

HotShots

Project Summary

September 9, 2015

Be a hotshot. Save energy.



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1.0 Introduction

The *HotShots* initiative was a one-year pilot project launched by the Government of Newfoundland and Labrador to raise awareness about energy efficiency and conservation among students and teachers within the province. The pilot project was launched on October 10, 2014 and concluded on June 21, 2015. The following document summarizes the development and implementation of this project and the results.

Background

In 2011, the Government of Newfoundland and Labrador released *Moving Forward: Energy Efficiency Action Plan*, with the goal of supporting a major shift in the uptake of energy efficiency in the province. The action plan outlines 40 commitments to achieve this goal, including actions aimed at increasing awareness and understanding of energy efficiency throughout the province.

One of the commitments was to continue implementing the *Save It Forward* initiative, which was launched by the Provincial Government in 2010 to help students and teachers develop projects to conserve energy. This program ran for two years, with about 30 schools in the province participating. Given the limited reach, a decision was made to discontinue this program in favour of developing and implementing an initiative that would reach every school in Newfoundland and Labrador with messages about energy efficiency and conservation. Budget 2014 therefore committed \$200,000 over two years to develop and implement the *HotShots* initiative.

Project Overview

The *HotShots* initiative was led by the Office of Climate Change and Energy Efficiency (CCEE), with funding and expertise from the Department of Education and Early Childhood Development (EECD). Additionally, as noted below, two of the four project components were completed in partnership with Newfoundland and Labrador Hydro and Newfoundland Power, as these companies jointly administer the takeCHARGE program, which has existing initiatives for schools relating to energy efficiency and conservation.

The four components of the *HotShots* initiative were:

- **Disseminating resource packs** to all 263 schools in the province, including French packs for immersion teachers and schools within the Conseil Scolaire Francophone;
- **Delivering presentations** in at least 50 schools in the province, in addition to presentations delivered in at least 50 schools by the utilities through the takeCHARGE program;



Photo of the Honourable Susan Sullivan and the Honourable Dan Crummell during the launch of the *HotShots* initiative

- **Developing a contest** for grades 7-12 to complement the existing takeCHARGE contest for grades K-6, while opening both contests to entries in French for the first time; and
- **Launching a new website** for teachers with a “Curriculum Connections” component that links online resources about energy efficiency and conservation to curriculum outcomes for particular courses.

The *HotShots* initiative was launched at C.C. Loughlin Elementary School in Corner Brook on October 10, 2014 by the Honourable Dan Crummell, Minister Responsible for the Office of Climate Change and Energy Efficiency; the Honourable Susan Sullivan, Minister of Education and Early Childhood Development; and the Honourable Vaughn Granter, MHA for Humber West. The initiative was implemented throughout the 2014-15 school year, concluding in June 2015.

Throughout this period, the *HotShots* initiative was promoted by the Provincial Government via social media, emails and mail-outs to schools, advertisements and an article in the Bulletin for the Newfoundland and Labrador Teachers’ Association (NLTA), as well as during the 2014 Conference for the Math, Sciences and Special Interests Council. Overall, it is believed these activities helped contribute to the success of the *HotShots* initiative, as demonstrated throughout this document.

2.0 Information Packs

The goal of developing information packs was to reach every school in Newfoundland and Labrador with interesting, accurate and locally relevant information on energy efficiency and conservation.

Design

Two distinct information packs were developed: one pack for grades K-6 and another pack for grades 7-12. Both information packs were developed in English and French. Each pack consisted of a folder inside of which were a series of 10-12 information sheets and two posters on energy efficiency and conservation. Examples of topics covered in the information packs include: sources of energy in Newfoundland and Labrador, how we use energy, and how we can save energy.

In order to promote uptake, a strategic decision was taken to design the packs to include information that would assist in meeting curriculum outcomes for particular courses. As such, the grade K-6 pack was designed to include information to meet outcomes for the Electricity Unit of Grade 6 Science, and the grade 7-12 pack was designed to include information to meet curriculum outcomes for the Electricity Unit of Grade 9 Science.

All written content was prepared by CCEE, in consultation with EECD, the utilities, and the Department of Natural Resources. Through a Request for Proposals, Brickworks Communications Inc. was contracted at a cost of \$35,222 to execute the creative design of the information packs. The consultant was also required to print the information sheets and folders and send them to CCEE for assembly and distribution.

