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Puget Sound Clean Air Agency

Working together for clean air



Puget Sound Air Quality and Fleets

Leslie Stanton

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Why Fleets?

Air Quality Concerns

- **Motor vehicles are major contributors for most air pollutants**
- **Greenhouse gases and climate change**

Clean fuels and energy efficiency align with our energy goals

- **Partnership with the Clean Cities Coalition**

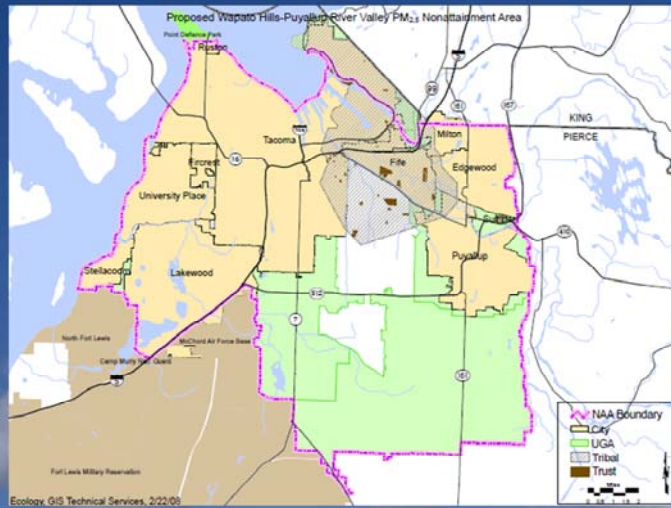
Air Pollutants

- **Fine particulate matter (PM2.5)**
- **Diesel particulate matter**
 - Recent study found 70 to 80% of the cancer risk from air pollution comes from diesel particulate matter (soot)
 - Non-cancer effects
- **Wood smoke**



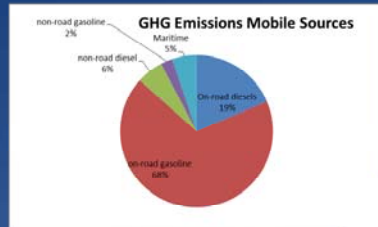
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Tacoma non-attainment area

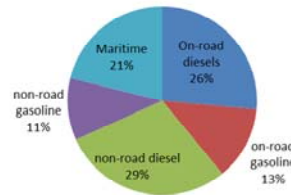


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Fleet Emissions



Diesel Particulate Matter Sources



Fleets clearly comprise most of the diesel emissions, and more than a quarter of GHG emissions.

Evergreen Fleets Program Goals



Help fleets

- Reduce costs and environmental impacts
- Gain public recognition for doing the right thing
- Implement best practices and policies for greening fleets
- Share information and data.

Guidance Manual and Evaluator



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Evergreen Fleets Evaluator
Home | 1. Best Practices | 2. Baseline Data | 3. Current Data | 4. Diesel Vehicles | **Results** | Analysis | Dept. of Ecology Data | History

Preliminary Certification Results
 Evergreen Fleets will verify the results and provide a final score once you have submitted your application and supporting documents.

NEXT STEP: Upload the file AND all supporting documents to Evergreen Fleets by logging in to your account at www.evergreenfleets.org and clicking on the "My Fleet" page.

RESULTS SUMMARY

	YOUR SCORE	POSSIBLE SCORE
Best Practices	28	up to 50
Greenhouse Gas Performance	40	up to 50
Combined Score	68	

Preliminary Certification Rating *******

RESULTS DETAIL

	YOUR SCORE	POSSIBLE SCORE
Best Practices		
Green Fleet Plan	3	3
Vehicle Purchasing	8	10
Green Fleets & Efficiency Measures	18	25
Maintenance	5	10
Green Vehicle Summary		
Total Number of Diesel Vehicles in Fleet	0	
Total Number of Diesel Retrofits	0	
Total Number of Green Cap Fleets	0	
Percent of Fleet with an Emission Control Device	0	
Greenhouse Gas Performance		
	MTCO ₂ e	Percent
<small>(Points are awarded by demonstrating significant improvement from Baseline to Current)</small>		
Baseline Emissions	27,425.63	
Current Emissions	23,749.69	
Change in MTCO ₂ e emissions from baseline	-3,675.93	-13%
Change in PER-VEHICLE CLASS emissions from baseline year to current year	-7.99	-7%

