2011 takeCHARGE Rebate Program Evaluation

takeCHARGE Rebate Program Evaluation
February 15, 2012
Redacted Version

takeCHARGE Rebate Program Evaluation

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1. Objective

The objective of the takeCHARGE Rebate Program Evaluation is to gather and analyze key program data and market information to assess potential program modifications, identify future opportunities, and develop marketing strategies for 2012 and beyond. Participant numbers used in this report represent the calendar year.

2. Residential Participant Demographics

2a. Eligible Customers

The table below provides the total customers per area and the corresponding total number of customers eligible to participate in the takeCHARGE Rebate Programs. In order to be eligible to participate in takeCHARGE Rebate Programs, the customer's home must be all-electric or have supplementary electric heat and use at least 15,000 kWh per year.

Table 1: Eligible Customers by Area

Area	Total Customers	Eligible Customers	% Eligible	2011 Rebate Participants	2011 Rebates as % Eligible
St. John's	90,928	46,905	52%	2,758	6%
Carbonear	30,906	13,623	44%	654	5%
Clarenville	13,814	5,212	38%	171	3%
Burin	9,979	5,362	54%	254	5%
Grand Falls-Windsor	18,368	7,232	39%	305	4%
Gander	17,436	7,144	41%	368	5%
Corner Brook	19,159	7,966	42%	328	4%
Stephenville	13,925	6,074	44%	186	3%
Contractors & NLHC	-	-	-	628	-
Unknown[1]	-	-	-	651	-
TOTAL	**214,515**	**99,518[2]**	**46%**	**6,303**	**6.3%**

[1]Cannot be broken down by area.
[2] Eligible customers number excludes new houses connected in 2011 as that data was unavailable.

Conclusion

- Over 41% of Newfoundland Power customers are eligible for takeCHARGE Rebate Programs. In 2011, 6.3% of eligible customers participated in one or more programs. In 2010, 3.7% of eligible customers participated in one or more programs.

Opportunities/Recommendations

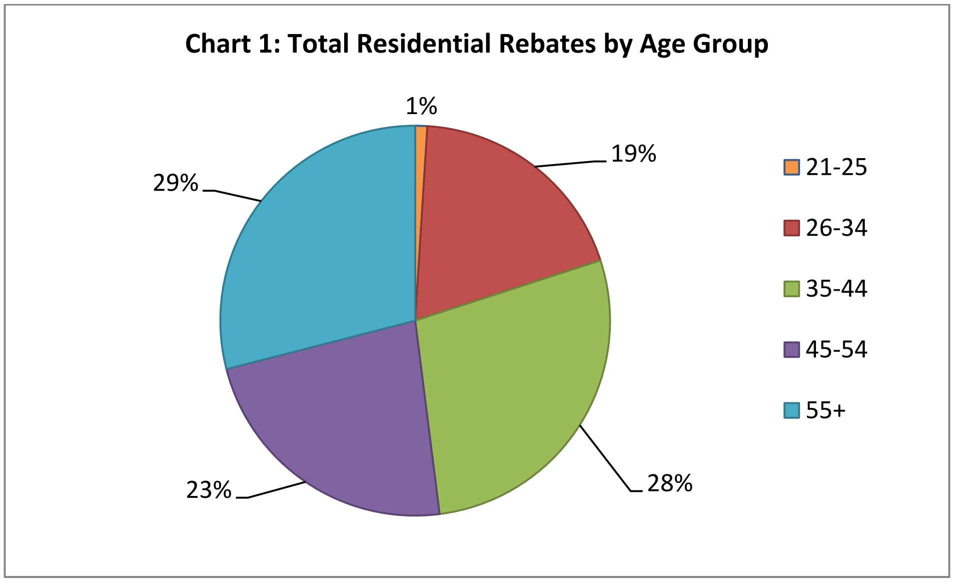
- While the number of customers participating in the takeCHARGE Rebate Programs continues to increase, there is additional opportunity to significantly increase the number of participants based on the number of eligible customers.

2b. Age of Participants

The table below provides the age groups of participants in the residential takeCHARGE Rebate Programs for the period of June 2009 (the inception of the takeCHARGE Rebate Programs) to December 2011.

Of the 10,961 people who participated in takeCHARGE Rebate Programs over the last two and half year period, 62% provided age information. This table reflects the age information available.

Total Residential Rebates by Age Group



Conclusion

- The largest age group participating in takeCHARGE Rebate Programs is the 55+ years old (29%) age group, followed closely by customers aged 35-44 (28%). The third largest age group is the 45-54 years old group (23%).
- The youngest age group, ages 21-25 (1%), are low users of the takeCHARGE Rebate Programs. The low participation of 21-25 year olds is not surprising as people in that age group tend to be renters, still in school or live with their parents.
- When the age groups are broken down by takeCHARGE Rebate Program, the participants reflect a similar age distribution as the total participants in all programs.

Opportunities/Recommendations

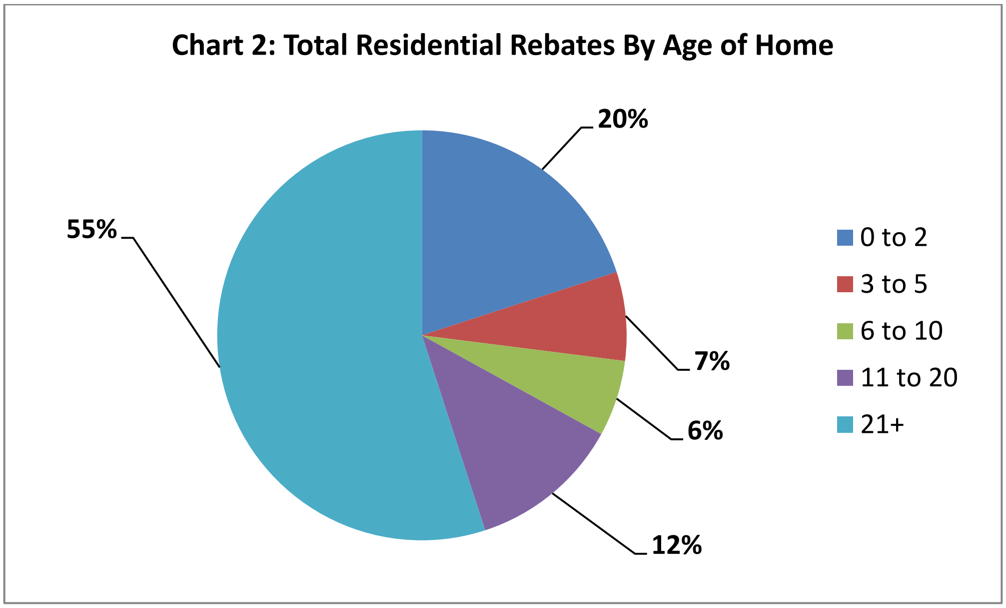
- The current target market used in the 2009, 2010 and 2011 marketing plan is customers aged 25-54. Based on this analysis, the target market for the 2012 marketing plan will continue to include customers ages 25 and older, removing the upper limit of 54 years old. This may change the focus of the advertising and media campaign.
- There is an opportunity to engage first time home owners in the adoption of energy conservation behavior as the younger generation tend to be more environmentally conscious. Consideration of this target group will be factored into promotional plans giving consideration to real estate agents and contractors as the link to this group.

2c. Age of Homes

The table below provides the age of homes of participants in the residential takeCHARGE insulation and ENERGY STAR window Rebate Programs for 2011, excluding rebates from the October 22nd special insulation offer.

Of the 3,020 participants in insulation and ENERGY STAR® windows takeCHARGE Rebate Programs in 2011 with the exception of the October 22nd special insulation offer, 62% provided age of home information. This table reflects the age of home information available.

