Oregon Environmental Council
It's Your Oregon

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Testimony to the Senate Environment and Natural Resources Committee on Senate Bill 488

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Founded in 1968, the Oregon Environmental Council (OEC) is a nonprofit, nonpartisan, membership-based organization. We advance innovative, collaborative solutions to Oregon's environmental challenges for today and future generations.

Oregon Environmental Council supports SB 488 in order to build a stronger, more resilient economy, support jobs, improve health, and address climate change.

The Clean Fuels Opportunity

In 2009, the Oregon Legislature authorized adoption of the Low Carbon Fuels Standard, now known as the Oregon Clean Fuels Program.

Since then, gas prices have nearly doubled and they will continue marching upward, robbing Oregon of dollars that could be circulating in our economy. In contrast, clean fuels job are a growth sector for Oregon and our region. When we make fuels in Oregon, these companies not only benefit our state through direct employment, but also through the economic activity generated by their Oregon-based supply chain. ZeaChem, an advanced cellulosic ethanol biorefinery located in Boardman, draws from 65 companies all throughout the state. Brammo, an electric motor cycle company that is gaining national fame, is expanding operations and recently announced the addition of 130 jobs in Southern Oregon. Companies like SeQuential Pacific Biodiesel create jobs for Oregonians, pay family wages and add to the tax base.

- Full implementation of the Clean Fuels Program builds on the strong foundation these companies have started and creates demand for more investment in Oregon. But only by lifting the 2015 sunset will Oregon create market certainty for these and the clean fuel companies to follow. The Clean Fuels Program has many advantages: it is technology neutral, performance-based, provides environmental certainty, and is flexible. It creates a more level playing field for a variety of fuels, including biofuels, electricity, natural gas, biogas and propane. Many of these clean fuels are cheaper than gasoline or diesel: Electricity is 4-5 times cheaper than gasoline per mile driven.[1]
- Propane (autogas) has been over $1.30 cheaper than gasoline over the last three years.[2]
- Biofuels have saved Oregonians $2.7 million at the pump since 2007.[3]
- Natural Gas was $2.00 cheaper than diesel per gallon equivalent in January 2013.[4]

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[1] U.S. Department of Energy, Idaho National Laboratory. "Comparing Energy Cots per Mile for Electric and Gasoline-Powered Vehicles." Available at: http://avt.inel.gov/pdf/fsev/costs.pdf

[2] Alliance Autogas Propane to Gasoline Comparison, 2010-2013

[3] Letter to Administrator Jackson from Governor Kitzhaber regarding the Renewable Fuel Standard, October 9, 2012.

[4] U.S. Department of Energy. Alternative Fuels Data Center. January 10 through January 25, 2013.

- An independent economic analysis of the program by Jack Faucett Associates found that Oregon drivers could save between $43 million and $1.6 billion in fuel costs over the 10-year period of the program.[5]

An Effective Policy

Oregon is not the first state to consider adopting a Clean Fuels Program. California and British Columbia already have similar programs in place and Washington State is likely to follow. In California, during the first five quarters of the program, double the number of credits were generated as were needed. An analysis by University of California at Davis found that if all costs were passed on to consumers, it would amount to 0.1 cents per gallon.[6] Hardly the exaggerated costs that opponents are raising. An analysis of California gas prices is attached. It shows no impact from the low carbon fuel standard, but price spikes from problems with oil refineries. This is an illustration that relying on oil is harmful and diversifying our fuel mix is necessary for fuel stability.

