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IDLE-FREE TOOLKIT



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No one can do everything, but everyone can do something.

Max Lucado



A. INTRODUCTION

Welcome!

This Toolkit was put together by the Parkland Airshed Management Zone ([PAMZ](#)) Idle Reduction Committee, which was established to address growing concerns about ground level ozone and fine particulate matter (PM 2.5) exceedances in Red Deer and Central Alberta. Contrary to popular belief, air quality is increasingly becoming a real environmental health concern in Central Alberta. Vehicles emit greenhouse gases and air contaminants that are harmful to the environment and to our health. Eliminating unnecessary vehicle idling is a key way to address air pollution.

Municipalities are well positioned to tackle air pollution and to demonstrate leadership in this area. Through the establishment of their own policies and practices and through the careful development of targeted awareness campaigns, municipalities can be the drivers of change to improve air quality.

Environmental issues such as air pollution can be addressed through:

1. Engineering and technological solutions
2. Legislation and enforcement
3. Education, resulting in voluntary behaviour change

Generally, a combination of the above three approaches are often the most effective at achieving desired outcomes. Every community is unique, and opportunities and barriers to taking action are different in each municipality. This toolkit was designed to provide urban and rural municipalities with options that are suited to their specific needs and realities, and to provide support and tools to help all municipalities take steps – whether small or large – to tackle vehicle idling in their communities.

The PAMZ Idle Reduction Toolkit:

1. Is tailored to the characteristics and potential goals of municipalities in Central Alberta;
2. Provides a rationale and background information on the importance of idle reduction;
3. Provides a diversity of strategies and tools to support the development and evaluation of municipal initiatives that will result in measurable idle reduction in their communities;
4. Provides a number of case studies of real idle-free campaigns and actions tested and evaluated by urban and rural municipalities in Central Alberta;
5. Can be used by *anyone* (municipal staff, volunteer organizations, etc.) interested in working to reduce vehicle idling in their community.

The PAMZ Idle Reduction Committee is pleased and grateful to have worked closely with Lacombe County and the Town of Sylvan Lake as “pilot communities” to test out two different and unique idle reduction campaigns. We drew upon learnings from those two municipalities to develop this toolkit, and you will find case studies from those communities throughout the toolkit.

Why Should We Care About Vehicle Idling?

Before going any further, familiarize yourself on the basics. (*See Campaign Tool B1 and B2 Vehicle Idling Fact Sheets*).

B. BACKGROUND

The PAMZ Idle Free Pilot Project

The PAMZ Idle Free pilot project was seen as an important and needed initiative for the Central Alberta area which is facing issues related to ground level ozone and particulate matter issues in our air. Vehicle emissions are one of the major sources for these emissions that needs to be addressed.

Vehicle idling is an ongoing concern for Central Alberta due to the potentially serious human health and environmental impacts of excessive automobile emissions. Airborne particulate matter levels for the Red Deer area have recently exceeded trigger levels under the Clean Air Strategic Alliance (CASA) Particulate Matter and Ozone Management Framework. With Alberta's rapidly growing population and increasing industrial activity, air pollution in the form of particulate matter is likely to increase and spread throughout the province without targeted strategies to address root causes.



TIP

PAMZ can provide workshops to assist municipalities in using this Toolkit and planning a realistic strategy for their community.

Simultaneous with the development of Alberta Environment and Parks' mandatory [Red Deer Fine Particulate Matter Response](#), PAMZ planned to develop and deliver an education and behavior change strategy, in partnership with key stakeholders, to reduce the frequency of vehicle idling in the Parkland airshed. This strategy was to address the goals outlined in Alberta's Clean Air Strategy (2012), and work alongside the PM plan to reduce vehicle idling emissions as one significant source of Particulate Matter within the PAMZ area.

Goals, Desired Outcomes and Target Audience

The PAMZ Idle Free initiative addresses air quality issues in the PAMZ area by tackling the major problem of vehicle idling. The pilot projects lay the foundation for an expanded, longer-term initiative that will actively support municipalities within the PAMZ zone in planning/delivering locally customized idle-free education and awareness campaigns.

The overall and long-term goal is to reduce the frequency and duration of vehicle idling activity throughout the PAMZ area. Desired outcomes are to achieve behavioral change among vehicular owners within the PAMZ region, which include:

- Drivers of all types of vehicles (personal, government, industrial) turn off their engines and refrain from idling for time periods greater than one minute, unless absolutely necessary.
- Drivers understand the many negative impacts of vehicle idling.
- Drivers have the skills, tools, and motivation required to adopt "idle free" behavior.
- Common myths and misconceptions surrounding vehicle idling are dispelled.

The specific focus for the pilot project initiatives was on vehicular owners/operators in two municipalities within the PAMZ region, one rural and one urban. Thus, partnerships were established with Lacombe County (rural) and the Town of Sylvan Lake (urban). The target audience for Lacombe County is their personnel and the target audience for the Town of Sylvan Lake includes its municipal residents.

Developing the Project

In early 2014, PAMZ set up an Idle Free Steering Committee to explore the potential of partnering with municipalities within PAMZ to address the issue of idling. They felt it was important to work with both a rural municipality and an urban municipality in order to obtain a comprehensive view of how an idle free strategy would work in both kinds of jurisdictions. PAMZ invited representatives of Lacombe County and representatives of

a local citizen group from the Town of Stettler, who had expressed interest in working on this issue, to be part of the Steering Committee. Together they met several times to discuss a partnership and process for such a project.

Basically, the process was as follows:

- PAMZ would develop and deliver idle-free workshops designed to help municipal staff and volunteers organize and design their Idle Free strategies that would work best in their community.
- PAMZ would provide ongoing consultation and resource assistance to the municipalities as needed.
- The Steering Committee would develop a Toolkit of resources, which have been tested and evaluated by the pilot projects, and are realistic in enabling other municipalities to implement their own idle-free campaigns
- The Toolkit would be made available to other municipalities in the region, along with workshops to help them learn how to use it.
- Critical to carrying out the pilot initiative was the need to do a pre and post research evaluation survey of each municipal project for two reasons:
 1. To identify idling “hot spots” in each of the communities and/or to identify key opportunities to target sectors of the population with idle free awareness campaigns, and/or to identify critical knowledge gaps among citizens related to idling behavior
 2. To compare idling behaviors pre- and post- campaigns in order to evaluate the effectiveness of the pilot idle free campaigns.

Challenges

One of the major challenges in proceeding was to find funding to carry out the pre and post surveys. Fortunately, Lacombe County was able to absorb the cost internally (as they were only targeting County personnel) but funding to do a survey for the broader urban community was costly.

Several funding requests were sent out but it was not until September 2014 that the group successfully obtained a grant from the Community Initiatives Program, Community Lottery Grant to pay for the pre and post surveys for the urban municipality project.

In October, the Committee received word that the Town of Stettler had to drop out of the initiative. Numerous towns in the area were contacted and the Town of Sylvan Lake made the fastest and most committed response to participate in Stettler’s place. The Town of Sylvan Lake set up their working committee in February 2015.

Implementing the Projects

Lacombe County focussed on their staff in order to build awareness and create champions within the organization. Emphasis was on idle reduction rather than idle free in order to be able to create tangible goals. Some examples of activities they have done to date are:

- A staff pre-survey, as well as gathering observational data on idling behavior.
- Creation of four main messages that will each be brought out for six weeks each on Health, Environment, Wear and Tear on Vehicles, Cost Savings.
- Set idling times to equipment by contacting all equipment providers.
- Asked equipment operators to keep a diary of their idling so they can set goals that are realistic.

- Piloted two auxiliary batteries in their enforcement vehicles.
- Organized a vehicle emissions testing clinic for all staff vehicles in which 73 employee and County vehicles went through the clinic.
- Completed a post evaluation survey.

