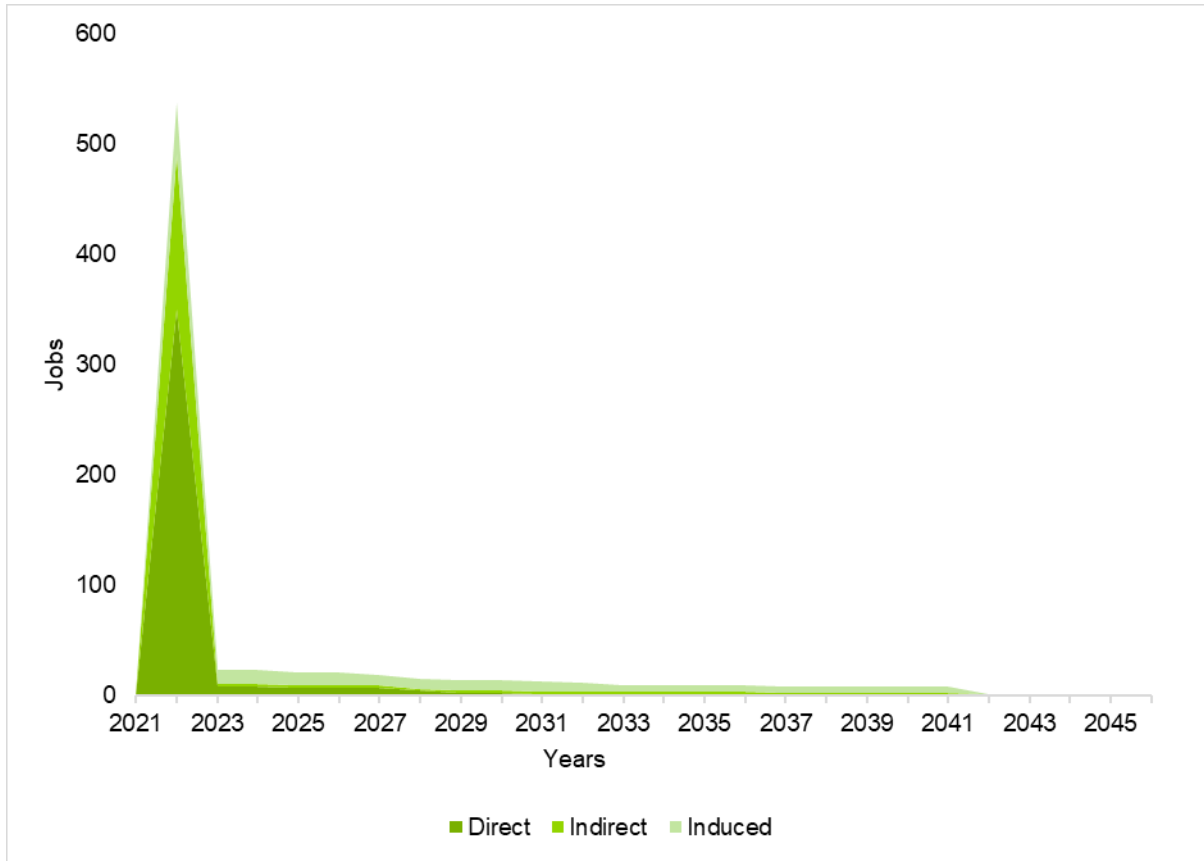
Impact Category	Amount (\$M)	Description of Impact	Time Period
Bill Savings	\$120M	Positive economic effect on ratepayers	2021-2045
Program Funding	-\$45M	Negative economic effect on ratepayers	Over WAML period (Gas: 2021)
Net Ratepayer Bill Savings	\$75M	Net economic effect on ratepayers	2021-2045
Lost Utility Fuel Expenditures	-\$8M	Negative economic impact on fuel production and transportation	2021-2045
Incentives and Rebates	\$23M	Positive economic effect on ratepayers	2021
Net Incremental Measure Costs	\$53M	Negative economic effect on ratepayers; positive economic effect on retailers and suppliers	2021
Program Administration Costs	\$22M	Positive economic effect on utilities	2021

Source: Guidehouse analysis of Nicor Gas Tracking data (2021)

## Employment Impacts

Figure 1 presents a visual summary of the employment impacts of the 2021 energy efficiency portfolio investments over time, separated into direct, indirect, and induced impacts. Because the portfolio produces long-term economic effects as a result of persisting energy savings, employment impacts produced are not confined to a particular year but occur over the 2021-2045 time period.

