

## ecoENERGY for Personal Vehicles Program

### FINAL REPORT MANDATORY TEMPLATE

This report must be completed at the end of the project and co-signed by project proponents.

#### A. Background information

Complete the following general information about the project. See the information agreed to in the contribution agreement.

<b>Project title</b>	Fuel Efficient Driving Pilot Program in Greater Sudbury
<b>Proponent name</b>	Mining Innovation, Rehabilitation and Applied Research Corporation
<b>Project start date</b>	April 27, 2009
<b>Project end date</b>	March 31, 2010
<b>Partners (collaborators and funders)</b>	Clean Air Sudbury

#### B. Results

Complete the following sections. (If you need additional sheets, copy this page.)

<b>1. Project goals and objectives</b>
Referring to Appendix A of your contribution agreement, your original project proposal and work plan, summarize your project's goals and objectives.
<i>The goal of the project is to engage the citizens of Greater Sudbury and motivate them to be more fuel-efficient in the way they buy, drive and maintain their personal vehicles, thereby reducing their emissions of air pollutants and greenhouse gases. The benefits of the program include a reduction in greenhouse gas and air pollutant emissions, fuel savings, and free tips, tools and strategies to assist residents in improving their personal fuel efficiency.</i>
<i>The objectives, as stated in our original proposal, are:</i>
<ul style="list-style-type: none"><li>- <i>To increase knowledge of personal vehicle owners regarding the amount of air pollutants and greenhouse gases emitted by personal vehicles and the amount of fuel wasted by improper driving and maintenance habits</i></li><li>- <i>To provide information regarding fuel-efficient vehicles available in Ontario and how to drive and maintain personal vehicles for maximum fuel efficiency</i></li><li>- <i>To improve and change personal behaviour with respect to personal vehicle purchase, use and/or maintenance practices</i></li><li>- <i>To provide tools and incentives to encourage participants to reduce fuel consumption and associated air pollutant/greenhouse gas emissions</i></li><li>- <i>To record personal vehicle usage by program participants before and after attending workshops to measure achievements</i></li><li>- <i>To achieve a reduction in fuel consumption and corresponding reductions in air pollutant and greenhouse gas emissions</i></li></ul>

- To empower citizens to continually strive to improve fuel efficiency in their personal vehicles beyond the completion of the program and to motivate others to do the same.

**2. Variances from the proposed work plan**

Explain any variances from your proposed work plan.

The scope of the proposed work plan was followed. The only variances made were with respect to scheduling. The contract was not finalized until late April and as a result, the initial tasks to gather/summarize relevant information and to develop/produce a fuel efficiency guide were completed in the 2<sup>nd</sup> quarter instead of the 1<sup>st</sup> quarter. The timeline for workshops was extended from the end of November until the end of January to increase numbers of participants. The follow-up survey, data analysis and program evaluation were conducted in March, rather than January-February to accommodate the extended schedule for the workshops and lunch and learn sessions.

**3. Performance measurement results**

List your performance measurement indicators and measurable results. Add rows as required

<b>Project and performance measurement indicators</b>	<b>Measurable results</b>																
<b>A) Pilot Program</b>																	
Number of participants	59																
Number of fuel efficiency guides and toolkits distributed	76																
Knowledge gain of participants through pre and post surveys	19%																
Reduction of fuel consumption and greenhouse gas emissions by participant	Average of 6.5%																
Reduction of fuel consumption and greenhouse gas emissions by the pilot program	<p>For pilot program only, assuming 75% participation rate, based on completed tracking forms:</p> <table border="0"> <tr> <td><u>Four-month program</u></td> <td><u>Projected for 1 year</u></td> </tr> <tr> <td>1,642 L gasoline reduced</td> <td>4,925 L gasoline reduced</td> </tr> <tr> <td>3,775 kg CO<sub>2</sub> reduced</td> <td>11,326 kg CO<sub>2</sub> reduced</td> </tr> <tr> <td>195 kg air pollutants reduced</td> <td>586 kg air pollutants reduced</td> </tr> </table> <p>For pilot program and lunch and learn programs combined (high school students not included), based on follow-up survey results:</p> <table border="0"> <tr> <td><u>Four-month program</u></td> <td><u>Projected for 1 year</u></td> </tr> <tr> <td>7,674 L gasoline reduced</td> <td>23,021 L gasoline reduced</td> </tr> <tr> <td>17,650 kg CO<sub>2</sub> reduced</td> <td>52,949 kg CO<sub>2</sub> reduced</td> </tr> <tr> <td>913 kg air pollutants reduced</td> <td>2,740 kg air pollutants reduced</td> </tr> </table> <p>(see attached calculation spreadsheet)</p>	<u>Four-month program</u>	<u>Projected for 1 year</u>	1,642 L gasoline reduced	4,925 L gasoline reduced	3,775 kg CO <sub>2</sub> reduced	11,326 kg CO <sub>2</sub> reduced	195 kg air pollutants reduced	586 kg air pollutants reduced	<u>Four-month program</u>	<u>Projected for 1 year</u>	7,674 L gasoline reduced	23,021 L gasoline reduced	17,650 kg CO <sub>2</sub> reduced	52,949 kg CO <sub>2</sub> reduced	913 kg air pollutants reduced	2,740 kg air pollutants reduced
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Percentage of participants who remain engaged in reducing their fuel consumption and associated emissions one to two months after the completion of the pilot program (via survey)	93%																
Evaluation of the pilot program success by participants	Evaluation forms completed by all participants; comments very positive; good or excellent ratings																
<b>B) Lunch and Learn Sessions</b>																	
Number of people attending	402 (including 194 high school students)																
Number of fuel efficiency guides and toolkits distributed	408 (including 194 handouts to high school students and 6 teacher packages)																

