



EcoDriver: A Landmark Case Example of CBSM

Presented by Beth Jones, M.A., February 15, 2012



Natural Resources
Canada

Ressources naturelles
Canada

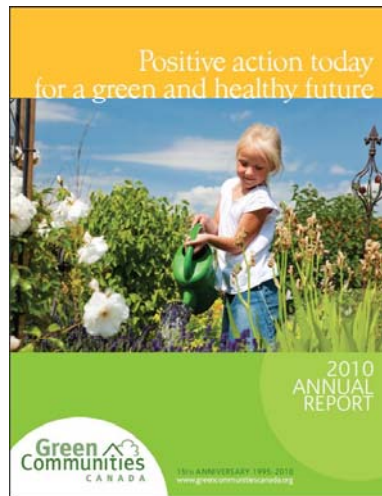


About Green Communities:



- 30 members
- help people go **green**:
 - Households, businesses, municipalities, local utilities
- are non-profits
- are community-based
- \$24M
- 595 employees
- 2000+ volunteers

About GCC:



www.greencommunitiescanada.org

Members enjoy

- information
- inspiration
- capacity building
- joint programs:



National/provincial programs:



Natural Resources
Canada

Ressources naturelles
Canada



Ontario



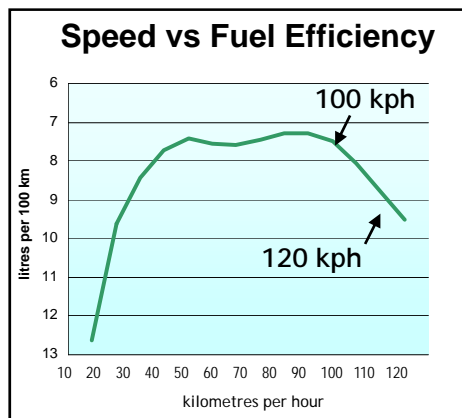
Promotes:



- 1) Driving Fuel Efficiently
35% difference between most and least efficient
- 2) Buying Fuel Efficient Vehicles
most efficient midsize 33% less fuel than median
- 3) Driving Less
most effective way to reduce emissions



Slow down and save.



For every 10 kph above 100 fuel efficiency drops 10%

Going 120 is like paying 20% extra at the pump.

Go Idle Free.



TEN SECONDS of idling uses more fuel than restarting.

The best way to warm up a car is to DRIVE IT.

Other fuel efficiency factors.



- ✓ tire pressure
 - ✓ combining trips
 - ✓ coasting to stop
 - ✓ tune ups
 - ✗ hard starts & stops
 - ✗ heated seats, ac
-

Timeline



- 2006: Clean Nova Scotia's DriveWiser
- 2007: MOE proposal, successful \$120K
- 2008-9: Phase 1 Implementation
- 2009-10: Phase 2 MOE + NRCan \$175K
- 2010-11: Phase 3 NRCan \$120K
- 2010-11: Fleet Training OSRA , Calgary



Program Development



- 1) Research, Drafting Materials
- 2) Focus Groups:
 - \$1500 budget, tested logo, tagline, draft materials
- 3) Peer Review
- 4) Two-day Training



Program Philosophy



Friendly

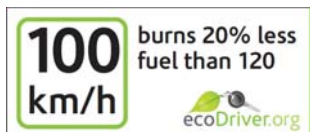
Driver-to-driver (peer learning)

Go to where the people are

Hands on learning where possible



Materials



Program Elements



Workshops – 4,987 attendees



Community Events – 26,500 reached



Tire Clinics – 1,260 vehicles



Program Elements



Media – 77 media hits, 3.4M impressions



Other activities:

- Billboard (Collingwood)
- EcoDriver Challenge Rally (T-Bay)
- Hybrid Alley (York Region)

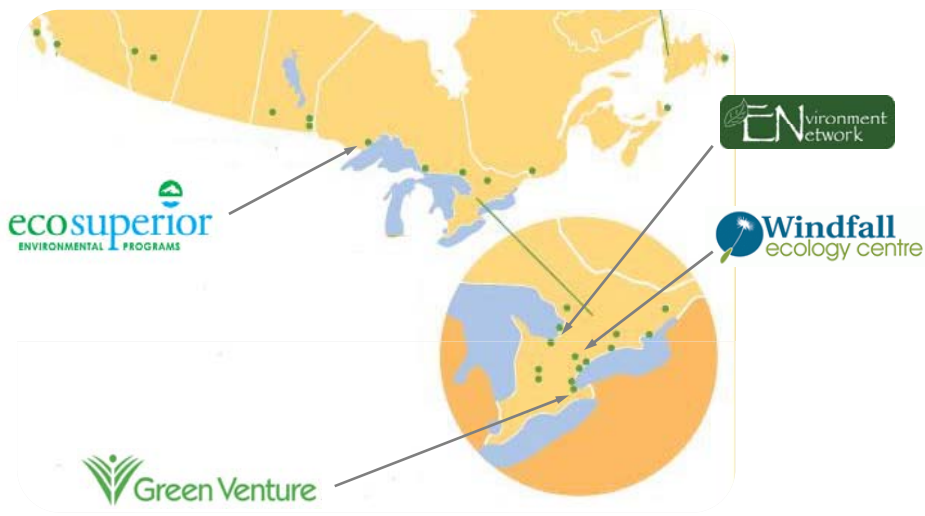


Program Resources



- Signage
 - Powerpoint Template
 - Backgrounder (60 pages)
 - Exit and Follow up Surveys
 - Reporting Templates
 - Newsletter, list-serve
 - Webinars
-