The Town of Sylvan Lake focussed on education and changing the behavior of the public at large within the town. To date they have:

- Completed telephone pre-survey of town residents about their knowledge and attitude about idling.
- Branded their idle free campaign.
- Made mock idling tickets with entries for a draw to win a tree, which their beach ambassadors will hand out over the summer.
- Made idle free tattoos for kids which were first handed out at their Council BBQ.
- Produced videos on idling, which were seen on Shaw Cable.
- Made plans to work with teachers and parents in the schools, with the idea building idle free ambassadors among all residents
- Completed telephone post-survey of town residents to evaluate their knowledge and attitude about idling after the education campaign.

C. MUNICIPAL IDLE FREE INITIATIVES IN CENTRAL ALBERTA: A SUMMARY

Several municipalities in Central Alberta have taken some steps to reduce idling in their communities. Below is a brief summary of action taken by communities, obtained through a survey conducted by PAMZ in 2012.

Olds

Olds did a considerable amount of research into this topic, including drafting a bylaw. In the end, the strategy was to inspire change through education instead of legislative change. The campaign lost momentum and did not get implemented in the end. However, they have provided a great deal of information under planning and campaign development that may be useful to other communities. *(See Planning Tools [A1](#), Campaign Tools [B3](#) and [B4](#); and Policy Tools [C1](#)).*

Ponoka

The Town of Ponoka has a management policy for their organization's fleet. It requires vehicles that are left unattended or will be left for a period of time should not be left idling. They encourage the public to do the same through occasional messaging.

Red Deer

The City of Red Deer has taken action on idling with schools, businesses, residents and in their own operations. All schools in the city have committed to being idle free. The City of Red Deer has an idle free policy for its own operations, and businesses in the city can receive two idle free signs when they commit to reducing idling. Public education campaigns included intervention campaigns where drivers are asked to stop idling or rewarded for not idling. *(See Idle Free Policy under Policy Tools [C2](#) and campaign materials under Campaign Tools [B5](#) and [B6](#)).*

“
Never doubt
that a small
group of
thoughtful,
committed
citizens can
change the
world; indeed,
it's the only
thing that
ever has.

Margaret Mead

”

Rocky Mountain House

The Town of Rocky Mountain House has a Corporate Anti-Idling Policy. It is not a community-wide policy and applies only to the Town itself. (See **Policy Tools C3**).

Sundre

The Town of Sundre adopted a sustainability program in 2005 and wrote their Municipal Sustainability Plan (MSP) that same year. The MSP addresses a multitude of things the town would like to see adopted. One of the first initiatives was the establishment of the anti-idling policy. (See **Policy Tools C4**).

Sylvan Lake

The Town of Sylvan Lake has an anti-idling policy for its own operations, and some schools have declared themselves to be idle free zones. The Town took action on idling in their community in 2015 as a pilot community for Parkland Airshed Management Zone's municipal idle free toolkit. They developed a public education campaign that included a website, fact sheets, videos, posters and public outreach by their Beach Ambassadors. (See **campaign materials under Campaign Tools B9, B10, B11 and B12**).

D. GET STARTED IN YOUR MUNICIPALITY

Adaptive Management

The Toolkit is based on the concept of adaptive management. This simply means creating a project that allows for flexible decision making and ensures continuous and timely evaluation of methods and outcomes. The adaptive management model has four components:

PLAN: Create a project plan, set goals, decide on the details of the budget, target audience, develop an evaluation mechanism, consider constraints, identify risks, identify partners, undertake baseline data collection, etc.

DO: implement the plan

ASSESS & EVALUATE: Evaluate the outcomes of the project. Were the outcomes what you expected? Did you stay on budget, within the timeframe you chose? Did anything derail the project? Did you achieve your goals?

LEARN & SHARE: Summarize the findings from your assessment and evaluation and share them with others doing similar work.

ADAPT: Make some changes to the original plan based on findings from the Evaluate phase and adjust the project. If at first you don't succeed, try again. This ensures continuous improvement.

Effective project planning and management are key to the success of any initiative or program.

Now that you're ready to get started, use the following steps to guide your progress.



TIP

Start early!
Use Tool **B1**:
Vehicle Idling
Fact Sheet to
help persuade
council and staff
the importance of
tackling vehicle
idling.

1. Project Purpose

As a first step, you will need to articulate the purpose of the project clearly and succinctly:

- What is the problem and what will you do to resolve it?
- What do you want to achieve at the highest level and why?
- Is there any relevant background to this issue?

2. Getting Buy In

Getting buy-in and support at the organizational level is crucial. Without the right people involved it will be difficult to resource and execute your idle reduction plans. Here are some tips for getting the buy-in needed to make your initiative successful:

- Assign a project lead to oversee and manage the project
- Create a committee or working group (see section 'C' below)
- Find a champion within council, a local celebrity, or another influential individual who can help persuade others and endorse your project
- Find ways to connect this work to other plans and priorities in the municipality, to add weight to its importance. See case study from Lacombe County below.
- Use examples of case studies or other municipalities that have successful projects
- Use media articles and data to exemplify the 'why' or urgency of the project
- Identify potential opportunities for grant funding
- You may be asked to develop a business case, which should include for rationale:
 - i. Compelling argument for investing time/\$ into the initiative
 - ii. Link to Clean Air Strategy and findings about regional air quality problems
 - iii. Budget overview and confirmed or potential sources of funding
 - iv. Information on key resources (such as this toolkit) that you would use to develop and execute your project.
 - v. A summary of the personnel involved, their estimate time commitments related to the project and an overview of the steps involved/project timeline from start to finish.

CASE STUDY: Town of Stettler

As stated earlier, PAMZ was originally partnered with a volunteer group from the Town of Stettler who wanted to proceed with a local town idle free campaign. Representatives from the group worked hard with PAMZ to set up the terms of reference on how we would work together. Unfortunately, this local group did not check or discuss their goals with their municipal council until they had their plan in place. When they took their plan to council, it was turned down. Councillors were not committed to the general idea or the plan. As a result, the volunteer group from Stettler had to bow out of the project. The process proved how important it is to obtain approval and support from municipal leaders before embarking on such a project. Without their active support there is little chance of success.

CASE STUDY: Lacombe County

Buy-in for the Idle Free project from Lacombe County can be credited to the fact that the project linked well with the County's plan, policies and issues that Council and management were currently addressing.

Energy consumption was one of the five priority areas identified in Lacombe County's Environmental Management Plan (EMP). The County's goals for this priority area was to understand their energy consumption and the impact on their environment, identify potential areas for change, and implement changes. Since vehicle idling unnecessarily uses fuel, the idle reduction project was a natural fit with EMP goals that had already been adopted by Council. In addition, Lacombe County was aware and concerned about Central Alberta's exceedance of PM 2.5 and saw this as an opportune time to partner with PAMZ.

3. Creating a Committee

A committee is a group of individuals working together to achieve a common goal. There are many benefits to working with a committee; whether you set up a steering committee (more of an advisory body) or a working group (where work is divided up between the committee or group members). Creating a committee can increase the effectiveness of your idle reduction project through:

- **Human resources:** to help with campaign activities (i.e. links to large volunteer pools, dedicated staff)
- **Funding:** increased opportunities to obtain financial support as a partnership or to pool the available resources of several partners.
- **Networks:** access to established communication networks and events that can be leveraged during the campaign
- **Expertise:** members of your team will bring with them specialized skills that can benefit your campaign such as communications
- **Experience:** being aware of other past and current campaigns will help avoid duplicating the work of others and allow you to build on past success.
- **Solidarity:** increased buy-in with your campaign approach, with the participation of multiple partners; and
- **Credibility:** increased validity of your campaign to the public, municipal governments and other stakeholders

Ideally, your Idle Reduction committee would include representatives from different departments of the organization to ensure a diversity of perspectives, and smoother implementation and acceptance of your initiative. See Case Study (next page) for more info on how this worked in Lacombe County.