<i>Knowledge gain of participants through pre and post surveys</i>	<i>19%</i>
<i>Evaluation of lunch and learn sessions success by participants</i>	<i>Evaluation forms completed by 95% of adult participants; comments very positive; good or excellent ratings</i>
<b>C) Media Campaign</b>	
<i>Number of media messages and articles produced</i>	<i>142 radio messages; 10 advertisements in Northern Life newspaper; 1 press release; 5 min CTV news segment; 1 article in Sudbury Star newspaper; 1 article in Northern Life newspaper; 1 article in a special Sudbury Star environmental supplement; 1 article (French) in a special Le Voyageur environmental supplement.</i>
<b>4. Successes and accomplishments</b>	
Referring to your goals and objectives statements and performance measurement indicators, comment on the extent to which your project met them.	
<p><i>The project met the goals and objectives stated in #1. The successes and accomplishments can be grouped into the following three categories:</i></p> <ol style="list-style-type: none"> <li><i>1) <u>Knowledge Gain</u>: Participants gained knowledge about: air pollutant and greenhouse gas emissions from personal vehicle use; driving and vehicle maintenance strategies to reduce fuel consumption and associated emissions; how to calculate fuel consumption; fuel-efficient vehicles available in Ontario including hybrids; and how to evaluate fuel efficiency in vehicle purchase decisions. The average knowledge gain measured through pre- and post-quizzes was 19%. A successful media campaign heightened awareness about fuel efficient driving within the larger community.</i></li> <li><i>2) <u>Behaviour Change</u>: Participants demonstrated behaviour change in their answers to questions on the workshop/presentation evaluation forms and follow-up survey. Participants made commitments on evaluation forms to implement strategies to reduce their fuel consumption. The majority of participants remained engaged in reducing their fuel consumption and associated emissions one to three months after attending a community workshop or lunch and learn presentation. Ninety-three per cent of respondents indicated that they think about fuel consumption more than they did prior to the presentation and 98% indicated that they told others (friends, family) about fuel efficient driving tips learned in the presentation. All respondents indicated that they would consider fuel efficiency in their decision to purchase their next vehicle.</i></li> <li><i>3) <u>Reduction in Emissions</u>: Reductions in fuel consumption, greenhouse gas emissions and air pollutant emissions were realized in this program. Based on follow-up survey results, it is anticipated that a high proportion of participants will remain actively engaged in reducing their emissions in the future, motivated by their success during this program.</i></li> </ol>	
<b>5. Raising awareness of climate change and bringing local relevance</b>	
Referring to your performance measurement indicators and measurable results, comment on the extent to which your project contributed towards raising awareness of climate change related to personal vehicle use and to bringing local relevance to the program.	
<p><i>The opening module of the workshop and lunch and learn presentation included an explanation of the emissions of greenhouse gases from personal vehicles and how these emissions are contributing to climate change. Fuel consumption tracking forms included a specific line item for calculation of CO<sub>2</sub> emissions so participants could track their personal emissions. Reductions in CO<sub>2</sub> were realized during the program. Participants demonstrated knowledge of climate change and personal vehicle use through pre and post-quizzes. Local relevance was brought to the entire program. Data and statistics for Greater Sudbury (traffic, air quality, anti-idling surveys and studies, website links) were used wherever possible in presentations, in the Greater Sudbury Fuel Efficient Driving Handbook, other program materials, and on our website.</i></p>	

**6. Changing behaviour**

Referring to your performance measurement indicators and measurable results, comment on the extent to which your project contributed toward changing behaviour related to reducing greenhouse gas emissions as they relate to personal vehicle use.

