

**2012 takeCHARGE Rebate Program Evaluation**

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**May 21, 2013**  
**(Redacted Version)**

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## 1. Objective

The objective of the takeCHARGE Rebate Program Evaluation is to gather and analyze program process data and market information to assess potential program modifications, identify future opportunities, improve processes and develop marketing strategies for 2013 and beyond.

### 1a. Definitions

**Recent Builds:** Any home that has a service and application date since the launch of the takeCHARGE residential rebate programs

**Retrofit:** Any home with a service date before the launch of the takeCHARGE residential rebate programs

**The data provided is based on a calendar year and not a financial. These totals will not line up with financial reporting that is used for annual report and cost effectiveness testing.**

## 2. Residential Participant Demographics

### 2a. Eligible Customers

In order to be eligible to participate, the customer's home must be electrically heated or use at least 15,000 kWh per year.

Table 1 below provides the total customers per area and the corresponding total number of customers eligible to participate in the residential takeCHARGE Rebate Programs in 2012.

Table 1: Eligible Customers by Area 2012					
Area	Total Customers	Eligible Customers	% Eligible	2012 Rebate Participants	2012 Rebates as % Eligible
St. John's	93,096	44,291	48%	3,613	8.2%
Carbonear	31,422	13,017	41%	304	2.3%
Clarenville	14,035	4,954	35%	128	2.6%
Burin	10,081	4,978	49%	91	1.8%
Grand Falls-Windsor	18,603	6,613	36%	161	2.4%
Gander	17,599	6,660	38%	195	2.9%
Corner Brook	19,453	7,314	38%	232	3.2%
Stephenville	14,001	5,556	40%	127	2.3%
<b>TOTAL</b>	<b>218,290</b>	<b>93,383</b>	<b>43%</b>	<b>4,851</b>	<b>5.2%</b>

Table 2 below shows the cumulative eligible customers by area since program inception 2009 to 2012 by takeCHARGE Rebate Program.

<b>Table 2: Cumulative Customer Participation by Area 2009-2012</b>						
<b>Area</b>	<b>Total Per Area</b>	<b>Eligible Customers</b>	<b>Thermostat Rebates as % Eligible Customers</b>	<b>Window Rebates as % Eligible Customers</b>	<b>Insulation Rebates as % Eligible Customers</b>	<b>Total Rebates as % Eligible Customers</b>
St. John's	95,494	44,291	8.6%	7.8%	6.2%	22.7%
Carbonear	32,292	13,017	3.4%	3.5%	4.9%	11.9%
Clarenville	14,400	4,954	2.3%	2.8%	2.9%	8.0%
Burin	10,263	4,978	3.5%	1.9%	4.9%	10.3%
Grand Falls-Windsor	18,910	6,613	3.3%	3.9%	4.0%	11.2%
Gander	17,960	6,660	4.2%	4.3%	4.8%	13.3%
Corner Brook	19,800	7,314	4.2%	3.8%	4.3%	12.4%
Stephenville	14,333	5,556	2.4%	3.2%	3.6%	9.1%
<b>TOTAL</b>	<b>223,452</b>	<b>93,383</b>	<b>5.9%</b>	<b>5.5%</b>	<b>5.2%</b>	<b>16.7%</b>

**Conclusion**

- As per Table 1, approximately 42% of Newfoundland Power customers are eligible for takeCHARGE Rebate Programs. In 2012, 5.2% of eligible customers participated in one or more program. In 2011, 6.3% of eligible customers participated in one or more program. The decrease in participation is attributable to the special one-time insulation offer held in October of 2011.
- The distribution of the percent of eligible customers across the island in Table 1 is broadly consistent (34-49%).
- Burin has the highest percentage of eligible customers but the lowest percentage of participation.
- There are still a large number of eligible customers that could participate in the takeCHARGE Rebate Programs.
- In Table 2, the total percent of customers that have participated in each takeCHARGE Rebate Program are similar (5.2-5.9%).
- 34% of Clarenville's population is eligible to participate in the takeCHARGE rebate programs but they have the lowest cumulative participation compared to the other areas.

**Opportunities/Recommendations**

- The removal of eligibility of new homes from the ENERGY STAR Windows and Insulation programs will decrease the number of eligible customers significantly. Effort should be focused

on the retrofit market to increase the number of participants based on the number of eligible customers.

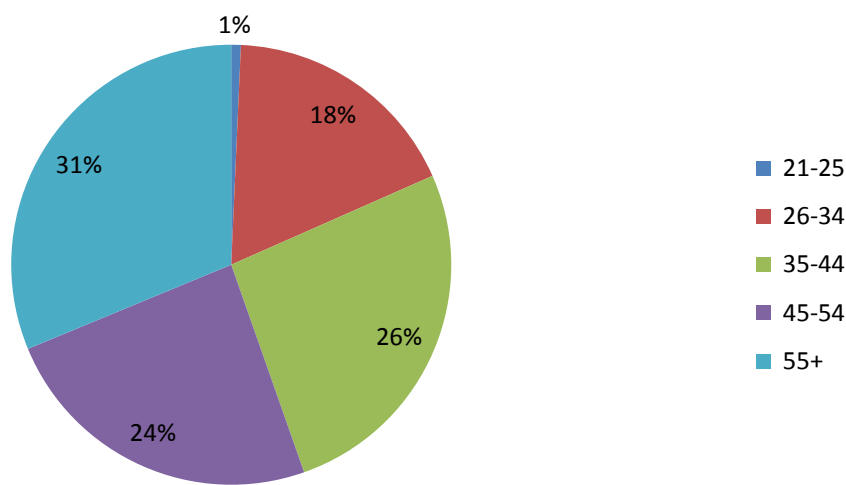
- There should be focused outreach in areas such as Burin and Clarendville that have low overall participation but high eligibility. This may consist of special incentives and events for customers, such as double thermostat rebates or additional retailer days.

**2b. Age of Participants**

Chart 1, below provides the age groups of participants in the residential takeCHARGE Rebate Programs for the period of 2012.

Of the customers who participated in takeCHARGE Rebate Programs over the last year, 58% provided age information. This chart reflects the age information available.

**Chart 1: Total Residential Rebates by Age Group  
2012**



**Conclusion**

- The largest age group participating in takeCHARGE Rebate Programs is the 55+ age group (31%), followed closely by customers aged 35-44 (26%). The third largest age group is the 45-54 age group (24%).
- The youngest age group, 21-25 (1%), are low users of the takeCHARGE Rebate Programs. The low participation of 21-25 age group is not surprising as younger customers 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 with the exception of the Thermostat Program. Programmable thermostats for Recent Builds are highest among ages 26 - 34 (37%) and low in 55+ age group (15%). However, ages 35-44 customers have a high participation for electronic thermostats in Recent Builds (40%).

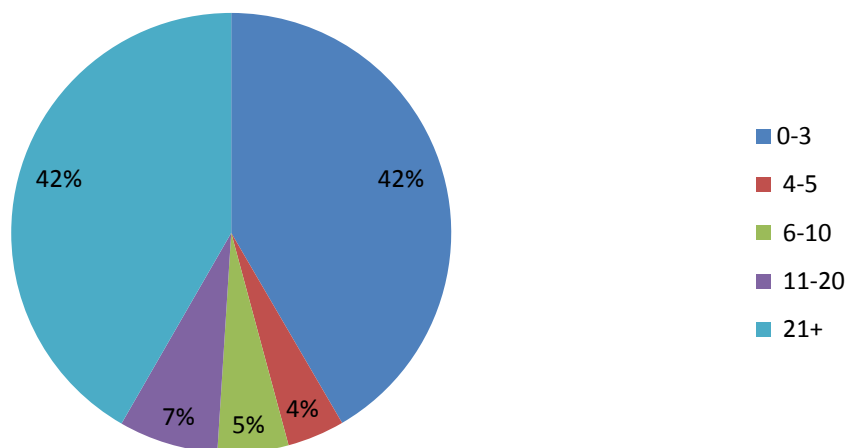
### Opportunities/Recommendations

- There is an opportunity to engage first time home owners in the adoption of energy conservation behavior through education and program promotion. Provide first time homeowners with information about energy efficient technologies to be aware of when evaluating the purchase of their first home. This could be done through tips on the website or providing a printable checklist.
- Continue to push programmable thermostats to age groups 21-25 and 26-34. Customers in these age groups are very open to energy efficient technologies but may not have the resources of older age group customers to avail of upgrades/additions that require a larger dollar investment. Promotion through social media outlets is cost efficient and effective to reach this younger demographic.
- Opportunity for stronger promotion to age groups 35 through 55+ of ENERGY STAR Windows and Basement/Attic Insulation as these customers are more established financially and in a position to afford the upfront cost of these upgrades.
- Marketing should reflect the current trend in program participation by age group. It should focus both on where participation is highest and lowest to continue to encourage those who are the highest percentage of participants as well as try to encourage the lowest percentage to participate in the programs.

### 2c. Age of Homes

Chart 2 below provides the age of home of participants in the residential takeCHARGE Rebate Programs for 2012.

**Chart 2: Total Residential Rebates by Age of Home  
2012**



**Conclusion**

- 42% of customers who participated in the takeCHARGE insulation, ENERGY STAR Window and Thermostat Rebate Programs, reside in homes that are more than 21 years old. This is a 13% decrease over previous years. Another 42% of customers reside in homes that are less than 2 years old, this is an increase of 22% , this reflects the increase in contractor incentives of 482% over 2011
- When the “age of the home” is analyzed by program, the participants in the ENERGY STAR Window Rebate Program reflect a similar “age of home” distribution. In the Insulation Program, 60% of the participants lived in homes 0-3 years old and only 21% lived in homes 21+. In the Programmable Thermostats program, 51% of participants lived in homes 21+.
- It can be concluded that customers 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. 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 financial equity in retrofits of older homes could be a trigger in participation in takeCHARGE Rebate Programs.

**Opportunities/Recommendations**

- There is potential to engage renovation contractors in encouraging customers to choose ENERGY STAR Windows and Basement Insulation when making upgrades to their homes. Opportunities to entice renovation contractors to promote the takeCHARGE rebate programs needs to be investigated. Methods such as cross promotion or financial incentives should be researched.
- Marketing should also focus on the homes 21+ years of age. The life of windows is about 25 years; therefore homes of this age should begin to need to replace these technologies and should avail of takeCHARGE rebates when doing so.

**2d. Building Contractor Participation**

Table 4 below compares homeowner participation to contractor participation in the takeCHARGE Residential Rebate Programs in 2011 and 2012.

