

## A Plan to Save

- √\$500K\* fuel / year
- √ Maintenance costs
- ✓ 1519 tons CO2e / year
- ✓ Improve Air Quality

\*Estimate based on industry research, preliminary fleet numbers.

### WHO:

Canada's leading green fleet organization

+ Canada's Leading IDLE-FREE Campaign.

#### WHAT:

Build HRM IDLE-FREE Culture over three years.

### HOW:

Driver training, measure / promote results. *Fuel savings pays for program.* 

WHEN: Announce HRM IDLE-FREE Pilot National Clean Air Day, June 7, 2017.



### <u>Current Situation, Halifax Policy</u>

- "Vehicles shall never be left idling when unattended.
- Engine warm up periods will not exceed one minute.
- Vehicles shall be shut down whenever idling periods are expected to exceed one minute"
- TRANSIT: 'three-minute rule'.

http://www.halifax.ca/transit/policies.php#Antildling

#### HRM 1100 vehicles

"HRM should focus on driver training in order to realize the highest return on investment."

#### "Fact:

Municipal vehicles typically idle \*35-45% of operating time, meanwhile police vehicles idle \*\*65-85% of operating time."

(Federation of Canadian Municipalities, 2010).

Halifax Regional Municipality

Corporate Plan to Reduce

Greenhouse Gas Emissions

2012-2020

Sustainable Environment Management Office, HRI
http://www.halifax.ca/environment/semo.html

Halifax Regional Municipality
Corporate Plan to Reduce GHG Emissions
2012-2020

Sustainable Environment Management Office, HRM

Prepared by: Lauralee Sim, Environmental Performance Officer August 2011 "City of Hamilton is realizing savings of \$300,000 annually through reduced idling ••estimates it can save \$2-3 million annually through full compliance with its idling policy of limiting idling to 3 minutes per hour of operating time.

-Fleet Challenge Ontario, 2008

## Three Year Target

- All drivers IDLE-FREE trained.
- Fuel savings pays for HRM-wide IDLE-FREE culture in three years.
- Walk-the-talk: HRM IDLING policies.
- Employees, public and other fleets inspired to save much more.



## Facts: IDLE-FREE Pilot

- 1) Idling consumes between <u>2.5 4 litres/hour (NRCan, SEMO etc.)</u> We use 2.5 litres / hour for this calculation.
- 2) We use \$1.00 / litre for fuel savings this calculation.
- 3) Time frame for pilot: 90 days.

  Train, then measure savings next 90 days (~13 weeks = 65 working days).
- 4) IDLE-Time maintenance savings significant but difficult to quantify.

**CUMMINS:** Engine life reduced up to 20%. 500 hours = 103,000 km/wear.

# Assumptions: IDLE-FREE Pilot

Driver subset, proof of concept. Example: 100 drivers, 80 vans / delivery trucks.

50% early "buy-in" reduce IDLE-Time by 1 hour per day.

80% buy-in over time.