Before getting started with your committee, it is important to clearly define roles and responsibilities. A Terms of Reference document should be finalized before the committee starts working together. This outlines the main purpose, goals, objectives, composition, relevant timelines and other key details to guide the work of the committee and keep it on track. (See [Tool A4: Example of Committee Terms of Reference- Lacombe County](#)).

CASE STUDY: Lacombe County

The County created a working committee to help develop an idle reduction project that targeted staff members' behaviour at work. The committee consisted of staff from multiple departments including fleet operators, accountants, planners and environmental staff. This ensured buy-in from all departments and a variety of perspectives.

How the Committee was selected

The Idle Free Committee was made up of those interested in participating however they tried to ensure that each department within the County was represented as best as possible. The 7 member committee was made up of representatives from:

- Environmental and Protective Service
- Planning and Development
- Administration
- Agriculture and
- 3 representatives from different areas of Public Works

In order to create a team of staff members who were able to create and deliver the Idle Reduction Project, steering committee members were educated about the regional air quality and issues related to idling through workshops conducted by PAMZ. With the support of NOVA Chemicals, they also participated in a vehicle emissions testing clinic where they learned firsthand about the hydrocarbon and carbon monoxide levels being emitted from County personnel vehicles. In addition, the steering committee was responsible for collecting baseline data through the use of qualitative and quantitative research.



E. PLAN

As you proceed to the project planning stage, please keep in mind that these steps are iterative, so you may not follow them in the order written below. You will gain information from each step that will cause you to re-evaluate your previous steps. Review the following sections, and execute the steps in the order that works best for your project.

1. Approach Options

As mentioned previously, there are three ways to tackle the problem of vehicle idling:

- a. Engineering and Technology



Numerous studies document that education alone often has little or no effect upon sustainable behavior. As a consequence, programs that make use of information intensive approaches such as bill-stuffers, flyers and direct mail have very little likelihood of changing behaviour.

Doug Mackenzie-Mohr,
Fostering Sustainable
Behaviour*



Example: Installing Webasto heaters in vehicles so that they can be heated/cooled for comfort without idling the engine. (See *Technology and Engineering Tools*, [D1](#) and other tools at [D2](#) and [D3](#))

b. Legislation and Enforcement

Example: Implementing and enforcing an anti-idling bylaw through fines. (See *examples of bylaws and policies under Policy Tools* [C1](#), [C2](#), [C3](#), [C4](#) and [C5](#))

c. Education for Behaviour Change

Example: Applying Community Based Social Marketing to develop a campaign that removes barriers for drivers to turn off their engine when not moving.

Which approach(es) will your committee tackle? Education and awareness building campaigns are often the most realistic and accessible options, but many municipalities have implemented a combination of the three approaches.

If you plan to do education or awareness-building of any kind, it is useful to look to the field of behavioural psychology, and become familiar with the key principles of Community Based Social Marketing (CBSM). Many municipalities and organizations have applied a CBSM approach to develop idle-reduction campaigns that have been effective in reducing idling behaviour. (For a Summary of how CBSM works, see *Community Based Social Marketing At A Glance in Additional Resources* [F1](#)).

The remainder of the PAMZ Idle-Reduction Toolkit focuses primarily on and provides a planning framework to specifically support the development and delivery of education campaigns for behaviour change. *If your approach includes planning for Legislation & Enforcement, see [Policy Tools](#).*

2. Setting Objectives for Idle Reduction Education Campaigns

Now that you have formed a committee and decided to proceed with an education campaign, the first and perhaps most important step is to agree on what you want to achieve before proceeding with planning. What are you working toward? How will you know your efforts have been successful?

It can also be helpful to define the scope of the project, i.e. a definition of what the project includes and just as importantly what does it not include?

Natural Resources Canada (NRCan) has developed a handy 10-step guide to assist community organizations, municipalities, environmental groups, schools, and other organizations in designing initiatives to address unnecessary vehicle idling. The remainder of the toolkit links to the NRCan 10-step guide, and offers additional tools, templates, and case studies to suit the needs of municipalities in Central Alberta. (See *NRCan's 10 step guide in Additional Resources* [F2](#)).

What do you want to achieve?

We are using the term “objectives” to describe what we want to achieve. Different organizations use different terms- like goals, outcomes, etc.- to more specifically describe different levels of achievement, but for our purpose we will just use “objectives”.

Setting specific campaign objectives will help you identify the information you need to start your campaign, the best actions to take, and methods to evaluate progress and the impact of your campaign. Decide upon one or more specific objectives that you would

like to achieve with your campaign and that support the overall goals and mandate of your organization.

You can start by keeping your objectives high level, such as:

- To reduce the idling behaviours of motorists in your community
- To reduce greenhouse gas emissions and associated environmental impacts
- To improve air quality and related health problems
- To reduce fuel consumption
- To develop knowledge and expertise in encouraging a whole community to change their behaviour
- To support a larger suite of environmental / energy saving activities

If you are ready, you can be more specific by using the SMART principles to define your objectives:

- Specific
- Measurable
- Achievable
- Realistic
- Time-bound

For example:

Short-term	Medium-term	Long-term
Council approves idle-free plan by (insert date).	Idling longer than 1 minute around target school hotspot is reduced from 60% of vehicles to 40% by (insert date).	By (insert date), zero vehicles are witnessed idling at three previously identified idling hotspots
Three partners representing small, medium and large businesses are committed to being on the idle-free project Steering Committee by Q2 2016.	Idling longer than 1 minute around target business hotspot is reduced from 87% of vehicles to 67% by (insert date).	Three partners are trained to and successfully delivering idle-free presentation in the community by (insert date)
80% of the population is aware of the health effects of unnecessary vehicle idling by (insert date) as quantified by statistically significant telephone survey.	80% of the population knows that "a minute or less is best" by (insert date) according to a statistically significant telephone survey.	
	80% of the population believes that unnecessary vehicle idling contributes to air pollution by (insert date) according to a statistically significant telephone survey.	

“
Begin
with
the end
in mind

Stephen Covey

”

It may sound elementary, but ensure your objectives reflect your project purpose. It is easy to get sidetracked when ideas start flowing.

Whether you start with general or specific objectives, make sure you revisit them after you have established partnerships and conducted research to make sure they still fit.

CASE STUDY: Lacombe County

The objectives were developed by the committee as a whole through a collaborative planning process that created ownership by all members.

Objective #1: *All county staff to reduce idling to no more than 5 minutes in the parking lot headquarters.*

Objective #2: *To build a positive change of awareness and behavior about idling among staff both at home and at work.*

Objective #3: *To reduce fuel consumption by 10%.*

CASE STUDY: Town of Sylvan Lake

The Town of Sylvan Lake chose to outline their objectives in a Report to Council where they gained support for proceeding with their campaign. (See [Planning Tools A2](#)).

The main goal of [the] idle free initiative is to reduce the frequency and duration of vehicle idling activity throughout the [Parkland Airshed Management Zone], and beyond.

Desired outcomes include:

Drivers of all types of vehicles (personal, government, industrial) turn off their engines and refrain from idling for time periods greater than one minute, unless absolutely necessary;

Drivers understand the many negative impacts of vehicle idling;

Drivers have the skills, tools, and motivation required to adopt “idle free” behavior;

Common myths and misconceptions surrounding vehicle idling are dispelled.

This methodology gave community leaders the opportunity to review and buy-in to the objectives of the plan. Council chose to participate in the initiative with the objectives described.

