Greening the Fleet; Why it Makes Good Business Sense

Roger Smith
Toronto Board of Trade Power Breakfast
4 April 2008
About Fleet Challenge

• A not-for-profit program of the Canadian Energy Efficiency Alliance

• FCO began as provincial arm of FC Canada

• FCC was federally funded & active in 5 provinces

• Now active in Ontario (FCO) and BC (GreenFleets BC)
About Fleet Challenge

• FC works closely with private and public sector fleets wishing to take action on emissions.

• FC is an intermediary, delivering a balanced perspective.

• FC presents regional workshops, events, stakeholder consultations and information sessions.

• FC facilitates market adoption of existing and emerging green technologies
About Fleet Challenge

• FC completes projects for governments & top corporations:
  – Green Fleet analysis, business planning and evaluations for governments & corporations
  – Green Fleet Awareness & Communications Plan
  – Green Commercial Vehicle Project

• Represents the E3 Green Fleet System in Ontario
E3 Green Fleet System

• E3 modeled after LEED

• Through a proprietary software solution and best management practices, E3 drives improvements in
  - Energy use
  - Emissions
  - Financial performance

• Green Rating system to recognize performance

• 49 fleets now active in E3
E3 Fleet System

E3 Successes – Langley, B.C…

• Increased fleet fuel efficiency by 15%
• Reduced Greenhouse Gases by 14%
• Reduced operating costs by 5%
E3 Fleet System

Fleets across Canada basing their greening plans in the new E3 system:

- Hamilton, Ontario - Canada’s first Green rated Fleet - Silver level

- 5% reduction in fuel consumption and 2% reduction in GHGs
Greening the Fleet

*Why?*
Top 10 Reasons to Green the Fleet

Greening your fleet.....

10. is good for employee morale
9. fleet increases shareholder confidence
8. enhances public image
7. will optimize use of fleet assets
6. can lead to improved service levels
5. enhances corporate social responsibility
4. will reduce criteria air contaminants causing SMOG
3. will reduce particulate matter responsible for respiratory disease
2. will reduces greenhouse gases (GHG) responsible for global warming
1. will save money and support emerging Canadian technologies!
“There is no way to avoid paying serious attention to corporate citizenship: the costs of failing are simply too high. ... There are countless win-win opportunities waiting to be discovered: every activity in a firm’s value chain overlaps in some way with social factors — everything from how you buy or procure to how you do your research — yet very few companies have thought about this.

The goal is to leverage your company’s unique capabilities in supporting social causes, and improve your competitive context at the same time. The job of today’s leaders is to stop being defensive and start thinking systematically about corporate responsibility.”

Michael Porter, Professor, Harvard Business School
“The CSR industry believes that a broader understanding of the world in which they operate can help companies manage these risks (to their reputation) better (and if they are lucky, grab some opportunities too)

The economist also noted that for companies having a defined CSR policy, the benefits ranged from:

1. Having a better reputation
2. Making better long-term decisions
3. Being more attractive to employees
4. Having better relations with regulators and lawmakers
5. Having higher revenue
Media focus

Toronto Running on Soybeans

By the season Hydro--running its soybeans biodegrees the production is geared to follow biodegrees an Ont for Can In re Toronto the N Ontario

OEA says Hawthorne "leader of the year," Toronto Hydro "company of the year"

The Ontario Energy Association has chosen Bruce Power CEO Duncan Hawthorne its "leader of the year," and Toronto Hydro-Electric System its "company of the year."

Hawthorne was nominated for the award by the Bruce Power executive team, which cited his accomplishments in both economic and safety performance at the Bruce site. Bernard Jones, President and CEO of the OEA, said "Duncan Hawthorne went beyond what one might reasonably expect of an excellent chief executive officer faced with unusually challenging circumstances."

In nominating him, the Bruce executive cited his strong communication profile—especially his quarterly CEO updates and Team Talks with employees—the "top of the world" performance of the Bruce units, and the much-improved safety performance (0.23 accidents per 200,000 hours in 2002). PWU Chief Steward Dennis Fry also praised Hawthorne, saying, "When the British Energy consortium fell apart, [Duncan] worked tirelessly, just tenaciously, to pull the current ... ownership structure together."

Newscast 2003:09
Industry recognition

- National Transportation Week Award of Excellence
- Ontario Energy Association Company of the Year
- Electrical Distributor's Association Environmental Excellence
- Canadian Renewable Fuels Association Green Fleet Award
Greening the Fleet

Time Capsule
1973 - The foreign oil supply was suddenly disrupted for political reasons.
Solutions ensued

- Smaller, lighter & more aerodynamic cars & trucks, computerized engines

- Maximized truck load capacity, modal shift, route planning
70’s Oil Crisis – Multi-year Impact...

