Energy Conservation Awareness Program

Final Report

Prepared for:

The New Brunswick Environmental Trust Fund

New Nouveau Brunswick
Your Environmental Trust Fund at Work
Votre Fonds en fiducie pour l'environnement au travail

By:

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- Environment Canada
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- South-eastern Anglers Association
- Cap-Pelé Watershed Group
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- Shediac Bay Marina
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- Shediac Bay Marina
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- Cott's Beverages Ltd.
- Tim Horton's
- Parlee Beach Provincial Park
- The Southern Gulf of St. Lawrence Coalition on Sustainability
- The office of Dominic LeBlanc, MP

Many other groups and individuals contributed to make our programs a success again this year and the SBWA whishes to extend their sincere gratitude.

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1 INTRODUCTION

1.1 Project Description and Objectives

People have the tools, knowledge and resources to combat climate change. Numerous simple actions can be done by people of all ages. The time to act is now. The Shediac Bay Watershed Association is committed to the development and implementation of an Energy Conservation Awareness Program for reducing greenhouse gases and to encourage individuals to conserve energy. We offer awareness information as well as materials regarding energy production, conservation and efficiency to local schools, businesses and to the public.

We received over 300 CFL bulbs from Efficiency NB including booklets containing information on CFL bulbs. With these tools, the SBWA organized a light bulb exchange with schools, which means students were invited to bring one incandescent bulb from home and we would exchange it for a CFL bulb. The presentations contained information on causes and impacts of climate change internationally, nationally and locally, as well as measures being taken to reduce the impact. The goal of our presentations was to promote energy conservation and the effects of climate change.

Local businesses play a key role in the energy consumption reduction process. We feel that a large amount of energy is wasted due to unnecessary use of lights and equipments by businesses throughout the Shediac Bay watershed. A program aiming at reducing energy consumption will contribute to the overall reduction of power waste and ultimately CO_2 emissions. The preeminent goal for the energy conservation/climate change program for local businesses is to create awareness on good practises to be efficient with energy conservation practises that can be done at their establishment. The survey was developed to further understand the energy use and practices of local businesses. We visited businesses with information kits on climate change, energy efficiency as well as idling facts. Each business was asked to fill a questionnaire on energy consumption in their establishment.

Finally, ensuring that the public is well informed and aware of the SBWA's activities is of the outmost importance for remaining a strong and productive organization.

1.2 Project Objectives

Project	How goals are measured?
Shediac Farmer's Market	o Level of community participation at this special event o Number of information bundles distributed to the public o Number of articles posted in local newspapers o Number of flyers posted in local establishments o Number of people who visited our kiosk o Number of light bulbs exchanged

Energy Consumption Reduction Program among local businesses	o Number of local businesses visited to investigate obvious energy waste behaviour as well as idling frequency emitted by costumers o Number of information bundles distributed to local businesses o Number of press releases and flyers distributed to local businesses o Number of pledge received from targeted businesses o Recommendations about how to be more energy efficient
School education	o Number of information bundles distributed to students (pamphlet or other promoting material distributed) o Number of school visited o Number of students attending class sessions o Level of students, teachers and parents participating at the question period o The positive feedback received by teachers

2 ACCOMPLISHMENT AND ACTIVITIES

2.1 School Presentation on Climate Change and Energy Efficiency

In January and February 2010, the SBWA developed and presented an interactive presentation on climate change and energy efficiency to three local schools. The goal of these presentations was to create a sense of awareness as well as raise awareness among students on these matters.