Delivery

The information packs were distributed by CCEE to every teacher of Grade 6 Science and Grade 9 Science in the province, including English and French immersion teachers in the English School District, as well as teachers in the Conseil Scolaire Francophone. Additionally, to ensure province-wide coverage, each school principal also received one or more packs, depending upon the grade levels within their school. The information packs were also made available online via the *HotShots* website.

Results

In total, 1,044 information packs were distributed, reaching all grade 6 and grade 9 science teachers in the province, as well as every school principal (see Table 1).

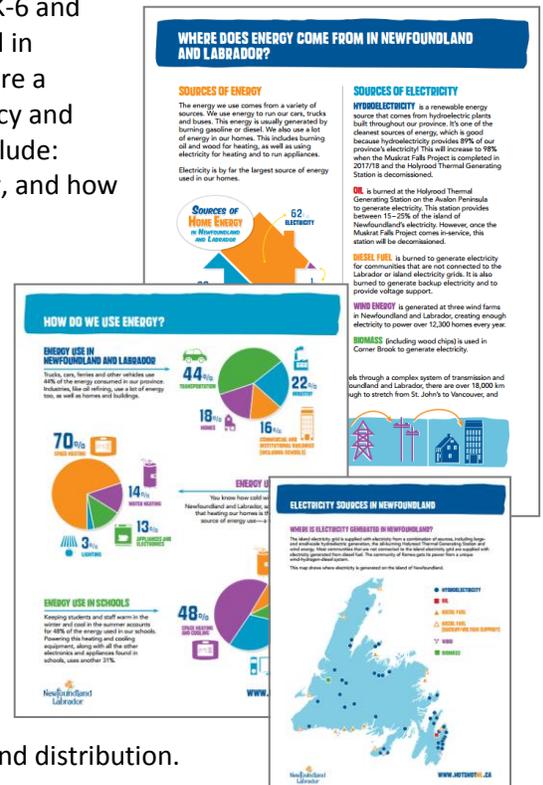


Table 1: Overview of Information Pack Distribution¹

Information Package Distribution	School Principal	Grade 6 Teacher	Grade 9 Teacher
Grade 6 English Package	194	296	-
Grade 6 French Package	5	43	-
Grade 9 English Package	180	-	277
Grade 9 French Package	5	-	44
Total:	384	339	321

While a feedback sheet was included in each pack, only one completed sheet was received. As such, the effectiveness of the information packs cannot be determined at this time.

¹ To determine the number of packs distributed to each school, the total number of classes was calculated by dividing the total student number in a particular grade level by the maximum class size (27 for grade 9 and 25 for grade 6).

3.0 Presentations

Over the previous two school years, the takeCHARGE program had delivered presentations about energy efficiency and conservation to grade K-6 students throughout the province. One of the goals of the *HotShots* initiative was to partner with the takeCHARGE program to double the number of schools receiving presentations in the 2014-15 school year.

Design

In the previous two years, the takeCHARGE program had reached 50 schools per year with presentations about energy efficiency and conservation. The utilities deliver two distinct presentations: an Energy Efficiency Explorers presentation for grades K-3 and an Energy Efficiency Superheroes presentation for grades 4-6.

In preparation for the 2014-15 school year, the takeCHARGE program modernized their school presentations to use digital applications. The utilities contracted M5 Marketing to design the digital applications, which takes users through rooms in a home to find tips about saving energy.

As part of the *HotShots* initiative, the Provincial Government contracted M5 at a cost of \$3,065 to build upon their ongoing work for the utilities by creating French versions of the digital applications and to add the *HotShots* logo alongside the takeCHARGE logo.

Delivery

Through the *HotShots* initiative, a target was established to reach at least 100 schools with presentations during the 2014-15 school year, doubling the number of presentations delivered in previous years.

As such, the utilities would continue to deliver presentations in at least 50 schools in 2014-15, and the Provincial Government would contract a company to deliver the same presentation in at least 50 additional schools. The Conservation Corps of Newfoundland and Labrador (CCNL) was contracted through a Request for Proposals to complete this work at a cost of \$48,725.