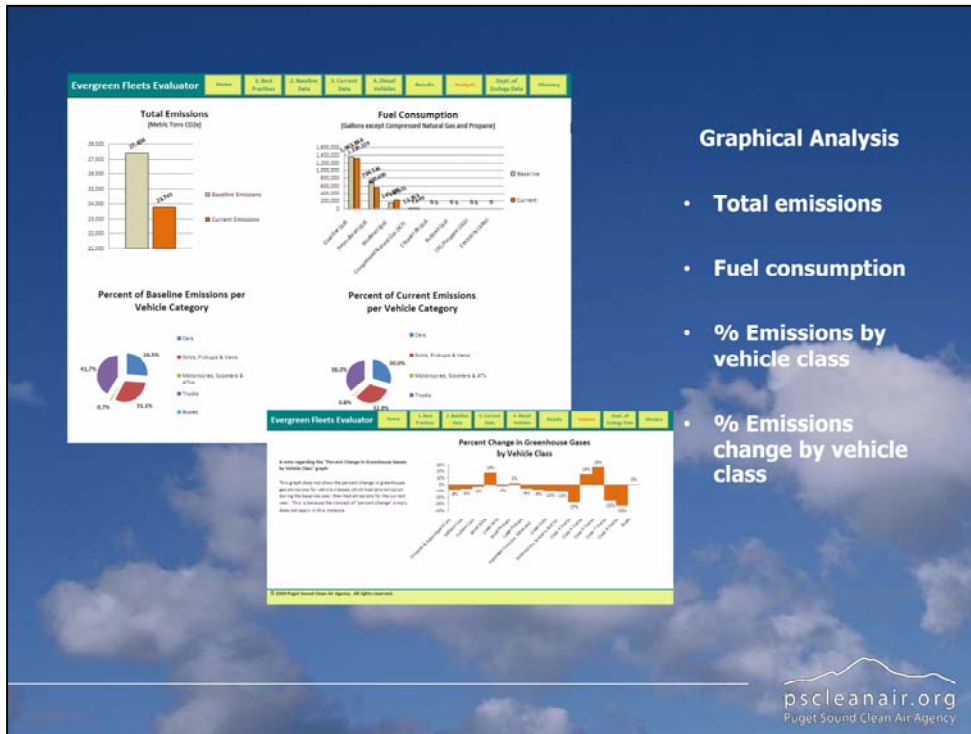
KEY

Combined Score	Certification Level
90 to 100	*****
75 to 89	****
60 to 74	***
40 to 59	**
30 to 39	*
0 to 29	Not Certified

Track Results

- Best Practices
- GHG Performance
- Fleet Maintenance
- Diesel Retrofits

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Graphical Analysis

- Total emissions
- Fuel consumption
- % Emissions by vehicle class
- % Emissions change by vehicle class

Cost Benefit Analyses with the Clean Cities Coalition

Five light duty trucks

- Annual mileage 15,000 (or 5 gal per workday)
- \$10,000 cost premium for each propane system
- Fuel economy: 11.7 MPG propane vs. 12 MPG gasoline
- Positive tax liability



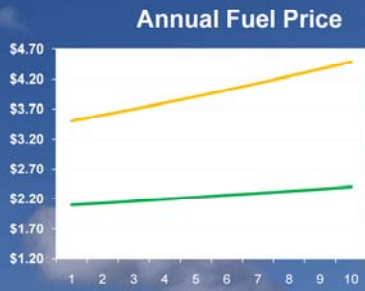
Gasoline: \$3.3 /gal + 2.8%

Propane: \$2.1 /gal + 1.5%


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<http://www.ridacrifter.com/>

Sample Autogas Scenario: Five Vehicles

- Investment made whole in year 6
- 15% IRR
- Ten year savings of ~\$40,000



Best Practice: Trip routing software, employee incentives

- ✓ Small private fleet
- ✓ 5 delivery trucks
- ✓ \$6,000 investment
- ✓ Saved \$100,000 per year in operational costs

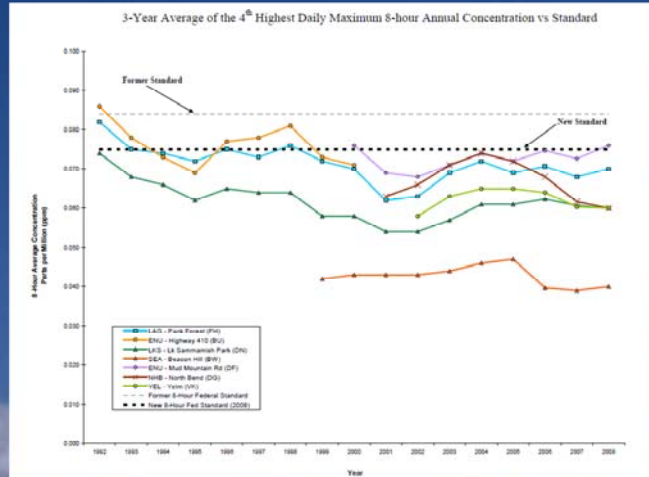


Best Practice: Right sizing and car sharing

- ✓ Large public fleet
- ✓ 3400 vehicles
- ✓ Joined Zipcar, encouraged car-sharing
- ✓ Estimated \$4M in fuel savings



New Air Quality Concern: ozone



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Resources for Fleets

Puget Sound Clean Cities Coalition

- Information on renewable fuels, energy efficiency, advanced technology vehicles, networking, workshops and events
- www.pugetsoundcleancities.org

Evergreen Fleets

- Green certification program for fleets
- www.evergreenfleets.org

Questions

Leslie Stanton

206-689-4022

leslies@pscleanair.org

Stephanie Meyn

206-689-4055


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