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April 10, 2025

Board of Commissioners of Public Utilities
Prince Charles Building
120 Torbay Road, P.O. Box 21040
St. John's, NL A1A 5B2

Attention: Jo-Anne Galarneau
Executive Director and Board Secretary

Re: Electrification, Conservation and Demand Management Report for the Year Ended December 31, 2024

Please find enclosed Newfoundland and Labrador Hydro's Electrification, Conservation and Demand Management Report for the year ended December 31, 2024.

Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

Shirley A. Walsh
Senior Legal Counsel, Regulatory
SAW/rr

Encl.

ecc:

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Dominic J. Foley
Douglas W. Wright
Regulatory Email

Electrification, Conservation and Demand Management Report

For the Year Ended December 31, 2024

April 10, 2025

A report to the Board of Commissioners of Public Utilities

Contents

List of Appendices

1.0 Introduction

Electrification, Conservation and Demand Management ("ECDM") activities undertaken by Newfoundland and Labrador Hydro ("Hydro") include programs specifically targeted to Hydro's customers as well as joint utility programs offered by both Hydro and Newfoundland Power Inc. ("Newfoundland Power") (collectively, the "Utilities") through the takeCHARGE partnership. The purpose of this report is to provide a summary of the costs and initiatives implemented by Hydro, including Hydro's portion of costs related to the delivery of joint initiatives in 2024.

In 2024, Hydro's residential, commercial, and industrial ECDM programs yielded a total 1,019 MWh of annual incremental energy savings. Since 2009, Hydro has accumulated energy savings of 57,906 MWh through these programs.[1]

2.0 Coordination and Context

2.1 Utility Planning

Starting with the initial ECDM plan in 2008, the Utilities have designed and implemented a joint utility portfolio of programs for electricity customers within the province. Currently, programs offered through the joint utility model provide rebate options to incentivize energy and demand savings for residential and commercial electricity customers. The Utilities continuously evaluate customer conservation programs and periodically undertake third-party program evaluations to refine program design and support future planning.

ECDM activities for 2024 included the continuation of the residential and commercial rebate programs, the Isolated Community Energy Efficiency Program ("ICEEP"), the Industrial Energy Efficiency Program as further discussed in Section 3.0, and the delivery of government-funded programs as detailed in Section 2.2. The description of the programs offered during 2024 through the joint utility partnership, including those specific to Hydro's customers, are provided in Appendix A of this report.

2.2 Government Engagement and Programming

Building on its long-term partnerships, Hydro works directly with both the Nunatsiavut Government and the NunatuKavut Community Council on the delivery of energy efficiency programs in their respective

[1] Numbers may not add due to rounding.

communities. Building upgrades, direct install of energy efficient products, and the co-delivery of programs benefit the local communities and increases the effectiveness of Hydro's ECDM programming.

Hydro continues to have a positive working relationship with both the provincial and federal governments and remains engaged in dialogue on potential programming, policy, and partnership opportunities. Through these partnerships, Hydro delivered three government-funded programs to customers in 2024 – the Electric Vehicle Rebate Program, the Oil to Electric Rebate Program, and the Commercial Electric Vehicle Charger Rebate Program, which was funded through Natural Resources Canada's Zero-Emission Vehicle Infrastructure Program. These three programs are fully cost recovered and required no funds from ratepayers.

Additionally, Hydro secured $2.7 million in cost-shared funding through Natural Resources Canada's Green Industrial Facilities and Manufacturing Program ("GIFMP") to expand the ICEEP offerings to manufacturing facilities. This funding will help drive additional energy efficiency programming in Hydro's isolated communities in the coming years.