The education program was developed on a two day visit where the first visit emphases general climate changes concepts, while the second visit targets energy conservation strategies. Both visits involve interactive presentations, games and demonstrations. During the first visit, a Power Point presentation focusing on climate changes causes and impacts on coastal communities was offered. Demonstrations using household accessories are presented to explain basic climate changes concepts such as green house gas production cycle. Games targeting energy conservation values are also proposed to vehicle the message in an interactive manner. A survey targeting household's behaviour on energy consumption is also distributed to raise awareness at the family level (Appendix A). The survey was collected during the second visit and results were shared with the kids. The results of the survey will be further analysed by Efficiency NB. Finally, students were invited to take part in a light bulb exchange sharing fluo-compact bulb's advantages where they signed a pledge to pursue energy conservation behaviours. During the second visit a Power Point presentation focusing on energy conservation was also offered. Games developed by the Université de Moncton "Littoral et Vie" group were performed. A demonstration using a model home explaining energy conservation concepts was also part of the curriculum to better explain valuable concepts (Appendix B). The

energy consumption model was developed to educate school students on the importance of energy conservation and alternative energy sources. The model represent a small scale wind turbine and solar panels associated with a model house where energy consumption. Students also received a participation certificate to congratulate their efforts towards energy conservation.

The schools visited performed for fourth grade students from École Donat-Robichaud in Cap-Pelé, École Mgr-François-Bourgeois in Shediac and École de Grande-Digue in Grande-Digue (Appendix C – Fig. 3). A total of 96 students participated (6 seminars for 5 classes) at both presentations as well as with the light bulb exchange. Moreover, 96 home surveys were distributed provided by Efficiency NB. Certificates (Appendix D) were distributed to students and information was shared on energy conservation and renewable energy power.

Moreover, during the first visit, we had explained to the students that trees help reduce greenhouse gases by converting carbon dioxide to oxygen; therefore, the SBWA gave a pledge letter (Appendix E) to each class to be signed by students where they can receive a tree in the spring of 2010.

The school curriculum is detailed in Appendix F.

2.2 Energy Consumption Reduction Program among Local Businesses

In June and July 2009, the SBWA visited seven local businesses, where we discussed idling as well as the importance of energy efficiency. The goal of this program was to inform businesses on the importance and impacts of energy waste on environmental and economical issues. The concept of “no-idling” was also introduced to promote this concept at the business site for client and employee awareness. Efficiency NB who again provided us with CFL bulbs and booklets supported this program.

Goody packs including one CFL bulb and information material were distributed during each visits with commercial managers or owners. The information material included: “Commercial Buildings Retrofit Program”, “New Commercial Buildings Incentive Program”, Shedding Some Light on Compact Fluorescents”, “Bright Ideas Promoting Premium-Efficiency Lighting Products”, “Climate Change Action Plan 2007-2012 Summary”, “Climate Change Challenges: A Guide for the Kent County Region’s Businesses”, “Energy Efficiency Tips for Businesses”, Energy Efficiency Incentive Programs for Commercial Building and Small and Medium Industrial Operations” “Idling Fact Sheet”). Information documents were provided by Efficiency NB, New Brunswick Climate Change Secretariat Department of Environment, Natural Resources Canada as well as Pays de Cocagne Sustainable Development Group.

An energy conservation survey (Appendix G) was also performed by each visited business. The results of the survey allowed us to further understand how to improve energy consumption behavior.

The following are the results from the survey:

1. 5 businesses responded that they shut their interior lights after hours (excluding emergency lights); however, the other 2 businesses operate lights 24/7 during summer. Both businesses stated that their lights are turned off during the day, due to the quantity of windows, and turned on during the night. 5 businesses stated that they use CFL bulbs. None of the businesses visited had motion sensor lights.
2. Only 1 business stated that they turn off their outdoor lights throughout the night. None of the businesses visited had outdoor motion sensor lights.
3. 5 businesses stated that they do have a programmable thermostat for their heating system.
4. All businesses stated that they did not turn off or unplug their electronics such as computers; however, 3 businesses stated that they do unplug small appliances such as toasters, coffee makers, radios, etc.
5. 3 businesses responded that they had one energy star appliance.
6. 5 businesses stated that they do have a recycling program
7. 3 businesses responded that they do encourage car pooling within their establishment.
8. All 7 managers/owners responded that they have changed a habit to save energy at home such as replacing incandescent bulbs with CFL bulbs, turning off their lights when they leaving a room, as well as turning their car engine off when they go inside a business establishment.