<b>Table 4: Homeowner vs. Contractor Incentives 2011 to 2012</b>							
<b>Program</b>	<b>2012 Contractor Incentives</b>	<b>2012 Homeowner Incentives</b>	<b>2012 Total Incentives</b>	<b>2011 Contractor % of Rebates</b>	<b>2011 Homeowner % of Rebates</b>	<b>2012 Contractor % of Rebates</b>	<b>2012 Homeowner % of Rebates</b>
Windows	\$343,827	\$388,997	\$732,824	13%	87%	47%	53%
Insulation	\$206,259	\$183,354	\$389,613	8%	92%	53%	47%
Thermostat	\$3,030	\$121,400	\$124,430	0%	100%	2%	98%
<b>TOTAL</b>	<b>\$553,117</b>	<b>\$693,750</b>	<b>\$1,246,867</b>	<b>9%</b>	<b>91%</b>	<b>44%</b>	<b>56%</b>



Table 5 below identifies the average rebate for ENERGY STAR windows, Insulation and Thermostats for 2010 through 2012, broken down by residential customer and contractor.

Table 5: Average Rebate by Contractor versus Customer 2010-2012						
Program	2010 Residential Customer	2010 Contractor	2011 Residential Customer	2011 Contractor	2012 Residential Customer	2012 Contractor
ENERGY STAR windows	\$277	\$350	\$325	\$462	\$289	\$440
Insulation	\$237	\$162	\$315	\$450	\$354	\$412
Thermostats	\$57	\$63	\$44	\$63	\$73	\$69

Table 6 below provides information on the contractors who participated in the takeCHARGE Rebate Programs, the location and the dollar value of participation for 2012 versus 2011.

Table 6: Building Contractor Participation 2011 to 2012					
Contractor	Location	2011	2012	% 2012 vs 2011	Total 2012 and 2011
[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]





## **Conclusion**

- 44% of 2012 residential program participation was from contractors. This is a result of the communication to contractors about the impending changes to the residential programs. Also, to educate the contractors about the changes to Part 9 of the National Building Code that was announced in December of 2012.
- There has been an increase in the number of contractors participating in the residential programs in 2012. 43 contractors participated in 2012 versus 13 contractors in 2011. The total dollars rebated to contractors in 2012 was up 482% over 2011 primarily due to increased contact and education targeted toward contractors.
- The highest growth for contractor participation is in the Insulation Program with a 310% increase. This may be due to the St. John's Energy Reduction Strategy that requires new homes built in St. John's to install basement insulation.
- The Windows Program has the highest contractor participation in 2012 compared to the other programs. This may be attributable to the relative ease of the application process and the effect of the St. John's Energy Reduction Strategy.
- Of the 43 participating contractors in 2012, three are located outside of the St. John's and surrounding area (Burin and two in Gander)
- Seven of the building contractors participated in the Thermostat Program in 2012. Feedback from contractors is that the higher initial cost for electronic or programmable thermostats does not make it cost efficient.

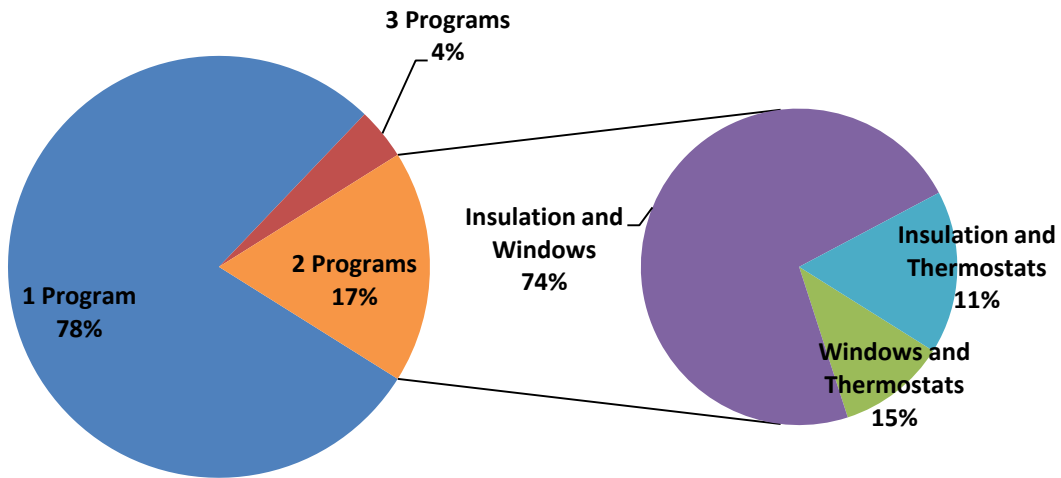
## **Opportunities/Recommendations**

- In order to keep contractors engaged a thank-you for participating in 2012 email and reminder that new home construction is still eligible may help increase contractor participation in 2013.
- There is an opportunity for outreach across the island to engage new contractor participation. Only 3 of the 43 contractors who participated in the takeCHARGE rebate programs in 2012 were located outside of St. John's CMA.
- Opportunities and methods to engage renovation contractors should be explored. It is important to develop partnerships with renovation contractors so they can help promote the take-charge Rebate Programs to existing home customers.

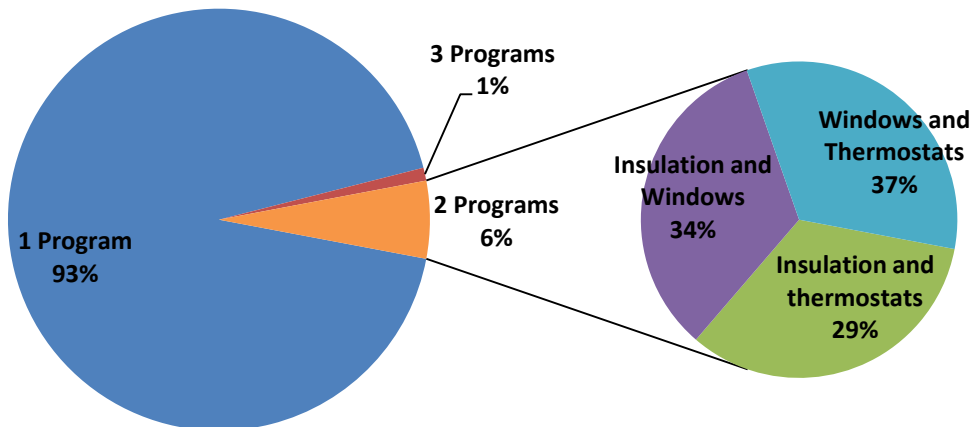
**2e. Participants in Multiple Residential Programs**

Chart 3, 4 and 5 below shows the percentage of participants based on the number of takeCHARGE Rebate Programs they participated in 2012.

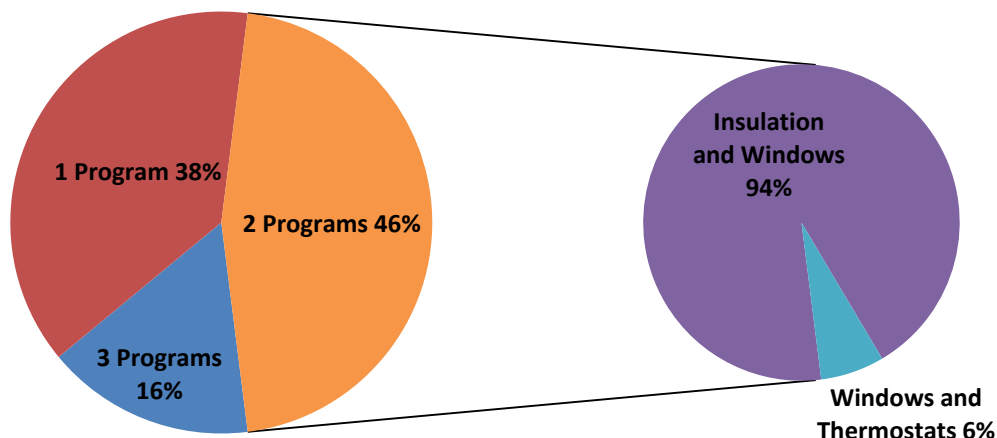
**Chart 3: Recent Builds Participants in Multiple Programs**



**Chart 4: Retrofit Participants in Multiple Programs**



**Chart 5: Contractor Participation in Multiple Programs**



**Conclusion**

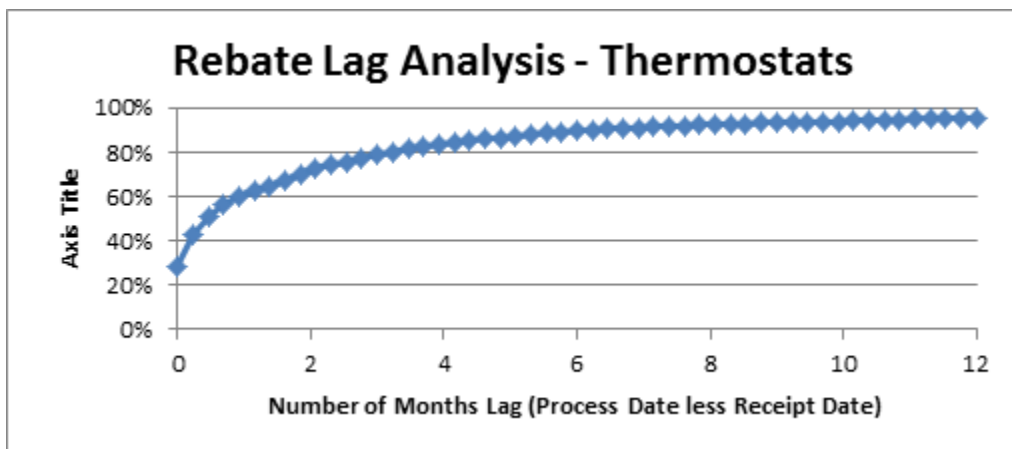
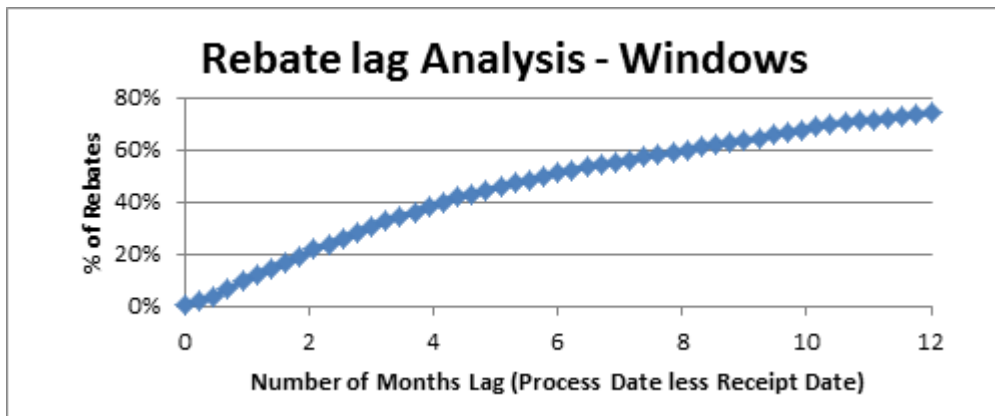
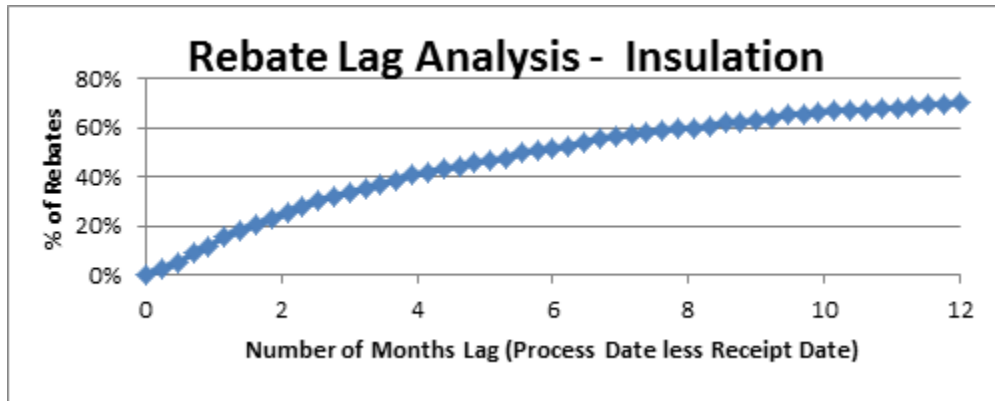
- 79% of Recent Build participants participated in only one program (23% insulation, 22% Thermostats, 55% windows), 17% participated in 2 programs, and 4% participated in 3 programs.
- 93% of retrofit participants participated in only one program (11% insulation, 54% Thermostats, 35% windows), 6% participated in 2 programs, 1% participated in 3 programs.
- 38% of contractor participants participated in only one program (100% windows), 46% participated in 2 programs, and 16% participated in 3 programs.
- When participants participated in two programs, the most prominent combination is insulation and ENERGY STAR windows, with the exception of retrofit applications that participated mostly in the ENERGY STAR windows and thermostat programs.