The CCNL completed an implementation plan at the outset of the project to outline how they would approach presentation scheduling and delivery. The organization was assigned regional targets for the delivery of presentations, which are outlined in the next section. In addition to reaching 50 schools, the CCNL was required to maximize reach by delivering at least 125 presentations. To facilitate implementation, all schools in the province were either assigned to the CCNL or to the utilities.² However, to streamline communication with schools, the CCNL was responsible for conducting all outreach to schools, including to those schools that received presentations from the utilities.

In addition to copies of the digital applications, the Provincial Government supplied the CCNL with all necessary supplies to complete the presentations. This included presenter clothing, banners, student

² Schools assigned to the utilities were those that fell within 25 kilometers of a Newfoundland Power regional office. Newfoundland and Labrador Hydro did not deliver presentations during the 2014-15 school year due to limited resources.

handouts and promotional items (e.g. notebooks, cinch bags and highlighters), as well as a hand generator to demonstrate the energy required to power an incandescent bulb versus a CFL or LED.

Payments for the presentations were triggered by the submission of milestone reports, which allowed the Provincial Government to track progress towards reaching the targets. These reports were due in eight-week intervals, with a final report due at the end of the project.

Results

All presentation targets established by the Provincial Government and the utilities were met or exceeded throughout the 2014-15 school year (see Table 2).

CCNL Presentations	Schools Reached		Presentations Delivered	Students Reached
	Target	Actual		
Eastern	30	32	120	3385
Nova Central	8	9	22	624
Western	8	8	19	524
Labrador	0	3	22	818
French	4	4	8	128
Total:	50	56	191	5479

When combined, the Provincial Government and the utilities delivered 448 total presentations to 106 schools in Newfoundland and Labrador, reaching over 11,900 students. This represents 34 per cent of the entire K-6 student population in Newfoundland and Labrador.

Each teacher who scheduled a presentation was asked to submit a feedback form to grade the quality of the presentations. These were tracked throughout the project to ensure quality and identify any issues. In total, 75 feedback forms were completed. Overall, feedback was positive, as highlighted below.

<ul style="list-style-type: none"> • Of the 56 schools that received presentations, over half (33 schools) sent back feedback forms. • Almost all (95 per cent) of respondents said that they would recommend the presentation to a colleague. • Feedback was positive on the presentation content. Respondents found the presentation to be acceptably or very: <ul style="list-style-type: none"> ○ Engaging (96 per cent) ○ Informative (96 per cent) ○ Useful for meeting curriculum outcomes (89 per cent) ○ Well received by students (94 per cent)

4.0 Contests

The *HotShots* contest was designed for grades 7-12 to complement the takeCHARGE program's existing K-I-C Start contest for grades K-6. Similar to the K-I-C Start contest, students were asked to design creative entries to communicate messages about energy efficiency and conservation. Entries could include videos, posters, songs or books, and needed to explain why saving energy is important in a way that would inspire other students to take action.

Design

Whereas entries as part of the K-I-C Start contest were a classroom effort with prizes awarded at the classroom level, students in higher grade levels are not typically grouped together in the same classes. As such, a decision was taken to allow entries under the *HotShots* contest to be from individual students or groups of up to five students. Both the *HotShots* contest and the K-I-C Start contest were open to receiving entries in English and French.

To promote interest in the *HotShots* contest, prizes were structured so that each of the three winning groups would receive an iPad for each member of their group, as well as 10 iPads for their school.

Delivery

Both contests were promoted in the information packs sent to schools, in advertising completed in the NLTA Bulletin and via social media. The original deadline for entering the contest was April 2, 2015. However, due to an initially low response rate, the contest deadline was extended until May 15, 2015. This extension allowed additional promotion to be done by emailing and mailing contest posters to all schools throughout the province with the relevant grade levels.

Results

In total, 69 entries were received as part of the *HotShots* contest for grades 7-12 and 34 entries were received as part of the K-I-C Start contest for grades K-6.

In total, there were 11 winners of the *HotShots* contest, which included

- Four students from Menihek High School in Labrador City;
- Five students from Xavier Junior High School in Deer Lake; and
- Two students from St. Paul's Junior High in St. John's.

Each winning student received an iPad for personal use and each winning school received 10 iPads. All prizes were distributed prior to the end of the 2014-15 school year.