2.2.1 Electric Vehicle Rebate Program

The Electric Vehicle Rebate Program is intended to encourage the purchase of an electric vehicle ("EV") through a $2,500 rebate for Battery Electric Vehicles ("BEV") and a $1,500 rebate for Plug-in Hybrid Electric Vehicles ("PHEV"). In 2024, the program approved a total of 744 rebate applications; 396 were for BEV and 348 were for PHEV. The Electric Vehicle Rebate Program has certain eligibility requirements including a customer application post-sale, therefore it does not capture 100% of EV sales within the province; however, 744 EV sales in 2024 represents 2.2% of total vehicle sales in Newfoundland and Labrador.[2]

2.2.2 Oil to Electric Rebate Program

The Oil to Electric Rebate Program provides rebates to help customers transition oil-heated homes to electric-based space heating. In 2024, the program provided a total of 225 rebates for customers in Hydro communities who removed their oil heating system and replaced it with an electric alternative;[3] of these 225 conversions in Hydro's service territory, over 90% were heat pumps, which are the most

[2] Based on 33,326 new vehicle sales in Newfoundland and Labrador as reported by Statistics Canada.
[3] This program is offered under takeCHARGE with each utility being responsible for their respective customers. Previous versions of the program were administered exclusively by Hydro to all customers.

efficient alternative with the lowest impact on the electrical system. Year four of the program launched in April 2024 and was delivered by both Utilities under the takeCHARGE partnership.[4]

2.2.3 Commercial Electric Vehicle Charger Rebate Program

With the launch of the Commercial Electric Vehicle Charger Rebate Program in May 2022, qualified applicants can receive a rebate toward the cost to purchase and install qualifying Level 2 and Level 3 EV chargers at workplaces, in public places, or on street. Qualified applicants can receive a rebate for up to 50% of the costs to purchase and install eligible chargers, for a maximum of up to $5,000 per Level 2 charger, and up to $50,000 per Level 3 Direct Current Fast Charger. In 2024, the program funded the installation of 68 EV charger plugs, utilizing all remaining funds in the program. Since the beginning of this program, Hydro has rebated 118 new EV chargers across the province.

2.3 Electrification System Impacts

Hydro is closely monitoring the results of these government-funded programs delivered by the Utilities to better understand the potential impacts on the electrical system from electrification. Hydro's experience with these programs will continue to help inform demand management strategies and customer education opportunities to limit the cost impacts on the electrical system from electrification. Hydro has also worked closely with the provincial government on changes to program design, which is resulting in more customers selecting technology choices with lower system impacts (i.e., heat pumps versus electric resistance heat).

Data and trends seen through this programming continues to help inform Hydro's load forecasts for system planning purposes.

[4] Hydro delivered this program in year one and year two on behalf of the provincial government. With takeCHARGE delivering programming in year three and four, each utility is responsible for rebating customers in communities within its own territory.

3.0 2024 ECDM Program Costs and Energy Savings

3.1 Portfolio Level Program Costs and Energy Savings

Table 1 provides customer participation,[5] annual energy savings, non-coincident peak demand savings and Levelized Utility Cost ("LUC")[6] for each ECDM program in 2024.

Table 1: Hydro's 2024 ECDM Program Participation, Savings and LUC[7]

	Customer Participation (Customers)	Annual Energy Savings (MWh)	Non-Coincident Demand Savings (kW)	LUC (¢/kWh)
Residential Programs				
Insulation and Air Sealing	39	89	64	16.7
HRV[8]	-	-	-	-
Energy Savers Kits[9]	89	71	20	15.2
ICEEP (Residential)	124	327	9	16.4
Commercial Programs				
Business Efficiency Program	7	140	17	15.9
Isolated Systems Business Efficiency Program	-	-	-	-
ICEEP (Commercial)	61	392	53	12.8
Industrial Energy Efficiency Program	-	-	-	-
Total All Program	**320**	**1,019**	**161**	**15.7**

[5] The transaction units are specific to each program. The Insulation and Air Sealing, and Heat Recovery Ventilators ("HRV") Programs reflect approved rebates. The Energy Savers Kit Program participation indicates the number of kits that have been mailed to approved applicants. The ICEEP, both residential and commercial, denotes the number of residential and commercial customer premises that received direct installations. The Business Efficiency Program, Isolated Systems Business Efficiency Program, and Industrial Energy Efficiency Program reflect the number of completed retrofit projects.

[6] LUC is a method used to compare costs associated with conservation programs to the value of energy saved. The LUC represents the economic cost to the utility (cents per kWh) to achieve those energy savings. LUC is an industry metric that is calculated by discounting future energy savings resulting from conservation programs to a present value.

[7] Numbers may not add due to rounding.