**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.
- Automated email notification to customers that have participated in the takeCHARGE Rebate Programs should advise them that their rebate has been applied to their bill. This email could also be used to inform the customer that they are eligible to participate in the other rebate programs and provide a link to the website where they can receive more information.
- Marketing efforts should focus on new home participants that have participated in one program to promote participation in the other programs before they are excluded from the programs.
- Specific marketing of thermostats to all customers who have already participated in the ENERGY STAR Windows and Insulation Programs because thermostats may be an easy additional upgrade.

**2f. Rebate Submission Lag Time**

The three charts below indicate the time between when a customer purchases a product and the time it takes for them to submit their rebate application for each residential program.



**Conclusion**

- Within 3 months of purchasing insulation, 33% of customers have submitted their rebate application, by 6 months 52% have submitted, by 9 months 63% have submitted and by 12 months, 71% of applications are submitted.

- Within 3 months of purchasing ENERGY STAR windows, 30% of customers have submitted their rebate application, by 6 months 51% have submitted, by 9 months 64% have submitted and by 12 months, 74% of applications are submitted.
- Within 3 months of purchasing high performance thermostats, 79% of customers have submitted their rebate application, by 6 months 90% have submitted, by 9 months 93% have submitted and by 12 months, 96% of applications are submitted.
- Windows and insulation have similar lag times with approximately 70% of the rebates being submitted after 12 months.
- Thermostats have a high submission level compared to the other two programs. This is most likely because of the simplicity of the application form for thermostats.

#### **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 should motivate customers to submit their application on a timely basis. A deadline for application submissions should be added to the program guidelines.
- Investigate ways to improve and simplify the application process by researching other utility practices and procedures without comprising the quality of information gathered from applications.
- Modifying the application process to include electronic rebate submission may improve program lag times. Paper rebate applications can increase lag times because customers want and expect to be able to submit applications online. Because this option is not currently available, customers may decide not to mail in the application.
- Processing lag time should also be investigated. This would help ensure the processing of applications is kept within the 6 to 8 week time frame that is outlined on the rebate form.



**2g. Cost to Process Rebate Applications**

Table 8 below shows the average cost to process a rebate application per program for 2011 and 2012.

<b>Table 8: Average Cost per Application per Program<sup>1</sup> 2011-2012</b>						
<b>Average</b>	<b>Cost per Application 2011</b>	<b>Cost per Application 2012</b>	<b>% Change 2012 vs 2011</b>	<b>Average time to Process Application 2011 (Mins)</b>	<b>Average time to Process Application 2012 (Mins)</b>	<b>% Change 2012 vs 2011</b>
ENERGY STAR Windows	\$10.55	\$17.34	64%	23 mins	36 mins	57%
Insulation	\$19.77	\$18.09	-8%	43 mins	38 mins	-12%
Thermostats	\$1.62	\$2.20	36%	4 mins	5 mins	25%
<b>Total Average</b>	<b>\$10.65</b>	<b>\$12.54</b>	<b>18%</b>			

**Conclusion**

- The least cost application to process is the thermostat application. This is due to the fact it requires the least amount of information from a customer.
- The most expensive application to process is Insulation. This is because of the detailed calculations required of the Energy CARs to complete the application process.
- With the exception of Insulation, the program cost per application and processing time has increased in 2012 from 2011.

**Opportunities/Recommendations**

- The reason why the cost and time to process a window rebate application has increased from 2011 needs to be investigated.
- Training for the Energy CARs should be increased. Coaching the best practices to the Energy CARs for processing could help reduce the higher cost per application for windows and insulation.
- Develop tools and calculators that the Energy CARs can use to improve the application processing time.

<sup>1</sup> Table 7 includes the time that Energy CARs spend taking and responding to Contact Center calls and escalations. This time is unable to be removed from the data because it is not available by individual. This time is included in the averages.

- A review of the current rebate applications should be conducted to simplify the process of generating the customer rebate.
- The time that Energy CARs are being pulled away from processing applications for other responsibilities needs to be recorded and tracked.
- Create a time stamp for when an application is started to when it is completed in the Customer Rebate Tracking System. This should allow for accurate cost and time estimates for processing applications by program.
- Consider making an Energy CAR a full time position. Having a dedicated Energy CAR would improve processing time of applications.

### 3. Programs

#### 3a. Insulation

The Insulation takeCHARGE 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.

Table 9 below shows the number of insulation participants by area and the percent change for 2010 through 2012.

<b>Table 9: Insulation Rebates Growth by Area 2010-2012</b>					
<b>AREA</b>	<b>2010</b>	<b>2011<sup>2</sup></b>	<b>% Change 2011 vs 2010</b>	<b>2012</b>	<b>% Change 2012 vs 2011</b>
St. John's	342	679	99%	799	18%
Carbonear	98	147	50%	57	-61%
Clarenville	18	23	29%	24	4%
Burin	24	48	104%	20	-58%
Grand Falls-Windsor	31	75	143%	38	-49%
Gander	63	81	28%	50	-38%
Corner Brook	48	65	36%	44	-32%
Stephenville	37	35	-6%	39	11%
<b>TOTAL</b>	<b>661</b>	<b>1,153</b>	<b>74%</b>	<b>1,071</b>	<b>-7%</b>

Overall, participation in the insulation program has decreased 7%. There was a large decrease in Carbonear, Burin and Grand Falls. The decrease may be in relation to the special insulation offer in 2011

<sup>2</sup> The 2011 special insulation offer has been removed from this data.

because this may have caused high participation of insulation for 2011, impacting the number of participants for 2012.

### 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 other purposes other than basements or attics. For example, a portion of insulation sold is used for the main wall cavity of the house and for cabins, sheds, garages, etc. which are not eligible for our rebate program.

Tables 10 below show the percentage of applications by age of home.

Table 10: Insulation Applications by Age of Home 2010-2012						
	2010		2011 <sup>3</sup>		2012	
<b>Recent Builds</b>	165	25%	549	48%	752	70%
<b>Retrofit</b>	496	75%	604	52%	319	30%
<b>Total</b>	661	100%	1,153	100%	1,071	100%

Tables 11 and 12 below show the percentage of participants that completed projects that had no insulation prior to participating and those that upgraded existing insulation levels for the period 2012.

Table 11: 2012 Retrofit Insulation Participant Demographics						
Starting R-value	Basement Walls		Attics		Basement Ceilings	
	Rebates	%	Rebates	%	Rebates	%
None	408	82%	21	12%	80	95%
Existing	90	18%	149	88%	4	5%
<b>TOTAL</b>	<b>498</b>	<b>100%</b>	<b>170</b>	<b>100%</b>	<b>84</b>	<b>100%</b>

Table 12: 2012 Recent Builds Insulation Participant Demographics						
Starting R-value	Basement Walls		Attics		Basement Ceilings	
	Rebates	%	Rebates	%	Rebates	%
None	190	81%	0	0%	49	100%
Existing	45	19%	35	100%	0	0%
<b>TOTAL</b>	<b>235</b>	<b>100%</b>	<b>35</b>	<b>100%</b>	<b>49</b>	<b>100%</b>

<sup>3</sup> The 2011 special insulation offer has been removed from this data.

Approximately 82% of retrofit participants installing insulation in basement walls started with no insulation; approximately 81% of Recent Build participants installing insulation in basement walls started with no insulation.

Approximately 12% of retrofit participants installing attic insulation started with no insulation.

Approximately 95% of retrofit participants installing insulation in basement ceilings started with no insulation; approximately 100% of Recent Build participants installing insulation in basement ceilings started with no insulation.

Tables 13, 14 and 15 below show the types of insulation installed in basement walls, ceilings and attics for rebates submitted in 2012.

<b>Table 13: 2012 Types of Insulation Installed In Basement Walls</b>	
Batt	68.00%
RIGID	10.00%
ICF	7.00%
Sprayfoam	5.00%
Expanded Polystyrene	4.00%
Batt & Expanded Polystyrene	1.70%
Ridgid & Expanded Polystyrene	1.30%
Poly bead	1.05%
Batt & Ridgid	1.00%
Batt & Codeboard	0.30%
Blown in	0.30%
Cellulose	0.20%
Trueboard	0.15%

<b>Table 14: 2012 Types of Insulation Installed In Basement Ceilings</b>	
Batt	91.00%
Sprayfoam	7.00%
Blown In	1.50%
ICF	0.50%

<b>Table 15: 2012 Types of Insulation Installed In Attics</b>	
Batt	52.00%
Blown-in	47.50%
Sprayfoam	0.50%

Batt insulation is the most commonly used type of insulation for both basement wall and basement ceiling applications. Batt insulation is the most commonly used type of insulation for attic applications.