1972
Cars averaged 14.5 MPG

1973 Oil Crisis

1997
Cars averaged 28.5 MPG
Today’s Reality

- Transportation causes over 30% of Canada's greenhouse gas emissions

- Ontario responsible for 32% of national transportation emissions

- Greenhouse gas emissions are directly related to fuel consumption - *and fuel cost!*
Green Fleet of the Future

- Most agree that hydrogen fuel cells will ultimately power the vehicles of the future

- Fuel cell vehicles will be almost pollution-free

- Fuel cell vehicles are close to commercialization
In the meantime

- Hydrogen infrastructure development will take years
- Significant concentration of fuel cell vehicles will take much longer – decades
- *What can be done now?*
An “Inconvenient Truth”

- Solutions that greatly reduce fuel consumption and therefore GHGs and air pollution are available today.

- There may be a degree of inconvenience - today's solutions may take an incremental increase in effort to implement.

- The options are here now, what’s needed is “the will to make the change.”
Greening the Fleet

*Industry Scan – Putting It Into Perspective*
**Industry Scan**

Over 7,000,000 registered vehicles on Ontario roads today:

Of these, over 300,000 are commercial fleet vehicles.

Commercial fleet vehicles:

- Transport goods (i.e. raw & finished)
- Move people (i.e. urban & inter-urban)
- Mobilize service personnel
Industry Scan

All businesses depend on road transport at some point in the supply chain:

What are the options?

a) Operate own fleet (in source)

b) Source transportation externally

c) Both
Regardless of your business sector, vehicle fleets are an integral part of corporate reality:

- Fleets of light, medium and heavy trucks provide mobility for those that build & maintain the electrical grid, the gas & telecom networks
- Manufacturers ship raw goods in & finished products out
- Green options exist (rail or ship), but trucking still unavoidable!
OTA - If you got it, a truck brought it!
Green Fleet Leadership

What do these top organizations have in common?
Governments are greening their fleets:

Case studies:

- **Municipal** – leaders include Toronto, Hamilton, London

- **Provincial** – Ontario, BC, Manitoba have made major changes

- **Federal** – the National Fleet Challenge
Industry Scan

Top retailers are greening their fleets:

Case studies:

• Wal-Mart – plans to double fleet efficiency by 2015, reducing GHGs 25% and saving $494m

• HBC – biodiesel pilot project

• Coca – cola – 120 hybrid trucks will reduce emissions by 32% and fuel consumption by 37%
Industry Scan

Top utilities are greening their fleets:

Case studies:

• Enbridge – Green leadership example, over 600 CNG vehicles, support green fleet initiatives i.e. Repair Our Air Fleet Challenge.

• Manitoba Hydro – Plug-in hybrids to bolster the grid

• Toronto Hydro and other LDC’s – biodiesel use, hybrids
Industry Scan

Couriers are greening their fleets:

Case studies:

- *Purolator Courier* – 2000 hybrid trucks (50% fuel use reduction), prototype all-electric truck

- *FedEx* – Hybrid trucks and pilot H2 fuel cell trucks

- *UPS* – 700+ propane units – latest 139 truck order will save 254 tonnes GHGs per year.
Greening the Fleet

A Primer
What is a Green Fleet?

A green fleet will have made progress in 10 areas:

1. Green Fleet Action Plan
2. Training & Awareness
3. Idling Reduction
4. Vehicle Purchasing
5. Fuel Data Management
6. Operations & Maintenance
7. Trip & Route Planning
8. Utilization Management
9. Fuel Efficiency Improvement
10. GHG Reductions
Planning a Holistic Approach

There are no “silver bullet” solutions -

Key elements of a green fleet plan include:

• *Policy, outreach, awareness, change management, BMPs, advanced vehicle technologies, alternate fuels*
Organizational change, stated in policy:

- **Procurement** - green vehicles, suppliers & contractors
- **Operational** - Idling reduction, vehicle usage practices
Outreach

A collaborative approach for maximum impact:

- Seek buy in at all levels – starting at the top, employ internal communications channels
Issues awareness facilitates lasting change:

- Help employees connect the dots – car = climate change, idling reduction campaigns, fuel efficient driver training
Consider the available options:

• Hybrid cars & trucks, alternate fuels, electronic engines/transmissions, auxiliary cab heaters, auxiliary power units and battery banks, remote shutdown devices
Change management

Collaborative problem solving:

• Identify the issues & co-develop customized solutions
Best Management Practices

**Employing BMPs will accelerate new efficiencies:**

- Utilization management, exception reporting & balanced scorecard, fleet downsizing, unit right-sizing
Conclusion

It’s time to be part of the solution:

• Greening your fleet will reduce your fleet’s fuel efficiency and this is good for the environment.
• Greening your fleet will raise your corporate profile.
• Greening the fleet is good for the Canadian economy; it supports emerging green technologies.
• Greening saves your organization money!
Questions?