



Welcome to

# FleetSmart

**ICCT NESCAUM**

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# Fleet*Smart*

A voluntary program to help fleet managers, owners and owner-operators reduce fuel costs and vehicle emissions while increasing productivity through improved energy-efficient practices.



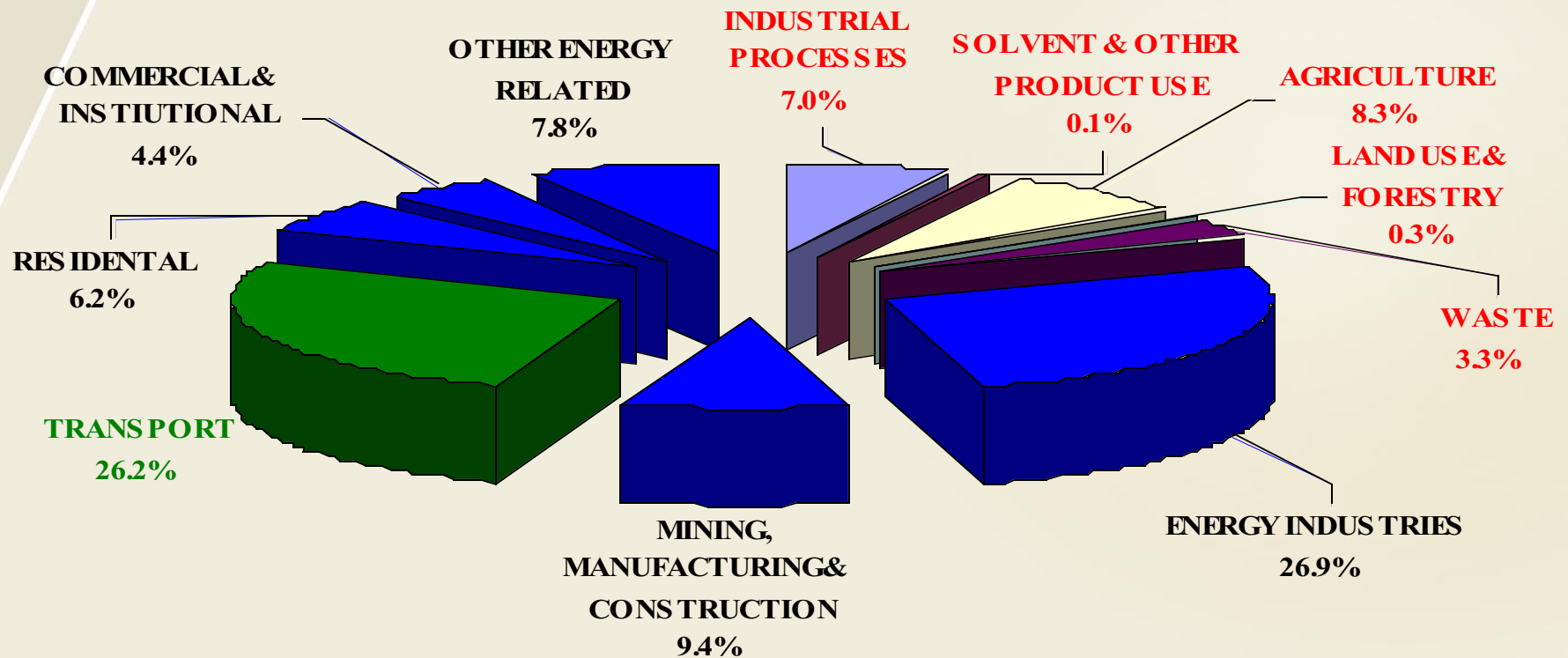
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# GHG Emission Sources





## Our Audience

- Forestry Trucking
- Highway Trucking
- Motor Coach
- Transit
- School Bus
- Municipalities & Utilities
- Urban Transportation (light & medium duty)



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## Why Bother?

- ✓ Save \$\$ + Reduce emissions
- ✓ Support government initiatives
- ✓ Good management of a finite natural resource.



