

Oregon Department of Transportation

Alternative Fuel Fact Sheet

Table 1 – ODOT Alternative Fuel Vehicles		
Type of Fuel	Number of Vehicles	Type of Vehicles
Flex Fuel – E85	N/A	Varies
Hybrid Passenger Vehicles	20	
Hybrid Truck	1	Hybrid Electric Bucket Truck
Plug-in Hybrid	3	Passenger vehicles
All Electric	5	Passenger vehicles

Table 2- Alternative Fuel Stations	
Type of Fuel	Number of Stations
Electric (Level 2)	7
Biodiesel (B20 summer, B5 winter)	57

Alternative Fuel Experience

Level of satisfaction with alternative fuels

If supplies continue to hold, renewable diesel seems to be the easiest for people to implement. Other than a tank maintenance program, no other infrastructure changes are needed.

Why did the DOT adopt alternative fuel vehicles?

State policies including the state sustainability plan, Zero-Emission Vehicle Program Memorandum of Understanding (ZEV MOU), energy goals, and greenhouse gas emission reduction strategies.

Combustion Fuel Types and Feedstocks

40% B20 in summer and B5 in colder months. Feedstock has been flexible as long as it met ASTM standard, but now tightening to avoid certain feedstocks in winter.

Also using 13% ethanol blend of gasoline and starting use of renewable diesel.

Procurement Process

ODOT has a “market basket” approach. They contract with most manufacturers and call to get quotes and bid manufactures against each other.

Future Plans

Starting in 2016 ODOT has a goal that 3% of all light fleet sedans purchased will be zero emission vehicles. As an agency, they are moving away from ordering diesel engines in light to medium fleet because operating costs are high. As result of reduced diesel purchases, their biodiesel use will go down.

Table 3 – Barriers to Adoption and Strategies to Address Barriers	
Barrier	Strategy for Overcoming Barrier

<p>Barrier 1: Incentive Availability through state tax sources were initially used, but went away after the first year.</p>	<p>Reduced need for fleet purchase incentives as costs are lowered and capital budgeting improves with experience.</p>
<p>Barrier 2: Uncertain Costs in the initial deployment led to fewer vehicle orders.</p>	<p>Gaining experience over time increases confidence in developing accurate cost estimates and suitability for fleet use.</p>

Photos



CNG Work Truck



CNG Work Truck



Plug-in Hybrid Sedan



Hybrid Electric Bucket Truck



Hybrid Electric Bucket Truck