*Participants demonstrated behaviour change in their answers to questions on the workshop/presentation evaluation forms and follow-up survey. The majority of participants remained engaged in reducing their fuel consumption and associated emissions one to three months after attending a community workshop or lunch and learn presentation. Ninety-three per cent of respondents indicated that they think about fuel consumption more than they did prior to the workshop/presentation and 98% indicated that they shared the information with others (friends, family). All respondents indicated that they would consider fuel efficiency in their decision to purchase their next vehicle. Participants made commitments on evaluation forms to implement specific strategies to reduce fuel consumption and emissions and then listed the strategies they continue to employ on the follow-up survey. The most popular strategies employed included reduced idling (74.4% of respondents), driving to warm up the engine instead of idling in the winter (74.4%), reduced highway driving speeds (48.8%), avoiding aggressive driving (41.9%) and checking tire pressure more often (41.9%).*

**7. Sustainability**

Comment on how your organization’s capacity was increased by undertaking this project (e.g. new skills developed or improved, new partnerships created, increased ability to manage project elements, communications, events). Has your project become more sustainable over the course of the contribution agreement (i.e. through support from more partners)?

*Our organization’s capacity was increased in many ways as a result of this project. We gained expertise in fuel efficiency, traffic-related emissions and data/statistics related to local traffic patterns and emissions. The grant has allowed us to develop the expertise and program materials necessary to be a “go-to” resource on fuel efficiency in our community. This has allowed us to expand the range of services we offer as a non-profit organization committed to local air quality issues. It has also allowed us to be a leader in developing programs to address the air quality and climate change objectives of EarthCare Sudbury’s Local Action Plan. We have increased our capacity to offer other types of community-based programs through relationships with Community Action Networks and local businesses forged during this project. It has increased recognition of Clean Air Sudbury in the community, for this project as well as our other initiatives.*

*The grant funding provided by the ecoEnergy for Personal Vehicles Program allowed us to leverage additional funds and in-kind support from local businesses and organizations. On-going financial support from our partner organizations will allow us to continue to offer fuel efficiency lunch and learn presentations to local businesses and schools in future years. We have also initiated a partnership with another local environmental organization (reThink Green) that is interested in offering a fuel efficient driving program in future years that will continue and expand upon this pilot program.*

**8. Media and promotion**

If applicable to your project, summarize the types of media and promotion your project achieved.

<b>Category of medium</b> Specify Print (specify weekly, daily, magazine, etc.) or Electronic (specify T.V., radio, Web, e-mail, etc.)	<b>Type of promotion</b> Specify article, interview, promotion, radio spot, public service announcement (PSA), advertisement, etc.	<b>Number of types of promotions</b> (articles, ads, PSA, etc.) e.g. 10 articles	<b>Audience reach or circulation</b> e.g. 20 000 readership
<i>Print, daily</i>	<i>article</i>	<i>2 articles</i>	<i>55,000</i>
<i>Print, bi-weekly</i>	<i>articles</i>	<i>1 article</i>	<i>60,000</i>
<i>Print, bi-weekly</i>	<i>advertisements</i>	<i>10 advertisements</i>	<i>60,000</i>
<i>Print, weekly</i>	<i>article (French)</i>	<i>1 article</i>	<i>10,000</i>
<i>Radio</i>	<i>radio spots and advertisements</i>	<i>89 radio spots (15-30 seconds)</i>	<i>47,000</i>
<i>Radio</i>	<i>radio spots</i>	<i>53 radio spots (15-30 seconds)</i>	<i>50,000</i>