[8] No HRV rebates were distributed by Hydro in 2024 as there were no certified HRV installers in Hydro's service area. Hydro's costs of the program are representative of shared costs with Newfoundland Power. Hydro will further evaluate this program for customers in its service area in the next 5-year ECDM plan.

[9] The decline in customer participation and energy savings relative to targets associated with the Energy Savers Kit program in 2024 were primarily due to the Canada Post strike coinciding with typical promotion and uptake in the program in the advance of the winter months.

In Board Order No. P.U. 33(2022), Hydro's proposed revisions to the existing ECDM Cost Deferral Account to allow deferral of ECDM costs incurred for the Labrador Interconnected System was approved beginning in 2023. Hydro's total ECDM expenses from 2020 to 2024 across all of Hydro's systems are described in Table 2.

Table 2: Hydro's ECDM Portfolio Costs ($000)[10,11,12]

	2020	2021	2022	2023	2024
General Costs					
Education	68	67	69	71	76
Support	46	47	23	24	25
Planning	142	135	138	142	151
Total General Costs	**256**	**249**	**230**	**236**	**252**
Program Costs					
Thermostats	41	58	19	4	7
Insulation and Air Sealing	96	83	70	145	141
HRV	3	4	2	7	17
Instant Rebates	47	102	36	68	-2[13]
Energy Savers Kits	-	-	17	59	51
Residential Benchmarking	9	-	-	-	-
Business Efficiency Program	60	77	83	112	154
Small Business Direct Install Pilot[14]	-	-	-	24	3
Isolated Systems Business Efficiency Program	23	43	18	29	11
ICEEP[15]	291	1,124	866	926	983
Industrial Energy Efficiency Program	-	14	14	18	44
Total Program Costs	**570**	**1,505**	**1,126**	**1,392**	**1,409**

[10] Numbers may not add due to rounding.
[11] The Insulation and Air Sealing, Business Efficiency Program and Industrial Energy Efficiency Program include costs in 2024 related to the Conservation, Demand Management, and Electrification Potential Study.
[12] The Thermostat and Instant Rebates programs concluded in 2023. Costs in 2024 reflect the close-out of these programs.
[13] This negative entry reflects an adjusted total which included an over-accrual from 2023 that was greater than the value of rebates granted in 2024.
[14] This pilot program concluded in 2024.
[15] The Isolated Systems Business Efficiency Program costs in 2024 include an energy model – see Section 3.5 for more details.

Based on Board Order No. P.U. 18(2016), the cost-effectiveness of ECDM programs is evaluated using the Total Resource Cost ("TRC") and Program Administrator Cost ("PAC") test. Table 3 and Table 4 provide the TRC and PAC test results for ECDM programs Hydro contributed to in 2024. Table 3 includes the TRC and PAC test scores for joint utility programs under the takeCHARGE partnership[16] for the combined Island Interconnected System. Table 4 includes cost effectiveness results for the Isolated Systems, which are provided by Hydro only.

Table 3: Island Interconnected System Combined ECDM Portfolio Cost-Effectiveness Results[17]

Program	TRC Test	PAC Test
Insulation and Air Sealing	4.1	4.3
HRV	1.6	2.1
Energy Savers Kits	3.7	3.7
Business Efficiency Program	1.6	3.1

Table 4: Isolated Systems ECDM Portfolio Cost-Effectiveness Results

Program	TRC Test	PAC Test
Isolated Systems Business Efficiency Program[18]	N/A	N/A
Isolated Community Energy Efficiency Program	1.5	1.0

3.2 Residential Programs

Hydro's residential portfolio included three programs offered jointly by the Utilities (Insulation and Air Sealing, HRV, and the low-income Energy Savers Kit) and one program offered solely by Hydro the ICEEP. Throughout 2024, Hydro continued to promote the takeCHARGE programs and technologies. Local advertising and building partnerships with retailers remain priorities and are integral factors in the promotion of customer rebate programs. Cumulatively, these programs yielded 487 MWh of savings in

[16] Joint utility programs include the Thermostats, Insulation and Air Sealing, HRV, Energy Savers Kit, and Business Efficiency Program.
[17] Results include the provincial portfolio results for the Island Interconnected System for both Utilities as well as the cost effectiveness scores from Hydro's Isolated Energy Efficiency Programming.
[18] As noted in Table 1, there were no energy savings under Isolated Systems Business Efficiency Program in 2024. Please see Section 3.3 for details of Commercial Energy Savings under Isolated Systems Business Efficiency Program in 2024.