Where do you want to target your campaign?

Select specific areas to target in your campaign. “Idling hotspots” are locations where idling is prevalent – e.g. community centres, arenas, libraries, hospitals, schools, and commuter pick up zones. Focusing on specific target locations will help increase the effectiveness of your campaign.

Consider the following factors when selecting the target location(s) for your campaign:

- Is this a location where many drivers idle their engines?
- Does the location have a specific area where drivers typically idle their vehicles (e.g. passenger drop-off area)?
- Is there a safe area where volunteers/staff can discretely and safely identify idling vehicles and record data?
- Are there places where idling reduction signs could be posted?
- Will the characteristics of the site enable the volunteers/staff to approach drivers to engage them in conversation about idling and ask for a commitment to reduce idling?



TIP

NRCan has an Objectives Planning worksheet you can use to help set your campaign objectives in Planning Tools [A3](#).

Who do you want to engage?

In setting your campaign objectives, you may have identified a particular group that your organization has a keen interest in working with – for example, parents at local schools.

Identify your specific target audiences early in your campaign as communication materials and approaches you use will need to be tailored to each specific group.

The following background information from the Idle-Free Zone website may help you in thinking about your objectives and target audience:

Why do Canadians idle?

Idling wastes fuel and money

Emission impacts from idling

Links between fuel consumption, climate change, our environment and health

What other communities are doing

CASE STUDY: The City of Red Deer

How did it come to be that schools were identified as a key target audience/objective?

In 2010 Red Deer City Council passed a resolution directing Environmental Services to undertake an idle free public education campaign in response to air quality concerns expressed in the community and at the Environmental Advisory Committee. Schools were chosen to be a key part of this campaign because:

Schools were identified as idling hotspots.

Children are especially vulnerable to health effects from air pollution, Schools have a vested interest in and responsibility to protect their students, and would be open to providing this as an educational opportunity,

The City had an Environmental Educator who had excellent contacts within the school division.

3. Building Partnerships

Partnerships are extremely valuable when considering idling education campaigns. This is an opportunity to invite stakeholders to participate, and you might be surprised at who wants to join you.

Partners can provide valuable insight into your local issue, new channels of communication, human and financial capital, and lend credibility to your campaign. Consider groups that have similar interests in the objectives of the project, organizations associated with the target location or audience where you would like to implement your campaign, and stakeholders who might be affected by your campaign.

Partners could include:

- Schools/school boards
- Transit authorities
- Government (municipal, provincial, federal)
- Private companies – small, medium and large businesses (drive-throughs, service stations, convenience stores, couriers, etc.)
- Healthcare organizations or not-for-profit agencies
- Environmental groups, including airshed groups
- Universities/colleges
- Organizations that offer volunteers to assist community-based projects

Example: The City of Red Deer's Idle Free Coalition recognizes community idle free partners

- ATCO
- Alberta Health Services
- BMO Bank of Montreal
- Peavey Mart
- Bower Place Shopping Centre
- Lafarge
- Red Deer Catholic Regional Schools
- Red Deer College
- Sunnybrook United Church

Don't assume that organizations with idling built into their operations won't want to join you. They may have reasons they want to reduce idling that you don't know about, or they might just want to help shape the message you send. Having potential detractors being seen as part of your campaign can attract a broader audience. The bottom line is that you don't know if you don't ask.

This is also an opportunity to build bridges with potential detractors. In Sylvan Lake a local business-person complained to the Town that the phone survey unfairly pointed fingers at his company because one of the questions used drive-throughs as an example of where people idle. Perhaps this could have been avoided if he had been invited to be a partner from the offset.

Ensure that the senior-most members of the organizations know about and condone the partnership. This could be municipal council, senior administration, the CEO or the head of the Board. Having their clear support from the beginning will help avoid surprises down the road. Their buy-in will also help you gain buy-in throughout the organization.

Consider formalizing your partnership with a partnership agreement or Terms of Reference to make sure everyone is clear about the intent, what they can give to the



If you want
to go fast, go
alone, if you
want to go far,
go together

African Proverb



effort and what they need to get out of it. And don't forget to recognize your partners in your communications material and messaging. *(See Lacombe County/PAMZ and Town of Sylvan Lake/PAMZ MOUs and City of Red Deer/ PAMZ Clean Air Day partnership agreement in Planning Tools, [A5](#), [A6](#) and [A7](#))*

Remember to take advantage of opportunities to partner as they arise: The City of Red Deer created a partnership with a McDonald's Restaurant to create an idle free zone in their drive-through waiting area, where customers wait if their order will take longer than usual. This happened as a result of working with the organization on their development permit.

4. Conducting Research

Research is critical to education campaigns for several reasons:

- Help you understand your target audiences' attitudes and behaviour
- Identify barriers to an activity and possible solutions
- Identify benefits to an activity and ways to communicate them
- Learn what worked and didn't work for other communities
- Help you evaluate any change resulting from your efforts

This introductory work is labour-intensive and tempting to skip. But without it you risk creating a campaign that doesn't resonate for your target audience, which then won't result in the desired change. It also means you won't have any evidence of the effects of your campaign, leaving it open to over- or under-estimation of the progress you've made.

Common research methods include:

- **Literature review:** review the work of others to discover their methods and results. Journals, academic articles, and other municipalities/levels of government can be good sources.
- **Focus groups:** these are small groups of randomly chosen people who represent your target audience. They can discuss in detail their attitudes and behaviours.
- **Surveys:** obtain information from a larger group that is more likely to be representative of your population. These can be conducted by mail, telephone or digitally and each method has advantages and disadvantages. Surveys, when done properly, provide objective measurement of attitudes and behaviours.
- **Observations:** learn by watching. If you can watch behaviour first hand, you can learn more about the people who engage in it and under what circumstances. It is important that you are able to watch without it being known that you are observing behaviours.
- **Intercept interviews:** these are technically a type of survey, but really are a cross between observations and surveys. Visit places where your target audience is, and ask questions of both those engaged in the activity you want to change and those not engaged in the activity to see how they differ.

Both our case study municipalities used surveys but you can learn more about *other types of research from sections 3 and 4 of NRCan's 10-step guide and Fostering Sustainable Behaviour by Doug McKenzie-Mohr.*



TIP

Remember it is important, when doing a survey, to inform the residents ahead so they know the survey phone call is legitimate and thus may be more willing to respond. (Attached is the notice that the Town of Sylvan Lake sent out to the community residents before proceeding with the first survey under Evaluation Tools [E2](#)).

CASE STUDY: Town of Sylvan Lake

The Town of Sylvan Lake wisely took advantage of opportunities that presented themselves. They accepted Parkland Airshed Management Zone's offer of assistance—both financial and human—to conduct pre- and post- surveys on idling attitudes and behaviour in town.

PAMZ committee members had recommendations for a company that could conduct statistically significant surveys. A survey was compiled based on the survey Lacombe County used. The baseline (pre-) survey was conducted in April 2015 before any action was taken, and the same survey was conducted in May 2016 (post-) to determine what changed in the community. (See Evaluation Tools [E1](#) for survey questions and format for Town of Sylvan Lake).

Costs to administer the 24 question statistically significant pre and post surveys was \$19,915.82. (See Evaluation Tool [E5](#) for survey costs for Lacombe County).

CASE STUDY: Lacombe County

Lacombe County conducted both qualitative and quantitative research, the former through pre and post surveys and the latter through observation of idling activity by staff vehicles.

Qualitative data was collected in two surveys which took place before the Idle reduction campaign and after the campaign. The pre-survey gathered information about staff attitudes, behavior and knowledge about idling. The post survey then gathered and compared the differences and changes in staff attitudes, behavior and knowledge in order to evaluate the effectiveness of the campaign. (See Evaluation Tools [E4](#) for Lacombe County's survey questions).