Oil Prices Rising, Reliance Harms Our Economy

In 2010 and 2011, while Oregonians were dealing with unemployment, oil companies were posting record profits. CNN Money ranked Exxon Mobile the most profitable company in 2010, raking in $30 billion that year alone.[7] According to the U.S. Energy Information Administration's American Energy Outlook 2013, even though production of tight crude production will increase through 2020, prices will remain at $100 per barrel in the reference case, possibly topping $150 per barrel in the same time period. After 2020, prices increase dramatically, particularly for diesel. Production declines as "producers develop sweet spots first and then move to less productive or less profitable drilling areas."[8]

The Oil Industry Is Not a Growth Sector for Oregon

Oregon has no petroleum production or refineries. The over $6 billion that we pay to import gasoline and diesel goes to benefit large, multinational corporations. The station owners in Oregon benefit very little from fuel sales. In fact, for every $3.50 spent on a gallon of gas, only $0.04 benefits the station owner. For every three dollars a consumer or business spends on gasoline, oil companies get over a dollar in profit. The vast majority—over a dollar—goes to companies that produce crude oil, like Exxon Mobile.[9]

Oil Is Bad for Our health

Tailpipe pollution contributes to cardiovascular and respiratory illnesses, like asthma. Oregon has one of the highest burdens of asthma, ranking us in the top five states for adults with asthma in 2009. Asthma hospitalizations cost us $28 million in 2008 and an estimated $71 million in lost productivity from missed school and work days.[10] A recent study by the University California at Los Angeles further solidified the link between traffic pollution and increased rates of autism.[11] In contrast, lower carbon fuels are also cleaner burning, eliminating carcinogens (like benzene found in gasoline), particulate matter (from diesel combustion), sulfur compounds, and other harmful emissions.

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[5] Jack Faucett Associates. "Economic Impact Analysis of the Low-Carbon Fuel Standard Rule for the State of Oregon." Report number 11-AQ-004d. January 2011. Available at: http://www.deq.state.or.us/aq/committees/docs/lcfs/appendixDeconimpact.pdf

6 Yeh, Sonia and Julie Witcover. 2012 Status Review of California's Low Carbon Fuel Standard (LCFS) 2011-August 2012. (November 14, 2012). Available at SSRN: http://ssrn.com/abstract=2174817

[7] http://money.cnn.com/galleries/2011/fortune/1104/gallery.fortune500_most_profitable.fortune/index.html

[8] U.S. Energy Information Administration. Annual Energy Outlook 2013 Early Release. Available at: http://www.eia.gov/forecasts/aeo/er/pdf/0383er(2013).pdf

[9] Miu, Simon. "Following the money: Who profits from your pain at the pump?" Natural Resources Defense Fund. Available at: http://switchboard.nrdc.org/blogs/smui/following_the_money_whos_profi.html

[10] Oregon Asthma Program. 2010. The Burden of Asthma in Oregon: 2010. Available at: http://public.health.oregon.gov/DiseasesConditions/ChronicDisease/Asthma/Documents/burden/orasthma2010.pdf

[11] Becerra, et al. " Ambient Air Pollution and Autism in Los Angeles County, California." Environmental Health Perspectives. Vol. 121, No. 3, March 2013. Available at: http://ehp.niehs.nih.gov/pdf-files/2013/Mar/ehp.1205827_508.pdf

Addressing Climate Change: A Moral and Economic Imperative
Advancing clean fuels development and use is critical for Oregon to meet its greenhouse gas reduction goals. The transportation sector is responsible for the largest share of Oregon's emissions and only by pursing cleaner vehicles, cleaner fuels and reduced miles traveled can we bring emissions down to safer levels.

Oregon is not immune from climate damages. Costs of climate change by 2020 include:

- $48 million from property and crop damage due to extreme weather events
- $109 million in lost forest assets from wildfires and pest and disease damages
- $764 million in health-related costs
- $632 million in lost revenue from reduced salmon populations[12]

Every year that we delay implementing solutions increases the likelihood of damages to Oregon's health and well-being. We know from recent events in the U.S. that extreme weather events hurt real people and businesses. It's heart breaking to watch people stranded on rooftops or trying to find one savable family memento after a flood. Or to watch farmers survey their land when all their hard work has been erased by drought. Or to see a small business owner try to figure out how to start over when their business has been wiped out by a hurricane. These costs are real, they're personal, and they're going to keep happening unless we take action.

The time to act is now. We cannot wait. OEC urges you to support full implementation of the Clean Fuels Program by passing SB 488 and lifting the 2015 sunset.