2024, below Hydro's target of 776 MWh. This variance was primarily due to the Energy Savers Kit program offered to Hydro's interconnected customers, which was materially impacted by the Canada Post strike in the fourth quarter of 2024 and delayed customer communications to early 2025.

3.3 Commercial Programs

Hydro's commercial portfolio includes the Business Efficiency Program, offered jointly through the Utilities to provide prescriptive and custom rebates for commercial energy efficiency projects. Hydro also offers the Isolated Systems Business Efficiency Program to commercial customers in its isolated regions to provide technical support to identify economical energy efficiency opportunities and financial support for capital upgrades.

Additionally, Hydro provides direct installs, energy audits, and building upgrades to several commercial customers in isolated communities through the Isolated Community Energy Efficiency Program. Cumulatively, these programs yielded 532 MWh of energy savings for Isolated Commercial customers in 2024, exceeding Hydro's target of 510 MWh.

In addition to existing commercial programs, takeCHARGE concluded the Small Business Direct Install Pilot Program that launched in 2022. This pilot program was designed to help small businesses in select communities improve their energy efficiency through direct installations of LED lighting and water saving technologies. After the pilot concluded, it was determined that a program could not cost effectively be delivered to a wider customer base.

3.4 Isolated Community Energy Efficiency Program

The ICEEP targets residential and commercial customers in Hydro's isolated diesel systems. The objective of the program is to provide outreach, education, and energy-efficient products to residential and business customers in the diesel system communities within Newfoundland and Labrador. From 2012 to 2024, the program has installed over 175,000 energy efficient products in 875 business visits and over 8,683 home visits, achieving over 13 GWh in energy savings. The program has also increased local knowledge of energy efficiency, provided employment for 60 local residents, and improved the energy efficiency of local homes and businesses.

In 2024, residential ICEEP offerings included energy efficiency kits, smart and programmable thermostat installations, shifted energy smart water heater installations, heat pump installations, and offering the

federal government's Greener Homes Grant Program. Commercial offerings for ICEEP included lighting upgrades, energy audits, and piloting cost-shared commercial building upgrades. These programs combined resulted in 719 MWh of energy savings in 2024.

3.4.1 2024 Isolated Community Energy Efficiency Program – Residential

The residential energy efficiency kit program for 2024 involved distributing kits containing energy saving products to select eligible residents in the communities of Rigolet, Makkovik, and St. Brendan's. The kits consisted of water-saving technologies, LED specialty bulbs, smart power strips, and weather-stripping products. In addition to energy savings, the provision of energy savings kits to community members acted as an important opportunity for community engagement and local relationship building in the region. This program resulted in 113 MWh of annual electrical energy savings.

Smart and programmable thermostat installations were offered to residential customers with electric heating in the communities of the Labrador Straits region. The type of thermostat offered depended on criteria such as internet Wi-Fi capability and the availability of a smart phone or tablet in the home. In total, 16 programmable and 40 smart thermostats were installed which resulted in 24 MWh of annual electrical energy savings.

In 2024, 17 shifted energy units were installed on residential hot water tanks in the Labrador Straits region which resulted in 8 MWh of annual electrical energy savings. Shifted energy hot water controllers provide energy consumption savings through timed use and learning algorithms as well as providing demand response options.

The heat pump pilot program continued in 2024 with the installation of 20 single-zone, cold-climate, ductless mini-split heat pumps in the Labrador Straits and Port Hope Simpson regions. Customers eligible for a cost-shared heat pump installation were required to have electricity as their primarily heat source and meet minimum R-value criteria. In total, the residential heat pump installations resulted in 163 MWh of annual electrical energy savings.

Hydro leveraged the federal government's Greener Homes Grant Program by offering support to electrically-heated residents of the isolated communities enabling access to the program through ICEEP. This involved sending a certified energy advisor to the Straits region to perform "D" (pre-retrofit) and "E" (post-retrofit) level energy audits. Upgrades undertaken through this program were included in the deemed savings for ICEEP. The Greener Homes Grant program concluded in 2024 and the final 'E"

energy audit was completed which yielded 19 MWh of energy savings from a heat pump and insulation upgrade.