Quantitative data was gathered through two observational sessions carried out by staff volunteers who monitored the length and frequency of idling by County staff's personal and work vehicles. The first observation session was completed in the winter of 2015 (January/February) over multiple weeks and the second observational session was completed in of the summer of 2015 (July/August).

The information from these surveys and observation activities helped to establish “when idling is appropriate and “when idling is not appropriate” for staff vehicles and machinery. It also provided an effective way for staff to self-evaluate personal behaviour and identify areas for improvement.

(To see the observation forms and observation data collected, go to Evaluation Tools [E8](#) and [E9](#))

5. Strategy Development

Keeping your objectives and research results top of mind, it's time to get to where most people start: designing the campaign.

These steps don't necessarily happen in this order: sometimes an idling campaign happens because a group of people have an idea of who to target from anecdotal experience, so the target audience is already chosen. Alternatively, Council might direct you to implement an idle free campaign, so you need to identify specifically who you will target.

This outlines the who, what, when, where, why and how of your campaign. Every tactic you choose should link to and help you achieve the objectives you already set in the Plan.

Step 1 – Select Specific Target audience(s)

Your research should help you narrow down your audience. It is more effective to target a specific audience than to target “general public” or “drivers”. Who are they, where are they, when are they there? “Parents picking up their children after school at Red Deer elementary schools” is a much more tangible audience to which you can specify messages and target campaigns.

It is important to use your research to finalize your target audience(s). Though you may have started with one audience in mind, your research may have revealed that they aren't the problem, they are impossible to reach, or that you can be more specific in who you reach out to. Remember that we all carry assumptions with us, and that these assumptions influence how we will design a project.

Step 2 – Identify strategy constraints and opportunities

Identifying constraints and opportunities will help determine which strategies you will use. A SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) can be helpful to identify these. (See *Planning Tools* [A8](#) and [A9](#)).

Constraints can be tangible (lack of resources) or perceived (someone thinks there will be backlash to the campaign), and may include:

- Budget
- Time
- Staff resources
- Lack of expertise
- Resistance from Council, staff or residents

To help you identify constraints, ask yourself what positive and negative feedback have you received regarding the idea of the program, whether it be from Council, staff, stakeholders, residents or general public.

Opportunities are very important because they are key to adding momentum, and may include:

- Available grants
- Interested parties
- Potential partners
- Shared interests (e.g. RCMP warning drivers about idling vehicles being stolen)
- Political climate

These two tables are examples of how to analyse each constraint and opportunity, and how they could affect your overall strategy.

Table 1 – Constraints

Constraint Identified	Describe situation	Strategy Design Considerations
Budget	Budget for this year already set; need to request money for next financial year.	Opportunity to use this year for planning and begin implementation in next financial year.
Staff constraints	Due to unavailable staff the steering committee is low on people to help deliver the project.	<p>This may result in having to do the project over a longer amount of time.</p> <p>Perhaps some of the function of the team will have to be externally sourced – this may have budget implications.</p> <p>If we don't have expertise in community engagement, we may have to reduce the level of engagement we undertake.</p>

Table 2 – Opportunities

Opportunities Identified	Describe situation	Strategy Design Considerations
Funding	Partnering with PAMZ may open up possibilities for funding in future such as grant applications?	<p>With additional funds we may be able to engage our target audience in a more comprehensive way.</p> <p>Possibility of incentives for 'good behaviour'</p> <p>Possibility of more advertising or marketing materials because of more funds</p>
Perceived as important by target audience	Staff from various departments understand that reducing vehicle idling fits with goals of the EMP	Staff can act as ambassadors in their various departments to encourage change from within

Complete a similar exercise using worksheets found in Planning Tools.

Step 3 – Environmental Literacy Ladder

The overarching goal of any environmental education campaign is to foster Environmental Literacy, or the capacity to “think, plan, and act with the environment in mind”. The ladder below outlines five essential components of environmental literacy. It is designed to be a loose hierarchy from the simple to the more complex, each building on the step below. However, as with many models, the steps overlap in real life. It's important to note that environmental literacy cannot be achieved without all steps of the ladder; achieving any one step alone is inadequate and will not result in literacy. In other words a person may be aware of a particular topic but that may not lead to them directly seeking knowledge about it before they decide on their attitude towards it. Conversely, a person may be very knowledgeable about a subject but that may not lead to action. In designing your

campaign, it can be helpful to assess where on the Environmental Literacy ladder your target audience is.

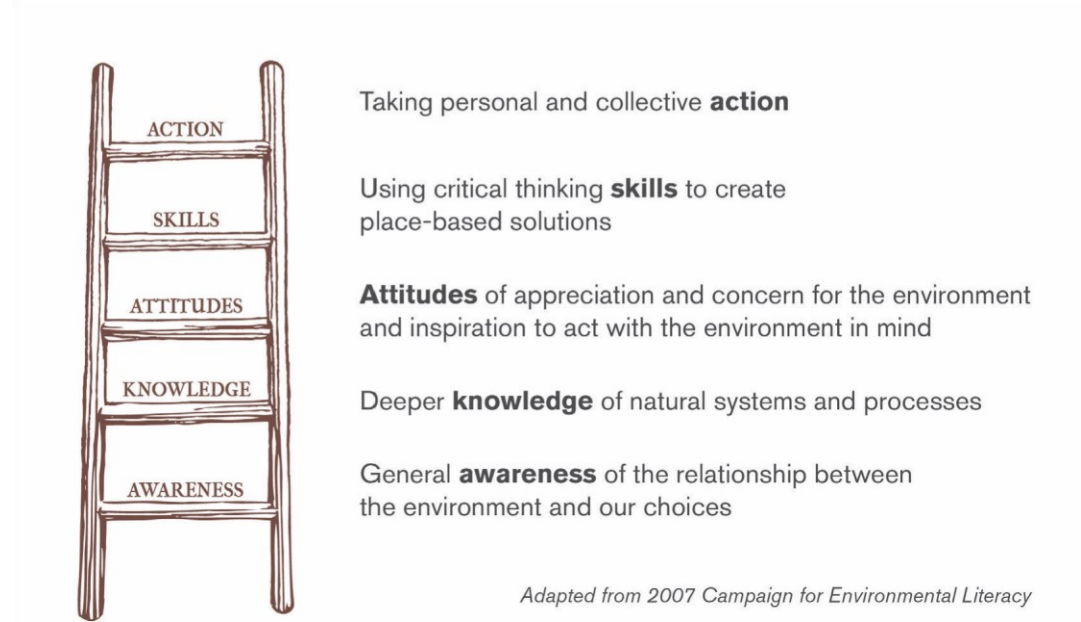


Fig. 1. The Components of Environmental Literacy

The benefits of knowing where an audience is at on the ladder include:

- Determining a starting point from which you can evaluate change
- Design projects around the appropriate phase so they are effective, interesting and appropriate to your audience
- Set your expectations for change relevant to your audience. For example, don't expect to create awareness and see action within the same time frame or created from the same project.

Awareness: At the "Awareness" level of Environmental Literacy, a person may have a basic recognition that the situation, condition, or problem exists. Don't assume that everyone in your target audience is aware of the issue; it's best to test this theory. Is your target audience aware of the effects of idling?

Knowledge: At the "Knowledge" level, an individual may begin to have more detailed information and understanding about a topic gained through experience or education. Knowledge goes past the initial awareness of an issue ("Have you heard about the issue of idling vehicles?") to having understanding of the topic ("What do you know about the effects of idling vehicles?"). When you understand what your target audience knows, you can design a campaign to fill in knowledge gaps.