A high proportion of the visited business owners (60%) were not aware of the meaning of Energy Star appliances; therefore, the SBWA has ordered “Energy Star Purchasing Guide” and “Energy Star for Office Equipment Simple Steps to an Energy Smart Office” booklets from Natural Resources Canada. For next year’s business visit, the SBWA will have booklets to give regarding Energy Star appliances.

Emphasis was put on raising awareness regarding customer’s vehicle idling habits when visiting businesses. Most commonly, customers idle their cars when going inside establishments or waiting to receive their product at gas stations, fast-food restaurants and movie stores. As part of the “No Idling” campaign, signs were offered to business owners to promote best practices (Appendix H). A total of nine “No-Idling” signs were requested. The SBWA developed the signs and they will be in production and distributed in March 2010.

2.3 Shediac Farmer’s Market Presentation

The SBWA offered awareness sessions at the Shediac Market in the Park on June 28 and July 19, 2009 (Appendix C – Fig. 4). The objectives were to inform the public on climate change and energy efficiency. During both visits, information booklets and direct communication were offered to the public. Documentation included: “Climate Change Action Plan 2007-2012 Summary”, “Existing Homes Energy Efficiency Upgrades Program”, “Grants for Residential Property Owners”, “Retrofit Your Home and Qualify for

a Grant", "New Homes Program", "Upgrades Program for Multi-Unit Residential Buildings", "New Multi-Unit Residential Buildings Program", "Commercial Building Retrofit Program", "New Commercial Buildings Incentive Program", "Save Money on Energy Costs", "Shedding Some Light on Compact Fluorescents", "Bright Ideas Promoting Premium-Efficiency Lighting Products", "What Can I Do to Save Energy in My Home", "Concerned About Your Energy Consumption?", and nevertheless, "Make Your Home More Energy Efficient" to the public. Efficiency NB, Natural Resources Canada as well as New Brunswick Climate Change Secretariat Department of Environment provided these various booklets.

Furthermore, light bulb exchanges where taking places during each visits at the Market. A total of 71 incandescent light bulbs were exchanged for CFL bulbs. It was estimated that a over 300 people visited our kiosk during the summer and we were able to share plenty of valuable information with the public on energy conservation practices. The visits at the Market and bulb exchanges were announced by placing flyers at the Belliveau's convenience store, Caisse Populaire, Co-op Gas Bar, Guy's Frenchys, Ice Cream & Sub Delight, Jean Coutu, Le Petit Magasin, Magico Restaurant, NB Liquor, Parlee Beach information centre, Petro Canada, Pointe-du-Chêne Wharf, Rossy's, Save Easy, SBWA's office, Shediac Bay Marina, Shediac Centre-Ville Mall, Shediac Co-op, Shediac tourist information centre, Subway as well at Wilson's Gas Bar. Moreover, press releases were distributed to local newspapers, church parishes and radio stations. The SBWA would like to thank these establishments for their support.

Our attendance to the market was a success; however, the number of light bulb exchanged was reduced compared to the previous year. Numerous individuals did not want to participate at the exchange for the reason that they have seen on the media that CFL bulbs contain mercury. Some individuals reported experiencing complications with CFL bulbs such as color lighting and short longevity of the CFL bulb (i.e. the first day placed). During the second visit, we provided information concerning the quantity of mercury found in CFL bulbs, the types of lighting, the types of bulbs (i.e. outdoor, dimmers, etc), and regarding health issues about CFL bulbs. The public seemed very satisfied and content that the SBWA could answer their questions by giving facts about CFL bulbs. All information was retrieved from Natural Resources Canada, Health Canada as well as U.S. Environmental Protection Agency. Additionally, during both visits at the Market, the SBWA received questions dealing with homes air-leakage, moisture problems, Energy Star products, etc. Therefore, we ordered "Energy Star Purchasing Guide", "Energy Star in Canada – Fact sheet", Look for Energy Star to Identify the Most Energy Efficient Products", "Retrofit Homes Air-Leakage Control: Why Should I Worry About Air-Leakage Problems", "Retrofit Homes Moisture Problems: Why Should I Worry About Moisture Problems", Windows, Doors & Skylights – Fact sheet", "Energy Efficient Residential Windows, Doors and Skylights", as well as "Retrofit Grants for Homeowners – Fact sheet". All booklets and fact sheets were provided by Natural Resources Canada.