3.4.2 2024 Isolated Community Energy Efficiency Program – Commercial

Direct installations of LED commercial lighting were completed based on opportunities identified during audits and data collected during previous surveys. Direct installations included the installation of LED tubes, LED wallpacks and High-Intensity Discharge replacement bulbs. Across four communities, 32 commercial buildings received lighting upgrades, which resulted in annual energy savings of 341 MWh.

Hydro first introduced commercial energy audits through ICEEP to identify energy saving opportunities as the program transitioned to providing more offerings to the commercial sector in 2022. In 2024, 19 commercial building audits were completed throughout the communities of Hopedale, Makkovik, and Rigolet. Commercial buildings were selected for an energy audit based on survey and billing data that was analyzed to identify buildings with high consumption and potential for energy reduction. Based on opportunities identified in the audits, the ICEEP piloted the introduction of commercial building upgrades, which implemented a cost-sharing mechanism for two businesses to install heat pumps and a hybrid heat pump-water heater which resulted in 51 MWh of annual energy savings.

In 2024, Hydro was awarded $2.7 million in cost-shared funding through Natural Resources Canada's ("NRCAN") GIFMP to expand the ICEEP offerings for manufacturing facilities in isolated communities (funding announced by NRCAN February 2025).[19] Through 2025 and 2026, ICEEP will provide strategic energy management, energy audits and capital upgrades to participating facilities with the goal of reducing their energy consumption and costs.

3.5 Biomass Space Heating

Electrification of space heating continues to be a trend in Hydro's isolated communities. This trend is being driven by challenges associated with heating oil supply and equipment service, as well as customers desire to move away from fossil fuel-based heat sources for environmental reasons.

In response to this change in the market, Hydro is investigating biomass heating programming for both its residential and commercial customers. Biomass (wood) space heating is a traditional heat source

[19] https://www.canada.ca/en/natural-resources-canada/news/2025/02/greening-the-diesel-powered-industry-in-newfoundland-and-labrador.html

which was identified through Hydro's 2023 'Innovation Day'[20] event as an energy source with significant potential and local support.

In 2024, Climate Forest Canada was engaged to investigate the economic and supply-chain factors related to wood-fuel supply and demand in the isolated communities. This research aims to develop a strategy for establishing a sustainable supply chain that supports the expanded use of wood heating systems. This research will inform the viability of future wood heating programs to manage electricity demand on the diesel systems.

Further, in 2024 Hydro provided funding for an energy model for a commercial new construction project in a diesel generated community, through the Isolated Systems Business Efficiency Program. The purpose of the energy model was to analyze the operating costs and energy savings of various potential heating systems, including biomass heating. Hydro will continue to advance biomass space heating in the coming years through pilot programs to assess its viability in its service areas and CDM program benefits.

3.6 Industrial Program

Since 2010, Hydro has delivered the Industrial Energy Efficiency Program, which offers support and financial incentives for Hydro's Industrial customers based on projects for lighting retrofits, process improvements, equipment changes, loss prevention (e.g., heat, steam energy), and funding for energy audit consultant reports. Promotion of the Industrial Energy Efficiency Program is facilitated through Hydro's Key Account Management Framework to support improved project planning, scheduling, and execution. Within this framework, industrial customers are directly engaged with their Key Accounts Specialist to assist with the Industrial Energy Efficiency Program. This also allows Hydro to better understand customer facilities, processes, plans, and schedules for potential efficiency improvement projects.

In 2024, no industrial energy efficiency projects were completed; however, Hydro's Key Accounts Specialist remains engaged with industrial customers to assist with future projects, should customers want to pursue them.

[20] Hydro provided further information on its Innovative Day event in Section 3.4.3 the Electrification, Conservation and Demand Management Report for the Year Ended December 31, 2023.