**Figure 1. Nicor Gas Energy Efficiency Portfolio Employment Impacts (2021-2045)**



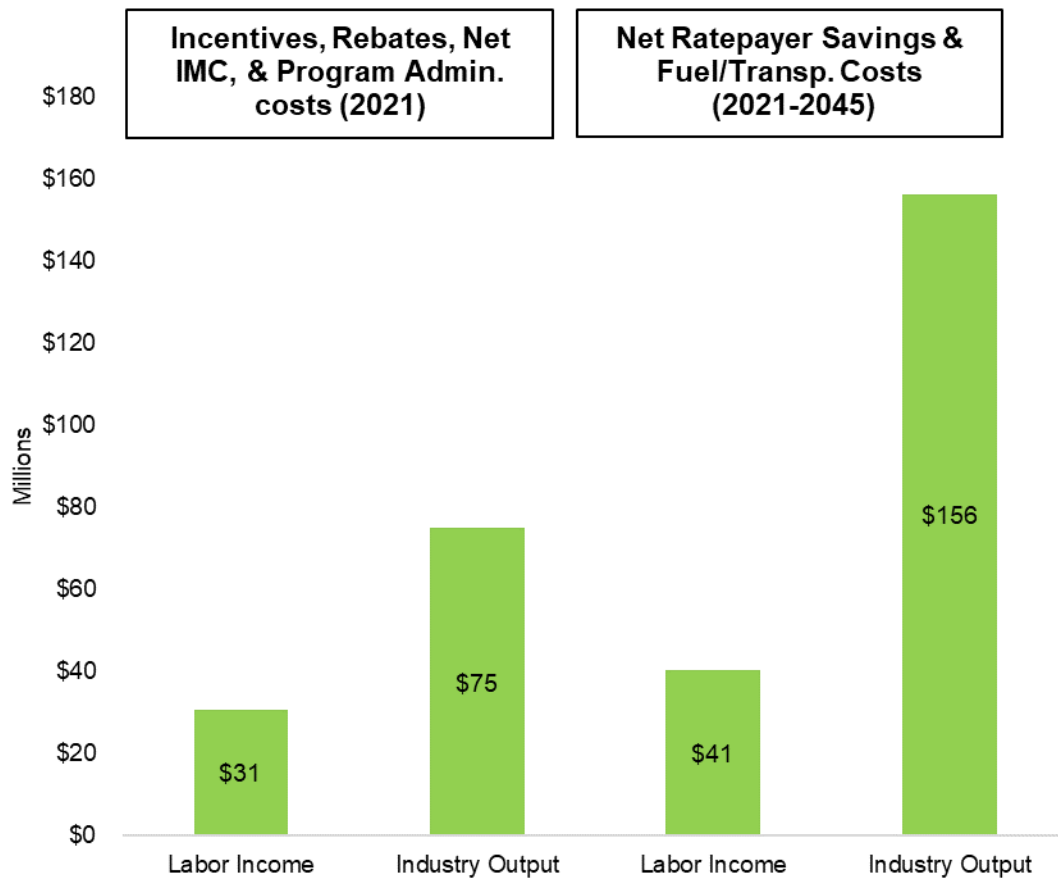
Source: Guidehouse analysis of Nicor Gas Tracking data (2021)

The large spike in impacts seen in 2021 results from initial spending triggered by the implementation and management of Nicor Gas's energy efficiency portfolio in calendar year 2021, including but not limited to program incentives and administrative spending and incremental measure spending resulting from the effects of the portfolio. The impacts beyond 2021 are derived almost entirely from the persisting effects of Nicor Gas's energy efficiency portfolio in the form of net ratepayer bill savings realized by those who were treated by or participated in Nicor Gas's 2021 programs. Impacts persist over a similar period as the cumulative persisting annual savings (CPAS) produced by the Nicor Gas energy efficiency portfolio.

## Industry Labor Income and Business Sales

Figure 2 presents direct, indirect, and induced effects on labor income and industry output from the 2021 Nicor Gas energy efficiency portfolio. The figure also separates these effects into those resulting from 1) program spending and program-induced spending (incentives, rebates, net incremental costs, program administration, fuel/transportation expenditures etc.), and 2) net ratepayer bill savings.

**Figure 2. Nicor Gas Energy Efficiency Portfolio Labor Income and Industry Output Impacts (2021-2045)**



Source: Guidehouse analysis of Nicor Gas Tracking data (2021)

Table 2 presents a summary of the cumulative industry labor income and industry output impacts (“economic impacts”) of Nicor Gas’s 2021 energy efficiency portfolio investments (2021-2045).