Total Residential Rebates by Age of Home



Conclusion

- Over 55% of customers who participated in the takeCHARGE insulation and ENERGY STAR window Rebate Programs, reside in homes that are more than 21 years old. Another 20% of customers reside in homes that are less than 2 years old.
- When the "age of the home" is analyzed by program, the participants in both the insulation and ENERGY STAR window Rebate Program reflect a similar "age of home" distribution.
- It can be concluded that people are likely to participate in the takeCHARGE insulation and ENERGY STAR window rebate programs when they are building a new home or when retrofitting their home to add living space. When the life expectancy of a building product is about to expire (i.e. life expectancy of a window is approximately 25 years) it triggers new window installations. These types of decisions tend to be expensive and require longer term planning.
- The accessibility of equity in retrofits of older homes could also be a trigger in participation in takeCHARGE Rebate Programs.

Opportunities/Recommendations

- In 2009, 2010 and 2011, the marketing plan has focused on general messaging of all residential programs to the broad market. The marketing plan for 2012 for insulation and ENERGY STAR windows will focus on new homes and retrofits for the older home market. To build on the new home market, a focus on educating and building awareness with real estate agents and building contractors will occur, and a new home information package for customers when they sign up for their electricity service will be created.

2d. Building Contractor Participation

The table below provides information on the building contractors who participated in the takeCHARGE Rebate Programs, the location and the dollar value of participation for 2011 versus 2010.

Table 2: Building Contractor Participation

Contractor	Location	2010	2011	% 2011 vs 2010	Total 2011 and 2010
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Per Year		**$69,551**	**$95,111**	**+37%**	**$164,662**

Contractor Participation by Program

The table below provides information on the programs that the building contractors participated in 2010 and 2011.

Table 3: Contractor Participation by Program			
Program	**# of Apps**	**$ Value**	**%**
ENERGY STAR windows	310	$ 139,857	85%
Insulation	55	$ 24,805	15%
Thermostat	0	$ 0	0%
TOTAL	**365**	**$ 164,662**	**100%**

Contractor versus Residential Customers Average Rebate

The table below identifies the average rebate for ENERGY STAR windows and Insulation for 2010 and 2011 broken down per residential customer and contractor.

Table 4: Average Rebate by Contractor versus Customer		
Program	**Residential Customer**	**Contractor**
ENERGY STAR windows	$ 325	$ 462
Insulation	$ 315	$ 450

Conclusion

- There has been an increase in the number of contractors participating in the residential programs in 2011. Thirteen contractors participated in 2011 versus five contractors in 2010. The total dollars rebated to contractors in 2011 was up 37% over 2010 primarily due to participation in the ENERGY STAR window Rebate Program.
- Four of the five contractors that participated in both years had reductions in rebates in 2011.
- Of the 13 participating contractors in 2011, only two are located outside of the St. John's and surrounding area.
- Contractors have advised that customers are choosing other features and amenities when building a new house such as hardwood floors instead of investing in basement insulation. This issue will be resolved when the revised National Building Code and St. John's building standards are enforced.
- None of the building contractors participated in the thermostat program in the last two years. Feedback from contractors is that the higher initial cost for electronic or programmable

thermostats does not make it cost efficient. In addition, it takes too much time to program each thermostat.

- Building contractor projects are larger than residential customer projects as reflected in the higher average rebate for contractors. Those contractors who participate in the residential rebate programs install ENERGY STAR windows and insulation in new homes, while most residential customers are utilizing the programs when completing retrofits. Residential customers do retrofits in phases and the average rebate for the residential customer is lower than contractors.

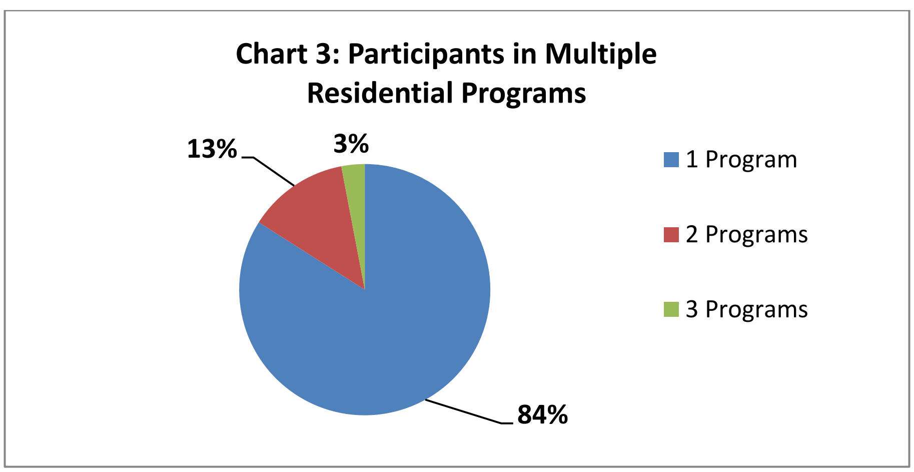
Opportunities/Recommendations

- There is an opportunity to promote the takeCHARGE Rebate Programs to contractors across the province. The participation is low relative to the number of contractors in the province and the participation outside of St. John's and surrounding area is relatively untapped. An emphasis on engaging contractors throughout the province through awareness and education of all programs will occur in 2012.
- Packaging the three programs together with an additional incentive will be investigated to determine if it is a feasible option to encourage program participation.
- Engaging contractors in the residential rebate programs is valuable as the rebates and associated energy savings are larger than the residential customer on a per home basis. When these energy efficient products are installed in the initial home construction, the benefits and savings are associated with the home right from the start.

2e. Participants in Multiple Residential Programs

The chart below shows the percentage of participants based on the number of programs they participated in for the period June 2009 to December 2011.

Participants in Multiple Residential Programs



The table below shows the program combinations for customers participating in two rebate programs during the period of June 2009 to December 2011.

Table 5: Participants in Two Rebate Programs	
Programs	**Percentage**
Insulation and ENERGY STAR Windows	41%
Insulation and Thermostats	40%
ENERGY STAR Windows and Thermostats	19%

Conclusion

- 84% of participants participated in one program, 13% participated in two programs and 3% participated in three programs.
- When participants participated in two programs, the two most prominent combinations are insulation and ENERGY STAR windows , and insulation and thermostats.

Opportunities/Recommendations

- There is an opportunity to "cross-promote" residential programs to participants who have already participated in one of the programs. These individuals have already made a commitment to energy efficiency and are aware of the rebate process. In 2012, these individuals will be contacted and provided information on the other programs.
- A marketing campaign will be established utilizing testimonials of individuals that have participated in the rebate programs.

2f. Contractor vs. Do-It Yourself Insulation Installation

In an effort to understand if customers are doing the work themselves or are hiring contractors to install insulation under the insulation program, customers were surveyed during the October 22nd special insulation offer audits.

The table below shows the percentage of customers who participated in the October 22nd special insulation offer and the percentage who installed insulation themselves versus the percentage who hired contractors.