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# The FleetSmart Approach

## 1. Education and Awareness

- Driver
- Trainers
- Technicians
- Fleet Managers
- Owner-operators

## 2. Technologies



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# Technology

*Based upon total fuel energy content  
104kmh /65 mph Steady State*

## Energy Loss Vector

### Fuel Use %

- Engine cooling 30%
- Exhaust heat 30%
- Aerodynamics 21%
- Rolling Resistance 13%
- Accessories 4%
- Drive train 2%

- Engine 12 %
- Aerodynamics 10.5 %
- Rolling resistance 13 %
- Accessories 5 %
- Driveline 1.5 %

**Total potential fuel  
efficiency gain 42%**

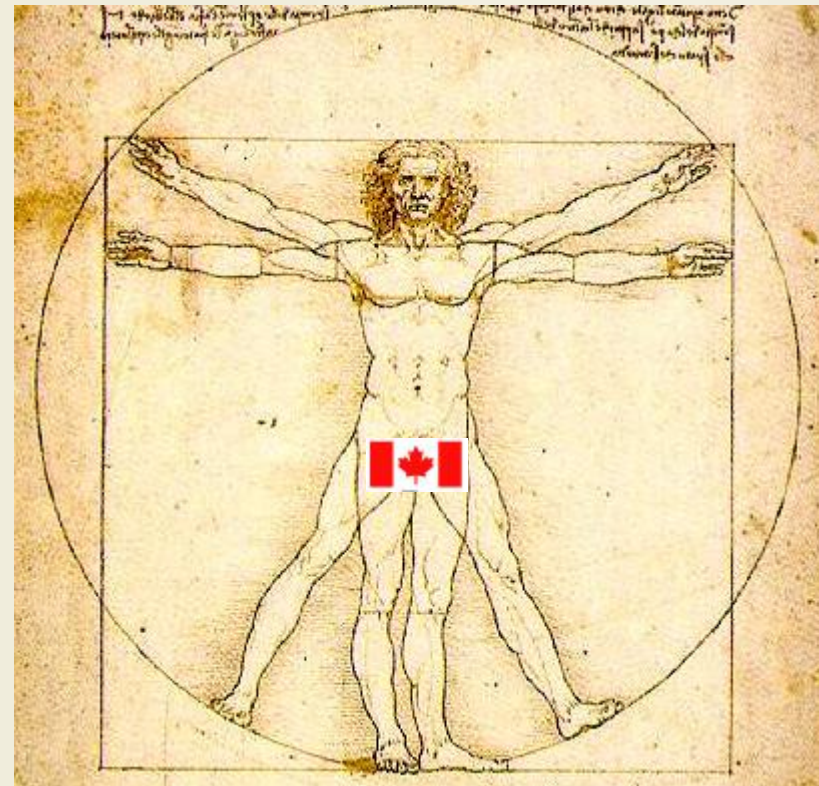




# FleetSmart & the use of On-board Technologies

*The most important  
on-board  
technology today -*

**THE DRIVER**



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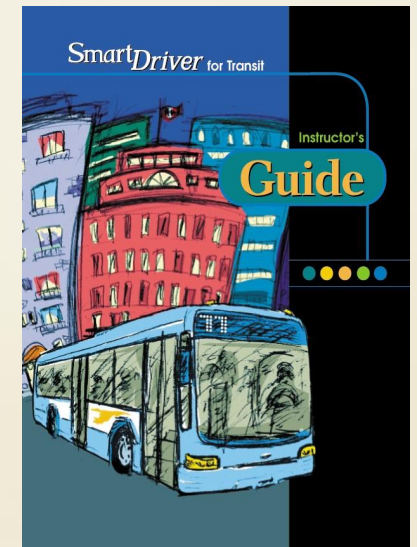
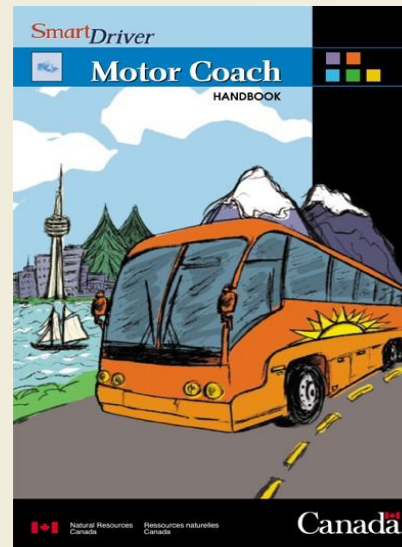
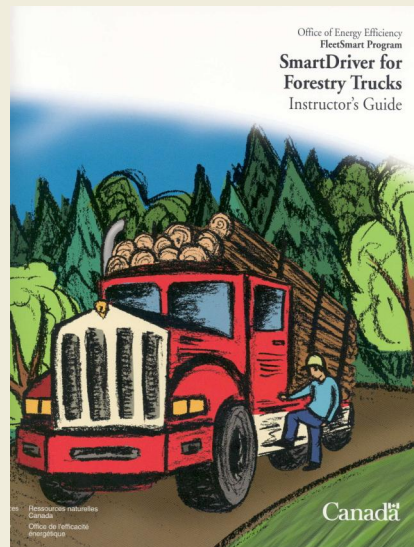
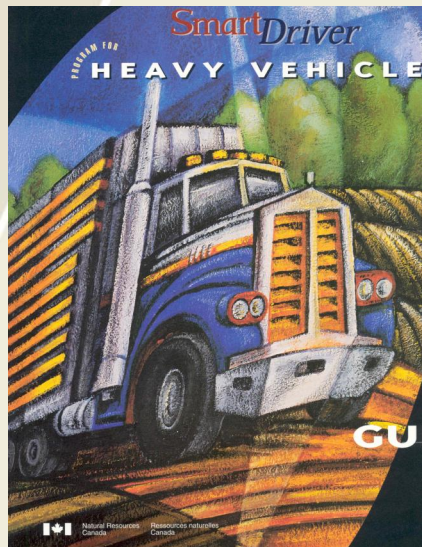
## Why SmartDriver?