Attitudes: Attitude is defined as "A settled way of thinking or feeling about someone or something" (Merriam-Webster Dictionary, 2015). Attitudes are often easily defined, but sometimes it's difficult to understand why we have them. How did you come about this 'settled way of thinking': through seeking unbiased information; personal experience; or did someone you respect tell you about it and therefore you think in a similar way? For this reason just providing people with "knowledge" may not result in any change.



You see, in life, lots of people know what to do, but few people actually do what they know. Knowing is not enough! You must take action.

Tony Robbins



Skills: An Environmental Literacy campaign will only be successful if target audiences know how they can personally influence the desired environmental outcome. They need the skills required to create change in the world around them. At the ‘skills’ level on the Environmental Literacy ladder, individuals apply their knowledge and attitudes through the development of specific skills: in the case of vehicle idling, the skills involved are finding alternatives to excessive vehicle idling.

Action: The “Action” level of the ladder is the ultimate goal of any environmental literacy campaign. This is where individuals apply their knowledge and skills and use them to address the environmental problem in a tangible way. A successful idle-reduction campaign should bring about a measurable change in behaviour among motorists: there should be a reduction in the duration and frequency of vehicle idling among the target audience.

Use the Environmental Literacy Ladder: Current Situation Analysis worksheet to help you determine where your target audience is on the ladder. (*See **Environmental Literacy Worksheet in Planning Tools A10***).

When you have completed this exercise you should be able to answer: *Where on the environmental literacy ladder is your target audience?* Knowing where you are starting from is key to creating and implementing effective strategies.

Step Four: Project Plan

Incorporate the components from previous sections into the Project Plan

- **Objective:** taken from the objectives that you developed
- **Target Audience:** who specifically are you targeting for each objective
- **Literacy Ladder:** what rung on the Literacy Ladder are you addressing
- **Deliverable:** what tactics do you want to employ, for example interventions at schools. Use baseline data and your research to decide which tactics best suit your needs. For example, your research showed that residents most related to vehicle idling as a health problem and that excessive vehicle idling happens at schools. What are you going to do to change behaviour?
- **Action:** what are all the high level things you need to do to achieve the deliverable
- **Tools/Tasks:** what will you use to achieve the actions
- **Timeframe:** when will this happen
- **Person responsible:** who will do it

Objective	Target Audience	Literacy Ladder	Deliverable	Action	Tools	Timeframe	Person Responsible
Idling longer than 1 minute around target school hotspot is reduced from 60% of vehicles to 40% by Q4.	Parents picking up children after school at Eastview Middle School.	Awareness	Idling education at hotspot	Make the link between vehicle idling and health effects	50 word article in school newsletter about how many children at the school have respiratory issues such as asthma, and that unnecessary vehicle idling contributes to poor air quality Create/procure script for conversation on the health effects of vehicle emissions, including one-question quiz to open the conversation.	appear in September 15 newsletter space reserved by August 15 students with respiratory issues by September 1 article ready for review by committee by September 5; changes submitted by September 10 article submitted by September 12 deadline	Principal Skinner - reserve space in newsletter and find estimate for percentage of school population with respiratory issues Lauren - write and submit article
		Knowledge		Communicate to all drivers the health effects of vehicle emissions	Create or gain permission to use an existing handbill that outlines the benefits and busts the myths of vehicle idling, emphasizing health effects Procure appropriate token of appreciation	Campaign to occur bi-weekly from October 1-15 before it gets cold Draft script distributed to committee for review September 1 Changes discussed and agreed on at September 5 committee meeting Draft handbill distributed to committee for review September 1 Changes discussed and agreed on at September 5 committee meeting; printed by September 29 Bring options to September 5 committee meeting for decision	Sue - review NRCAN's Sample Intervention Script and City of Red Deer's script; revise as needed Sharina - research and create engaging quiz question to incorporate into script Lauren - review PAMZ and NRCAN idle free handbills; revise as needed Principal Skinner - print 200 copies of handbill Blayne - Check if Fake Company would like to donate any of their "Turn Your Key, Be Idle Free" key rings If not, Blayne to procure coffee and doughnuts/oranges to offer idle free drivers
		Action		Thank drivers who are not idling with a token of appreciation			

The more detail you can provide in terms of tools, timeframes and person responsible the more accountable your project will be in terms of all resources, human and financial. Don't forget to include any stakeholders or consultation that needs to be done and who will undertake it.

You may also want to include a total for 'in-kind' costs which may include staff costs within your organization, volunteer hours or any donations that are given to provide a full cost estimate of the project.

Determine a timeline for each deliverable, including a start and end date. This provides guidance on expectations from each group member and keeps the project moving forward. Be realistic: remember to include time for approvals, changes or unforeseen circumstances.

(The [NRCAN 10 Step Guide](#) has more resources on choosing your plan in Steps 4, 5 and 7).

Once you have your Plan drafted, spend some time identifying risks. By predicting risks you can be more prepared to deal with them. For example, how will you handle a parent who gets offended or abusive at an idling intervention? How will you handle a business owner who thinks his drive through business has been unfairly targeted? Brainstorm potential risks; your SWOT analysis might be helpful here too. Then identify strategies to help ensure the risks don't happen or to manage the damage for risks that are out of your control.



TIP:

How will you measure the impact of your initiatives? Now – during the planning stage – is the time to think about and plan for Evaluation. See [Section E](#), Evaluation for more info.

CASE STUDY: Town of Sylvan Lake

Sylvan Lake saw many opportunities they could take advantage of. They knew their Council was looking for an environmental project, and thought an idle free campaign could fit the bill. PAMZ approached Sylvan Lake with financial and human resources. Sylvan Lake already had the Beach Ambassadors- summer students who engage with the public- one of whom was taking digital media studies and interested in producing videos for the Town. (See [Planning Tools, Report to City Council 42](#)).

The results of the pre-survey conducted by Sylvan Lake showed that residents were most concerned about the health effects of idling. This information shaped the campaign significantly.

F. IMPLEMENT

Once you have done your objective setting, background research, planning and strategizing, it's time to execute your campaign! Read below for examples of what each of the pilot communities implemented as part of their unique and customized Idle-reduction campaigns.



Take time to deliberate; but when the time for action arrives, stop thinking and go in.

Andrew Jackson



CASE STUDY: Town of Sylvan Lake

The Town of Sylvan Lake's internal committee developed ideas for the campaign, and the Town's Communications Officer was responsible for most of the execution.

- Developed an identity for their campaign: logo is a set of leaves that look like lungs, and is accompanied by the tagline "Breathe Easy"
- Established web presence inviting people to join the idle free movement and explaining why it is important
- Created fact sheets using information from PAMZ, NRCan and the baseline survey, and used them on the website and at open houses
- Created the Breathe Easy video series: two longer ones that explain the program, and a third that is broken into five mini-videos that included facts and reminders about reducing idling time. These were picked up by Shaw TV.
- Handed out temporary tattoos with Breathe Easy logo at community events
- Created posters and placed throughout town facilities
- Advertised in Sylvan Lake News and in the community guide throughout the year
- Used Facebook and Twitter messages
- Beach Ambassadors handed out mock tickets in grocery store parking lots
- Reinforced existing anti-idling policy for the Town's fleet to model behaviour

The Town took advantage of their existing situation. They already hire summer student Beach Ambassadors to provide customer service and community & tourist information along the beach front. They used the Ambassadors to help create the education tools and disseminate the idle free message. One of the Ambassadors was studying digital media, and created arguably the most successful part of the campaign: a series of funny videos that weren't preachy and easily shared. They got a broad reach, especially when they were picked up by Central Alberta's Shaw television network.