The Shediac Market in the Park director has graciously added the SBWA on their website due to the fact it has been our second summer attending to the event

(http://www.marketinthepark.com/). With the success of this initiative, we plan to participate at this event in years to come.

3 DISCUSSION

The Shediac Bay watershed has a population of approximately 15,000 people; with this in mind, the SBWA developed an Energy Conservation Awareness Program. The Program's objectives focus on conducting educational and awareness sessions to promote energy consumption and conservation concepts to the general public, local schools as well as local businesses.

In 2010, three schools participated at our climate change and energy efficiency interactive presentation. We were able to implement valuable information on these issues that are often left out in the school's curriculum. Students have participated at our presentation by asking numerous questions, engaging in our activities as well as assisting in our demonstrations. The success of this initiative is measured with the amount of students that have participated to both presentations including the positive feedback received by teachers. With the success of the 2010 school presentations, the SBWA will continue to develop educational sections of the program by targeting new schools. On a long-term basis, the SBWA will also continue to offer seminars in schools as well as continue the development and improvement of the school curriculum on energy conservation concepts. The presentations were a success in terms of students' participation and response. Teachers praised our presentation and were receptive to future involvements with their schools and our association.

With the businesses that have participated in the 2009 program, the SBWA will continue to target further businesses for 2010. The initial response with businesses was very good. By visiting their establishment and responding to our energy efficiency survey, we were able to hand and gather valuable information to each of the participating business regarding energy use. Managers/Owners seemed to be aware of energy efficiency such as shutting their lights when leaving a room, etc; however, very few knew what the Energy Star symbol represented. As a result, the SBWA will have booklets to give to businesses on Energy Star products, in 2010. We are confident that our visits raised awareness among business owners regarding energy conservation. We intend to further develop this program by creating a list of recommendation that will present more friendly energy use practices. Moreover, we were able to create a partnership with these businesses.

The Shediac farmer's market presentation was a valuable tool for the SBWA in terms of visibility. We were able to reach the public in different ways. The light bulb exchange went well and our presence was well received by the public. Our objectives were met as we received numerous visitors and our presence at the market was well received by the community.

4 CONCLUSION

Finally, the program was very successful in many ways and providing adequate educational and promotional information. Furthermore, the community received additional knowledge to perform good environmental practices at home and at work. The SBWA received positive feedback from students and teachers affirming that the information delivered were very knowledgeable and fun. All five teachers appreciated the SBWA's presentations as well as the information given to the students; all are eager to receive more presentations in the future. Moreover, students have been informed on CFL bulbs, Energy Star products as well as on various sources of renewable energy. With confidence, the SBWA have inspired some students to be leaders for the future generations as regards good environmental practices. We certainly helped reduce energy consumption from businesses in the Shediac Bay watershed as well as creating new partnerships among local businesses. We raised awareness among business owners regarding on energy conservation. Each small action for the environment can make a big difference.

APPENDIX A – SURVEY ON ENERGY CONSUMPTION AT HOME

Sondage sur la consommation d'énergie à domicile

Lorsque vous consommez moins d'énergie à la maison, votre famille contribue à protéger l'environnement et peut en plus économiser de l'argent sur les coûts énergétiques!

Le présent sondage vous aidera à découvrir où vous et votre famille économisez déjà de l'énergie et ce que vous pouvez faire pour en économiser encore plus!

Avant de commencer, pensez aux gestes que vous posez chaque jour qui consomment de l'énergie dans votre maison. Ensuite, réunissez votre famille et commencez à répondre aux questions du sondage. Voyez comment vous vous en sortez et découvrez quels sont les cinq principales mesures que votre famille peut prendre pour économiser davantage d'énergie.