Table 6: Installer of Insulation				
INSTALLER OF INSULATION	ATTIC	BASEMENT WALLS	BASEMENT CEILING	TOTAL
CONTRACTOR	26%	12%	6%	15%
CUSTOMER	74%	88%	94%	85%

Conclusion

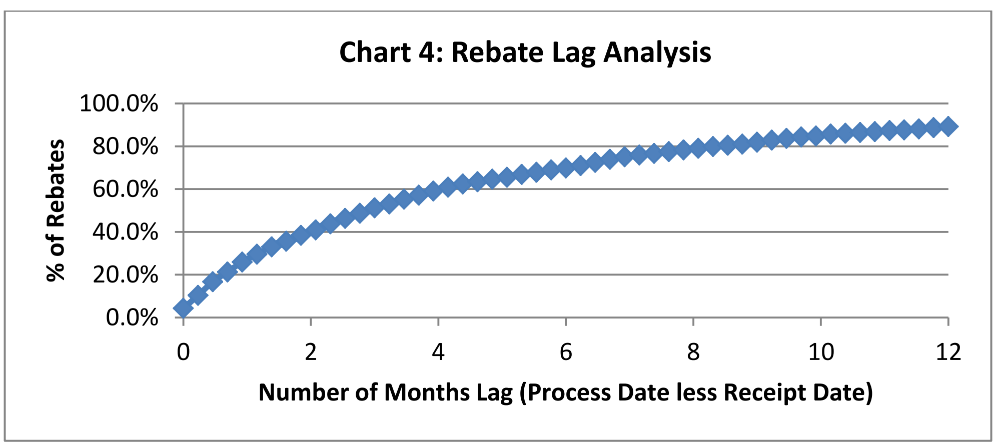
- Overall, customers are installing insulation themselves as opposed to using contractors. Two possible explanations are affordability and the availability of contractors to do the work.

Opportunities/Recommendations

- As customers are installing insulation themselves, it is important that additional education on the proper techniques of installing insulation is easily available to ensure the project is completed properly and the customer receives the full savings benefit from the insulation project.

2g. Rebate Submission Lag Time

The chart below indicates the time between when a customer purchases a product and the time it takes for them to submit their rebate application.



Conclusion

- Within 3 months of purchasing the product, 51% of customers have submitted their rebate application, by 6 months over 70% have submitted, by 9 months over 82% have submitted and by 12 months, over 90% of applications are submitted.

Opportunities/Recommendations

- Some customers either forget or lose the paperwork required to submit their application even though they may be well intentioned when purchasing the product. Thus, a deadline for customers to submit their application will motivate customers to submit their application on a timely basis. A deadline for application submissions will be added to the program guidelines.

3. Programs

3a. Insulation

The Insulation Rebate Program targets efficiencies in home heating by providing customers with incentives to improve insulation levels in basements and attics. Eligibility is limited to electrically-heated homes or those with supplementary electric heat and use at least 15,000 kWhs per year. Customers can receive an incentive of two cents per R-value per square foot of insulation added to basement walls or ceilings, and one cent per R-value per square foot for insulation added to their attics. This program is promoted in partnership with trade allies in the retail, home building and renovation industries.

This table provides the insulation rebates for 2010 and 2011 by area and the percentage increase year over year.

Insulation Rebates

Table 7: Insulation Rebates by Area							
AREA	**2010 Total**	**2011 Regular Rebates**	**% Change 2010 Total vs 2011 Regular**	**2011 Oct. 22 Only**	**% Change 2011 Total vs 2011 Oct 22 Only**	**2011 Total**	**% Change 2011 vs 2010 Total**
St. John's	389	372	-4%	664	78%	1,036	166%
Carbonear	121	113	-7%	264	234%	377	212%
Burin	29	39	34%	128	328%	167	476%
Clarenville	22	22	0%	63	286%	85	286%
Gander	66	66	0%	114	73%	180	173%
Grand Falls-Windsor	38	62	63%	68	10%	130	242%
Corner Brook	59	56	-5%	118	111%	174	195%
Stephenville	46	28	-39%	56	200%	84	83%
Contractors and NLHC	44	259	489%	0	-	259	489%
Unknown[1]	0	136	-	0	-	136	-
TOTAL	**814**	**1,153**	**42%**	**1,475**	**28%[2]**	**2,628**	**223%**

[1]Cannot be broken out by area.
[2]The October 22 rebates are 65% higher than 2011 regular rebates with contractors and NLHC rebates excluded.

Market Penetration

Determining the size of the market and market penetration information for insulation is a challenge. Insulation sales in the market do not equate to potential rebates in the takeCHARGE Rebate Programs as insulation is used for many purposes other than basements or attics. For example, a large portion of insulation sold is used for the main cavity of the house and for cabins, sheds, garages, etc. which are not eligible for our rebate program.

Data from the Provincial Government Department of Natural Resources on the types of insulation projects that participants are completing in their EnerGuide for Houses program provide insight into the different types of insulation projects completed. This table provides the total participants in the EnerGuide for Houses by area insulated.

EnerGuide for Houses Participation

Chart 8: EnerGuide For Houses Participation		
Area Insulated	**Total Participants (2009-2011)**	**Percentage of Applicants**
ATTIC	780	42%
BASEMENT	703	38%
EXTERIOR WALLS	872	47%
HEADER AREA	428	12%
Total	2,783	139%[1]

[1] Some applicants insulated more than one area.

Of the participants in the EnerGuide for Houses program, 47% of applicants installed insulation in exterior walls and in the header area which does not qualify for rebates in the insulation program. This data demonstrates the difficulty in determining the potential size of the rebate insulation market.

Insulation Participant Demographics

This table shows the percentage of participants that completed projects that had no insulation prior to participating and those that upgraded existing insulation levels for the period 2009-2011.

Chart 9: Insulation Participant Demographics				
Starting R-value	**Basement Walls**		**Attics**	
	Rebates	**%**	**Rebates**	**%**
None	806	86%	239	12%
Existing	131	14%	1756	88%
TOTAL	937	100%	1995	100%

Approximately 86% of participants installing insulation in basement walls started with no insulation; approximately half of those insulated to the maximum level of R-20. Approximately 88% of participants installing insulation in attics had some existing insulation; the average existing level was R-16, with the average upgrade level R-22. Since the current building code requires a minimum of R-32 in attics for new homes, the majority of attic projects would be upgrades to existing insulation.

Conclusion

- Regular rebates were up 42% in 2011 compared to 2010 with the October 22 special insulation offer excluded and up by 223% with it included. The special insulation offer may have motivated those holding regular rebate applications to submit them as it created a level of awareness in the market.
- The majority of basement wall insulation projects had no insulation to begin with. Over half of the participants insulated to the maximum level of R-20, thereby achieving maximum energy savings from their project.
- The October 22nd special insulation offer resulted in a large increase in rebate applications particularly from the rural areas; highest increases in Burin (328%), Clarenville (286%), Carbonear (234%), and Stephenville (200%). Grand Falls-Windsor was lowest at 10%. Rural areas react positively to additional incentives.

- The October 22nd special insulation offer demonstrated that a one-time special offer can have a significant impact on participation and the market. During the special insulation offer, a number of retailers increased their advertisements and added on additional savings in order to attract customers to their store.
- The majority of participants in the special offer indicated they would not have participated without the 100% rebate so the impact on future year's participation may be minimal; however, some customers may decide to put off their projects as waiting for the next special offer.

Opportunities/Recommendations

- Adjust the minimum R-value from R-12 to R-18 to coincide with the introduction of the revised National Building Code (see Section 5).
- Promotions like the October 22 work well to increase participation in a short period of time but under the current financial arrangement, require limits to rebate amounts and type of insulation included.
- Retailers are critical trade allies to promote the benefits of the product and programs; additional retailer staff education and training is required.
- Packaging the three programs together with an additional incentive will be investigated to determine if it is a feasible option to encourage program participation
- Provide more point of purchase advertising at the retailer locations
- Focus marketing efforts on contractors and real estate agents to increase participation in insulation, particularly for new home construction.

3b. Thermostat

The Thermostat Rebate Program assists customers in improving the temperature control of their homes, thereby reducing the heating usage of their electric heating system and improving their comfort levels. Incentives of $10 for each programmable thermostat and $5 for each electronic high performance thermostat are offered. This program is promoted in partnership with manufacturers, retailers, electrical contractors and home builders.

Overall, there was an increase of 18% in thermostat rebates in 2011 versus 2010. The largest increase in 2011 was in Clarenville, Gander and Grand Falls-Windsor, with Burin showing the largest decrease, followed by Corner Brook. St. John's experienced a slight decline in 2011, however, if the double rebate offer in 2010 held at [redacted] was excluded, St. John's rebates are actually higher in 2011 than 2010. Contractor participation in the Thermostat Rebate Program is low as previously mentioned in Section 2d.