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[12] Niemi, Ernie. "An Overview of Potential Economic Costs to Oregon of a Business-As-Usual Approach to Climate Change." ECONorthwest and The Climate Leadership Initiative. February 17, 2009. Available at: http://www.theresourceinnovationgroup.org/storage/economicreport_oregon.pdf

A Look Behind the Recent Exaggerated Cost Figures
History Repeats Itself

March 2013

Oil companies have a history of spreading misinformation and exaggerating costs. Past standards for air pollution have provided critical public health protections at low cost—despite decades of "sky-is-falling" economic claims from regulated companies. The fact is, efforts to clean up pollution have paid huge economic and public health dividends. Yet again though, oil companies are trotting out the usual exaggerated studies as Oregon gets ready to clean up pollution. History tells us that estimates developed by regulated industries routinely inflate cost predictions and ignore societal benefits. These latest attempts to undermine Oregon's Clean Fuels Standard are no different.

Industry Estimates Routinely Inflate Costs

Regulation	Industry estimate	Actual costs	Industry exaggeration
Previous State and Federal Fuel Regulations			
Reformulated Gasoline Phase 1 (RFG)	23 cents/gallon (WSPA) [i]	2.2 cents/gallon* [ii]	10 times
Tier II Gasoline Sulfur Standard	2.6 [iii] - 5.7 [iv] cents/gallon (NPRA)	0 cents/gallon** [v]	∞
500 ppm Sulfur Highway Diesel Fuel Standard	3.3 cents/gallon (NPRA) [vi]	2.2 cents/gallon* [vii]	1.5 times
Ultra Low Sulfur Diesel Fuel Standard	14.7 - 48.9 cents/gallon (API) [viii]	6.5-10.7 cents/gallon*** [ix]	1.5 – 4.5 times
Other Stationary and Mobile Source Regulations			
Federal Acid Rain Program	$3.5 - 7.5 billion/year [x]	$1.0 - 1.4 billion/year [xi]	2.5 – 7.5 times
1990 CAA Amendments – general	$104 billion/year [xii]	$22 billion [xiii]	4.7 times
Benzene	$350,000/plant [xiv]	$0/plant [xv]	∞
1996 Federal Tier 1 Vehicles Standard	$432/vehicle [xvi]	$88.42/vehicle [xvii]	5 times
CFCs – Auto Air Conditioners	$650 - $1,200/vehicle [xviii]	$40-$400/vehicle	1.6 – 30 times

* Some experts suggest that it is not possible to attribute a 2.2 cent / gallon cost increase in fuel prices to a discrete fuel policy measure, meaning actual costs due to RFG Phase 1 and the 500 ppm sulfur standard are mostly unnoticeable