Table 16 below shows the breakdown of insulation rebates by location and age of homes for 2012.

<b>Table 16: 2012 Breakdown of Insulation Applications by location</b>				
	<b>Basement Wall</b>	<b>Basement Ceiling</b>	<b>Attic</b>	<b>Total</b>
<b>Recent Builds</b>	74%	15%	11%	100%
<b>Retrofit</b>	66%	11%	23%	100%
<b>Total</b>	68%	12%	19%	100%

Majority of Recent Builds are applying for basement wall insulation and the majority of retrofit applications are for attic insulation.

Table 17 below illustrates the average rebate by insulation location and by age of home for 2012.

<b>Table 17: 2012 Average Insulation Rebate</b>			
<b>Recent Builds</b>	\$303		
<b>Retrofit</b>	\$213		
	<b>Basement Wall</b>	<b>Basement Ceiling</b>	<b>Attic</b>
<b>Recent Builds</b>	\$308	\$463	\$153
<b>Retrofit</b>	\$234	\$276	\$169

The highest average rebate for both Recent Build and retrofit homes is for basement ceiling insulation with rebates of \$463 and \$276 respectively.

Table 18 below shows the average installed insulation square footage per rebate per age of home.

<b>Table 18: Insulation Average Rebated Square Footage 2010-2012</b>									
	<b>Basement Wall</b>			<b>Basement Ceiling</b>			<b>Attic</b>		
	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Recent Builds</b>	2,993	2,948	2,757	2,490	2,658	2,684	2,232	1,473	3,037
<b>Retrofit</b>	749	2,523	2,451	2,392	2,382	2,146	2,078	2,165	2,226

Attic insulation in Recent Build and retro homes has the largest average installed square footage rebated and the smallest average installed square footage rebated is for basement wall insulation.

Table 19 below shows the average R-Value added to the insulated area for submitted rebates in 2012

<b>Table 19: 2012 Average R-value added to Insulated Area</b>			
	<b>Basement Wall</b>	<b>Basement Ceiling</b>	<b>Attic</b>
<b>Recent Builds</b>	18	20	13
<b>Retrofits</b>	16	20	23



## Conclusion

- Regular rebates decreased 7% in 2012 compared to 2011 with the October 22 special insulation offer excluded.
- The majority of basement wall and basement ceiling insulation projects had no insulation to begin with.
- Batt insulation is the most commonly used type of insulation for both basement wall and ceiling applications. Blown-in insulation is the most commonly used type of insulation for attic applications
- Majority of Recent Builds and retrofit applications are applying for basement wall insulation.
- The highest average rebates are for ceiling in Recent Builds.
- The average insulation square footage rebated is the largest for attics in Recent Builds.
- Over half of the participants insulated to the maximum level of R-20, thereby achieving maximum energy savings from their project.
- The average cost for batt insulation is approximately \$52 and is the most widely used type of insulation.
- There are significant variations in price from store to store across the island, from \$38.49-\$78.00.
- Rejection rates for insulation rebate applications are moderate at 3%.

## Opportunities/Recommendations

- 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.
- Promote program to existing home owners to increase participation in retrofit market.
- Develop marketing materials to compare the costs of various types of insulation material versus how much the rebate covers for each.
- Research ways to improve the insulation application process to create a more streamlined approach for customers to submit their rebate applications.

### 3b. Thermostat

The Thermostat takeCHARGE 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.

Table 22 below shows thermostat rebates by area from 2010 through 2012.

<b>Table 22: Thermostat Rebates by Area</b>					
<b>AREA</b>	<b>2010</b>	<b>2011</b>	<b>% Change 2011 over 2010</b>	<b>2012</b>	<b>% Change 2012 over 2011</b>
St. John's	1,098	1,255	14%	1,198	-5%
Carbonear	128	150	17%	113	-25%
Burin	51	44	-14%	57	30%
Clarenville	24	52	117%	50	-4%
Gander	68	83	22%	56	-33%
Grand Falls-Windsor	51	99	94%	88	-11%
Corner Brook	85	87	2%	102	17%
Stephenville	33	38	15%	41	8%
<b>TOTAL</b>	<b>1,538</b>	<b>1,808</b>	<b>18%</b>	<b>1,705</b>	<b>-6%</b>

Overall, there was a decrease of 6% in thermostat rebates in 2012 versus 2011. The largest growth in 2012 was in Burin. The largest decrease was in Gander, followed by Carbonear and Grand Falls.

### **Thermostat Rebates by Type**

Table 23 below identifies the number of thermostat rebates for electronic and programmable thermostats received in 2009 through 2012.

<b>Table 23: Thermostat Units by Type 2009-2012</b>							
<b>Type of Thermostat</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>% Change 2011 vs 2010</b>	<b>2012</b>	<b>% Change 2012 vs 2011</b>	<b>Total</b>
Electronic	526	1,224	1,685	38%	1,621	-4%	4,530
Programmable	2,105	6,928	8,314	20%	7,905	-5%	23,147
<b>TOTAL</b>	<b>2,631</b>	<b>8,152</b>	<b>9,999</b>	<b>23%</b>	<b>9,526</b>	<b>-5%</b>	<b>27,677</b>

Based on the rebate application data from our Customer Rebate Tracking (CRT) system, 84% 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. This increased slightly from the results in 2011.

### **Retailer Information for Thermostats**

Six major retailers in St. John's were visited for the thermostat evaluation. All retailers except for Canadian Tire and Walmart carried approximately 40% mechanical and electronic thermostats. Price for mechanical thermostats was \$11 and up; electronic \$20 and up; programmable \$25 and up.



Most retailers had thermostats displayed using quarter of an aisle racking in St. John's, less shelf space in smaller stores. Most major retailers did not have any takeCHARGE signage for thermostats.

Table 24 below shows the average rebate for electronic and programmable thermostats in 2012.

<b>Table 24: Average Thermostat Rebate</b>				
	<b>Electronic Thermostat</b>		<b>Programmable Thermostat</b>	
	<b>#</b>	<b>\$</b>	<b>#</b>	<b>\$</b>
<b>Recent Builds</b>	13	\$67	7	\$91
<b>Retrofit</b>	6	\$29	5	\$74
<b>Total</b>	9	\$46	5	\$78

The highest average rebate of \$91 is programmable thermostats in Recent Builds. The lowest thermostat rebate average is for electronic thermostats for retrofit customers. The effects of the double rebates in 2012 have caused the average rebate for programmable thermostats to be higher.

Table 25 below shows breakdown of thermostat type rebates by age of home for 2012.

<b>Table 25: 2012 Type Thermostat Rebates by Age of Home</b>		
	<b>Electronic Thermostat</b>	<b>Programmable Thermostat</b>
<b>Recent Builds</b>	17%	83%
<b>Retrofit</b>	6%	94%
<b>Total</b>	9%	91%

Programmable thermostats are the most rebated type of thermostats for both Recent Builds and retrofit applications.

Table 26 below shows the percent of thermostat rebates for Recent Builds and retrofit projects for 2012.

<b>Table 26 The % Of Recent Builds vs. Retrofit Thermostat Rebates 2012</b>		
	<b>Recent Builds</b>	<b>Retrofit</b>
<b>Thermostats</b>	25%	75%

In 2012, retrofit thermostat rebates are rebated more than Recent Builds.

Table 27 below shows the contractors that participated in the Thermostat Program in 2012 and where they purchased their thermostats.

Table 27: Contractors Purchasing Thermostats	
Contractor	Retailer
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

Table 28 below shows thermostat rebates by manufacturer in 2012.

Table 28: The % Of Thermostats by Manufacturer	
Percent	Manufacturer
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

The highest percent of rebated thermostats were manufactured by [REDACTED].

Table 29 below illustrates the price differential of thermostats by type and retailer.

Table 29: Thermostats Price Differential			
Store	Mechanical	Electronic	Programmable
[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]

<b>Average Cost</b>		<b>\$15.84</b>	<b>\$35.62</b>

Table 30 below shows the number of thermostat applications that have been rejected and why.

<b>Table 30: Thermostat Applications Rejected</b>		
<b>Rejections</b>		
0.6% Rejection Rate		
<b>Reasons:</b>	<b>#</b>	<b>%</b>
Missing required info (receipts)	8	80%
General Service Account - doesn't quality	1	10%
Receipt dated prior to April 30, 2009	1	10%
Total	10	100%

Thermostats have a low rejection rate. This reflects the simple application process to apply for the rebate.

**Effect of 2012 Double Rebates on Thermostats**

There were a number of double rebate events in 2012, with an emphasis in the fall of 2012. Based on programmable thermostat rebates from 2010 through 2012 it appears that for the standard \$10 programmable thermostat rebate level is \$50,177 on average with quantities of approximately 5,261 programmable thermostats.

The double rebate offerings over the last 3 years appear to drive the rebate levels beyond the \$50,177 level. For 2012, the rebates for programmable thermostats resulted in approximately \$124,430, with \$80,520 of that for double rebates.

Table 31 below shows the results for programmable thermostats for 2010 through 2012.

<b>Table 31: Programmable Thermostat Results</b>				
	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>Average</b>
<b>Regular rebate</b>	\$52,690	\$53,930	\$43,910	\$ 50,177
<b>Double rebate</b>	\$33,620	\$ 700	\$80,520	
<b>Total</b>	\$86,310	\$54,630	\$124,430	
<b>Units</b>				<b>Average</b>
<b>Regular rebate</b>	5,269	5,393	5,122	5,261
<b>Double rebate</b>	1,681	35	4,026	
<b>Total</b>	6,950	5,428	9,148	

There were 100 programmable thermostats rebate payments made to contractors.

Table 32 below shows the list of thermostat retailer events for 2012. All of the retailer events in 2012 promoted the programmable thermostats by offering a double rebate.

<b>Table 32: List of Retailer Events for 2012</b>			
<b>Retailer Event</b>	<b>Date</b>	<b>Impact - Units</b>	<b>Rebate Amount</b>
<b>Total</b>	<b>9</b>	<b>4,026</b>	<b>\$ 80,520</b>

**Conclusions**

- The number of thermostat units rebated decreased by 6% in 2012 compared to 2011.
- The largest decrease was in Gander (33%), followed by Carbonear (25%) and Grand Falls (11%). The average number of thermostats rebated per application did not change or increase in these particular locations.
- The average application for electronic thermostats in 2012 was 9 units and \$46 rebated.
- The average application for programmable thermostats in 2012 was 5 units and \$78 rebated.
- In 2012, 9% of thermostat rebates was for electronic thermostats and 91% was for programmable thermostats.
- 75% of thermostat rebates in 2012 were for retrofit applications.
- Contractors purchase thermostats both at specialty stores and standard realtors.