Thermostat Rebates

Table 10: Thermostat Rebates by Area			
AREA	**2010**	**2011**	**% Change**
St. John's	1093	1068	-2%
Carbonear	128	129	1%
Burin	51	44	-14%
Clarenville	24	32	33%
Gander	68	89	31%
Grand Falls-Windsor	51	68	33%
Corner Brook	85	78	-8%
Stephenville	33	35	6%
Contractors and NLHC	5	3	-40%
Unknown[1]	0	262	-
TOTAL	**1538**	**1808**	**18%**

[1] Cannot be broken out by area.

Market Penetration

Given the competitive nature of this market, manufacturers were unwilling to provide sales data so the size of the market can be determined (i.e. the number of electronic and/or programmable thermostats sold compared to standard thermostats). We were able to obtain data from a number of the distributors in the province so were able to extrapolate some thermostat market information.

Thermostat Sales by Distributor

The table below provides the percentage of thermostat types sold by the distributors noted for 2009, 2010 and 2011.

Table 11: Thermostat Sales by Distributor						
Distributor	**Elect/Prog 2009**	**Standard 2009**	**Elect/Prog 2010**	**Standard 2010**	**Elect/Prog 2011**	**Standard 2011**
[redacted]	20%	80%	20%	80%	50%	50%
[redacted]	2%	98%	6%	94%	22%	78%
[redacted]	1.5%	98.5%	4%	96%	6.5%	93.5%

Market data from the three distributors noted indicate that over the last three years the market has shifted from standard thermostats to electronic and programmable thermostats. However, although progress is being made, there is still room to grow in this market.

Thermostat Rebates by Type

The table below identifies the number of thermostat rebates by year for electronic and programmable thermostats received by the Company.

Table 12: Thermostat Rebates by Type						
Type of Thermostat	**2009**	**2010**	**2011**	**% Change**	**Total**	**% of Type**
Electronic	526	1,224	1,685	38%	3,435	17%
Programmable	2,105	6,928	8,314	20%	17,347	83%
TOTAL	**2,631**	**8,152**	**9,999**	**23%**	**20,782**	**100%**

Based on the rebate application data from our Customer Rebate Tracking (CRT) system, 83% of the thermostats rebated are programmable suggesting that when customers decide to focus on energy efficient thermostats, the preferred option is programmable versus electronic thermostats.

Conclusions

- Thermostat rebates grew by 18% in 2011 compared to 2010. Double rebate promotions in 2010 resulted in an increase in rebates in 2010 and even though this type of promotion did not occur in 2011 the number of rebates continued to grow.
- Double rebate promotions can significantly drive participation in a very short period with minimal effort.
- Distributor market data indicates the market is shifting in terms of the number of electronic/programmable thermostats sold by distributors in comparison to the standard type.
- Contractors are not participating in the Thermostat Rebate Program.
- The Thermostat Rebate Program is the easiest program for energy conscious customers to participate in due to the low investment required.

Opportunities for Future

- Identify local marketing opportunities to ensure thermostat rebates are increasing in all areas.
- Educate customers and contractors on how to program thermostats to ensure customer satisfaction and maximum benefits.
- Retailers are critical trade allies to promote the benefits of the product and programs; additional retailer staff education and training is required.
- Packaging the three programs together with an additional incentive will be investigated to determine if it is a feasible option to encourage program participation
- Provide more point of purchase advertising at the retailer locations

3c. ENERGY STAR windows

The ENERGY STAR windows program encourages customers purchasing new or replacement windows to choose ENERGY STAR rated windows over standard windows . Eligibility is limited to electrically-heated homes or have supplementary electric heat and use at least 15,000 kWhs per year. Customers who purchase ENERGY STAR windows receive a rebate of two dollars per square foot of window installed.

This program is promoted in partnership with trade allies, such as retailers, manufacturers, and home building and renovation contractors.

The table below provides the ENERGY STAR window rebates by area for 2010 and 2011.

ENERGY STAR Window Rebates

Table 13: ENERGY STAR® Windows Rebates			
AREA	**2010**	**2011**	**% Change**
St. John's	573	654	14%
Carbonear	103	148	44%
Clarenville	24	54	125%
Burin	15	43	187%
Grand Falls-Windsor	46	107	133%
Gander	82	99	21%
Corner Brook	78	76	-3%
Stephenville	44	67	52%
Contractors and NLHC	87	253	321%
Unknown[1]	0	366	
TOTAL	**1052**	**1867**	**77%**

[1] Cannot be broken out by area.

Overall, there was a significant increase of 77% in rebates for 2011 compared to 2010. Almost all areas experienced an increase including participation by contractors.

Market Penetration

The table below provides the percentage of ENERGY STAR window versus clear window sales by manufacturer sales for 2009, 2010 and 2011, as well as the percentage of rebates being reimbursed by manufacturer in the takeCharge rebate program for the period of May 2009 to December 2011.

Table 14: Manufacturer Sales by Window Type							
Manufacturer	**2011 ES**	**2011 Clear**	**2010 ES**	**2010 Clear**	**2009 ES**	**2009 Clear**	**% of Rebates**
[redacted]	61%	39%	45%	55%	40%	60%	28%
[redacted]	68%	32%	65%	35%	40%	60%	16%
[redacted]	50%	50%	10%	90%	10%	90%	5%
[redacted]	n/a	n/a	n/a	n/a	n/a	n/a	15%
[redacted]	100%	0	n/a	n/a	n/a	n/a	2%
[redacted]	n/a	n/a	n/a	n/a	n/a	n/a	6%
[redacted]	n/a	n/a	n/a	n/a	n/a	n/a	8%
[redacted]	70%	30%	n/a	n/a	n/a	n/a	11%

Information from window manufacturers indicates market penetration for ENERGY STAR windows in the province has increased significantly since 2009.

- [redacted] has the largest market share of window sales and 61% of their window sales are ENERGY STAR rated, a 50% increase since 2009. [redacted] also accounts for 28% of the window rebates.
- [redacted], the second most popular in terms of rebates (16%), sold 68% ENERGY STAR windows.
- One manufacturer, [redacted], only makes ENERGY STAR windows.

The market shift may be a result of the increased awareness about the benefits of ENERGY STAR windows, and the impact of the federal and provincial energy efficiency grant programs. If this trend in market transformation continues in 2012, the high penetration of ENERGY STAR windows in the market will require a reassessment of our rebate program in 2013 to determine if an incentive is still necessary.

The table below provides the price differential per square foot for ENERGY STAR windows over clear windows per retailer as of January 2012.

Table 15: Price Differential ENERGY STAR vs. Clear

Window Retailer	ENERGY STAR windows Price Differential per Sq. Ft.
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
Weighted Average	**$2.53**

Window retailer pricing is very competitive and the price differential between ENERGY STAR and clear glass windows is decreasing. In 2009, the difference between the price of an ENERGY STAR and clear glass windows was about 10%; currently it is closer to 5%. Data obtained in a market survey of retailers shows the price differential of ENERGY STAR and clear glass windows ranging from $0.98 to $3.85 per square foot. The majority of window retailers also offer winter booking discounts from November through April, ranging from 7% to 17% thereby reducing the price differential even more.

Currently, the weighted average price differential for ENERGY STAR and clear glass windows is $2.53 per square foot. As the current rebate of the ENERGY STAR window program is $2.00 per square foot, depending upon the retailer, customers can purchase ENERGY STAR windows at a lower price than clear glass.