(See Campaign Tools [B9](#), [B10](#), [B11](#) and [B12](#) Idle Reduction Campaign fact sheet, poster, mock tickets and videos)

*In the Town of Sylvan Lake, Beach Ambassadors handed out some mock tickets that educated people on why they shouldn't idle and gave them an entry to win a tree, which had been a very popular prize at a previous event. The Ambassadors found that visitors were often very receptive to the anti-idling message, as it resonated for them to keep the beautiful recreation/natural area clean and free of exhaust. However, residents didn't share the same outlook: they look at the town as a place to live and do their business conveniently. Facebook and Twitter messages got a lot of negative feedback when residents thought the idle free campaign might be enforced, and the reaction was aggressive enough that it discouraged Beach Ambassadors from approaching people on this issue. Refer to **Campaign tools [B7](#) and [B8](#)** for guidance examples as to how to intervene or approach vehicle owners about their idling.*

CASE STUDY: City of Red Deer

The City of Red Deer flipped the idling intervention on its head by doing positive interventions at schools. Some schools had committed to being idle free several years ago and wanted to refresh drivers on the program. Drivers who were caught not idling their vehicles in the idle free zone were approached and rewarded with a small gift, and asked if they would like to display an idle free decal in their rear window. Drivers that were idling were not approached. Effects were not measured, but response from drivers was positive. (See Campaign Tools [B5](#) and [B6](#) -Turn the key decals and Idle free zone signs).

CASE STUDY: Lacombe County

The first phase of educational campaign began in June, 2015 with a vehicle emissions testing day. Lacombe County staff were encouraged to bring fleet and personal vehicles through the testing bay. A total of 47 fleet vehicles and 26 personal vehicles went through the testing stations.

In addition to the emissions testing day, the educational program focused on raising awareness and creating knowledge on four key subject areas; these areas determined by staff feedback in the pre- survey. The four subject areas were human health, environmental health, wear and tear on vehicles and cost savings. Each of the 4 educational themes was delivered for one month. The delivery of each subject consisted of either:

- 1. posters placed in key areas in the County main building or shop*
- 2. an article in the staff newsletter dedicated to the monthly topic*
- 3. a fact card in the payslip*
- 4. a contest for each monthly topic with the reward of a sticker for completing each contest in which when all four stickers were collected (which also serve as prompts to remind staff to not idle). The staff members' names were placed into a draw for a \$50 gift card. The contests included getting your photo taken to publicly support reduced idling, filling out fact or fiction quizzes, spreading the message to family and friends via social media and sharing photos, idle free signs or educational materials with other staff or committee members.*

This part of the educational program ran until December 2015.

The second phase of the educational program was administered in December, 2015 and focused on removing barriers to help create new behaviours around idling. This educational program encouraged incentives such as windscreen covers, internal heaters and also looked at engineering changes to fleet vehicles which would reduce the amount of idling time by automatically shutting down an engine. The success of the second portion of the education program was monitored by repeating the observational data and the qualitative survey with the same questions as the pre-program survey in order to evaluate how responses changed.

The second part of the Idle Reduction Program was also geared towards fleet operators such as truck drivers, grader operators and enforcement officers with the intent to reduce their daily idling and focusing in on determining where, when, why and for how long these fleet operators idle.

In January of 2016 a Standard Operating Procedure for Fleet Vehicles was created that examined how Lacombe County manages its fleet regarding procurement, day-to-day operations, fuel purchasing and consumption as well as training and driver choices (i.e., route optimization). The purpose of this report for Fleet Vehicles was to achieve the following goals:

- 1. optimize vehicle use and efficiency (i.e., mode of travel, fuel type, route planning, fleet operation and vehicle size)*
- 2. increase the use of alternative fuels and sustainable technologies*

In 2015 a vehicle fleet fuel audit was completed that provided detail into the baseline of fleet management at Lacombe County. The audit found that annual expenditure on fuel for fleet was an average of \$1.34 million per year from 2012 to 2014. The annual greenhouse gas emissions associated with operating the vehicle fleet were 3,548 tonnes CO₂ on average per year.

In an effort to reduce these greenhouse gas emissions associated with fleet vehicles Lacombe County also attempted to implement the following engineering related changes with regards to the Idle Reduction Program:

Auxiliary batteries in enforcement vehicles: *Auxiliary battery power has been supplemented in two of the four enforcement vehicles. The initial purpose of the battery packs was to enable enforcement officers the ability to not rely solely on an idling vehicle to provide enough power for all their equipment needs. Unfortunately, after some trial time they found that the additional auxiliary batteries are not sufficient to provide enough power to reduce idling time substantially.*

Idle stop technology: *Lacombe County gravel trucks were all equipped with 15-minute idle timers. This means that if a truck has been idling for 15 minutes it shuts down automatically. Some of the light vehicles, which are pickup trucks, have command start technology, which allowed-remote starting of vehicles. Trucks without timers had to be manually started and stopped. Depending on the brand, vehicles were allowed to idle between 9 and 15 minutes before shutting off.*

In-cab heaters: *In the fall of 2015 five in-cab heaters were purchased and installed in fleet vehicles.*

(See Technical Engineering Tools [D1](#), [D2](#) and [D3](#) for more information about heaters, batteries, etc.)



If you think you're too small to have an impact, try going to bed with a mosquito.

Anita Roddick



G. Evaluate

After the planning and implementation phases, it's time to evaluate the impact of your efforts. It is important to take time to learn what effect your campaign had. If you achieved your objectives, you can use the results to lobby for more resources to expand your efforts. If objectives were not met you can learn from mistakes and make improvements in future programs.

Make sure you plan for this step from the beginning: you will need to have pre-program data to compare to post-program results in order to draw conclusions about results achieved. See section on Conducting Research.

Don't be afraid to share results if you didn't achieve your objectives. Sharing what didn't work is just as important as what did. Sharing information about our experiences helps keep us from reinventing the wheel in each municipality.

CASE STUDY: Lacombe County

Surveys were conducted from February 17 to February 27, 2015 for pre-campaign surveys and May 18 to June 3, 2016 for post-campaign surveys. In March of 2015 and June of 2016 the results of two Idling Awareness Surveys were made available to Lacombe County by Banister Research and Consulting Inc.

The survey topics included:

1. *employees' attitudes regarding vehicle idling*
2. *employees' idling behaviour*
3. *employees' knowledge about idling*
4. *communication and education about idling*
5. *the Idle Reduction Program*

For the pre-campaign survey, a total of 83 surveys were completed out of a possible 100; providing a margin of error no greater than $\pm 4.4\%$ at the 95% confidence level, or 19 times out of 20. For the post-campaign survey, a total of 71 surveys were completed out of a possible 100; results provide a margin of error no greater than $\pm 6.3\%$ at the 95% confidence level, or 19 times out of 20. This document presents a quick review of the pre and post-campaign survey results, for a more information on the Lacombe County staff responses please refer to the Idling Awareness Survey Reports.

Survey Administered	Operate Own Vehicle	Operate County Vehicle	Operate Fleet Machinery
Pre-campaign	45%	51%	43%
Post-campaign	38%	45%	45%

*In comparing the pre-campaign survey to the post-campaign survey, **the overall concern with vehicle idling as an environmental issue increased by 36% from pre-campaign responses.** Furthermore, the two major concerns identified by respondents about vehicle idling changed between the two surveys. Major concerns associated with idling for the pre-campaign survey included: polluting the environment (45%), followed by health-related issues (16%), waste of County resources (16%), and waste of fuel consumption while idling (15%), and the remaining 28% of the respondents were unsure.*

In comparison, major concerns for the post-campaign survey included: polluting the environment (44%), followed by waste of County resources (24%), health concerns (17%) and waste of fuel (11%), while 42% of the respondents were unsure. There was, therefore, a large jump in the number of respondents who were unsure about their major concerns with regards to idling in the post-campaign survey compared to the pre-campaign survey.