- Contractors are paying between \$30-35 for thermostats.
- 77% of thermostat rebates were [REDACTED] brand thermostats. Customers seem to know this brand and prefer it to other brands of thermostats.
- Thermostats have a low rejection rate of 0.6%.
- Double rebate promotions can significantly drive participation in a very short period with minimal effort.
- Turnkey contractors are still installing basic mechanical thermostats.
- The average price difference from a mechanical thermostat to an electronic thermostat is about \$20.00. The price difference from an electronic thermostat to a programmable thermostat is about \$16.00.
- Programmable thermostat technology is a challenge for customers and contractors.
- Customer's purchase an average of 6 thermostats per rebate, up from 5 per rebate in 2011.
- The highest number of submitted rebates was from retailers offering double rebate promotions and utilizing takeCHARGE flyer content.
- The Thermostat takeCHARGE Rebate Program is the easiest program for energy conscious customers to participate in due to the low investment required.

#### **Opportunities/Recommendations**

- Investigate why there were decreases in thermostat rebates in certain areas. Talk to the retailers and Area Coordinators to see if they have insight on why the thermostats rebates have decreased.
- Special promotions or Double Rebates could be used in areas where there was a decrease in participation to try and increase rebates.
- Continue to promote thermostats by partnering and advertising with retailers and contractors.
- Communicate to contractors and new home owners that they will still qualify for thermostat rebates in 2013.
- Promote electronic thermostats to contractors to move them from mechanical thermostats to a more energy efficient option. A special incentive or retailer event at popular contractor retailer locations may help promote the Thermostat takeCHARGE Rebate Program to this target audience.
- More point of purchase materials should be used at the distributor and retail locations to promote energy efficiency benefits of thermostats and simplicity of use.
- Educate customers and contractors on how to program thermostats to ensure customer satisfaction and maximum benefits.
- Additional retailer staff education and training is required to promote the benefits of the high efficiency thermostats.
- The CRT should be improved to record the cost of the thermostat rebated from the receipt provided by the customer. This would provide details on the market price of electronic and programmable thermostats.

### 3c. ENERGY STAR Windows

The ENERGY STAR Windows takeCHARGE Rebate 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 homes that 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.

Table 33 below provides the ENERGY STAR window rebates by area for 2010 through 2012.

<b>Table 33: ENERGY STAR® Windows Rebates 2010-2012</b>					
<b>AREA</b>	<b>2010</b>	<b>2011</b>	<b>% Change 2011 vs 2010</b>	<b>2012</b>	<b>% Change 2012 vs 2011</b>
St. John's	564	1185	110%	1,593	34%
Carbonear	88	175	99%	137	-22%
Clarenville	21	61	197%	45	-26%
Burin	13	48	274%	28	-42%
Grand Falls-Windsor	39	123	213%	68	-45%
Gander	70	113	61%	68	-40%
Corner Brook	67	89	34%	87	-2%
Stephenville	38	73	94%	49	-33%
<b>TOTAL</b>	<b>899</b>	<b>1,867</b>	<b>108%</b>	<b>2,075</b>	<b>11%</b>

Overall, there was an increase of 11% in rebates for 2012 compared to 2011.

Table 34 below shows the breakdown of Recent Build applications to retrofit applications for 2010 through 2012.

<b>Table 34: ENERGY STAR Window Applications by Age of Home 2010-2012</b>						
	<b>2010</b>		<b>2011</b>		<b>2012</b>	
<b>Recent Builds</b>	149	17%	761	41%	1,297	63%
<b>Retrofit</b>	750	83%	1,106	59%	778	37%

Table 35 below shows the average window rebate.

<b>Table 35: 2012 Average Window Rebate</b>	
<b>Recent Builds</b>	\$ 440
<b>Retrofit</b>	\$ 230

### Market Penetration

Table 36 below shows the manufacturer sales by window type for 2009 through 2012.

Table 36: Manufacturer Sales by Window Type 2009-2012								
	2009	2009	2010	2010	2011	2011	2012	2012
Manufacturer	Clear	E/S	Clear	E/S	Clear	E/S	Clear	E/S
██████████	70%	30%	60%	40%	39%	61%	27%	73%
██████████	90%	10%	90%	10%	50%	50%	25%	75%
██████████	60%	40%	35%	65%	32%	68%	15%	85%
██████████							50%	50%
██████████							30%	70%
██████████								
	N/A	N/A	N/A	N/A	30%	70%	20%	80%

The market for ENERGY STAR windows in Newfoundland has increased significantly since 2009. ██████████ Windows has the largest market share of windows sales in Newfoundland and 73% of the windows they sell are ENERGY STAR rated. That is a substantial increase in the ENERGY STAR market share since 2009 when our window program first started. ██████████ also accounts for 28% of the windows from our Window Rebate Program applications. ██████████ Windows were second and in 2012, they sold 75% ENERGY STAR windows and represent 17% of the windows from our rebates. The market shift may be a result of the increased awareness and benefits of ENERGY STAR windows and the impact of the St. John's Energy Reduction Strategy.





Windows have a low rejection rate of 1%. The application process is easy to complete but require detailed receipts, such as the Manufacturing Shipping Slip, which customers can neglect to send in or find it hard to obtain.

### **Conclusions**

- The ENERGY STAR windows program increased 11% in 2012. All areas decreased except St. John's which increased 34%. Grand Falls decreased the most by 45% followed by Burin; 42%, and Gander; 40%.
- The percent of Recent Build participants in the ENERGY STAR Windows takeCHARGE Rebate Program increased from 17% in 2010 to 63% in 2012. This reflects the increased contractor participation in 2012.
- Average window rebates for Recent Builds are almost double the average rebate for retrofits. This indicates that retrofit homes have fewer windows or are smaller homes.
- The price differential of ENERGY STAR and clear glass windows is \$2.05. This is a decrease from \$2.53 in 2011 to \$2.05 in 2012. This represents a decrease of approximately 17%.
- In 2012 there has been a major increase in participation from contractors; pricing and availability of ENERGY STAR windows; and increased customer awareness of the benefits of ENERGY STAR windows.
- ██████████ Windows is the number one manufacturer of windows with 28% of the total window rebates. This year 78% of windows sold from ██████████ Windows were ENERGY STAR windows, that is an increase of 50% since the program started in 2009.
- The ENERGY STAR Windows takeCHARGE Rebate Program has a low rejection rate of 1%.

### **Opportunities/Recommendations**

- Recommend not reducing the \$2.00 per square foot rebate amount for windows this year. The price differential remains at \$2.00, therefore the rebate covers the upgrade to ENERGY STAR Windows.
- Increase awareness of the Window Program to retailers and keep their employees knowledgeable. Develop a pilot project to help incent retailer employees to promote and fill out applications for their customers at the time of purchase. This type of pilot at a window specialty stores may increase participants from the retrofit market. This would also address one of the identified market barriers of administrative burden to customers.
- Provide more point of purchase advertising at the retailer locations.
- The price differential and the market data of ENERGY STAR Windows should continue to be monitored to determine if it is appropriate to end this program or if the incentive needs to be adjusted.
- The price of windows should be recorded when takeCHARGE employees conduct the regular retailer visits. This would assist in the ongoing market research of ENERGY STAR Windows.

### **3d. Commercial Lighting**

The Commercial Lighting takecharge Rebate 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 is intended to eliminate 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.

#### **Rebates by Distributor**

In 2012, the allocation of rebates amongst distributors is significantly skewed to [REDACTED]. They represent approximately 80% of the value of rebates. [REDACTED] has the approximately 15% of the 2012 rebates with [REDACTED] and [REDACTED] sharing the balance of rebates. [REDACTED] and [REDACTED] did not have any rebate applications in 2012.

According to GE there was an 18% decrease in lamp sales in 2012 compared to 2011. This could largely be explained by an increased price of lamps.

#### **T12 vs T8**

The share of GE T12 lamp sales remains virtually unchanged from 2011, (31%) to 2012,( 30%). Despite a ban on the manufacture of T12s in the US, and a pending ban in Canada, customers continue to use T12 lamps and defer the change-over to T8.

#### **F32 vs F28 Lamps**

88% of rebated lamps are F28s. This is positive as it is an assurance of energy savings. They would be a replacement of standard F32 T8s.

#### **Seasonality of rebates**

The quantity of commercial lighting rebates appear to be balanced in Quarter 1 and Quarter 2, slower in Quarter 3 (summer months), and then stronger in Quarter 4.

Lighting rebates are significantly impacted by large projects. For example, late in 2012 there was a retrofit of lamps at the [REDACTED] that included over 4,100 lamps.

Table 39: Lighting Type by Month					
Totals	Ballast	Exit	Lamp	Grand Total	
January	921	39	2,714	3,674	Q1
February	1,265	68	451	1,784	7729
March	1,620	104	547	2,271	0.229558
April	1,958	81	1,412	3,451	Q2
May	945	34	1,412	2,391	7836
June	777	51	1,166	1,994	0.232736
July	984	56	178	1,218	Q3
August	902	37	145	1,084	4832
September	1,486	109	935	2,530	0.143515
October	1,631	72	3,549	5,252	Q4
November	1,228	55	2,964	4,247	13272
December	570	25	3,178	3,773	0.394191
<b>Grand Total</b>	<b>14,287</b>	<b>731</b>	<b>18,651</b>	<b>33,669</b>	

Table 40 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.

Table 40: Commercial Lighting Rebates							
Units Rebated	2009	2010	% Change	2011	% Change	2012	% Change
Ballasts	3,602	11,088	308%	19,240	174%	14,287	-26%
Lamps	11,926	23,504	197%	26,767	114%	18,651	-30%
Exit Signs	-	-	-	725	-	731	1%

Ballasts and lamps have decreased considerably in 2012.

One very large project, rebated in January 2011 included 4,960 ballasts and 9,700 lamps. This one project significantly influences year to year comparisons of rebates. For example, excluding this large project from the 2011 rebates would make the 2011/2012 quantities very similar (2011/2012 comparisons for lamps would be 17,067/18,651, ballasts 14,280/14,287).

**Ratio of Lamps to Ballasts**

Table 41 below show the ratio of lamps to ballasts for 2010 through 2012.

<b>Table 41: Ratio of Lamps to Ballasts 2010-2012</b>			
	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Lamps</b>	68%	58%	53%
<b>Ballasts</b>	32%	42%	47%

There was one very large project in 2012 for the [REDACTED] in St. Johns. It included approximately 4,100 lamps. Not including this project, the split of lamps to ballasts was 53%-47%; including this project the split was 59% - 41%.