TV	news segment	1 news segment (5 minute)	81,000
<b>9. Unanticipated results</b>			
List any results, positive or negative, from your project that were not anticipated (e.g. new partnerships formed).			
<ol style="list-style-type: none"> <li>1) <i>Although the program targeted existing drivers within the local community, we were also able to deliver this program to 194 young drivers in Grade 12 at several local high schools. The fuel efficiency material complemented and expanded upon curriculum requirements for Grade 12 Transportation Technology and World Studies classes.</i></li> <li>2) <i>A new partnership was formed with a local environmental organization (reThink Green) that shares an interest in community-based projects focused on fuel efficiency.</i></li> <li>3) <i>We have been invited to participate in a variety of local events in April and May 2010, such as the annual Earth Day Festival (which draws up to 5000 visitors each year), a series of "Sustainable Living" tours throughout the community (expected to draw up to 200 participants) and a Webinar for the North-South Climate Change Network (expected to draw up to 100 participants). We will be presenting our fuel efficient driving program and distributing materials at these events.</i></li> </ol>			
<b>10. Partnerships</b>			
What type of activities did you undertake with your partners during your project? What was the role of your partners (e.g. funders, distributors of information, advisory role, publicity, etc.)?			
<i>Funding partners in this project provided project oversight, document review, translation services and logistical support. Many of our partners hosted lunch and learn presentations at their workplaces, helped promote the program to other businesses and organizations, and distributed program materials.</i>			
<b>11. Challenges</b>			
What challenges did your group face, what options were considered, and what solutions were implemented during the project? Consider obstacles, delays, impacts on the work plan, timeline, budget, and resources used. Describe how your organization adjusted accordingly.			
<p><i>The two main challenges associated with this project included participant recruitment and submission of fuel consumption tracking forms.</i></p> <ol style="list-style-type: none"> <li>1) <i><u>Participant Recruitment</u>: The original series of community workshops were held in various neighbourhoods in Greater Sudbury on weekday evenings from October to December 2009 (3<sup>rd</sup> quarter). A number of factors beyond our control resulted in low attendance at these workshops, including the H1N1 flu virus outbreak that made public group settings undesirable, and adverse weather conditions (snow storm in December). We also did not receive as much support from Community Action Networks in recruiting participants to neighbourhood workshops as we had anticipated. After the first few workshops, a decision was made to allocate additional funds for paid advertising to enhance recruitment. The project team also decided to hold one additional session in the 4<sup>th</sup> quarter on a Saturday afternoon in a central location, promoted by paid advertising, to maximize attendance. Since the lunch and learn component of the program was a success in the 3<sup>rd</sup> quarter, the project team decided to shift attention from the workshops to the lunch and learn component in the 4<sup>th</sup> quarter to maximize the number of participants reached by the program.</i></li> <li>2) <i><u>Fuel Consumption Tracking</u>: The fuel consumption tracking component of the pilot program did not go as well as planned. The reporting process was simple and further changes were made to the tracking forms throughout the project to further simplify the process. However, the return rate of these forms remained low.</i></li> </ol>			
<b>12. Lessons learned</b>			
What did you learn from this project experience that could serve as advice to other organizations that want to undertake a similar project?			
<i>In our experience, the lunch and learn format works much better than community workshops. Participation is higher when the presenter comes to the workplace and the participants are free to come on their lunch hour. In our experience, recruitment of participants to community workshops at community centres/public libraries required extensive effort and high advertising costs that were disproportional to the number of participants</i>			

reached. The ½ hour length of the lunch and learn session was also more appropriate for most people than the 1.5 hour workshop, although many workshop participants seemed to appreciate the added depth of coverage. The lunch and learn sessions were also easier logistically and less costly. We were disappointed in the low return rate of fuel consumption tracking forms. Even with simplification of the forms, detailed explanation at the workshops, provision of an excel spreadsheet to do the calculations automatically, repeated reminders, and a variety of methods to return forms (email, fax, mail, drop-off), the return rate was low. It seemed difficult to get people to commit to returning paperwork after the workshop event. The follow-up on-line survey had a much higher return rate and was able to provide some of this information, but with less detailed numerical information.

The media campaign worked extremely well. In particular, our “fuel efficient driving tips of the day” series on two local radio stations was well-received and a good information source for the general public.

**13. ecoENERGY for Personal Vehicles program feedback**

- a) Were the program information and materials provided by your Project Manager helpful? Explain.
- b) Was the service provided by the program’s Project Manager helpful? Explain and give feedback on areas for improvement.
  - a) *Our Project Manager provided any materials and information we required on a timely basis. She provided us with Auto\$mart materials and a video that we were able to include in our workshop sessions.*
  - b) *The service provided by the Project Manager was timely and helpful. We do not recommend any improvements based on our experience.*

**14. Other comments**

Give us any other relevant information on your project or on the ecoENERGY for Personal Vehicles program.  
*We wish to thank you for providing us with funding to initiate this project. We believe the project was a success.*

**C. Signature**

MIRARCO representative: \_\_\_\_\_ Date: \_\_\_\_\_

Clean Air Sudbury representative: \_\_\_\_\_ Date: \_\_\_\_\_

**Project Officer**

Report reviewed by: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_