Idling behaviour with respect to the number of trips vehicles made each week increased from the pre-campaign survey for County vehicles from 33% of respondents making 20 trips or more a week (pre-campaign survey) to 53% of County vehicles making 20 trips or more (post-campaign survey). This may also be attributed to the timing of the post-campaign survey due to summer months typically being busier for the majority of staff at Lacombe County resulting in a greater number of trips. The number of trips for personal vehicles between the precampaign survey (46%) and post-campaign survey (48%) and the number of trips for fleet machinery between the pre-campaign survey (19%) and post-campaign survey (25%) increased only slightly between the two surveys.

*Idling behaviour and attitude during winter months saw almost no change in the number of people who admit to idling, however, **the amount of time vehicles were left to idle was decreased substantially for all vehicle types from the pre-campaign survey to the post-campaign survey.** There was a significant change in the idling behaviour of fleet machinery during the summer months as the precampaign survey found that one-quarter of those who use fleet machinery idle their vehicle every trip they make.*

*In both surveys, respondents reported that the main reason why they believe people idle is to warm up their vehicle, followed by convenience. Both surveys also noted that **respondents believe that the main barrier for people in terms of reducing idling behaviour is weather.** Furthermore, when asked to identify “hotspots” or areas where idling occurs more often for employees, both surveys identified job sites or work locations.*

***There was an increase in knowledge about idling** as demonstrated by a higher percentage of respondents answering specific questions about idling correctly in the post-campaign survey verses the pre-campaign survey.*

*With regard to the usefulness for educating respondents on the Idle Reduction Program, **posters on bathroom stalls were identified as the most useful method,** followed by interactive days such as emissions training and social pledge days. Communication methods were also rated on how informative each method was at*

educating, with *Insider* articles (local County newsletter) found to be the most informative method.

Lacombe County implemented the following engineering related changes with regards to the Idle Reduction Program:

1. an auxiliary battery in one of the enforcement vehicles
2. changes to major equipment maintenance such as blade changes on graders
3. trialing of interior heating systems in company vehicles

Those who were aware of each change initiative were asked how effective each change was. **The majority of respondents believed that these engineering changes were not effective.**

Respondents were asked how successful the program was in terms of reducing idling behaviour both among employees and themselves personally. **Nearly two-thirds of respondents (61%) indicated that the program was successful in reducing their own idling and less than half of respondents (42%) indicated that the program was successful in terms of reducing idling behaviour among employees.**

Those who believed the program was not successful in terms of reducing idling behavior most commonly indicated that people are ignorant towards idling reduction (16%) or that it is difficult to break old habits (14%).

When those who believed the program was successful in reducing idling were asked why they felt this way, two-thirds of respondents indicated that idling awareness and education has increased (67%).

Of those who believed the program was not successful in reducing idling behavior, most indicated that they themselves do not idle.

Respondents were asked how strongly they would support the continuation of each type of measure including:

1. signage (placed strategically around the parking lot and in idling “hotspots” as a reminder to limit idling)
2. policy (this policy would state generalizations of proper behavior regarding idling)
3. negative reinforcement (for example, mock fines on your vehicle or pictures of offenders in the Insider)

Nearly half of respondents (48%) supported signage followed by 31% who supported policy and 13% who supported negative reinforcement.

Respondents were asked if they believed that the Idle Reduction Program should continue. **Over three-quarters of respondents (76%) indicated that the Idle Reduction Program should continue. Those who believed that the Idle Reduction Program should continue were then asked in which area Lacombe County**

should focus its efforts to reduce idling behaviour amongst employees. Over half of respondents (52%) said that the County should focus on education (for example, Insider articles, interactive days, posters, and leaflets).

(See Evaluation Tools [E6](#) and [E7](#) for detailed results from pre and post surveys).

What worked:

A committee consisting of representatives from all departments (as it affected everyone) so all departments were included.

A collaborative planning process that gave/ created ownership by all members.

Building the program first through knowledge (emissions day, posters, pamphlets) coupled with leadership from committee members and colleagues who were making changes in their own behaviour.

The microcosm test they targeted (just employees) allowed Lacombe County to concentrate their efforts, almost daily, in reminding employees of the program. This not as achievable in community projects.

Some motivation was rewards-based. However, the most significant driver was social pressure.

What didn't work

Negative reinforcements (getting a note to suggest you think more about your idling behaviour) were not accepted well among employees and should not be considered a popular approach.

CASE STUDY: Town of Sylvan Lake

Survey results indicated that the campaign didn't have much impact on awareness, attitudes or behaviour. Anecdotally this is consistent with what the Town staff experienced: their perception was that people learned a lot and the campaign increased awareness but didn't increase caring or action. The exception to this was that there was some strong negative reaction to the idea that the Town would be enforcing idle free behaviour: that precipitated a lot of negative feedback on social media.

Lessons learned

Staff realized that they idle fleet vehicles in the summer more than they thought.

Facebook and Twitter messages got a lot of negative feedback when people thought this might be enforced; the reaction was aggressive enough that it discouraged Beach Ambassadors from approaching people on this issue.

Approaching people was awkward and uncomfortable; developed fear of sending people out in case they got negative reaction.

Though Town Council supported the program in the form of a resolution, they never championed it and didn't share relevant messages on social media; without active support the campaign never gained traction.

Some local businesses took offense to wording in the survey: when asked when they idle beside when picking someone up, the surveyors used the example if you are going to a fast food restaurant to get coffee. These businesses felt they were targeted.

Videos were most effective tool: they got the broadest reach, were popular because they weren't preachy but were funny and sharable.

Beach Ambassadors found that visitors were often very receptive to the anti-idling message, as it resonated for them to keep the beautiful recreation/natural area clean and free of exhaust. However, residents didn't share the same outlook: they look at the town as a place to live and do their business conveniently.

Campaigns driven by Administration should be aimed where Administration has the most influence: within the organization. In order to have influence in the community, there needs to be an influential champion either on Council or in the community (e.g. if a local fast food chain declared they were going to partner with the town to reduce idling).

Even with PAMZ support, resourcing is an issue. Even with budget available, having staff resources to execute the plan is challenging.

Some citizens wanted a tool that they could put on their neighbour's vehicle asking them to stop idling, but that is against town bylaw; neighbours were encouraged to talk to each other instead.

(See Evaluation Tools [E3](#) for post survey results).



H. CONCLUSION

On behalf of the PAMZ Idle-Reduction Committee, thank you for joining us in working toward vehicle idling reduction in the Parkland Airshed Monitoring Zone and beyond! We sincerely hope that this toolkit serves as a helpful resource in planning and executing an effective idle-reduction initiative in your community. In closing, please review the following key points that summarize some of the most important findings from the PAMZ Idle-Reduction pilot programs:

Idle-Reduction Campaign Key Success Factors:

- It is extremely important to build your program based on research and information-gathering about your community or target group in terms of their attitudes, behavior and knowledge, as well as determining your target area's idling hot spots before planning any program or campaign.
- Ensure you have buy-in of all the key parties before embarking on a project.
- There seems to be greater chance of success if you can define a manageable target group. In the case of Lacombe County, it was a microcosm test they targeted (just employees). This allowed Lacombe County to concentrate their efforts, almost daily, in reminding employees of the program. This is not as achievable in community-wide projects.
- Ensure senior management and decision maker buy-in, as the program progresses. This can best be done through regular communication updates and reports.
- A campaign should be looked at as a kick off to motivate people to be idle free. This motivation needs to continue beyond the campaign with new ideas and messages in order to maintain momentum.
- Motivation can be rewards-based but the most significant driver was social pressure. Find ways to do this that are not negative methods that criticize a person's behavior.