Conclusions

- If the rapid market transformation continues into 2012, the high penetration of ENERGY STAR® windows in the market will require a reassessment of our rebate program in 2013 to determine if an incentive is still necessary.
- Rebates were received from twelve contractors including two based outside of St. John's, and accounted for 8% of total window rebates.
- Window rebate applications indicate that the smaller window retailers had the majority of window sales in 2011 which may be associated with the fact that they are passing manufacturer discounts on to customers.
- The introduction of the City of St. John's Energy Reduction Strategy in September 2011 as well as the expected changes to the National Building Code at the end of 2012, will require ENERGY STAR windows for new home construction. This will have a large impact on market penetration for ENERGY STAR windows .
- Customers have been inquiring about whether or not ENERGY STAR® patio doors are included in our rebate program.

Opportunities/Recommendations

- At the end of 2012, review market pricing and market penetration of ENERGY STAR windows and determine if incentive levels or new home eligibility should change.
- Evaluate the possibility of including ENERGY STAR patio doors in rebate program.
- Retailers are critical trade allies to promote the benefits of the product and programs; additional retailer staff education and training is required.
- Packaging the three programs together with an additional incentive will be investigated to determine if it is a feasible option to encourage program participation
- Provide more point of purchase advertising at the retailer locations
- Consider offering an incentive to retailers to complete window rebate applications on site (this will also eliminate one of the identified market barriers of administrative burden to customers).

3d. Commercial Lighting

The Commercial Lighting Program offers sales incentives to participating lighting distributors to sell high performance T8 lighting, ballasts and lamps to their customers, instead of selling standard T8 or T12 lighting systems. The incentive of $1.25 for lamps and $4.25 for ballasts eliminates the cost differential from upgrading to the higher efficiency lighting systems and provides a sales incentive for the distributor. High performance T8 lighting systems use 25% to 40% less energy than standard T8 and T12 systems. This program is promoted through local lighting distributors.

The Commercial Lighting Program was expanded in 2011 to include LED Exit Signs for retrofit applications. The incentive for LED Exit Signs is $21.00. LED Exit signs use 80- 90% less energy than fixtures with incandescent lamps.

Commercial Lighting Rebates

The table below shows the number of units of high performance ballasts and lamps that have been rebated since 2009 and the percentage increase year over year. LED Exit Signs were included in the Commercial Lighting Rebate Programs as of January 2011. The table also shows the percentage of rebates involving retrofit projects versus new installations.

Table 16: Commercial Lighting Rebates							
Units Rebated	2009	2010	% Change	2011	% Change	% New	% Retrofit
Ballasts	3602	11088	308%	19240	174%	17%	83%
Lamps	11926	23504	197%	26767	114%	31%	69%
Exit Signs	-	-	-	725	-		

Since the program's inception, ballast rebates have seen significant growth, with an increase of 174% in 2011 compared to 2010. Lamp rebates have seen more moderate growth, with an increase of 114% in 2011 compared to 2010. The percentage of retrofits is much larger than new installations.

Market Penetration

This table provides the percentage of high performance lamps and ballasts, and regular lamps and ballasts for the two largest lighting distributers in the province for the period of 2010-2011. A significant percentage of lamps sold in this market are the regular type, while the percentage of high performance ballasts sold in this market is higher than regular ballasts. According to sales data provided by GE, the top manufacturer of lamps and ballasts rebated by our program, 60% of GE ballasts sold in the province are high performance and 10% of GE 4 foot lamps sold are high performance. The manufacturer's sales data confirms the trend being experienced by distributors.

Commercial Lighting Distributor Market Analysis

Table 17: Commercial Lighting Distributor Market				
	Lamps		Ballasts	
Distributor	% of HP Lamps 2010-2011	% of Regular Lamps 2010-2011	% of HP Ballasts 2010-2011	% of Regular Ballasts 2010-2011
[redacted]	27%	73%	52%	48%
[redacted]	11%	89%	72%	28%
[redacted]	10%	90%	60%	40%

Conclusions

- Market data of units sold in province indicate that we are making progress with high performance ballast but there is room to grow the high performance lamps market.
- Many facilities are currently using T8 technology but have not moved to a high performance standard. This market segment includes health care, secondary and post-secondary schools.

Opportunities/Recommendations

- Increase awareness of the existing program through direct marketing to distributors and end users.
- Further education of the benefits and energy savings associated with high performance lighting fixtures and lamps. Target markets include distributors, designers/architects, consulting engineers, end users such as school and health care boards, and industry publications.
- A survey needs will be conducted to update the incremental costs to determine if the current rebate levels are still appropriate.

4. External Factors

There are external factors outside the control of takeCHARGE that are influencing the market and building standards, and therefore need to be considered when assessing the future of our rebate programs.

4a. Revised National Building Code (NBC)

The revised NBC is scheduled to be released in December 2012, and is expected to be adopted and enforced by larger municipalities by the second quarter of 2013.[1] The code will require:

- Basement concrete walls insulated to a minimum of R-18 (RSI 3.17)[2];
- ENERGY STAR windows [3]; and,
- Heat Recovery Ventilators (HRV) to have an efficiency of 60%[4], which meets the existing standard for ENERGY STAR HRVs. The NBC does not require an HRV be installed, but where an HRV is installed, the HRV must meet the NBC requirement.

Conclusions

- Adoption of the revised NBC in 2013 will result in the majority of new homes in larger municipalities becoming “free riders”.
- Based on historical housing start trends, it is expected that the majority of housing starts in the future will occur in the larger municipalities and thus, will be impacted by this change.

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[1] Conversation with Sylvester Crocker, Manager of Technical Services, City of St. John’s.
[2] National Building Code, Proposed change, 9.36.2.8 1), Table 9.36.2.7.B., For Zone 6 & 7a, Hdd 4,000 to 6,000 the minimum RSI for foundation walls is 3.17, with or without HRV installed.
[3] Ibid., 9.36.2.7 1), Table 9.36.2.7.B., For Zone 6 & 7a, Hdd 4,000 to 6,000 the minimum energy rating for ENERGY STAR windows & doors is 25. Current standard, Oct 1, 2010, for Energy Star ENERGY STAR windows .
[4] Ibid 9.36.3.9 2)

Opportunities /Recommendations

- The takeCHARGE insulation and ENERGY STAR window rebate programs will need to be reviewed in the first quarter of 2013 to determine if new home construction should be excluded from its eligible participants in larger municipalities or for all participants.
- In 2013, consider modifying criteria for basement insulation from a minimum of R-12 to a minimum of R-18.
- Investigate the development of a new takeCHARGE rebate program for HRV's that require an efficiency standard above the ENERGY STAR standard in the Five Year CDM Plan.
- Work closely with municipalities to ensure the NBC changes are ratified, adopted and enforced.

4b. St. John's Energy Reduction Strategy

On September 1, 2011, the City of St John's implemented the following standards for new home construction:

- Insulated basement walls to a minimum of R-16;
- ENERGY STAR® windows ; and,
- Electronic or programmable thermostats.

Conclusions

- The 600-700 new homes that are built each year in St. John's will become "free riders" in the three existing residential rebate programs.
- It is expected this will increase contractor participation in the rebate programs and incentive levels.

Opportunities/Recommendations

- Eligibility for the takeCHARGE residential programs will need to be modified to exclude new home construction in St. John's. The development of an exit strategy in this market should coincide with the release and adoption of the revised NBC in 2013 since both will have a similar impact and these two market factors will be addressed with one takeCHARGE rebate program revision. This will also minimize any political impacts since takeCHARGE was promoted to assist contractors with the implementation of these new standards.
- Since many of the contractors in the St. John's market are also building homes in surrounding municipalities such as Mount Pearl, Paradise and Conception Bay South, a new marketing effort will focus on influencing them to adopt these standards in all of their new home construction in advance of adoption of the revised NBC.