Lorsque vous aurez répondu à toutes les questions, découpez les conseils en matière d'énergie et conservez-les à la maison pour vous rappeler ce que vous devez faire pour aider votre famille à économiser de l'énergie. Rapportez le sondage rempli et les cinq principales mesures que vous avez choisies dans votre classe ou votre groupe pour en discuter et pour recevoir votre certificat d'excellence!

Voici une <u>première mesure</u> facile à prendre pour commencer à économiser de l'énergie : remplacez une de vos vieilles ampoules incandescentes par une ampoule fluocompacte écoénergétique.

Travaillez avec votre famille pour compléter les huit étapes faciles ci-dessous (demandez à au moins un adulte de vous aider) :

Huit étapes faciles	✔
Remplacez une ampoule incandescente par une ampoule fluorescente compacte.	
Signez la carte d'engagement à changer une ampoule	
Remplissez le sondage sur la consommation d'énergie à domicile.	
Énumérez cinq mesures que vous et votre famille pouvez prendre pour augmenter l'efficacité énergétique dans votre maison.	
Découpez le formulaire en deux (en suivant la ligne pointillée).	
Conservez les conseils en matière d'énergie à la maison en guise de rappel.	
Rapportez les résultats du sondage sur la consommation d'énergie à domicile en vue d'une discussion et pour recevoir votre certificat!	

SHEDIAC BAY ASSOCIATION BAIE DE SHEDIAC
PROTECTION - EDUCATION

efficiency efficacité NB

L'EFFICACITÉ ÉNERGÉTIQUE
Il est temps d'agir contre les changements climatiques

Ce projet est coordonné par l'Association du Bassin Versant de la Baie de Shediac et appuyé par Efficacité NB.

SONDAGE SUR LA CONSOMMATION D'ÉNERGIE À DOMICILE
(Rapportez ce côté)

CONSEILS EN MATIÈRE D'ÉNERGIE
(Laissez ce côté à la maison)

Questions du sondage	Réponses	Le saviez-vous?
Éclairage EN TOUT, nous avons ____ ampoules à la maison.		Les ampoules incandescentes ordinaires gaspillent beaucoup d'énergie : moins de 10 % de l'énergie qu'elles consomment sont utilisés pour l'éclairage. Les autres 90 % sont perdus sous forme de chaleur.
Sur toutes les ampoules que nous avons à la maison, ___ sont des ampoules fluocompactes.		Les ampoules fluoompactes homologuées ENERGY STAR® utilisent jusqu'à 75 % moins d'énergie et dure jusqu'à dix fois plus longtemps que les ampoules traditionnelles.
Lorsque nous quittons une pièce, nous éteignons la lumière.	- **La plupart du temps** - **Parfois** - **En général, nous oublions**	N'oubliez pas que le meilleur moyen d'économiser de l'énergie sur l'éclairage est d'éteindre les lumières!
Eau chaude Nous avons des robinets qui fuient à la maison.	**Oui / Non**	Les fuites peuvent s'avérer coûteuses. Une fuite de seulement une goutte par seconde gaspille environ 9 000 litres d'eau par année, soit l'équivalent de 16 bains chaque mois.
Nous utilisons des pommes de douche à faible débit.	**Oui / Non**	Les pommes de douche à faible débit utilisent jusqu'à 60 % moins d'eau que les pommes de douche ordinaires.
Nous lavons et rinçons nos vêtements à l'eau froide.	- **La plupart du temps** - **Parfois** - **En général, nous oublions**	En lavant les vêtements à l'eau froide, on peut consommer jusqu'à 93 % moins d'énergie.
Appareils électro-ménagers Nous éteignons l'ordinateur, la télévision, les jeux vidéos, etc., lorsque nous ne les utilisons pas.	- **La plupart du temps** - **Parfois** - **En général, nous oublions**	Activez les fonctions de gestion de l'énergie de l'ordinateur et du moniteur. N'oubliez pas qu'un « économiseur d'écran » ne vous fera pas économiser de l'énergie !
Nous utilisons une corde à linge lors des journées ensoleillées comme solution de rechange à notre sécheuse.	- **La plupart du temps** - **Parfois** - **En général, nous oublions**	Une sécheuse à linge électrique consomme en moyenne 937 kWh d'électricité, ce qui équivaut à environ 85 $ par année. Grâce au séchage à l'extérieur, vous économiserez et vos vêtements dureront plus longtemps. D'où croyez-vous donc que provient la charpie qu'on retire du filtre de la sécheuse ?