4.0 Electrification

In 2024, Hydro continued work to expand the existing public EV charging network in the province. In Board Order No. P.U. 21(2023), a project to add Direct Current Fast Chargers ("DCFC") to some of Hydro's most utilized sites was approved. The project is in partnership with the Government of Newfoundland and Labrador and the Government of Canada. The original project scope involved the installation of seven ultra-fast DCFC's; however, in 2024, additional funding was secured by the Government of Newfoundland and Labrador and the number of planned new chargers has increased to ten. The new assets are scheduled to go into service in 2025.[21]

Table 5 and Table 6 show the number of sessions, the energy usage and revenue from each Hydro owned public EV charging site for 2024.[22]

Table 5: 2024 Electric Vehicle Charging Stations Statistics – Non-Regulated[23]

Charger Location	Number of Sessions	Energy Usage (kWh)	Revenue[24] ($)
Bishop's Falls	1,174	32,863	7,305
Churchill Falls	73	3,286	813
Corner Brook	1,052	33,871	8,176
Deer Lake	1,218	33,583	7,705
Galway	3,114	81,994	19,211
Gander	1,298	38,963	8,882
Glovertown	912	24,986	5,462
Goobies	2,281	54,640	12,158
Holyrood	915	18,850	4,415
Happy Valley-Goose Bay	84	2,556	802
Labrador City	155	5,897	1,352
Channel-Port aux Basques	453	13,092	3,117
Port Blandford	967	27,407	6,057
Rocky Harbour	326	8,924	1,989
South Brook	939	24,244	5,383
Stephenville	248	6,656	1,666
Whitbourne	2,248	46,281	10,568
Total	**17,457**	**458,093**	**105,062**

[21] The project is in partnership with the provincial government who will fund the majority of the capital cost of $2.7 million; Hydro will contribute the remaining funds necessary. The capital funds are not proposed for inclusion in its regulated rate base for recovery from customers at this time.
[22] Each charging site includes one DCFC and one Level 2 charger.
[23] Numbers may not add due to rounding.
[24] Exclusive of taxes and payment processing fees.

Table 6: 2024 Electric Vehicle Charging Stations Statistics – Regulated[25]

Charger Location	Number of Sessions	Energy Usage (kWh)	Revenue[26] ($)
Birchy Head	95	1,907	377
Cow Head	165	5,228	1,250
Flowers Cove	159	4,142	919
Port au Choix	103	2,973	652
Roddickton	16	391	96
St. Anthony	115	3,500	846
Total	**653**	**18,140**	**4,139**

In 2024, takeCHARGE, with funding from NRCAN's Zero Emission Vehicle Awareness Initiative, continued offering much-needed information to help customers decide if an EV is right for their business, and promote off-peak charging for demand management. A survey was conducted with commercial customers to understand their current experience and knowledge in electrifying their fleets. The survey will be used to inform the design of educational and support resources. Resources and interactive tools can be found on the takeCHARGE website, providing a reliable and easy-to-understand source of information on EV fleets. The resources on the website provide everything businesses and municipalities need to know about adding EVs to their fleets, including various medium- and heavy-duty vehicle EV models, commercial chargers, a fleet fuel savings calculator, "EV Fleets 101", and an EV Fleets Pro Course.

5.0 Planning and Evaluation

The Utilities engage in external third-party evaluations and surveys to evaluate changes in market factors that impact the delivery of ECDM programs and to measure customer awareness, interest, and uptake in current programs. In 2024, the Utilities completed an annual marketing survey to assess home energy use and energy saving practices, as well as awareness of, and participation in, takeCHARGE programs.

In December 2023, the Utilities contracted with Posterity Group Consulting Inc. to undertake the Conservation, Demand Management, and Electrification Potential Study to assess the technical, economic, and achievable potential for conservation, demand management, and electrification activities

[25] Numbers may not add due to rounding.
[26] Exclusive of taxes and payment processing fees.

on the Island Interconnected System from 2025 to 2040. The study continued in 2024 and is expected to conclude in the first half of 2025. The study will be used by the Utilities to develop the next multi-year plan for electrification, conservation and demand management. In the 2024 Resource Adequacy Plan, Hydro committed to assessing the recommendations from this study for the next multi-year ECDM plan for inclusion in the next Resource Adequacy Plan update.[27]

6.0 Outreach and Support

During 2024, Hydro continued to partner with Newfoundland Power to deliver the takeCHARGE program, which offers customer education and conservation awareness activities, primarily through promotion of its takeCHARGE rebate programs and outreach activities. Residential and business programs were promoted through activities including media marketing, targeted promotions, community outreach, school contests, trade ally development, and partnerships. Marketing campaigns included radio, online, and social media advertisements. Campaigns run throughout the year for insulation, HRVs, heat pump education, and the Business Efficiency Program. The media chosen is based on the time of year that programs are in-market and consumer purchasing behaviours.