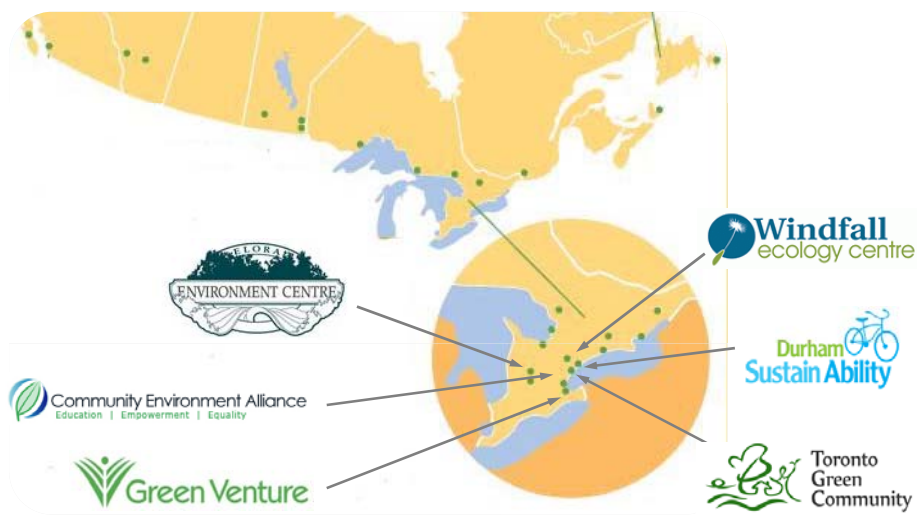
Phase 1 delivery:



Phase 1 “seed” delivery:



Phase 2-3 delivery:



Measurable Outcomes



ecoDriver Workshop Survey

How would you rate today's workshop?

Interesting and Engaging	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Needs Improvement
Well organized	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Needs Improvement
Useful for my daily life	<input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Needs Improvement

Will you tell others about things that you learned? ☐ Yes ☐ No ☐ Maybe

If yes, how many do you think you might tell? _____

Do you know of another group who would appreciate this presentation? ☐ Yes, what? _____

Are you a driver? ☐ Yes ☐ No Do you own a car? ☐ Yes ☐ No

After today's workshop, do you plan to reduce your idling time? ☐ Yes ☐ No ☐ Maybe If yes, by how much? _____ minutes/day

After today's workshop, do you plan to reduce your speed on the highway? ☐ Yes ☐ No ☐ Maybe If yes, by how much? _____ km/h

Comments: _____

(OVER)

Exit Surveys

- End of session
- 1836 collected (55%)
- \$25 Draw prize



EcoDriver follow-up - Answer and Win!

A while ago, you attended an EcoDriver presentation that offered tips on fuel efficient driving. Filling out this five minute feedback survey will help us to improve that program to make it as effective as possible, and will mean you can also enter your name in a draw to win one of six \$75 gift cards for Canada Post. Please answer as accurately as possible. Thank you.

1. Where did you attend your EcoDriver presentation? (Please choose the closest city or region from this list)

- () Hamilton and Huron Region (Green Venture)
- () York Region (Woodhill Ecology Centre)
- () Collingwood (Eastmanstone Network)

Follow up Surveys

- 8-12 weeks later
- 277 collected (10%)
- \$75 gift card draw prize



Fleet training



Ontario Ski Resorts - 2010



City of Calgary - 2011



Measurable Outcomes



Car Chip Data

- Calgary only
- 15 of 404 trained drivers
- idling, hard starts, hard stops
- Baseline and post-training



2008-2010 Results

ecoDriver Workshop Survey

How would you rate today's workshop?

Interesting and Engaging	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Needs Improvement
Well organized	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Needs Improvement
Useful for my daily life	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Needs Improvement

Will you tell others about things that you learned? ☐ Yes ☐ No ☐ Maybe

If yes, how many do you think you might tell? _____

Do you know of another group who would appreciate this presentation?