** Cost analysis cited states that it is "very likely" that there is no price increase attributed to the regulation

*** No appreciable differences have been identified above initial Government (EIA) estimates

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Citations

[i] Roland Hwang and Matt Peak, *Innovation and Regulation in the Automobile Sector: Lessons Learned and Implication for California's CO2 Standards*, NRDC (2006), available at docs.nrdc.org/air/files/air_08030301A.pdf.
[ii] John F. Anderson and Todd Sherwood, *Comparison of EPA and Other Estimates of Mobile Source Rule Costs to Actual Price Changes*, Office of Transportation and Air Quality, U. S. Environmental Protection Agency, 2002.
[iii] George R. Schink and Hal J. Singer, *Economic Analysis of the Implications of Implementing EPA's Tier 3 Rules*, Navigant Economics, Prepared for Emissions Control Technology Association (2012), available at www.navigantеconomics.com/docs/061212%20Economic%20Analysis%20of%20the%20Implications%20of%20Tier%203%20Sulfur%20Reduction%20Final_embargoed%20copy.pdf.
[iv] Anderson, supra note ii.
[v] Schink, supra note iii.
[vi] Anderson, supra note ii.
[vii] Id.
[viii] *The Transition to Ultra-Low-Sulfur Diesel Fuel: Effects on Prices and Supply*, U.S. Energy Information Administration (2001), available at www.eia.gov/oiaf/servicerpt/ulsd/.
[ix] *Ultra Low Sulfur Diesel Cost: Is It More Expensive Than Regular Diesel*, CarsDirect (2010), available at www.carsdirect.com/car-buying/ultra-low-sulphur-diesel-cost-is-it-more-expensive-than-regular-diesel. For government estimates, see: Energy Information Administration. The National Energy Modeling System: An Overview 2000, (March 2000), available at ftp://tonto.eia.doe.gov/forecasting/05812000.pdf, also see http://www.factcheck.org/2008/05/diesel-fuel-and-gasoline-costs/
[x] A. Denny Ellerman, , *Ex-post Evaluation of Tradable Permits: The U.S. SO2 Cap-and-Trade Program*, Center for Energy and Environmental Policy Research (2003), available at web.mit.edu/ceepr/www/publications/workingpapers/2003-003.pdf.
[xi] Id.
[xii] Business Roundtable. "Clean Air Act Legislation Cost Evaluation," January 18, 1990; E.H. Pechan & Associates, Inc., contracted by EPA. "Clean Air Act Section 812 Prospective Assessment: Cost Analysis Draft Report," September, 1995.
See also Suzanne Brooks, Testimony on EPA's Proposed Rule for "National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial- Institutional, and Small Industrial- Commercial-Institutional Steam Generating Units", May 24, 2011 Public Hearing, available at http://www.edf.org/sites/default/files/SusanneBrooks_EPAPublicHearingTestimony_24MAY2011_FINAL.pdf.
[xiii] Id.
[xiv] Hart Hodges, *Falling Prices: Cost of Complying With Environmental Regulations Almost Always Less Than Advertised*, Economic Policy Institute (1997), available at www.epi.org/page/-/old/briefingpapers/bp69.pdf.
[xv] Id.
[xvi] Hwang, supra note i.
[xvii] Id.
[xviii] Hart Hodges, *Falling Prices: Cost of Complying With Environmental Regulations Almost Always Less Than Advertised*, Economic Policy Institute (1997), available at www.epi.org/page/-/old/briefingpapers/bp69.pdf.

For additional information and research on the common overestimation of costs and underestimation of benefits by the industry in response to environmental regulations, see:

1) Sidney Shapiro & Ruth Ruttenberg, *Setting the Record Straight: The Crain and Crain Report on Regulatory Costs*, Center for Progressive Reform (2011), available at www.progressivereform.org/articles/SBA_Regulatory_Costs_Analysis_1103.pdf. (Disproving exaggerated claims of the economic burden that federal regulation has on business).

2) Winston Harrington, et al., *Reforming Regulatory Impact Analysis*, Resources for the Future (2009), available at www.rff.org/rff/documents/rff.ria.v4.low_res.pdf. (Examining the importance of robust and accurate regulatory impact analysis).

3) *Industry Claims about the Costs of the Clean Air Act*, Committee on Energy and Commerce (2009), available at democrats.energycommerce.house.gov/Press_111/20090616/dc_industryjobs.pdf. (Examining the Clean Air Act's bigger achievements against the backdrop of exaggerated predictions of almost certain failure).