5.0 Website (Curriculum Connections)

The goal of the *HotShots* website was to establish an online area to house “Curriculum Connections,” which is a tool that links online resources about energy efficiency and conservation to curriculum outcomes for particular courses. Additionally, the website also served to provide information on the various components of the *HotShots* initiative and to provide PDF versions of the information packs.

Design

The courses selected for Curriculum Connections were Grade 6 Science and Grade 9 Science. These courses were selected as they have specific outcomes relating to energy efficiency and conservation. The English version of Curriculum Connections and other written content for the site was completed by CCEE. However, to ensure the Curriculum Connections component of the site was equally strong in both languages, the Provincial Government contracted CMS Education at a cost of \$2,532 to develop Curriculum Connections using French resources.



Regarding the website development, given *HotShots* was a one-year pilot project, a decision was taken to build the *HotShots* site as a sub-section of the Provincial Government’s *Turn Back the Tide* website, which is an existing website about energy efficiency and climate change. This avoided the need to create additional infrastructure to maintain the site.

The Provincial Government contracted The Pixel Shop Inc. at a cost of \$12,769 to build a new section of the *Turn Back the Tide* website for the *HotShots* initiative. This company was originally contracted through a Request for Proposals to complete the original design and development of the *Turn Back the Tide* website.

The Pixel Shop was responsible for developing a creative design for the site based upon the look and feel of the information packs. The site, which has seven total pages, was developed in both English and French using the responsive design methodology to ensure a strong user experience across a variety of devices. The Pixel Shop was also required to provide a 30-day warranty period after the site’s launch to address any technical issues.

Delivery

The *HotShots* website, including English and French versions of Curriculum Connections for Grade 6 Science and Grade 9 Science, was launched on October 10, 2014.

Results

Overall traffic on the website was tracked throughout the initiative. In total, the *HotShots* site had 1,961 users with over 4,000 page views from October 2014 to June 2015.

6.0 Conclusion

Overall, the *HotShots* initiative was successful in meeting or exceeding all established targets. Achievements as part of the initiative include:

- **Disseminating resource packs to all 263 schools** in the province, including French packs for immersion teachers and schools within the Conseil Scolaire Francophone;
- **Delivering 191 total presentations in 56 schools**, reaching over 5,400 students during presentations delivered on behalf of the Provincial Government, and over 11,900 students when combined with presentations delivered by the utilities;
- **Receiving 69 entries for the HotShots contest** for grade 7-12, which were in addition to the 34 entries received as part of the K-I-C Start contest for grades K-6; and
- **Receiving over 4,000 page views** to the HotShots website from October 2014 to June 2015.

The initiative received these results with project expenditures totaling \$160,602 over two financial years, as outlined in Annex A.

Annex A: Project Expenditures

The following table provides a breakdown of project expenditures for the HotShots initiative over two financial years.

Table 5: HotShots Project Expenditures		
Expenditure	Year 1 (2014-15)	Year 2 (2015-16)
PROFESSIONAL SERVICES		
Brickworks Communications Inc. (promotional materials)	\$35,222	--
Conservation Corps of NL (presentation delivery)	\$31,671	\$17,054
The Pixel Shop Inc. (website development)	\$12,769	--
m5 (redesign of presentations)	\$3,065	--
CMS Education (French curriculum connections)	\$2,532	--
SUBTOTAL:	\$85,259	\$17,054
PURCHASE SERVICES		
Launch Event - Posters (Quantity: 4)	\$300	--
Launch Event - Banners (Quantity: 2)	\$ 782	--
Launch Event - Shirts (Quantity: 100)	\$838	--
Presentations - Banners (Quantity: 9)	\$3,515	--
Presentations - Folders (Quantity: 15,000)	\$9,675	--
Presentations - Power Generator/Light Box (Quantity: 2)	\$2,370 ³	--
Presentations - Presenter Clothing (Quantity: 3)	\$371	--
Presentations - Promotional Items (Quantity: 7,500)	\$16,528	--
Math, Science and Special Interests Council Conference	\$300	--
NLTA Bulletin Advertising	\$1,050	\$1,050
SUBTOTAL:	\$35,729	\$1,050
EQUIPMENT		
Contest Prizes - iPads (Quantity: 41)	--	\$21,510
SUBTOTAL:	--	\$21,510
TOTAL:	\$120,988	\$39,614

³ The cost includes \$82 for brokerage fees from PF Collins to import the power generator from the United States.