4c. Newfoundland and Labrador Housing Corporation (NLHC)

NLHC is expected to reduce their participation in energy efficiency rebates by one third of the $35,000 average for the past 3 years. This is largely the result of the termination of the Provincial Government's stimulus spending.

Conclusion

- The impact of NLHC rebates are expected to be in the $10,000-$15,000 range, down from the $35,000 average from the last 3 years.

Opportunities/Recommendations

- Will continue to provide education and awareness on energy efficiency to NLHC to encourage the wise use of energy with a focus on saving money.

4d. Federal and Provincial Government Programs:

The Federal and Provincial programs, Federal Eco-Energy Program and the Provincial EnerGuide for Homes Program, are based on the same pre and post retrofit assessment. Both programs offer the same table of grants for measures. The maximum grant for the Federal program is $5,000; the maximum grant for the Provincial program is $1,500 and also subsidizes the assessment cost by $300 per participant.

Conclusion

- Federal Eco-Energy Program: The Federal program stopped accepting new participants as of January 28, 2012. Registrants have until March 31, 2012, to complete their work.
- The Provincial EnerGuide for Homes Program: The Energy Efficiency Section of the Department of Natural Resources has applied for funding to extend the program and is expecting approval.

Opportunities/Recommendations

- Continue to partner with the provincial government to promote the additional value of participating in both the government and takeCHARGE rebate programs and work with them to customize their program to better match the needs of this province.

4e. New Lighting Standards in United States

The United States are introducing new standards effective July 2012 to remove T12 lamps from the market and allow only T8 lamps to be manufactured after this date. It is possible that these standards will be adopted in Canada by 2013.

Conclusion

- It is expected that this will affect our market as we move into 2013 by impacting our future energy savings estimates since we will be moving the market from T8 to HPT8, not T12 to HPT8.

Opportunities/Recommendations

- Continue to promote the use of HPT8 as a replacement in advance of the change in standard and the expected removal of T12 from the market.

5. Retailer Demographics

For all three residential programs, the customer is required to purchase their energy efficient product from a retailer and submit the receipt and application to Newfoundland Power to receive the rebate as a credit on their electricity bill. Over the period of May 2009 to December 2011, customers who received a rebate purchased products from one of 151 retailers across the province.

The table below identifies the top retailers (who have more than 10% of the rebates in their area). This is calculated based on the number of rebates for products purchased at a particular retailer in relation to the total number of rebates for products purchased at retailers in the same area as of December 2011.

5a. Top Retailers (with ≥10% of rebates) by Area

Table 18: Top Retailers (with ≥10% of rebates) by Area

TOP RETAILER	% of Rebates in Area
St. John's – 4 Stores	**52%**
[redacted]	[redacted]
Carbonear – 2 Stores	**26%**
[redacted]	[redacted]
Burin – 3 Stores	**67%**
[redacted]	[redacted]
Clarenville – 5 Stores	**77%**
[redacted]	[redacted]
Gander - 3 Stores	**41%**
[redacted]	[redacted]
Grand Falls-Windsor – 3 Stores	**38%**

[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
Corner Brook – 2 Stores	**37%**
[redacted]	[redacted]
[redacted]	[redacted]
Stephenville – 4 Stores	**52%**
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

Conclusion

- In St. John's, Burin, Clarenville and Stephenville areas, a small number of the retailers hold a large portion of the rebates in their areas. Customers participating in the rebate program are patronizing a small number of stores when purchasing products. Whereas, in Carbonear, Gander, Grand Falls-Windsor and Corner Brook, the rebates are spread out among a broader group of retailers, indicating that customers are patronizing a larger number of stores in their area.

Opportunities/Recommendations

- Generally, the top retailers in each area are engaged in the takeCHARGE rebate programs by promoting the programs to customers, displaying takeCHARGE point of purchase material, taking advantage of our education sessions for employees and using the takeCHARGE rebate programs to increase their business. Consider a recognition program be developed to ensure that top retailers are recognized for their promotion of the takeCHARGE rebate programs and encourage their support and continued participation.

5b. Engagement of Retailers in Area

The table below indicates the number of top retailers (those with more than 10% of the rebates), the total number of retailers in the area and the percentage of top retailers to total retailers. The purpose of this table is to identify the areas where there are opportunities to engage more retailers in promoting our residential programs to customers.

Top Retailers as % of Total Retailers in Area

Table 19: Top Retailers as a % of Total Retailers in Area			
Area	**Top Retailers ≥10% of Rebates**	**Total Number of Retailers**	**Top Retailers as % of Total Retailers**
St. John's	4	45	9%
Carbonear	2	29	7%
Burin	3	7	43%
Clarenville	5	9	56%
Gander	3	15	20%
Grand Falls-Windsor	3	18	17%
Corner Brook	2	16	13%
Stephenville	4	12	34%
Total	**26**	**151**	**17%**

Conclusion

- Engaging retailers in takeCHARGE rebate programs continues to be an effective strategy in promoting takeCHARGE rebate programs to customers. With the exception of Burin and Clarenville, the number of top retailers is small relative to the total number of retailers in the area. Thus, there are many other retailers in the area that can benefit from participating in the takeCHARGE rebate programs to increase their customer business.

Opportunities/Recommendations

- In 2012, there will be a focus on the retailers with only 5-10% of the rebates in each area with an objective of educating them on the benefits of takeCHARGE rebate programs and increasing their promotions to customers.

5c. Independent Store Retailers and Chain Retailers Participation

Retailers can be divided into two categories, independent store retailers and chain retailers. The table below identifies the chain retailers, the number of locations and the percentage of rebates by program attributable to the chain retailers.

Table 20: % Rebates by Chain Retailers					
CHAIN RETAILERS	**# OF LOCATIONS**	**% OF TOTAL 2011 REBATES**	**% OF 2011 THERMOSTAT REBATES**	**% OF 2011 WINDOW REBATES**	**% OF 2011 INSULATION REBATES**
[redacted]	[redacted]	21	37	5	19
[redacted]	[redacted]	10	1	19	10
[redacted]	[redacted]	7	4	9	9
[redacted]	[redacted]	7	5	1	11
[redacted]	[redacted]	7	24	0	0
[redacted]	[redacted]	5	18	0	0
[redacted]	[redacted]	5	0	8	5
Total		**62**	**89**	**42**	**54**

Conclusion

- The seven largest chain retailers in the province account for 62% of residential rebates. Although [redacted] and [redacted] only have one location in the province, their level of rebates is large due to the volume of business they do.

Opportunities/Recommendations

- A special focus on the seven chain retailers will occur in 2012. Continuing to identify opportunities to have in-store and flyer presence at the chain retailers across the province will be a key initiative. In the past, [redacted] has included takeCHARGE rebates alongside the weekly sales for products in their flyers, resulting in great success due to the combined savings for customers. Hosting retailer events to coincide with these sales has also proven to be very valuable.
- The window specialty stores are also another opportunity to encourage growth of rebates due to their low employee turnover and good knowledge of the takeCHARGE rebate programs. In 2012, will investigate the opportunity to incent window retailers for selling ENERGY STAR windows .
- An interactive retailer section on our website would be good method to train retailer staff.

6. Rural vs. Urban Markets

This table provides the breakdown of rebate by area by program as a percentage of the eligible customers in that area and, excludes the October 22 special insulation offer.