CINQ PRINCIPALES MESURES

# 1	
# 2	
# 3	
# 4	
# 5	

CINQ PRINCIPALES MESURES (Instructions)

Nommez cinq mesures que vous et votre famille pouvez prendre pour augmenter l'efficacité énergétique de votre maison et économiser de l'argent sur les coûts énergétiques.

CONSEIL : Pour vous aider à partir du bon pied, examinez les résultats de votre sondage sur la consommation d'énergie à domicile, mais n'hésitez pas à essayer de nouvelles idées en fonction des activités quotidiennes de votre famille! Par exemple :

- Est-ce que votre famille utilise une bouilloire électrique pour faire bouillir de l'eau au lieu d'une cuisinière ou d'un micro-ondes?
- Lorsqu'il fait chaud, fermez-vous les rideaux pour empêcher les rayons du soleil d'entrer?
- Pensez-vous à ce que vous voulez manger ou boire AVANT d'ouvrir la porte du réfrigérateur?
- Visitez www.efficacitenb.ca pour en savoir plus!

RENSEIGNEMENTS GÉNÉRAUX :

Nom* :

Code postal du domicile* :

Date où vous avez répondu au sondage sur l'énergie :

Nom du groupe ou de l'école :

Section réservée aux parents/tuteurs :
Aidez-nous à rendre cette activité encore plus amusante et instructive!
Autorisez-vous un représentant d'Efficacité NB à communiquer avec vous pour répondre à un très court sondage sur votre expérience?
Oui ○ **Non** ○
Numéro de téléphone _____ maison ○ / travail ○

Toutes les données seront analysées de façon globale seulement.

Signature :

efficiency efficacité NB

Pour obtenir de plus amples renseignements sur ce que vous pouvez faire pour être plus éconergétiques, appelez Efficacité NB au numéro sans frais 1-866-643-8833 ou visitez le site suivante : www.efficacitenb.ca .

Allez-y!

