

UCS Testimony in Support of SB 324  
Monday, February 2<sup>nd</sup>, 2014

Mr. Chairman and Members:

My name is Jason Barbose and I'm the Western States Campaign Manager for the Union of Concerned Scientists.

On behalf of UCS's 11,000 supporters in Oregon, thank you for the opportunity to provide comments on the Oregon Clean Fuels Program and SB 324.

Our Oregon members strongly support the Oregon Clean Fuels Program, as it is a way for the state to create new industries and jobs from home-grown sources of fuel and diversify fuel supplies to reduce our reliance on price-volatile imports while cleaning our air, improving public health, and reducing the level of the state's global warming pollution.

Some of the cleanest fuels are being developed from home-grown Oregon resources including:

- (1) low-carbon biofuels made from used cooking oil or residues from timber harvests that can be used in conventional cars and trucks
- (2) methane captured from landfills and wastewater treatment facilities that can replace fossil sources of natural gases used in busses and trucks.
- (3) electricity generated from hydroelectric dams and renewable sources like wind and solar that can be used to fuel electric vehicles (EVs)

The use of biofuels in the United States has grown by 500% over the last 10 years, proving that the US fuel system can change quickly in response to policy signals, and that compliance with the Oregon Clean Fuels program is eminently feasible.

California has seen billions in private investment for clean fuels and vehicle technology over the last eight years thanks to their low-carbon fuel and other policies to encourage cleaner energy while that state's overall economy has grown substantially during the same period. Oregon's in-state resources that can be converted to fuel should make it a magnet for

investment in clean fuels, but investors will need to see a signal from Oregon that the state is making a real commitment to these fuels or they will take their dollars elsewhere.

UCS and other researchers have identified many opportunities for developing fuels based on local resources and feedstocks, including the following:

- Oregon has significant biomass resources in both its urban wastes and residues from the forest products and agricultural sectors that can be converted into fuels. Eastern Oregon also has the potential to expand production of canola oil grown in rotation with wheat. These regionally specific resources can fit into Oregon's fuel system while complementing rather than displacing the existing industries.
- Oregon has the potential to produce millions of gallons a year of low-carbon biodiesel made from used cooking oil, and companies are already taking advantage of this local resource. Biodiesel produced from used cooking oil can cut global warming pollution by 75 percent relative to conventional diesel fuel, and can be added to conventional diesel to create a blend or used on its own.
- Oregon is also well suited to produce fast growing trees like hybrid poplar, which are among the fastest-growing trees in North America and an ideal source of sustainable biomass. According the Oregon Department of Environmental Quality, Oregon could produce more than 200 million gallons of fuel from this abundant local resource.
- And lastly, renewable natural gas from landfills, wastewater treatment facilities, and dairies can replace fossil sources of natural gas used in buses, trucks and other transportation applications, cutting the lifecycle emissions of these vehicles by more than half. Oregon landfills produce approximately 2.5 million tons of waste that could replace 75 million gallons of diesel fuel with a low carbon alternative.

In addition, electricity is already a lower cost fuel than oil, and as UCS analysis demonstrates, driving an electric vehicle in Oregon produces global warming emissions equivalent to driving a car with a mileage rating of 75 mile per gallon . With Oregon's abundant supply of affordably priced low carbon electricity, this is a fuel pathway that is poised to expand under a clean fuel standard, protecting consumers from high and volatile oil prices and reducing oil imports into the state. Moreover, the carbon pollution associated with driving an electric vehicle will continue to improve as Oregon's utilities decrease their procurement of electricity from coal and increases their share of electricity from renewable sources.

Moving forward with this policy will help Oregon reduce oil use. The Clean Fuels Program will complement measures in other sectors to develop new fuel sources and jobs, and help protect Oregon's citizens from the worst impact of climate change. Moreover, by creating a stable science-based policy framework that recognizes that cleaner fuels are more valuable than dirtier fuels, the policy will support investment in clean fuels production, bring down the costs of clean fuels, and encourage the development of the clean fuels industry in Oregon.

However, instability in the policy framework governing clean fuel markets is currently a major barrier to entry. This barrier is particularly significant for fuel such as cellulosic biofuels that have low cost feedstocks, but higher capital costs. These technologies require several years to finance, build, and start up, so until there is predictable policy framework extending several years into the future, it will be difficult to finance these large investments. This is why it is so important that the legislature lift the 2015 sunset on the Oregon Clean Fuels Program and provide long-term policy certainty

Once the sunset is lifted, the Oregon Clean Fuels Program, (and coordinated policies in other members of the Pacific Coast Collaborative,) will expand the market for low carbon (cellulosic) biofuels, supporting investment and bringing costs down.

For these reasons I request your support for SB 324 and supporting the Oregon Clean Fuels Program. Thank you.

Additional points if needed:

UCS research and analysis on vehicles and fuels has demonstrated the potential to cut projected oil use in half over the next twenty years through a focus on improved efficiency in all our uses of oil, together with expanded production of innovative clean fuels.

Two of the clean fuels with the greatest potential to cut oil use and reduce carbon pollution from transportation are electricity as a transportation fuel and cellulosic biofuels.

Oregon has the resources to be a leader in clean transportation. But transitioning from oil to cleaner alternatives takes time and a stable policy that allows all fuel types – gasoline, advanced biofuels, electricity, natural gas, etc – to compete based on their emissions, costs and other factors. Oregon's Clean Fuels Program encourages this exact type of competition and, when paired with similar policies in California and British Columbia, can create a regional market for clean fuels equivalent to the world's fifth largest economy.