## ROI Estimate: IDLE-FREE Pilot

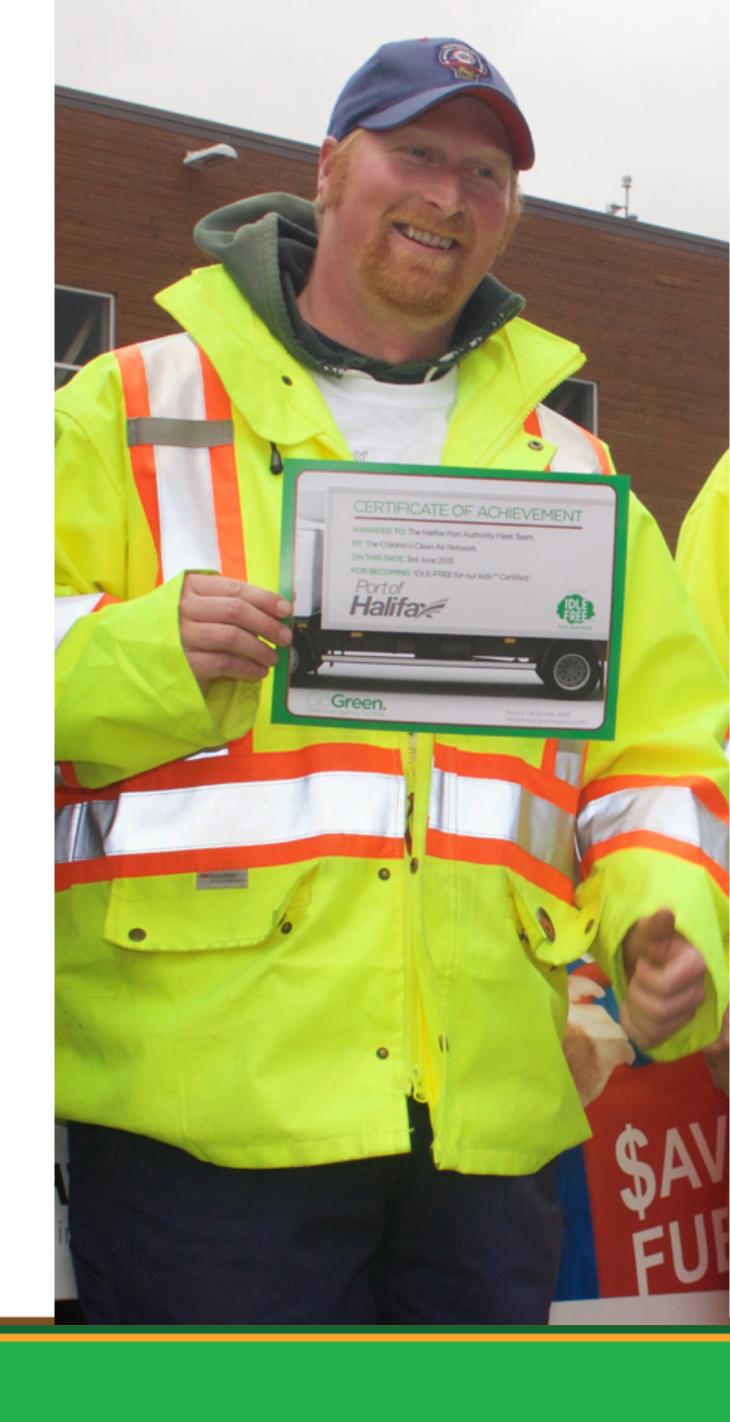
100 drivers trained for 1st quarter.

50 of 100 drivers save 1 hr/day IDLE-Time x 65 days  $\times$  2.5 litres / hour = 50 x 1 x 65 x 2.5 = 8125 litres.

 $8,125 \text{ litres} => $8125/quarter} => $32,500 / year.$ 

Pilot training costs \$20,000 (\$200/seat).

Payback = 8 months, conservative estimate.



## <u>How to Measure: IDLE-FREE Pilot</u>

- GPS Telematics where available.
- OBD card readers for subset of Pilot vehicles.
- Ongoing fuel, distance driven data.
- Measure against E3 Fleet 62,000 fleet databases.

GoGreen to consult with HRM Fleet Management on methodology.

## Roll-Out: IDLE-FREE HRM

After 90-day pilot demonstrates initial savings, HRM could start training the next 100 drivers.

All 500 municipal drivers trained in 15 months. 100 drivers every 90 days.

#### At this pace, fuel savings fully finances training.

Next: 600 transit drivers.

Then police (in conjunction with auxiliary power equipment).



## E3 - Fleet Review



#### 2011 SEMO report recommends Fleet review/audit, \$52,000

- E3 Fleet, leading 'green fleet' org in Canada.
- 12-year insight with municipalities across Canada, 62,000 vehicle database.
- Comprehensive fleet modeling software, provides independent fleet review.

HRM receives custom confidential reports, analysis of key performance indicators (KPIs) along with suggested opportunities for improvement.

Non-operational IDLE-Time baseline and savings potential is just one deliverable.

E3 Fleet (not-for-profit) Fleet Review \$9200 for whole HRM fleet (vs \$52,000 SEMO).

## Today's ASK

- 1. Transportation Committee asks for a Staff Report.
- \$9200 E3 Fleet Review.
   Assess entire HRM fleet 'green KPIs', including IDLE-FREE baseline.
- Develop formal IDLE-FREE Pilot Business Proposal
- Develop three year IDLE-FREE strategy for fleet.
- Outline public outreach campaign based on pilot / fleet results.
- 2. Report Goes Straight to Council
- 3. Announce IDLE-FREE Pilot, National Clean Air Day, June 7.

"We've saved \$10s of thousands annually."







Why 80% buy-in: Kids & Car Guys.