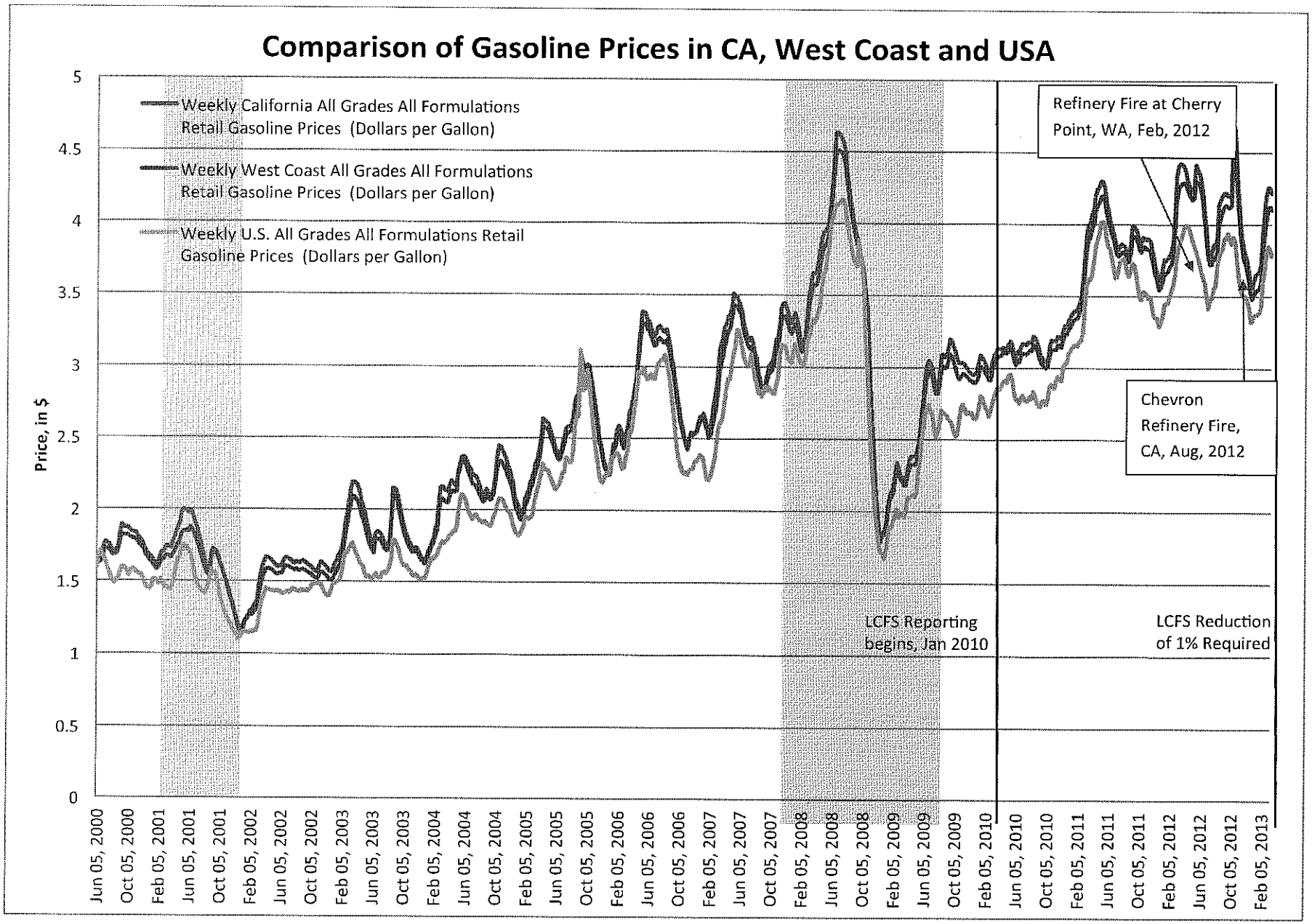
4) Frank Ackerman, *The Unbearable Lightness of Regulatory Costs*, 33 Fordham Urb. L.J. 1071 (2006), available at www.ase.tufts.edu/gdae/pubs/wp/06-02unbearablelightnessreg.pdf. (Identification of exaggerated trade-off between economic prosperity and environmental protection as based on mistaken premises).

5) Lauraine G. Chestnut and David M. Mills, *A fresh look at the benefits and costs of the US acid rain program*, Journal of Environmental Management (2005), available at epa.gov/airmarkt/presentations/docs/jemarpbenefitsarticle.pdf. (Update on the progress of Title IV of the 1990 Clean Air Act Amendments).

6) Liza Heinzerling & Frank Ackerman, *The Humbugs of the Anti-Regulatory Movement*, 87 Cornell L. Rev. 648 (2002), available at www.law.georgetown.edu/faculty/Heinzerling/Articles/Heinzerling_Humbugs.pdf. (Identification of parties and studies behind the myths and conclusions of prohibitively expensive regulations).