The split of lamps to ballasts has decreased, mainly because of an increase in the price of lamps, The \$1 per lamp rebate does not cover the incremental cost of the lamps.

Table 42 below illustrates the amount of lamps and ballasts that were new and retrofit for 2012.

<b>Table 42: Ratio of Lamps to Ballasts by New or Retrofit 2010-2012</b>		
	<b>New</b>	<b>Retrofit</b>
<b>Lamps</b>	37%	63%
<b>Ballasts</b>	29%	71%

The majority of lighting rebates are for retrofit applications.

**Conclusions**

- The rebate of \$1.00 per lamp rebate does not cover the incremental cost of the lamps.
- 63% of lamp rebates and 71% of ballast rebates were for retrofit applications.

**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, and electrical maintenance companies, end users such as school and health care boards, and industry publications.

**4. takeCHARGE Website**

**Website Visitors**

Table 43 below shows the number of visits to the takeCHARGE website in 2009 through 2012.

<b>Table 43: Customer Contacts for Energy Conservation Information 2009-2012</b>				
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Website Visits</b>	49,648	52,013	72,996	49,202

Total website visits have decreased in 2012 and are the lowest they have been since 2009.

**Conclusion**

- Website visits in 2012 have decreased by 33% from 2011. This is because of the special insulation offer in 2011 that caused a substantial increase in website visits in that year. 15,690 visits to the website occurred in October 2011, 21% of the year’s total. That is approximately 131% increase compared to 6,700 in 2010 and 6,913 in 2012 for the same time period.
- There was no new programming in 2012 to draw customers to the website.
- Insulation, followed by windows had the most page views in 2012.
- Commercial lighting page views are low in comparison to the other programs. This reflects the lack of promotion of the website as a source for commercial lighting information.

**Opportunities/Recommendations**

- Update website information to have current and new energy efficiency information on a regular basis. This should keep the customer coming back to see what new advice or promotions are being offered through takeCHARGE.
- Develop the commercial section of the website to be more descriptive and promote it to the commercial customers as an information resource for the commercial program.
- Allow customers to submit rebate applications online. This should draw them to the website and should cross promote other takeCHARGE Rebate Programs.
- Application forms should be labeled to provide information on where the customer obtained the application. Identifiers for website download, retailer or event should appear on the application. Applications provided at events should also be stamped to indicate which event the application is being submitted from.
- Continue to drive customers to the website as the primary resource for program information in all advertising and program promotions.

## 5. Christmas Campaign

Table 44 below shows the results of the 2012 Christmas Campaign. This Campaign was a call to action for residential customers to submit their application by November 30, 2012 with the expectation of receiving their rebate by the Christmas season.

<b>Table 44: 2012 Christmas Campaign Results</b>		
<b>Program</b>	<b>Quantity</b>	<b>Dollars</b>
Insulation	101	\$ 30,300
Thermostats	154	\$ 7,700
Windows	158	\$ 51,350
<b>Total</b>	<b>413</b>	<b>\$ 89,350</b>

### Conclusion

- Creating a call to action for customers to submit rebates can be very successful.
- Over \$89,000 in rebates were distributed as a result of this campaign.
- This type of campaign is cost effective. Minimal additional cost associated as used existing advertising to promote the campaign and no special rebate was offered.
- This campaign created a momentum that carried over when this campaign ended.

### Opportunities/Recommendations

- In 2013, more campaigns of this type should be offered. They are cost effective without having to offer any special incentives and they create high levels of participation.
- This type of marketing can be created and launched quickly if participation needs to be increased to meet targets.

## 6. 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.

### 6a. St. John's Energy Reduction Strategy

The St. John's Energy Reduction Strategy came into effect September 1, 2011. New homes constructed in St. John's were required to insulate basements to a minimum of R16, to install ENERGY STAR windows and electronic thermostats.

Many contractors were installing ENERGY STAR windows, but few were insulating basements before the strategy since ENERGY STAR windows were relative low cost, whereas an insulated basement cost several thousand dollars.

Table 45 below shows rebate amounts paid to contractors during the years 2010 through 2012 for basement wall insulation projects.

<b>Table 45: Amount Paid to Contractors for Basement Wall Insulation Projects 2010-2012</b>				
<b>Summary</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>Comparison to 2010/11 avg</b>
<b>All communities</b>	\$19,141	\$9,558	\$ 160,068	1115%
<b>St John's only</b>	\$792	\$430	\$81,038	13263%
<b>Excluding St. John's</b>	\$18,349	\$9,128	\$79,030	575%
<b>Excluding St. John's CMA</b>	\$6,742	\$1,204	\$4,781	120%
<b>Percent of rebates</b>				
<b>All communities</b>	100%	100%	100%	
<b>Excluding St. John's</b>	96%	96%	49%	52%
<b>Excluding St John's CMA</b>	35%	13%	3%	12%

While the results listed above are not delineated for Recent Builds and existing homes, the vast majority of contractor rebates are expected to be for Recent Builds.

In 2012, there was a very large effort to contact contractors and promote the takeCHARGE programs. This impact likely overshadowed the St. John's Energy Reduction Strategy.

It appears the St John's ERS had a major impact on basement insulation rebates in 2012, with a spill-over affect outside St. John's as 2012 had a significant increase in basement applications outside St. John's. One major consideration however was a large effort in contacting contractors to encourage and assist them in submitting applications.

#### **6b. National Building Code**

The National Building Code (NBC) was published on Dec 21, 2012. It will require:

- Basement concrete walls insulated to a minimum effective value of R-18;
- ENERGY STAR windows
- Heat Recovery Ventilators (HRV) to have a sensible recovery efficiency of 60%, 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.

The impact of the NBC was negligible in 2012.

The NBC will have a major impact in 2013 and beyond.

**Conclusion**

- Adoption of the revised NBC in 2013 and the St. John’s Energy Reduction Strategy will result in the majority of new homes in larger municipalities becoming “free riders”.

**Opportunities/Recommendations**

- Eligibility for the takeCHARGE residential programs will need to be modified to exclude new home construction. An Exit strategy will be developed to communicate to customers the change in the programs. A specified period of time will be allowed for customers to submit applications for new homes in 2013.
- Work closely with municipalities to ensure the NBC changes are ratified, adopted and enforced.
- Increased contractor education of the benefits of installing basement insulation and ENERGY STAR Windows should be conducted in 2013. The education should promote the ease of installation and possible increase in property values for homes with these features.
- Adjust the minimum R-value from R-12 to R-18 to coincide with the introduction of the revised National Building Code.
- An aggressive campaign should be launched in 2013 to encourage the increase of insulation rebates in existing homes. This will help smooth the transition into the existing home market in 2014.

**6c. EnerGuide for Houses**

The Provincial EnerGuide for Homes Program stopped taking new participants on March 31, 2012. Those already enrolled in the program by March 31, 2012 could participate. The program had minimal impact on the 2012 takeCHARGE program rebates.

Table 46 below shows the project completions from 2009 through 2013.

<b>Table 46: EnerGuide Project Completions 2009 – 2013</b>				
	<b>2009/2010</b>	<b>2010/2011</b>	<b>2011/2012</b>	<b>2012/2013</b>
<b>Window</b>	257	733	204	29
<b>Attic</b>	147	475	209	16
<b>Basement</b>	123	421	302	16

The program results 2011 and 2012 would be participants completing the final assessment between April 1, 2011 and March 31, 2012. Since April 1, 2012 there have been only 61 final assessments or program completions.



**7. Retailers**

**7a. Retailer Demographics**

Table 47 below identifies the top retailers who have more than 10% of the rebates in their area, with the exception of St. John’s showing the top 4 retailers in its 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.

<b>Table 47: Top Retailers (with ≥10% of rebates) by Area</b>	
<b>TOP RETAILER</b>	<b>% of Rebates in Area</b>
<b>St. John’s – 4 Stores</b>	<b>45%</b>
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
<b>Carbonear – 3 Stores</b>	<b>46%</b>
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
<b>Burin – 3 Stores</b>	<b>74%</b>
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
<b>Clareville – 4 Stores</b>	<b>72%</b>
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
<b>Gander - 4 Stores</b>	<b>63%</b>
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
<b>Grand Falls-Windsor – 3 Stores</b>	<b>52%</b>
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
<b>Corner Brook – 4 Stores</b>	<b>72%</b>
[REDACTED]	[REDACTED]

██████████	██████████
██████████	██████████
██████████	██████████
<b>Stephenville – 5 Stores</b>	<b>67%</b>
██████████	██████████
██████████	██████████
██████████	██████████
██████████	██████████
██████████	██████████

**Conclusion**

- In St. Johns in 2011, 4 retailers made up more than 50% of the rebates with each greater than 10% of the market. In 2012, 4 retailers make up 45% of the market. ██████████ represents 21% of the rebates for St. Johns, 91% of those rebates were submitted by contractors.
- In Burin, Clarendville and Corner Brook areas, a small number of the retailers hold greater than 70% of the rebates in their areas. Customers participating in the rebate program are shopping at a small number of stores when purchasing products. Whereas, in Stephenville, the rebates are spread out among a broader group of retailers, indicating that customers are shopping at a larger number of stores in their area.

**Opportunities/Recommendations**

- Outreach to retailers should be focused on those with less than 10% of the submitted rebates to determine why participation is low and to find ways to encourage higher participation and engagement.

**7b. Engagement of Retailers by Area**

Table 48 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.

<b>Table 48: 2012 Top Retailers as a % of Total Retailers in Area</b>			
<b>Area</b>	<b>Top Retailers ≥10% of Rebates</b>	<b>Total Number of Retailers</b>	<b>Top Retailers as % of Total Retailers</b>
St. John's	4	69	6%
Carbonear	3	31	10%
Burin	3	9	33%
Clareville	4	12	33%
Gander	4	19	21%
Grand Falls-Windsor	3	21	14%
Corner Brook	4	20	20%
Stephenville	4	16	25%
<b>Total</b>	<b>29</b>	<b>197</b>	<b>15%</b>

**Conclusion**

- The number of St. John's retailers with ≥10% of rebates has decreased from 9% in 2011 to 6% in 2012. Also, the number of Clareville retailers with ≥10% of rebates has decreased from 56% in 2011 to 33% in 2012. This may reflect new retailer stores that have opened in the last year creating a larger market spread for where customers can avail of insulation, windows and thermostats.
- Engaging retailers in takeCHARGE Rebate Programs continues to be effective in promoting takeCHARGE rebate programs to customers. With the exception of Burin and Clareville, 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.

**Opportunities/Recommendations**

- In 2013, there should 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.