Residential Rebates by Area by Program by Eligible Customers

Table 21: 2011 Residential Rebates by Area by Program by Eligible Customers								
Area	**Eligible Customers**	**Total Rebates[1]**	**Thermostat Rebates**	**% of Eligible Customers**	**Window Rebates**	**% of Eligible Customers**	**Regular Insulation Rebates**	**% of Eligible Customers**
STJ	46905	2094	1068	2.28%	654	1.39%	372	0.79%
CLV	5212	390	32	0.61%	54	1.04%	22	0.42%
CAR	13623	108	129	0.95%	148	1.09%	113	0.83%
BUR	5362	126	44	0.82%	43	0.80%	39	0.73%
GFW	7232	237	68	0.94%	107	1.48%	62	0.86%
GAN	7144	254	89	1.25%	99	1.39%	66	0.92%
CRB	7966	210	78	0.98%	76	0.95%	56	0.70%

STV	6074	130	35	0.58%	67	1.10%	28	0.46%
Contr/NLHC		628	3		366		259	
Unknown[2]		651	262		253		136	
TOTAL	**99,518**	**4828**	**1808**	**1.82%**	**1867**	**1.88%**	**1153**	**1.16%**

[1]Excludes October 22 special insulation offer.

[2]Cannot be broken down by area.

Conclusion

- Thermostats: Participation highest in St. John's, however more has been done to influence this in the St. John's market through [redacted] Flyers and [redacted] promotions. The [redacted] flyers and retailer events in [redacted] stores in Gander and Corner Brook are also starting to have a positive impact in these markets as well. Participation is lowest in Clarenville and Stephenville.
- ENERGY STAR windows : Gander and Grand Falls-Windsor participation is comparable to St. John's and is attributed to high retailer involvement and large new home construction relative to population size.
- Insulation: Participation rates across the majority of the island are consistent, with the exception of Clarenville and Stephenville which have the lowest participation rates.

Opportunities /Recommendations

- To work with retailers to promote thermostat program in other areas, similar to what's been achieved in St. John's, through local retailer events and special retailer promotions.
- Increase outreach and retailer events in Clarenville and Stephenville areas which tend to have a positive impact in smaller markets.
- Retailers are critical trade allies to promote the benefits of the product and programs; additional retailer staff education and training is required.
- Provide more point of purchase advertising at the retailer locations

7. Program Market Barriers

An evaluation on the market barriers that may affect participation in the takeCHARGE Energy Savers Rebate Programs was conducted. Several independent reports were cross-referenced with information employees have collected anecdotally from customers.

Residential Programs

- 15,000 kWh/electric heat requirement: This criteria eliminates customers who use alternative or secondary heating systems that reduce the amount of electric heat used.
- Life cycle of windows /insulation: The average life cycle of a window is approximately 20-25 years. Once new windows are installed, they last for many years. If customers have undertaken these projects before the program started, then they are unlikely to become participants at this point.

- Upfront costs: Customers buy the materials upfront to complete the project and the rebate is then applied to their electricity bill once they submit their application. This may impact a customers' ability to participate if they do not have the financial resources to make the initial purchase. Those who chose to use a credit card do not receive the rebate in cash that they could use to apply against their credit card balance.
- Administrative burden[5]: Customers are unable to submit an application online so the process of correctly filling out the paper application and sending it through the postal service can seem like a burden to some. Another administrative burden is submitting original receipts/packaging codes which are often needed for other rebate programs, i.e. government or manufacturers' warranties.
- Lack of familiarity at the retailer level[6]: Retailers have a limited understanding of the programs, and therefore, are unable to advise customers on the advantages of participating in our programs. Significant staff turnover at the retail level is a big factor.
- Education and Awareness: Customers are not yet fully aware of the benefits of our programs. Giving that research tells us that saving money is the biggest motivator, it is important to quantify potential savings so customers can relate.
- Customer skepticism of purpose of programs: Customers do not understand why Newfoundland Power wants to sell less electricity. Customers are suspicious and feel the rebate programs are associated with a rate increase in the future[7].
- Lack of information/awareness about best practices and energy saving technology: Work still needs to be done to build the culture of conservation in Newfoundland and Labrador, especially in rural and remote communities[8].
- Availability/affordability of qualified labour to complete projects[9].
- Incentive is not enough to get some contractors to change the products they are using: For example we do not receive any thermostat rebate applications for contractors because they are using thermostats that do not qualify due to cost.

Commercial Program

- Lack of promotion in comparison to residential programs. More outreach and advertising would be useful to promote these programs[10]. Direct marketing will be key to educating and motivating contractors, consulting engineers and end users of the benefits and energy savings of high performance lighting and the rebates we offer.
- A lack of government support and push towards efficient lighting creates a barrier[11].

[5] Ibid, p. 15.
[6] Ibid, p. 11.
[7] Ryan Research & Communications, *NLPower/NL Hydro takeCHARGE Focus Groups Research Summary*. (St. John's, NL March 2011) pp. 5-14.
[8] Summerhill, 2012-2015 *Residential Coupon Design Newfoundland and Labrador Hydro & Newfoundland Power.* (October, 2011).
[9] Ibid, p. 11.
[10] CADMUS, *Newfoundland Power: Process Evaluation.* (Portland, OR June 14, 2011) p. 12.
[11] Ibid, p. 12.

- Some lighting installation contractors would rather service more frequent burn-outs than sell longer measure fixtures/lighting[12]. This would increase the amount they make on servicing the lighting system.

Conclusion

- A big obstacle to customer participation in rural markets appears to be the 15,000 kWh mark due to the higher usage of secondary heat sources in these markets; however adjusting this criteria can only occur if it makes economic sense. The return on our investment will be diminishing for customers who are currently using less than 15,000 kWh because the amount they can actually conserve will be lower. Recommend this criteria be reviewed to confirm.
- Original receipts: With our tracking system able to detect duplicate receipts based on receipt number, requiring customers to submit original invoices seems redundant. A scanned copy of the receipts and manufacturing shipping slips should be sufficient to process a rebate. There could be some issues with people attempting to get the rebate and then returning the product if they still have their original receipt, however our audit processes have shown virtually 100% compliance and we already have the practice of sending back original receipts to customers who request them.
- Retailers need to be better educated so customers can learn about our rebates at the point of purchase.

Opportunities/Recommendations

- Review the 15,000 kWh criteria to see if it is cost effective to increase the number of eligible customers.
- Develop a process for retailers to notify the Company of returns.
- Retailers are critical trade allies to promote the benefits of the product and programs; additional retailer staff education and training is required.
- Packaging the three programs together with an additional incentive will be investigated to determine if it is a feasible option to encourage program participation

8. Program Management Opportunities

8a. Rebate Eligibility

A review of the current eligibility requirements for the takeCHARGE rebate programs was completed to ensure that they are relevant and appropriate.

Currently, the eligibility requirements for residential takeCHARGE rebate programs are:

1. Applicant must be the homeowner;
2. Home must be all electric or use minimum 15,000 kWh per year with a supplementary heat source; and,

[12] Ibid, p. 15.

3. Submission of original receipts showing proof of purchase. The UPC code cutout must also be attached with thermostat rebate applications, while the Manufacturing Shipping Slip (MSS) must be attached with window rebate applications.

Customers currently require a receipt to participate in takeCHARGE rebate programs and government programs and thus, this requirement is causing problems for customers. The CRT system currently tracks the receipt number of all applications and alerts the employee processing the rebate if the receipt is a duplicate. Thus, original receipts will no longer be required and a change will be made to the eligibility requirements of rebate applications

8b. Data Quality

The program evaluation process identified a number of improvements to be made to the data collection process in order to ensure the completeness and accuracy of data. The following improvements will be implemented as soon as possible.

- Ensure the rebate applications cannot be completed without the age of the home. If the customer does not provide it, the person processing the rebate should check the data provided in CSS.
- Change the “Age of Home” question on the rebate application form to reflect that it is mandatory field and request an estimate if not known.
- Investigate the opportunity to provide “online” form completion and submission. Use of mandatory fields will ensure all relevant data is collected before submission.
- Complete a review of the window and insulation rebate application with the objective of making it easier to complete for customers.

8c. Auditing Process

The program evaluation process identified a number of changes to the audit process in order to ensure the appropriate capture of relevant data and audits. The following improvements will be implemented as soon as possible.