APPENDIX B – MODEL HOME

Figure 1: Model Home and material used to demonstrate greenhouse effect

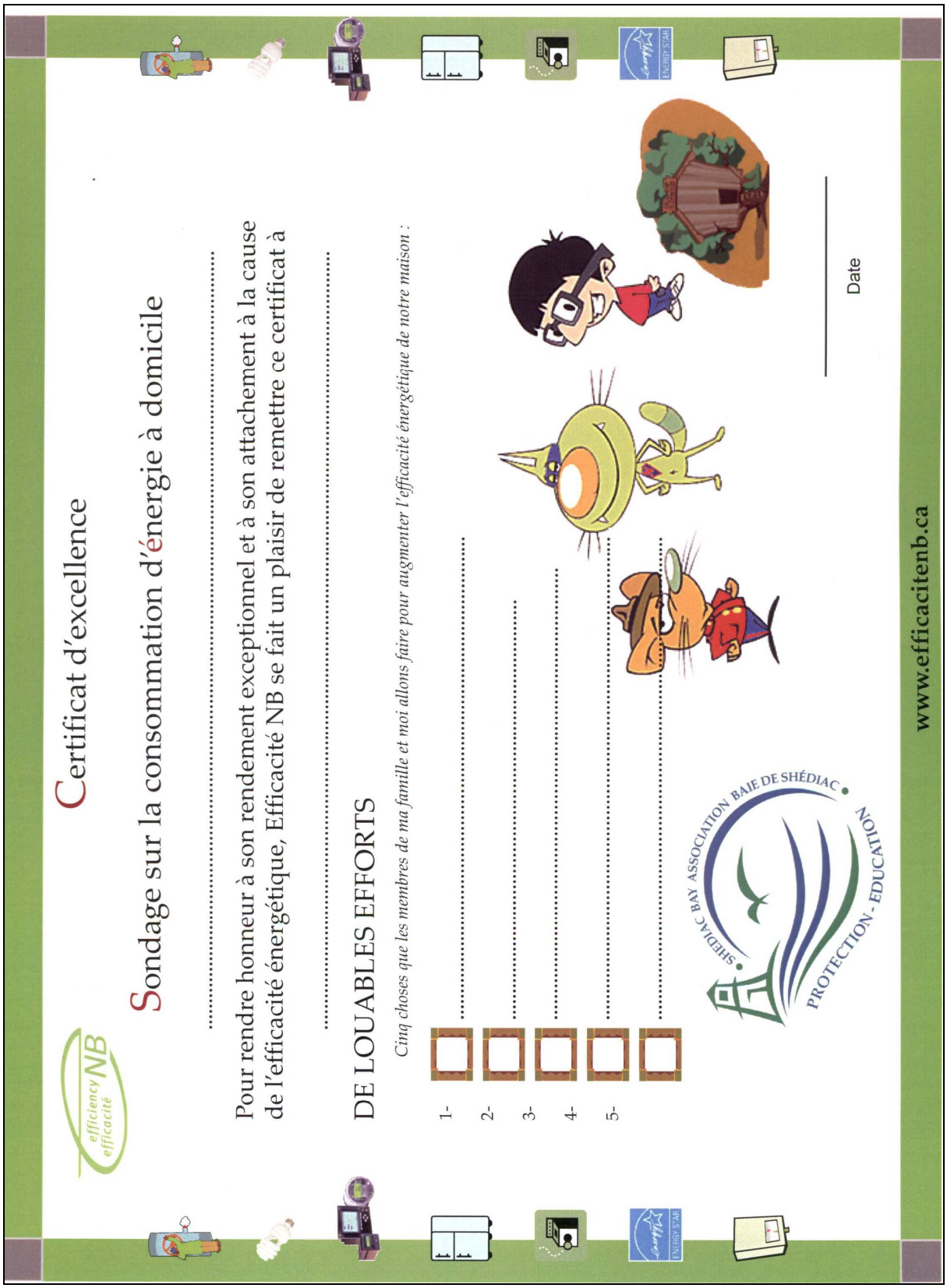
Figure 2: Model Home and material used to demonstrate alternative energy sources concept and energy conservation principles

APPENDIX C – PICTURES

Figure 3: School presentation in February 2010 by Erika Dawson and Travis Melanson.

Figure 4: Presentation performed at the Shediac Market in the Park where information was distributed and light bulbs exchanged.

APPENDIX D – CERTIFICATE OF EXCELLENCE


efficiency efficacité NB
Certificat d'excellence
Sondage sur la consommation d'énergie à domicile
Pour rendre honneur à son rendement exceptionnel et à son attachement à la cause de l'efficacité énergétique, Efficacité NB se fait un plaisir de remettre ce certificat à
DE LOUABLES EFFORTS
Cinq choses que les membres de ma famille et moi allons faire pour augmenter l'efficacité énergétique de notre maison :
1-
2-
3-
4-
5-
SHEDIAC BAY ASSOCIATION BAIE DE SHÉDIAC
PROTECTION - EDUCATION
Date
www.efficacitenb.ca

APPENDIX E – PLEDGE LETTER

ENGAGEMENT

Je m'engage à planter un arbre pour aider à réduire l'effet de serre dans ma région.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____
25. _____
26. _____
27. _____
28. _____
29. _____
30. _____
31. _____
32. _____
33. _____
34. _____

Nom de l'école : _____

Nom : _____ Date : _____

APPENDIX F – SCHOOL PRESENTATION CURRICULUM 2010

Plan du programme éducatif sur les changements climatiques et l'efficacité énergétique:

1ère visite:

- Discuter des buts et objectifs de l'ABVBS
- Révéler la présentation PowerPoint et discuter avec les élèves au sujet des changements climatiques. Nous discuterons en détail au sujet des effets et des causes des changements climatiques sur la scène internationale, nationale ainsi qu'au Nouveau-Brunswick
- Démontrer de l'effet de serre à l'aide du PowerHouse (démonstration)
- Discuter de l'activité : Les causes du changement climatique
- Discuter le défi à faire à la maison
- Remettre le sondage sur la consommation d'énergie à domicile. Le sondage sera évalué lors de la deuxième visite
- Inviter les élèves d'apporter une ampoule incandescente qui sera échangée pour une ampoule fluorescente compacte

2ème visite:

- Discuter le résultat du défi
- Révéler la présentation PowerPoint au sujet des enjeux reliés aux changements climatiques et l'importance de l'efficacité énergétique
- Discuter des ampoules fluocompactes (avantages, quantité de mercure et effets de la santé)
- Démontrer le fonctionnement des panneaux solaires (démonstration)
- Échanger les ampoules
- Remettre les certificats de participation aux élèves

Activités

1ère visite

2 – Démonstration de l'effet de serre

- Ajouter de l'eau dans le bol ainsi dans la bouteille
- Demander à un(e) élève de mesurer les deux températures initiales
- Déverser l'eau dans la bouteille dans le PowerHouse tout en s'assurant que le plastique est autour de l'eau
- Placer une lampe au-dessus le bol
- Placer l'autre lampe au-dessus le plastique
- Demander aux élèves leurs hypothèse/opinions des températures
- Demander à un autre élève de mesurer les deux températures (à la fin de la présentation PowerPoint)
- Dévouer les résultats et demander aux élèves d'effectuer une conclusion par rapport à l'effet de serre
- Expliquer que l'eau placer autour du plastique se compare avec l'atmosphère de la terre. Comme les gaz à effet de serre, il retient de la chaleur. Cependant, contrairement à la bouteille, l'atmosphère n'est pas une barrière solide qui empêche l'air chaud de s'échapper.

2ème visite

Défi sur l'efficacité énergétique

- Discuter avec les élèves les résultats du défi (Comment ils ont trouver le défis – difficile/facile)

Démonstration des panneaux solaires

- Placer le PowerHouse sur une table tout en s'assurant que la corde est traînante (avec objet au bout)

- Placer la lampe à peu près 30cm des panneaux solaires (pour charger les panneaux)

- À la fin de la présentation, faire fonctionner le moteur tout en montant l'objet

APPENDIX G – ENERGY CONSUMPTION BUSINESS SURVEY

Energy conservation survey for Businesses

Date: **Business:**

Do you shut your interior lights after business hours?

yes___ no___ **If yes, are they motion sensor lights**: yes___ no___

Type of bulb used:

___ regular incandescent bulbs

___ Compact Fluorescent Light (CFLs)

___Other: _____

_____

Are your exterior lights on through the night?

yes___ no___ **If yes, are they motion sensor lights:** yes___ no___

Type of bulb used:

___ regular incandescent bulbs

___ Compact Fluorescent Light (CFLs)

___ other : _____

_____

Do you have a programmable thermostat for your heating system?

yes___ no___

Do you turn off the power strip or unplug your energy-using electronics when they are not in use (computer, monitor, etc…)?

yes___ no___

Do you have energy star electronics?

yes___ no___

Do you have a recycling program (paper, batteries, bottles, etc…)?

yes___ no___ **If yes, what material is collected for recycling?**

_____

_____

Do you promote car pooling within your establishment?

yes___ no___

Have you ever changed a habit to save energy?

yes___ no___ **If yes, please describe:**

_____

_____

New Nouveau Brunswick
Your Environmental Trust Fund at Work!
Votre fonds de fiducie de l'environnement au travail!

SHEDIAC BAY WATERSHED ASSOCIATION
ASSOCIATION DU BASSIN VERSANT DE LA BAIE DE SHEDIAC

APPENDIX H – NO IDLING ZONE SIGN FOR BUSINESSES


NO IDLING
ZONE
ARRÊTEZ VOTRE
MOTEUR
SHEDIAC BAY WATERSHED ASSOCIATION
ASSOCIATION DU BASSIN VERSANT DE LA BAIE DE SHEDIAC