IDLE-myths

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# Additional Slides



# WHOS DEVELOPED THIS Plana



### Leading Green Fleet Org

### IDLE-FREE Campaign



Non-Profit

- Analyze HRM Fleet
- Measure fuel/CO2 savings
- Certify Results





Non-Profit For-Profit

- IDLE-FREE Training
- Branding
- Public Relations



# Announce HRM Pilot June 7, 2017





# Financing long-term IDLE-FREE culture from fuel savings

#### Year one

IDLE-FREE Pilot fixed-cost, ROI target: 8 to 12 months.

#### **Year two**

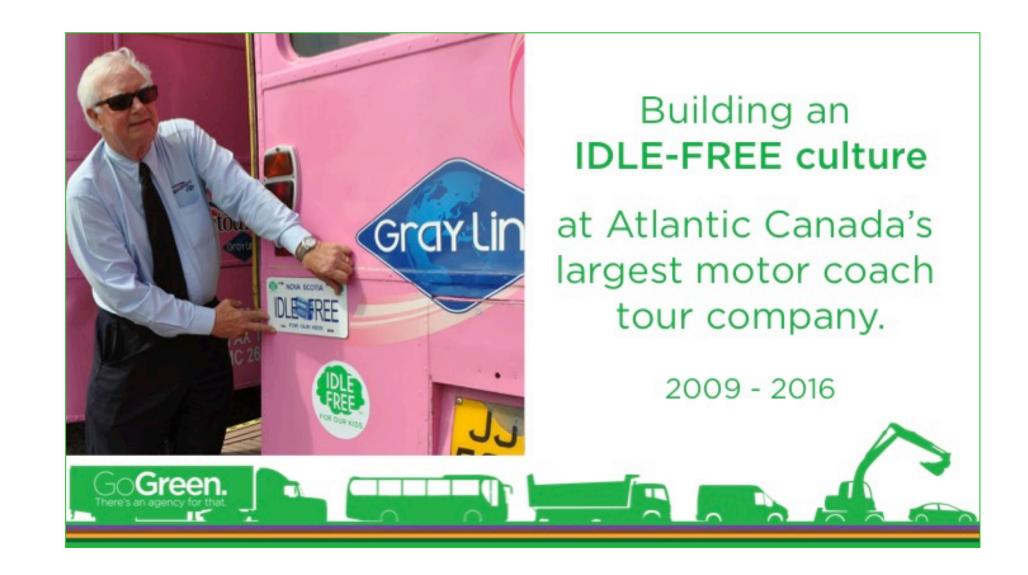
IDLE-FREE fleet-wide roll-out, ROI target: less time to achieve ROI than year one\*.

#### **Year three**

Fortify culture (regression, new drivers): less time to achieve ROI than year two\*.

\*Based on fleet type (industry), size and complexity.

## IDLE-FREE CASE STUDIES



Halifax Port Authority – IDLE-FREE 'Pier Leaders'
Case Study – GoGreen Communications Inc.

GoGreen.
There's an agency for that

**Ambassatours Gray Line** 

Port of Halifax

The Story
Behind
the Leading
IDLE-FREE
Campaign





The GoGreen
Difference.





#### **✓ DATA-DRIVEN RESULTS:**

Metrics-measured solution. Not a program; a management process.

#### **✓ FOCUS:**

Deep expertise: faster / lasting impact on reducing IDLE-Time.

- ✓ 3rd DIMENSION; *EMOTIONAL ENGAGEMENT:*Real kids, car guys flip the 'emotional light switch' in audiences. *Proven* behavourial change.
- ✓ ECO-DRIVING ICE-BREAKER:
  Emotional buy-in on IDLE-Time drives buy-in for reduced-speeding & eco-driving habits.



#### **✓ AUTHENTIC COMMUNITY:**

Engaging communities since 2006 = trust, credibility with audiences, public.

#### **✓ PR EXPERTISE:**

Ten years of IDLE-FREE know-how, helping clients get the green PR they deserve.

#### **✓ BRANDING EXPERTISE:**

Endorsed by the Olympics, co-branded by corporate & community leaders. We help enhance client brands in the growing green economy.

✓ TRADEMARKED, U.S. / Canada: Protected for wide, consistent adoption.



# Other programs do not address 'emotional, behavioural change'

Natural Resources Canada FleetSmart

Environmental Protection Agency (EPA) U.S.
SmartWay

Google: 'IDLE-FREE education'

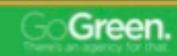


## Other Programs

Clean Foundation, Nova Scotia FleetWiser

"Please be aware that Clean's 2011-2014 Fleetwiser program has now concluded."







## Why 80% buy-in.