**7c. Independent and Chain Retailers Participation**

Retailers can be divided into two categories, independent store retailers and chain retailers. Table 50 below identifies the chain retailers, the number of locations and the percentage of rebates by program attributable to the chain retailers.

Table 49: % Rebates by Chain Retailers in 2012					
CHAIN RETAILERS	# OF LOCATIONS	% OF 2012 THERMOSTAT REBATES	% OF 2012 WINDOW REBATES	% OF 2012 INSULATION REBATES	% OF TOTAL 2012 REBATES
[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]
<b>Total</b>	<b>66</b>	<b>86%</b>	<b>7%</b>	<b>12%</b>	<b>47%</b>

**Conclusion**

- Chain retailers make up 47% of rebates in 2012, compared to 62% in 2011.
- [REDACTED] had the highest percent of rebates with 24%. This is largely influenced by the increase in contractor rebates. 91% of the rebates from [REDACTED] were submitted by contractors in 2012.
- [REDACTED] has decreased 9% from 2011; they comprised 37% of thermostat rebates in 2011 and have decreased to 28% in 2012. This is mainly because of three 1 day double rebate promotions that took place at [REDACTED].

**Opportunities/Recommendations**

- Continuing to identify opportunities to have an in-store and flyer presence at the chain retailers across the province should be a key initiative. In the past, [REDACTED], [REDACTED] and [REDACTED] have included takeCHARGE rebates alongside their weekly sales in their flyers, resulting in great success due to the combined savings for customers.
- Hosting retailer events to coincide with these sales has proven to be very valuable. In 2013, partnering with retailers to offer takeCHARGE rebates with in store promotions instead of offering special incentives should be a key retailer strategy.

- There should be a focus on educating retailer staff in 2013. Educating staff with lunch ‘n’ learns has been proven effective in 2012. More should be done in 2013 to engage and promote the takeCHARGE Rebate Programs among retailer staff.

## 8. Rural vs. Urban Markets

Table 50 provides the breakdown of rebates by area by program as a percentage of the eligible customers in that area for 2012.

Table 50: 2012 Residential Rebates by Area by Program by Eligible Customers								
Area	Eligible Customers	Total Rebates	Thermostat Rebates	% of Eligible Customers	Window Rebates	% of Eligible Customers	Insulation Rebates	% of Eligible Customers
St. John’s	44,291	3,590	1,198	2.70%	1593	3.60%	799	1.80%
Carbonear	13,017	307	113	0.87%	137	1.05%	57	0.44%
Clarenville	4,954	126	57	1.15%	45	0.91%	24	0.48%
Burin	4,978	98	50	1.00%	28	0.56%	20	0.40%
Grand Falls	6,613	162	56	0.85%	68	1.03%	38	0.57%
Gander	6,660	206	88	1.32%	68	1.02%	50	0.75%
Corner Brook	7,314	233	102	1.39%	87	1.19%	44	0.60%
Stephenville	5,556	129	41	0.74%	49	0.88%	39	0.70%
<b>Total</b>	<b>93,383</b>	<b>4,851</b>	<b>1,705</b>	<b>1.83%</b>	<b>2075</b>	<b>2.22%</b>	<b>1,071</b>	<b>1.15%</b>

### Conclusion

- Thermostats: Overall, participation has maintained from 1.82% in 2011 to 1.83% in 2012. St. John’s has the highest percent of eligible customers participating with 2.70%. Stephenville has the lowest percent of eligible participants in 2012 with 0.74%.
- ENERGY STAR windows: Overall, participation has increased from 1.88% to 2.22% in 2012. Percent of eligible rebates is highest in St. John’s with 3.60%, followed by Corner Brook with 1.19% of eligible customers participating. Burin had the lowest percent of eligible customers participating in 2012 with 0.56%.
- Insulation: Overall, participation has maintained from 1.16% in 2011 to 1.15% in 2012. In 2012, participation rates across the majority of the island are consistent, with the exception of St. John’s that has 1.80% of its eligible customers participating.

### Opportunities /Recommendations

- takeCHARGE should work with retailers in areas with low participation to promote all programs similar to what’s been achieved in St. John’s. This can be done through local retailer events and special retailer promotions.
- Retailers are critical trade allies to promote the benefits of the product and programs; additional retailer staff education and training is required.
- takeCHARGE should provide more point of purchase advertising at the retailer locations.
- takeCHARGE should focus attention on retailers in rural areas, especially in Carbonear, Clarenville, Burin, Grand Falls and Stephenville.

## 9. Program Market Barriers

An evaluation on the market barriers that may affect participation in the takeCHARGE Rebate Programs was conducted. Market barriers to program participation indicated through experience and customer feedback show that there are various barriers to customer participation for homeowners and contactors.

### Residential

- Lack of understanding of the benefits of installation of the energy efficiency products.
- 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. The same is true for insulation
- Retailers remain unaware of the benefits of the energy conservation programs, and therefore, are unable to advise customers on the advantages of participating in the programs. Significant staff turnover at the retail level is a big factor.
- Customers do not understand Newfoundland Power's motives in offering customer conservation programs. Customers are suspicious and feel the rebate programs are associated with a rate increase in the future.
- There is a lack of availability/affordability of qualified labour in the province to complete projects.

### Commercial

- Lack of promotion in comparison to residential programs. More outreach and advertising would be useful to promote these programs. Direct marketing should 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.
- Some lighting installation contractors would rather service more frequent burn-outs than sell longer measure fixtures/lighting. This would increase the amount they make on servicing the lighting system.

### Opportunities/Recommendations

- Investigate ways to improve and simplify the application process by researching other utility practices and procedures without comprising the quality of information gathered from applications.
- Allow for electronic submission through the takeCHARGE website.
- Examine opportunity to accept photocopy or electronic copies of original receipts for residential programs.
- Increase program education and support through the website and outreach activities
- Customer research undertaken in 2012 reports that 95% of customers are motivated to conserve energy to see savings on their electricity bill. This information should be used to quantify potential savings so customers can relate.
- Improve commercial information on the takeCHARGE website.

### Conclusion

- In 2013, takeCHARGE plans to offer new residential programs that should include all residential customers regardless of heat source
- Retailers need to be better educated so customers can learn about our rebates at the point of purchase. A retailer activation strategy is planned for 2013.

### 10. Other Utility Programs

Other Canadian utilities offer similar energy conservation programs for ENERGY STAR windows, Insulation and high performance electronic and programmable thermostats. Below is a listing of these programs

#### ENERGY STAR Windows

- **Fortis BC** - Offers \$2.50 per square foot of window installed as a credit on the customers electricity bill within 90 days of receipt for retrofits only. Doors are also eligible for this rebate.
- **Gaz Metro** - Offers incentives for ENERGY STAR Windows and patio doors for retrofit homes based on ENERGY STAR Zones B & C ranging from \$6-\$10 (max. \$600-\$1,000) per square foot. Customers must complete and return the notice of intent before purchase and installation otherwise may not be eligible for financial assistance.

#### Thermostats

- **Fortis BC** - Receive a 50% rebate on qualifying programmable thermostats up to \$20 each as part of Home Improvement Program. Limit five per household. Only for households whose primary heating system is electric.
- **Gaz Metro** - Provides a \$30 incentive when you install an ENERGY STAR® eligible programmable electronic thermostat. To take advantage of this offer, the programmable electronic thermostat must be installed by a Gaz Métro Authorized Partners. Limit of one programmable electronic thermostat per heating appliance.
- **Hydro Quebec** – Receive up to \$130 in mail in rebates on the purchase and insulation of wall mounted programmable or electronic thermostats. Offer applies to a minimum of five and a maximum of seven. Rebate requests must be mailed with two months of purchase or installation.
- **Union Gas** – Save \$25 on any programmable thermostat as credit on utility bill. Offer only available to residential homes that are heated with natural gas furnace. Offer is available on any programmable thermostat. Allow 8 weeks from the post-marked date to receive your \$25 credit on your Union Gas bill.
- **SaskEnergy** - \$15 rebate on programmable thermostats. Credit to be applied to bill. Offer limited to one programmable thermostat rebate per address. Must purchase and install your programmable thermostat between August 1, 2012 and March 31, 2013.

- **Efficiency Nova Scotia** – Programmable thermostats for electric baseboard heaters (single-pack) \$10 rebate, pack of 3 or more \$30 rebate. Instant rebates offered from October 1, 2012 – November 30, 2012.

### **Insulation**

- **Manitoba Hydro** - You can receive your rebate as either a cheque or as a credit on your energy bill.
  - Attic insulation: \$0.02/R/square foot, existing insulation must not exceed R-30, and can be rebated to a maximum of R-50
  - Wall cavities: \$0.04/R/square foot, insulate to a minimum of R-10
  - Walls, exterior: \$0.10/R/square foot, exterior wall insulation of a minimum of R-3.75 to a maximum of R-10;
  - Foundation walls: \$0.03/R/square foot, only uninsulated walls are eligible, insulate to R-24
- **FortisBC** - Receive \$0.25 per square foot to increase to greater than R20 in attic and R10 in walls, crawlspaces and basements as part of Home Improvement Program. Only for households whose primary heating system is electric.

### **11. Customer Rebate Tracking System (CRT) and Customer Service System (CSS)**

CRT/CSS improvements in data collection have been made during the evaluation process. These are:

- Lag time from customer application to processing
- Email Addresses – CRT does track email addresses but now will have the capability to pull email addresses from CSS for all customers who have applied for rebate programs
- More functionality within Live Data Sheet – ex: can filter by insulation location and insulation type. Allows for all residential rebate programs customer data to be manipulated in the one data sheet.
- More standardized information collected is needed to improve analysis.

### **Opportunities/Recommendations**

- Tracking the lag time between receipt of the customer rebate applications and time processed allows verification that customer applications are processed with the 6 to 8 week commitment.
- Creating an inventory of customer email addresses should allow for a variety of marketing opportunities.
- The continued improvements to the Live Data Sheet should provide the opportunity for better evaluation and customer analysis.
- Recommendation to request a time stamp to track Energy CAR application processing time in CRT. This should allow proper allocation of resourcing for quantity of applications on hand.
- The CRT system needs to be improved to include the premise number. Currently, the premise address is tracked but this would be an additional check to ensure that a specific home is not rebated for the same program more than once.



- Provide 12 month history of customers kWh usage to populate automatically to avoid having the Energy CARs search in CSS for this information. This will cut down on processing time for completing applications.
- Currently, the insulation type, window and thermostat manufacturer information supplied by the customer is entered free form into CRT. This should be selected from a drop down option to standardize the type selected to make analysis more accurate and efficient.