**Table 2. Cumulative 2021-2045 Industry Labor Income and Industry Output Impacts of 2021 Nicor Gas Energy Efficiency Portfolio Investments**

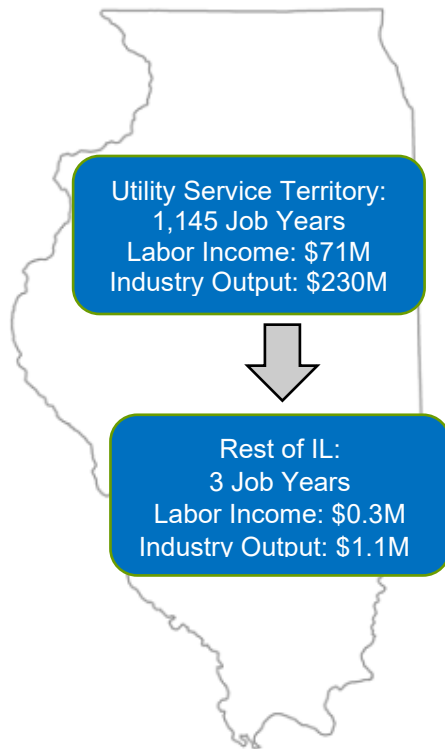
Impact Type	Labor Income	Industry Output
Direct	\$29M	\$77M
Indirect	\$13M	\$35M
Induced	\$29M	\$119M
<b>Total</b>	<b>\$71M</b>	<b>\$231M</b>

Source: Guidehouse analysis of Nicor Gas Tracking data (2021)

## APPENDIX

For comparison purposes, Figure 3 along with Table 3 provides the cumulative economic impacts and employment impacts in a format similar to that presented in the 2018 analysis. The evaluation team advises against use of employment impacts reported in job-years for ongoing reporting moving forward. As shown in Figure 1, employment impacts are long-term effects not confined to a particular year and reporting in job-years can mislead readers as to the effects produced.

**Figure 3. Cumulative Economic Impacts (2021-2045)**



Source: Guidehouse analysis of Nicor Gas Tracking data (2021)

**Table 3. Economic Impacts by Time Period (2018, 2019, 2020, & 2021)**

Time Period	Impact Type	Job Years			Labor Income			Industry Output		
		Utility Territory	Rest of State	State Total	Utility Territory	Rest of State	State Total	Utility Territory	Rest of State	State Total
2021 - 2045	Direct	415	0	415	\$28.6M	\$0M	\$28.6M	\$77.5M	\$0M	\$77.5M
2021 - 2045	Indirect	189	2	191	\$13.1M	\$0.15M	\$13.2M	\$34.8M	\$0.6M	\$35.4M
2021 - 2045	Induced	540	1	541	\$29.3M	\$0.11M	\$29.4M	\$118.1M	\$0.4M	\$118.5M
<b>2021 - 2045</b>	<b>Total</b>	<b>1,145</b>	<b>3</b>	<b>1,148</b>	<b>\$71.0M</b>	<b>\$0.3M</b>	<b>\$71.3M</b>	<b>\$230.4M</b>	<b>\$1.1M</b>	<b>\$231.4M</b>
2020 - 2044	Direct	383	0	383	\$24.0M	\$0.0M	\$24.0M	\$71.9M	\$0 M	\$71.9M
2020 - 2044	Indirect	174	2	176	\$12.0M	\$0.14M	\$12.1M	\$31.9M	\$0.6M	\$32.4M
2020 - 2044	Induced	202	1	203	\$10.9M	\$.06M	\$10.9M	\$29.7M	\$0.2M	\$29.9M
<b>2020 - 2044</b>	<b>Total</b>	<b>759</b>	<b>3</b>	<b>762</b>	<b>\$46.8M</b>	<b>\$0.2M</b>	<b>\$47.0M</b>	<b>\$133.4M</b>	<b>\$0.8M</b>	<b>\$134.2M</b>
2019 - 2043	Direct	778	0	778	\$69.0M	\$0M	\$69.0M	\$149.5M	\$0M	\$149.5M
2019 - 2043	Indirect	344	4	349	\$24.5M	\$0.26M	\$24.7M	\$65.0M	\$1.1M	\$66.1M
2019 - 2043	Induced	548	3	550	\$29.5M	\$0.14M	\$29.7M	\$82.6M	\$0.5M	\$83.1M
<b>2019 - 2043</b>	<b>Total</b>	<b>1,670</b>	<b>7</b>	<b>1,677</b>	<b>\$123.0M</b>	<b>\$0.4M</b>	<b>\$123.4 M</b>	<b>\$297.1M</b>	<b>\$1.6M</b>	<b>\$298.7 M</b>
2018 - 2042	Direct	283	0	283	\$19.M	\$0M	\$19.9M	\$56.0M	\$0M	\$56.0M
2018 - 2042	Indirect	133	1	134	\$9.3M	\$0.10M	\$9.4M	\$24.5M	\$0.4M	\$25.0M
2018 - 2042	Induced	218	1	219	\$11.8M	\$0.05M	\$11.8M	\$38.1M	\$0.2M	\$38.3M
<b>2018 - 2042</b>	<b>Total</b>	<b>633</b>	<b>2</b>	<b>636</b>	<b>\$40.9M</b>	<b>\$0.2M</b>	<b>\$41.1M</b>	<b>\$118.7M</b>	<b>\$0.6M</b>	<b>\$119.3M</b>
<b>2018 - 2045</b>	<b>Cumulative Total</b>	<b>4,207</b>	<b>15</b>	<b>4,223</b>	<b>\$281.7M</b>	<b>\$1.1M</b>	<b>\$282.8M</b>	<b>\$779.6 M</b>	<b>\$4.1M</b>	<b>\$783.6M</b>