The takeCHARGE team is also active on social media through a joint utility Facebook page (which has garnered over 16,400 likes), a YouTube channel, accounts on social media platforms X, Instagram, and LinkedIn, as well as an official website. The takeCHARGE website continues to be a leading source of information for customers seeking energy-efficiency information.

The 'takeCHARGE of Your Town' initiative invites municipalities to submit proposals that will support their efforts to develop or improve energy conservation or energy-efficiency projects. In 2024, Hydro awarded the Town of Norris Point $10,000 to install heat pumps in the Bonne Bay Cottage Hospital building.

takeCHARGE offered two school contests for students; one for kindergarten to sixth grade and the other for seventh to twelfth grade. These contests aim to increase student understanding of why saving energy is important and to demonstrate what they can do to conserve energy. In 2024, six groups were awarded prizes ranging from $500 to $2,500.

[27] 2024 Resource Adequacy Plan – An Update to the Reliability and Resource Adequacy Study," Newfoundland and Labrador Hydro, rev. August 26, 2024 (originally filed July 9, 2024).

The 15th annual takeCHARGE Energy Efficiency Week (October 1 to 7, 2024) and Business Efficiency Week (October 21 to 27, 2024) were dedicated to providing customers with information to assist them in saving energy and money through reducing their energy consumption. A full social media campaign was launched during each week and webinars were held to engage customers.

The 6th annual takeCHARGE Luminary Awards were held in 2024. The awards program provides an opportunity to recognize companies, individuals, and communities contributing to energy efficiency in Newfoundland and Labrador. This year, the Luminary Awards were held on October 23, 2024 and included an award to Frank's General Store in Nain for their insulation project which resulted in energy savings of over 56,000 kWh per year.

In 2024, takeCHARGE received awards for "Promotional Campaign of the Year" and "Sustained Excellence" from ENERGY STAR Canada. The awards recognize utilities, manufacturers, retailers, associations, homebuilders, and buildings that have demonstrated excellence in offering Canadian consumers the most energy-efficient products and technology available. Since 2020, takeCHARGE has received nine ENERGY STAR Canada awards

takeCHARGE proudly received the "Small Utility Excellence Award" announced at the E Source Forum 2024. This award recognizes exceptional utility initiatives that enhance customer satisfaction. E Source evaluated utilities based on innovation, creativity, initiative impact, and key metrics. takeCHARGE received this award for its Energy Savers Kit Program.

7.0 Conclusion

In 2024, Hydro continued to promote ECDM as a component of resource planning in Newfoundland and Labrador. ECDM is encouraged through joint utility programs offered by Hydro and Newfoundland Power through takeCHARGE as well as programming specifically targeted to Hydro's isolated and industrial customers. ECDM programs have been successful in providing education and fostering the development of a culture of energy conservation in the province. Overall, Hydro's efforts in 2024 supported annual incremental energy savings of 1,019 MWh and cumulative energy savings of 57,906 MWh since 2009.

Hydro has continued to work with its customers to understand needs and drivers of electrical consumption to support the achievement of sustainable energy savings through its programming.

Additionally, Hydro has worked in partnership with the provincial and federal governments on various programs and initiatives to support energy efficiency and a lower carbon economy. Hydro will use the information gathered from these programs to help inform future program requirements and manage system costs for customers.

In 2025, the Utilities will complete a Conservation, Demand Management, and Electrification Potential Study to assess the technical, economic, and achievable potential for conservation, demand management, and electrification activities on the Island Interconnected System from 2025 to 2040. After completion of this study, the Utilities will begin to develop their next multi-year plan for conservation and demand management.

Appendix A

Electrification, Conservation and Demand Management Program Descriptions

Residential takeCHARGE Rebate Programs

Program incentives are processed primarily through customer applications. The programs are promoted in partnership with trade allies in the retail, home building, and renovation industries.

