



Federal Grants and Advanced Vehicle Technologies

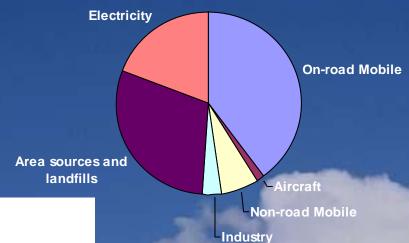


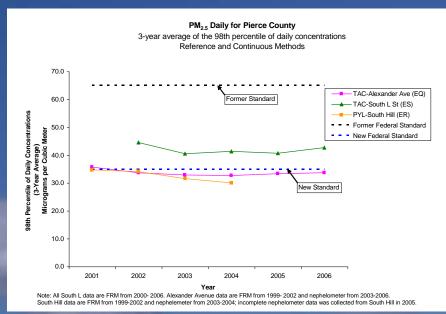
Dennis McLerran Executive Director October 23, 2009

Air Quality and Transportation

Puget Sound Greenhouse Gases 2005







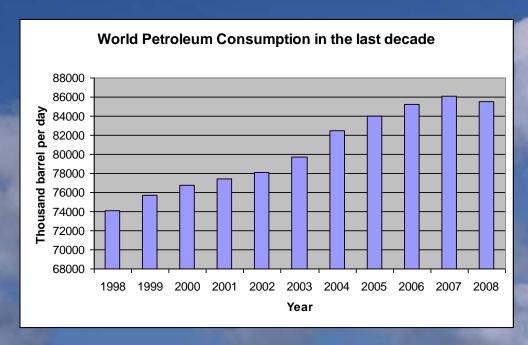
Transportation Impacts our Economy

 US imports 60% of our petroleum and over half of that is used for transportation

Washington State paid \$16 billion for petroleum fuels last year

Increased global demand is expected to increase fuel

prices



Puget Sound Petroleum Reduction Project

US DOE ARRA Grant

- Puget Sound Clean Cities Coalition
 - A program of the Puget Sound Clean Air Agency
 - Applied for and received \$15 Million over 2 years.
- 4 main projects and over 30 partners

Cost share leverages a total of \$34M





Advanced Technology Vehicles

Partners: 21 public and private fleets

Goal: Purchase 450 advanced technology vehicles

- Install electric charging infrastructure, including 2 photovoltaic stations
- 3 biodiesel and ethanol fueling stations
- Convert taxis and shuttles to compressed natural gas
- Support fleet efforts to become Evergreen Fleets certified

Funds: ~\$8.5 million





Port Electrification

Partner: Sea-Tac International Airport

Goal: Convert 200 pieces of ground support equipment to operate on electricity.

■ Install charging infrastructure.

Funds: ~\$5 million





Biogas for Buses

Partner: Western Washington University

Goal: Convert 3 commercial tour buses to natural gas

- Install a 100,000 GGE commercial natural gas refueling station (using refined biogas) at a dairy farm near Bellingham, WA
- Buses will serve the 2010 Olympic games in Vancouver, BC

Funds: ~\$500,000



Education and Outreach

Partner: Washington State University's Energy Program

Goal: Educate our citizens and market the technologies and infrastructure

- Includes public service announcements, driver training, and workshops.
- Guidebooks on alternative fuels, cost savings, and environmental benefits.

Funds: ~\$1 million





Project Benefits

- Reduce petroleum consumption by 3 million gallons
- CO2 emissions by 7500 metric tons
- Air pollutants by 220 metric tons per year
 - Includes 68 metric tons of smog-forming pollutants (NOx, VOCs, PM2.5)



Coordinating Regional Grant Efforts

- USDOE's Energy Efficiency and Conservation Block Grants
 - King County received \$6M for range of projects, including electric charging stations and support
- USDOE's Electric Drive Vehicle Battery grant
 - \$20M to eTec/Nissan for Seattle area EV charging infrastructure
- The New Energy Solutions project has eTec, PSRC, state and local governments collaborating on
 - Charging locations
 - Streamlined permitting and building code guidelines
- Puget Sound Clean Air Agency Diesel Solutions
 - EPA Diesel Emissions Reduction Act funding
 - \$2.4M to replace engines in three BNSF locomotives
 - Port truck replacement program with Port of Seattle and City of Tacoma



Conclusion

- The alignment of grant funding with new products coming to market creates a tremendous opportunity
- Low greenhouse gas profile for regional electricity is unique
- We have motivated elected leaders and communities



Questions?