- **Driver** – the most important on-board technology
- Up to 35% difference between the ‘best’ and the ‘poorest’ driver
- The investment in fuel-efficient technology **will not pay** off if the driver is not trained to drive efficiently
- Misinformation & myths are widespread





# SmartDriver Series



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## SmartDriver

- A ready-made program for fuel-efficient driving
- Developed with industry groups
- Adult learning techniques
- Free instructor kit for qualified instructors
- Train-the-trainer sessions
- Certificates for drivers



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# **SmartDriver Series of Driver Training Programs**

## ***Driver Training & Information Sessions***

- Intro to fuel & fuel efficiency
- Environmental factors that impact fuel efficiency
- Vehicle Spec'ing

## ***Driving Practices***

- Starting techniques
- Horse power / torque
- Lugging, speed, retarders etc.





# ETS SmartDriver

## Results To Date - Averages

### Benchmark Trip

### Coached Trip

<b>Fuel Used</b>	<b>3.1 Liters</b>	<b>2.6 Liters</b>	<b>16% Reduction</b>
<b>Fuel Rate</b>	<b>12.1 L per Hour</b>	<b>10.6 L per Hour</b>	
<b>Average Fuel Economy</b>	<b>44.57 L/100 KM</b>	<b>39.29 L/100 KM</b>	<b>12% Reduction</b>
<b>Time</b>	<b>0.2 KM</b>	<b>0.2 KM</b>	
<b>Distance</b>	<b>7.2 KM</b>	<b>7.2 KM</b>	
<b>Engine Load</b>	<b>25.27%</b>	<b>30.91%</b>	
<b>Max RPM</b>	<b>2162</b>	<b>2086</b>	
<b>Service Brake Acct</b>	<b>32</b>	<b>26</b>	
<b>Fuel Used 0&gt;</b>	<b>2.91 Liters</b>	<b>2.51 Liters</b>	<b>14% Reduction</b>
<b>Fuel Economy &gt;0</b>	<b>40.71 L/100 KM</b>	<b>34.82 L/100 KM</b>	<b>14.5% Reduction</b>
<b>Average Speed</b>	<b>28 KPH</b>	<b>29 KPH</b>	
<b>Fuel Used at 0</b>	<b>0%</b>	<b>0%</b>	
<b>Time at 0</b>	<b>0%</b>	<b>0%</b>	
<b>Idle Percent</b>	<b>12.35%</b>	<b>9.35%</b>	<b>24% Reduction</b>





# J.E. Fortin Transport

- *Regular run from Lacolle, QC to Miami FL*

## Before

21%

105 km/h

34,474 kg

38.9 l/100k  
7.27mpg

Idling time

Average Speed

Total load

Fuel Performance

## After

4%

90km/h

34,474 kg

34.2 l/100k /  
8.26 mpg



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## Other Key Activities

- Fuel Management 101
- Rebate program for proven technologies to reduce idling
- Idling awareness campaigns at Truck Stops, Tourism and Border crossing sites
- *SmartMechanic*
- Technical workshops on video – anti-idling technology, ECM's, fuel-efficient tires, on-board systems



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# What do FleetSmart fleets have in common?

- Management commitment
- Staff education & training
- Use of technology
- Monitoring performance
- Coaching to improve weak performers
- Incentives / recognition program







# Fleet*Smart*

**THANK YOU**

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