Insulation Rebate Program

The objective of this program is to provide incentives to increase the insulation R-value in residential basements, crawl spaces, and attics, thereby increasing the efficiency of the home's building envelope. Eligibility for the programs is limited to electrically-heated homes, determined based on annual energy usage. Home retrofit projects are eligible. Customers can receive an incentive of 75% of basement wall and ceiling insulation materials up to $1,000 and 75% of attic insulation material costs up to $1,000. In October 2022, a duct-insulation rebate was added to the existing insulation rebate program, which offers rebates of 50% of the cost up to $500 for insulating ductwork of a resident's primary heating source. In December 2022, an air-sealing rebate was also added on to the existing insulation rebate program, which offers rebates of up to $500 for improvements in their air-leakage score based on a pre- and post-retrofit home energy assessment.

Thermostat Rebate Program

This program encouraged installation of programmable and electronic thermostats to allow customers better control of the temperature in their home and to save energy. These high-performance thermostats provide accurate temperature control while the programmable option allows customers to set back the temperature automatically during the night or when they are away. Eligibility for the program was limited to electrically-heated homes, determined on the basis of annual energy usage. Home retrofit projects and new home developments were eligible. Incentives of $10 for each programmable thermostat and $5 for each electronic high-performance thermostat were offered. This program concluded in 2023.

HRV Rebate Program

This program encourages customers to purchase a high-efficiency HRV to improve the efficiency of their home. Eligible measures in this program include HRV models that have a Sensible Recovery Efficiency of 70% or more. Customers who purchase a high-efficiency HRV can receive a rebate of $175. All customers are eligible for this program regards of the age of the home or its heat source.

Isolated Community Energy Efficiency Program

This Hydro program includes both residential and commercial components targeting customers in isolated diesel communities and L'Anse-au-Loup. The focus is on residential customers through the direct installation of a kit of technologies; at-cash-register coupons on small technologies and mail-in rebates on energy-efficient appliances. Commercial customers also receive a direct installation of a kit of technologies. The kit includes items for water savings, draft proofing, lighting, and other measures.

Homeowners receive education on energy efficiency and existing takeCHARGE rebate programs. Community events, social media promotions, and exchanges are held to promote the program and energy-efficiency awareness.

Moving forward, the focus will be on targeted programs and locations. For residential customers, that may include the replacement of inefficient dial thermostats with programmable and smart thermostats; the direct install of water heater controllers; a heat pump pilot project; and potential energy efficiency upgrades through federal programs. Commercial targeted programs may include lighting direct installs; as well as energy analyses that will identify the top 10% of energy users. This information will create a customized energy reduction plan for those users. Targeted energy upgrades and rebates may be available to customers.

Energy Savers Kit

This low-income program provides income-qualified customers with a kit containing energy savings measures, educational materials, and instructions. The Energy Savers Kit contains products to help customers save on lighting costs, reduce hot water use, and seal drafts in their homes.

Commercial takeCHARGE Rebate Programs

Business Efficiency Program

The objective of this program is to improve electrical energy efficiency in a variety of commercial facilities and equipment types. The program components include financial incentives based on energy savings and other financial and educational supports to enable commercial facility owners to identify and implement energy-efficiency and demand-reduction projects.

This program is available for existing commercial facilities that can save energy or reduce demand by installing more efficient equipment and systems. The program includes custom project incentives and prescriptive rebates for specific measures on a per unit basis.

Isolated Systems Business Efficiency Program

Hydro's Isolated Systems Business Efficiency Program was launched in 2012 and targets commercial customers in the isolated diesel communities and L'Anse-au-Loup. The program provides a custom approach to finding energy-efficiency solutions and financial assistance for feasibility studies and for retrofit projects. It has the same program design and offerings as the joint utility Business Efficiency Program but has higher incentive levels for retrofit work because of the higher avoided cost of generation in these systems.

Industrial Energy Efficiency Program

The objective of this program is to improve electrical energy efficiency in a variety of industrial processes. The program components include financial incentives based on energy savings and other supports to enable industrial facilities to identify and implement efficiency and conservation opportunities. This program is a custom program designed to respond to the unique needs of the industrial market rather than a prescriptive technology approach.