- Review the audit form to allow capture of more relevant data and make it easier to run reports.
- Set up contractor audits on a regular and consistent basis.

9. **Summary of Opportunities/Recommendations**

Residential Participant Demographics

- While the number of customers participating in the takeCHARGE Rebate Programs continues to increase, there is additional opportunity to significantly increase the number of participants based on the number of eligible customers.
- The current target market used in the 2009, 2010 and 2011 marketing plan is customers aged 25-54. Based on this analysis, the target market for the 2012 marketing plan will continue to include customers ages 25 and older, removing the upper limit of 54 years old. This may change the focus of the advertising and media campaign.

- There is an opportunity to engage first time home owners in the adoption of energy conservation behavior as the younger generation tend to be more environmentally conscious. Consideration of this target group will be factored into promotional plans giving consideration to real estate agents and contractors as the link to this group.
- In 2009, 2010 and 2011, the marketing plan has been focused on general messaging of all residential programs to the broad market. The marketing plan for 2012 for insulation and ENERGY STAR windows will focus on new homes and retrofits for the older home market. To build on the new home market, a focus on educating and building awareness with real estate agents and building contractors will occur, and a new home information package for customers when they sign up for their electrical service will be created.
- There is an opportunity to promote the takeCHARGE rebate programs to contractors across the province. The participation is low relative to the number of contractors in the province and the participation outside of St. John’s and surrounding area is relatively untapped. An emphasis on engaging contractors throughout the province through awareness and education of all programs will occur in 2012.
- Packaging the three programs together with an additional incentive will be investigated to determine if it is a feasible option to encourage contractor participation.
- Engaging contractors in the residential rebate programs is valuable as the rebates and associated energy savings are larger than the residential customer on a per home basis. When these energy efficient products are installed in the initial home construction, the benefits and savings are associated with the home right from the start.
- There is an opportunity to “cross-promote” residential programs to participants who have already participated in one of the programs. These individuals have already made a commitment to energy efficiency and are aware of the rebate process. In 2012, these individuals will be contacted and provided information on the other programs.
- A marketing campaign will be established utilizing testimonials of individuals that have participated in the rebate programs.
- A review of providing an incentive to encourage customers to participate in all three programs will be completed.
- As customers are installing insulation themselves, it is important that additional education on the proper techniques of installing insulation is easily available to ensure the project is completed properly and the customer receives the full savings benefit from the insulation project.
- Some customers either forget or lose the paperwork required to submit their application even though they may be well intentioned when purchasing the product. Thus, a deadline for customers to submit their application will motivate customers to submit their application on a timely basis. A deadline for application submissions will be added to the program guidelines.

Programs

a. General

- Retailers are critical trade allies to promote the benefits of the product and programs; additional retailer staff education and training is required.
- Provide more point of purchase advertising at the retailer locations

b. Insulation Program

- Adjust the minimum R-value from R-12 to R-18 to coincide with the introduction of the revised National Building Code (see Section 5).
- Promotions like the October 22 work well to increase participation in a short period of time but under the current financial arrangement, require limits to rebate amounts and type of insulation included.
- Focus marketing efforts on contractors and real estate agents to increase participation in insulation, particularly for new home construction.

c. Thermostat Program

- Identify local marketing opportunities to ensure thermostat rebates are increasing in all areas.
- Educate customers and contractors on how to program thermostats to ensure customer satisfaction.

d. Energy Star Window Program

- At the end of 2012, review market pricing and market penetration of energy star ENERGY STAR windows and determine if incentive levels or new home eligibility should change.
- Evaluate the possibility of including ENERGY STAR® patio doors in rebate program.
- Consider offering a small incentive to retailers to complete window rebate applications on site (this will also eliminate one of the identified market barriers of administrative burden to customers).

e. Commercial Lighting Program

- Increase awareness of the existing program through direct marketing to distributors and end users.
- Further education of the benefits and energy savings associated with high performance lighting fixtures and lamps. Target markets include distributors, designers/architects, consulting engineers, end users such as school and health care boards, and industry publications.
- A survey needs will be conducted to update the incremental costs to determine if the current rebate levels are still appropriate

External Factors

- The takeCHARGE insulation and ENERGY STAR window rebate programs will need to be reviewed in the first quarter of 2013 to determine if new home construction should be excluded from its eligible participants in larger municipalities or for all participants.
- In 2013, consider modifying criteria for basement insulation from a minimum of R-12 to a minimum of R-18.
- Investigate the development of a new takeCHARGE rebate program for HRV's that require an efficiency standard above the ENERGY STAR standard in the Five-Year CDM Plan.
- Work closely with municipalities to ensure the NBC changes are ratified, adopted and enforced.
- Eligibility for the takeCHARGE residential programs will need to be modified to exclude new home construction in St. John's. The development of an exit strategy in this market should coincide with the release and adoption of the revised NBC in 2013 since both will have a similar impact and these two market factors will be addressed with one takeCharge rebate program revision. This will also minimize any political impacts since takeCHARGE was promoted to assist contractors with the implementation of these new standards.

- Since many of the contractors in the St. John's market are also building homes in surrounding municipalities such as Mount Pearl, Paradise and Conception Bay South, a new marketing effort will focus on influencing them to adopt these standards in all of their new home construction in advance of adoption of the revised NBC.
- Will continue to provide education and awareness on energy efficiency to NLHC to encourage the wise use of energy focused on saving money.
- Continue to promote the use of HPT8 as a replacement in advance of the change in standard and the expected removal of T12 from the market.

Retailer Demographics

- Generally, the top retailers in each area are engaged in the takeCHARGE rebate programs by promoting the programs to customers, displaying takeCHARGE point of purchase material, taking advantage of our education sessions for employees and using the takeCHARGE rebate programs to increase their business. It is important that a recognition program be developed to ensure that top retailers are recognized for their promotion of the takeCHARGE rebate programs and encourage their support and continued participation.
- In 2012, there will be a focus on the retailers with only 5-10% of the rebates in each area with an objective of educating them on the benefits of takeCHARGE rebate programs and increasing their promotions to customers.
- A special focus on the seven chain retailers will occur in 2012. Continuing to identify opportunities to have in-store and flyer presence at the chain retailers across the province will be a key initiative. In the past, [redacted] has included takeCHARGE rebates alongside the weekly sales for products in their flyers, resulting in great success due to the combined savings for customers. Hosting retailer events to coincide with these sales has also proven to be very valuable.
- The window specialty stores are also another opportunity to encourage growth of rebates due to their low employee turnover and good knowledge of the takeCHARGE rebate programs. In 2012, will investigate the opportunity to incent window retailers for selling ENERGY STAR windows .
- An interactive retailer section on our website would be good method to train retailer staff.

Rural vs Urban Markets

- To work with retailers to promote thermostat program in other areas, similar to what's been achieved in St. John's, through local retailer events and special retailer promotions.
- Increase outreach and retailer events in Clarenville and Stephenville areas which tend to have a positive impact in smaller markets.

Program Market Barriers

- Review the 15,000 kWh criteria to see if it is cost effective to increase the number of eligible customers.
- Develop a process for retailers to notify the Company of returns.

Program Management Opportunities

- Original receipts will no longer be required and a change will be made to the eligibility requirements of rebate applications
- Ensure the rebate applications cannot be completed without the age of the home. If the customer does not provide it, the person processing the rebate should check the data provided in CSS.
- Change the "Age of Home" question on the rebate application form to reflect that it is mandatory field and request an estimate if not known.
- Investigate the opportunity to provide "online" form completion and submission. Use of mandatory fields will ensure all relevant data is collected before submission.
- Complete a review of the ENERGY STAR window and insulation rebate application with the objective of making it easier to complete for customers.
- Review the audit form to allow capture of more relevant data and make it easier to run reports.
- Set up contractor audits on a regular and consistent basis.