7) Thomas C. McGairty & Ruth Ruttenberg, *Counting the Cost of Health, Safety, and Environmental Regulation*, 80 Tex. L. Rev. 1997 (2002). (Identification of the inherent problem in the frequent overreliance on ex-ante predictions and studies lacking an empirical basis).

8) Eban Goodstein, *Behind the Numbers: Polluted Data*, The American Prospect (2001), available at prospect.org/article/behind-numbers-polluted-data. (Examples of past overestimation of costs and underestimation of benefits).



Note: Shading shows NBER designated recessions. Data from: US Energy Information Administration, State of California, National Bureau of Economic Research

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Clean Fuels Now

SUPPORTERS as of 3-18-13

Clean Fuels Companies & Suppliers

- Alliance AutoGas
- Beaver Biodiesel
- Bi-Phase Technologies
- Blue Star Gas
- Brammo
- CalETC
- Cambrian Energy
- ChargePoint
- Clean Energy Fuels
- Clean Energy Renewable Fuels
- ClipperCreek
- Colombia Biogas
- Columbia Pacific Bio-Refinery
- Cool Planet Energy Systems
- EcoSpeed, Inc.
- ECOtality Inc.
- Electric Peoples Car of America
- Essential Consulting Oregon
- EV4 Oregon
- Family Generation Foods
- Green Lightning Consulting LLC
- Green Lite Motors
- Greenwood Resources
- HM3 Energy
- Imperium Renewables
- Inland Empire Oilseeds
- KersTech Vehicle Technologies
- Oregon Oils
- Pacific Ethanol
- Pacific PowerStock
- Powin Corporation
- Propel Fuels
- Rinehart Motion Systems
- Robinson Group, LLC
- Rising Phoenix
- SeQuential Biofuels
- SeQuential Pacific Biodiesel
- Summit Natural Energy
- TransEnergy Solutions
- Westport Innovations
- Whole Energy Fuels Corp.
- ZeaChem, Inc.

Fleets

- EcoShuttle
- GETIT Shuttle
- Hot Lips Pizza
- King Estate Winery
- One Green World/Northwoods Nursery
- Oregon City Golf Club
- Organically Grown Company
- Schwan's
- Willamette Valley Medical Transport

Trade Alliances & Businesses

- A to Z Wineworks
- Better World Club
- Brink Communications
- Carroll Investments
- Ceres
- Diane Dulken Strategies
- Environmental Entrepreneurs (E2)
- Equilibrium Capital Group
- Fluid Market Strategies
- Good Company
- Hartman Strong Hartman, LLC
- Hispanic Metropolitan Chamber
- Main Street Alliance
- Natural Choice Directory
- Neil Kelly Company
- Oregon Business Association
- Oregon Wheat Growers League
- Portfolio 21 Investments
- Renewable Natural Gas Coalition
- Russell Development Co.
- The Signal
- Thistle Restaurant
- Wildwood | Mahonia

Local Governments

- Association of Oregon Counties
- Metro
- Port of Morrow
- Port of Portland
- Portland Development Commission

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Non-Profit Organizations

- 1000 Friends of Oregon
- AFSCME Oregon
- American Lung Association, Oregon
- Beyond Toxics
- Citizens' Utility Board
- Climate Solutions
- Coalition for a Livable Future
- Columbia River Inter-Tribal Fish Commission
- Columbia Willamette Clean Cities Coalition
- Douglas County Global Warming Coalition
- Ecumenical Ministries of Oregon's Interfaith Power & Light
- Environment Oregon
- Environmental Defense Fund
- Focus the Nation
- Green For All
- League of Women Voters of Oregon
- National Wildlife Federation
- Natural Resources Defense Council
- Northwest District Association Air Quality Committee
- Onward Oregon
- Operation Free
- Oregon Conservation Network
- Oregon Environmental Council
- Oregon League of Conservation Voters
- Physicians for Social Responsibility, Oregon Chapter
- Sierra Club
- The Climate Trust
- Union of Concerned Scientists
- Upstream Public Health

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