Source: Guidehouse analysis of Nicor Gas Tracking data (2021)

**Table 4. Job Year Impacts by Time Period (2018, 2019, 2020, & 2021)**

Time Period	Direct Job Years		Indirect Job Years		Induced Job Years		State Total
	Utility Territory	Rest of State	Utility Territory	Rest of State	Utility Territory	Rest of State	
2021 - 2045	415	0	189	2	540	1	1,148
2020 - 2044	383	0	174	2	202	1	762
2019 - 2043	778	0	344	4	548	3	1,677
2018 - 2042	283	0	133	1	218	1	636
<b>2018 - 2045</b>	<b>1,859</b>	<b>0</b>	<b>840</b>	<b>9</b>	<b>1,508</b>	<b>6</b>	<b>4,223</b>

**Table 5. Job Impacts by Year (2021 – 2045)**

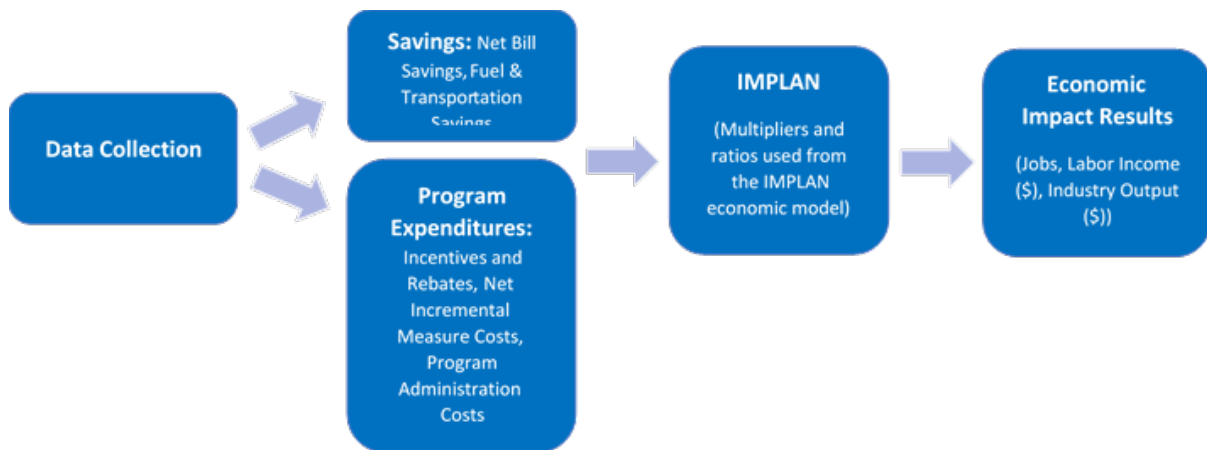
Year	Direct	Induced	Indirect	Total
2021	350	158	55	563
2022	8	4	40	52
2023	8	4	39	51
2024	7	3	38	48
2025	7	3	38	48
2026	7	3	33	44
2027	4	2	30	37
2028	2	1	29	32
2029	2	1	29	32
2030	2	1	28	31
2031	1	1	26	28
2032	2	1	18	20
2033	2	1	18	20
2034	2	1	18	20
2035	2	1	18	20
2036	1	1	16	18
2037	1	1	16	18
2038	1	1	16	18
2039	1	1	16	17
2040	1	1	16	17
2041	1	1	1	3
2042	1	<1	1	2
2043	1	<1	1	2
2044	1	<1	1	2
2045	1	<1	1	2
<b>Total</b>	<b>415</b>	<b>191</b>	<b>541</b>	<b>1,148</b>

## Economic Impact Assessment Methodology

The economic impact assessment for energy efficiency programs follows a three-step process (depicted in Figure 4):

- 1) Data collection of the economic activities of the energy efficiency programs
- 2) Economic modeling of these activities using IMPLAN
- 3) Analysis of the results – summarizing and assessing the economic measures (e.g. industry output, labor income, and jobs)

**Figure 4. Economic Impact Assessment Methodology**



Source: Guidehouse