## **12. Summary of Opportunities/Recommendations**

### **Contractor**

- In order to keep contractors engaged a thank-you for participating in 2012 email and reminder that new home construction is still eligible may help increase contractor participation in 2013.
- There is an opportunity for outreach across the island to engage new contractor participation. Only 3 of the 43 contractors who participated in the takeCHARGE rebate programs in 2012 were located outside of St. John's CMA.

### **Residential Participant Demographics**

- The removal of eligibility of new homes from the ENERGY STAR Windows and Insulation programs should decrease the number of eligible customers significantly. Effort should be focused on the retrofit market to increase the number of participants based on the number of eligible customers.
- There should be focused outreach in areas that have low overall participation but high eligibility. This may consist of special incentives and events for customers, such as double thermostat rebates or additional retailer days. Other options include, developing pilot programs for retailers in these areas to help promote participation.
- There is an opportunity to promote and educate customers of the benefits of installing programmable thermostats, especially for Recent Builds in the 55+ age group.
- There is an opportunity to engage first time home owners in the adoption of energy conservation behavior through education and program promotion. Provide first time homeowners with information about energy efficient technologies to be aware of when evaluating the purchase of their first home. This could be done through tips on the website or providing a printable checklist.
- Continue to push programmable thermostats to age groups 21-25 and 26-34. Customers in these age groups are very open to energy efficient technologies but may not have the resources of older age group customers to avail of upgrades/additions that require a larger dollar investment. Promotion through social media outlets is cost efficient and effective to reach this younger demographic.
- Opportunity for stronger promotion to age groups 35 through 55+ of ENERGY STAR Windows and Basement/Attic Insulation as these customers are more established financially and in a position to afford the upfront cost of these upgrades.

Marketing should reflect the current trend in program participation by age group. It should focus both on where participation is highest and lowest to continue to encourage those who are the highest percentage of participants

- There is potential to engage renovation contractors in encouraging customers to choose ENERGY STAR Windows and Basement Insulation when making upgrades to their homes. Opportunities to entice renovation contractors to promote the takeCHARGE rebate programs needs to be investigated. Methods such as cross promotion or financial incentives should be researched.
- Marketing should also focus on the homes 21+ years of age. The life of windows is about 25 years; therefore homes of this age should begin to need to replace these technologies and should avail of takeCHARGE rebates when doing so.
- In order to keep contractors engaged a thank-you for participating in 2012 email and reminder that new home construction is still eligible may help increase contractor participation in 2013.
- There is an opportunity for outreach across the island to engage new contractor participation. Only 3 of the 43 contractors who participated in the takeCHARGE rebate programs in 2012 were located outside of St. John's CMA.
- 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.
- Automated email notification to customers that have participated in the takeCHARGE Rebate Programs should advise them that their rebate has been applied to their bill. This email could also be used to inform the customer that they are eligible to participate in the other rebate programs and provide a link to the website where they can receive more information.
- Marketing efforts should focus on new home participants that have participated in one program to promote participation in the other programs before they are excluded from the programs.
- Specific marketing of thermostats to all customers who have already participated in the ENERGY STAR Windows and Insulation Programs because thermostats may be an easy additional upgrade.
- 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 should motivate customers to submit their application on a timely basis. A deadline for application submissions should be added to the program guidelines.
- Investigate ways to improve and simplify the application process by researching other utility practices and procedures without comprising the quality of information gathered from applications.
- Modifying the application process to include electronic rebate submission may improve program lag times. Paper rebate applications can increase lag times because customers want and expect to be able to submit applications online. Because this option is not currently available, customers may decide not to mail in the application.

- Processing lag time should also be investigated. This would help ensure the processing of applications is kept within the 6 to 8 week time frame that is outlined on the rebate form.
- The reason why the cost and time to process a window rebate application has increased from 2011 needs to be investigated.
- Training for the Energy CARs should be increased. Coaching the best practices to the Energy CARs for processing could help reduce the higher cost per application for windows and insulation.
- Develop tools and calculators that the Energy CARs can use to improve the application processing time.
- A review of the current rebate applications should be conducted to simplify the process of generating the customer rebate.
- Create a time stamp for when an application is started to when it is completed in the Customer Rebate Tracking System. This should allow for accurate cost and time estimates for processing applications by program.
- Consider making an Energy CAR a full time position. Having a dedicated Energy CAR would improve processing time of applications.

## **Programs**

### **Insulation Program**

- 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.
- Promote program to existing home owners to increase participation in retrofit market.
- Develop marketing materials to compare the costs of various types of insulation material versus how much the rebate covers for each.
- Research ways to improve the insulation application process to create a more streamlined approach for customers to submit their rebate applications.

### **Thermostat Program**

- Investigate why there were decreases in thermostat rebates in certain areas. Talk to the retailers and Area Coordinators to see if they have insight on why the thermostat rebates have decreased.
- Special promotions or Double Rebates could be used in areas where there was a decrease in participation to try and increase rebates.
- Continue to promote thermostats by partnering and advertising with retailers and contractors.
- Communicate to contractors and new home owners that they will still qualify for thermostat rebates in 2013.
- Promote electronic thermostats to contractors to move them from mechanical thermostats to a more energy efficient option. A special incentive or retailer event at popular contractor retailer

locations may help promote the Thermostat takeCHARGE Rebate Program to this target audience.

- More point of purchase materials should be used at the distributor and retail locations to promote energy efficiency benefits of thermostats and simplicity of use.
- Educate customers and contractors on how to program thermostats to ensure customer satisfaction and maximum benefits.
- Additional retailer staff education and training is required to promote the benefits of the high efficiency thermostats.
- The CRT should be improved to record the cost of the thermostat rebated from the receipt provided by the customer. This would provide details on the market price of electronic and programmable thermostats.
- When takeCHARGE employees conduct regular retailer visits they should record the price and shelf space of mechanical, electronic and programmable thermostats in the store. This would assist in the ongoing market research of thermostats.

#### **ENERGY STAR Window Program**

- Recommend not reducing the \$2 per square foot rebate amount for windows this year. The price differential remains at \$2.00, therefore the rebate covers the upgrade to ENERGY STAR Windows.
- Increase awareness of the Window Program to retailers and keeping their employees knowledgeable. Develop a pilot project to help incent retailer employees to promote and fill out applications for their customers at the time of purchase. This type of pilot at a window specialty stores may increase participants from the retrofit market but that is a large percent of their customer base. This would also address one of the identified market barriers of administrative burden to customers.
- Provide more point of purchase advertising at the retailer locations.
- The price differential and the market data of ENERGY STAR Windows should continue to be monitored to determine if it is appropriate to end this program or if the incentive needs to be adjusted.
- The price of windows should be recorded when takeCHARGE employees conduct the regular retailer visits. This would assist in the ongoing market research of ENERGY STAR Windows.

#### **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, and electrical maintenance companies, end users such as school and health care boards, and industry publications.

### **takeCHARGE Website**

- Update website information to have current and new energy efficiency information on a regular basis. This should keep the customer coming back to see what new advice or promotions are being offered through takeCHARGE.
- Develop the commercial section of the website to be more descriptive and promote it to the commercial customers as an information resource for the commercial program.
- Allow customers to submit rebate applications online. This should draw them to the website and should cross promote other takeCHARGE Rebate Programs.
- Application forms should be labeled to provide information on where the customer obtained the application. Identifiers for website download, retailer or event should appear on the application. Applications provided at events should also be stamped to indicate which event the application is being submitted from.

### **Christmas Campaign**

- In 2013, more campaigns of this type should be considered.
- This type of marketing can be created and launched quickly if participation needs to be increased to meet targets.

### **External Factors**

- Eligibility for the takeCHARGE residential programs will need to be modified to exclude new home construction. An Exit strategy will be developed to communicate to customers the change in the programs. A specified period of time will be allowed for customers to submit applications for new homes in 2013.
- Increased contractor education of the benefits of installing basement insulation and ENERGY STAR Windows should be conducted in 2013. The education should promote the ease of installation and possible increase in property values for homes with these features.
- Adjust the minimum R-value from R-12 to R-18 to coincide with the introduction of the revised National Building Code.

### **Retailer Demographics**

- Outreach to retailers should be focused on those with less than 10% of the submitted rebates to determine why participation is low and ways to encourage higher participation and engagement.
- In 2013, there should 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.
- Continuing to identify opportunities to have an in-store and flyer presence at the chain retailers across the province should be a key initiative. In the past, Kent, Home Depot and Canadian Tire have included takeCHARGE rebates alongside their weekly sales in their flyers, resulting in great success due to the combined savings for customers.

- Hosting retailer events to coincide with these sales has proven to be very valuable. In 2013, partnering with retailers to offer takeCHARGE rebates with in store promotions instead of offering special incentives should be a key retailer strategy.
- There should be a focus on educating retailer staff in 2013. Educating staff with lunch 'n' learns has been proven effective in 2012. More should be done in 2013 to engage and promote the takeCHARGE Rebate Programs among retailer staff.

#### **Rural vs. Urban Markets**

- takeCHARGE should work with retailers in areas with low participation to promote all programs similar to what's been achieved in St. John's. This can be done through local retailer events and special retailer promotions.
- Retailers are critical trade allies to promote the benefits of the product and programs; additional retailer staff education and training is required.
- takeCHARGE should provide more point of purchase advertising at the retailer locations.

#### **Program Market Barriers**

- Investigate ways to improve and simplify the application process by researching other utility practices and procedures without comprising the quality of information gathered from applications.
- Recommend electronic submission through the takeCHARGE website.
- Examine opportunity to accept photocopy or electronic copies of original receipts for residential programs.
- Increase program education and support through the website and outreach activities
- Customer research undertaken in 2012 reports that 95% of customers are motivated to conserve energy to see savings on their electricity bill. This information should be used to quantify potential savings so customers can relate.
- Improve commercial information on the takeCHARGE website.

#### **Customer Rebate Tracking System (CRT) and Customer Service System (CSS)**

- Tracking the lag time between receipt of the customer rebate applications and time processed allows verification that customer applications are processed with the 6 to 8 week commitment.
- Creating an inventory of customer email addresses should allow for a variety of marketing opportunities.
- The continued improvements to the Live Data Sheet should provide the opportunity for better evaluation and customer analysis.
- Recommendation to request a time stamp to track Energy CAR application processing time in CRT. This should allow proper allocation of resourcing for quantity of applications on hand.

- The CRT system needs to be improved to include the premise number. Currently, the premise address is tracked but this would be an additional check to ensure that a specific home is not rebated for the same program more than once.
- Provide 12 month history of customers kWh usage to populate automatically to avoid having the Energy CARs search in CSS for this information. This will cut down on processing time for completing applications.
- Currently, the insulation type, window and thermostat manufacturer information supplied by the customer is entered free form into CRT. This should be selected from a drop down option to standardize the type selected to make analysis more accurate and efficient.