If yes, who? _____

Are you a driver? ☐ Yes ☐ No Do you own a car? ☐ Yes ☐ No

After today's workshop, do you plan to reduce your idling time? ☐ Yes ☐ No ☐ Maybe If yes, by how much? _____ minutes/day

After today's workshop, do you plan to reduce your speed on the highway? ☐ Yes ☐ No ☐ Maybe If yes, by how much? _____ km/h

Comments: _____

(OVER)

Exit and Follow up

ecoDriver follow-up - Answer and Win!

A while ago, you attended an EcoDriver presentation that offered tips on fuel efficient driving. Filling out this five minute feedback survey will help us to improve that program to make it as effective as possible, and will give you one shot to win one of five \$75 gift cards for Canadian Tire! Please answer as accurately as possible. Thank you.

1. Where did you attend your EcoDriver presentation? (Please choose the closest city or region from this list.)

- () Hamilton and Halton Region (Green Venture)
- () York Region (Woodhill Ecology Centre)
- () Collingwood (Ecoventure Network)



Telling others



Exit
Will you tell others?
Yes + Maybe: 91%
If yes, how many?
Average: 5.0

Follow up
Have you told others?
Yes: 90%
If yes, how many?
Average: 4.7



Idling



Exit
Try to reduce idling?
Yes + Maybe 64%
If yes, by how much?
min/day: 3.65

Follow up
Idling has gone down
86%
If yes, by how much?
min/day: 4.03



Speed



Exit

Try to reduce speed?

Yes + Maybe 62%

If yes, by how much?

Avg km/hr: 10.85

Follow up

Speed reduced?

Yes 69%

If yes, by how much?

Avg km/hr: 10.15



Other Commitments

Other Commitments	exit	follow-up
Combine Errands	75%	52%
Reduce Jackrabbit	73%	61%
No Start Up Idling	72%	62%
Check Tire Pressure	72%	52%
Regular Tune Ups	71%	17%
Oil Change	70%	32%
Air Filter	68%	20%
Ride or Walk/Short Errands	63%	28%
Telecommute	48%	3%
Drive Thrus	41%	39%
Transit	29.2%	6%
Carpool	28.8%	9%



Total GHG Saved 2008-2010



- Total survey respondents 277
- Avg CO2 saved annually 178 kg
- Total # of attendees 3571
- Total CO2 saved 635 tonnes*

*Phase 1-2. Based only on idling, speed, tire pressure.



Self reporting bias?



Calgary data suggest ***under reporting***,
not over reporting:

Follow up surveys:

65% reduced idling

projected reduction

9 minutes per day

Car Chip data:

75% reduced idling

actual reduction

20 minutes/day



Cost effectiveness?



IEA: 5% at less than \$1/barrel

Netherlands: 0.9Mt at €4.5- €7/tonne

EcoDriver Phases 1-3 \$464
(per calculable tonne)

Savings/ tonne (@1.25/L) \$543



Final Key Points:



- EcoDriver starts where people are at – as drivers
- High acceptance of “driving less” messaging
- Need for prompts and norms
- Modal shift and increases in vehicle efficiencies are unlikely to meet GHG targets alone
- To meet targets ecodriving will be needed

Thank you!



Beth Jones

bjones@greencommunitiescanada.org

Cost effectiveness?



Smart Commute only

- Total CO2 saved 114 tonnes
- Total Cost \$15,722
- \$ per tonne \$138

City of Calgary

- Car chip data for idling alone: pay back estimated at just over a year.



Follow-up respondents keeners?

Snow Resorts: Comparison of their exit surveys to the rest of the group suggest not so much:

Idling	slightly higher commitments	
Speed	comparable levels of commitment	
Other commitments	full group	follow up respondents
at work	5.9/person	6.0/person
at home	7.1/person	7.9/person

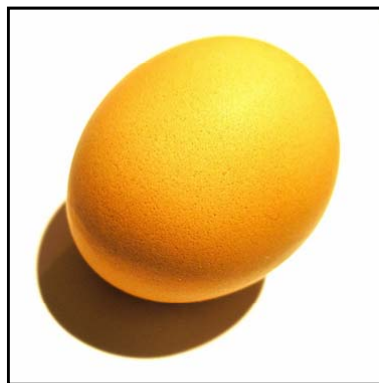


Other Commitments

Other Commitments	exit	follow-up	difference
Combine Errands	75%	52%	-23%
Reduce Jackrabbit	73%	61%	-12%
No Start Up Idling	72%	62%	-10%
Check Tire Pressure	72%	52%	-19%
Regular Tune Ups	71%	17%	-54%
Oil Change	70%	32%	-38%
Air Filter	68%	20%	-48%
Ride or Walk/Short Errands	63%	28%	-35%
Telecommute	48%	3%	-44%
Drive Thrus	41%	39%	-2%
Transit	29.2%	6%	-23%
Carpool	28.8%	9%	-19%



Take it easy.



Driving with hard starts & hard braking:

- uses 37% more fuel
- saves only 2.5 minutes/hour

Drive as if there's an egg under your foot.
