



OREGON INC

Creating Oregon's Future 2011 - 2013 Innovation Plan

In the midst of a historic recession, the Oregon Innovation Council is making good on its promise to incubate new ideas into growing businesses, help established industries become more competitive and create a new economic future for all Oregonians.

In less than four years of state funding, the six initiatives of Oregon InC have brought \$195 million in federal and private grants back to the state, and are on track to generate more than **\$7 for every dollar the Legislature has invested.**

In tough economic times, Oregon InC is on track to help **create and retain more than 1,113 jobs** and incubate **15 new companies** creating innovative products as diverse as a revolutionary portable kidney dialysis machine, new malaria-fighting drugs and gas-sipping fuel injectors for aerial drones. It has helped build eight world-class university lab facilities, offering Oregon businesses the competitive advantage of instant access to ready-made R&D facilities, equipment and researchers they couldn't afford in-house.

Now, with the creation of the 2011-13 Innovation Plan, this partnership – combining the business savvy of the private sector, the creativity of the state's research universities and the broad-based resources of government – is finding new ways to build innovation into the DNA of how **Oregon does business.**

www.oregoninc.org
www.oregon4biz.com

business
oregon
where business grows

Created by the
Governor and
Legislature,
Oregon InC
partners with
Business Oregon
in the agency's
work to create,
retain, expand
and attract
business in
Oregon.



Introduction:

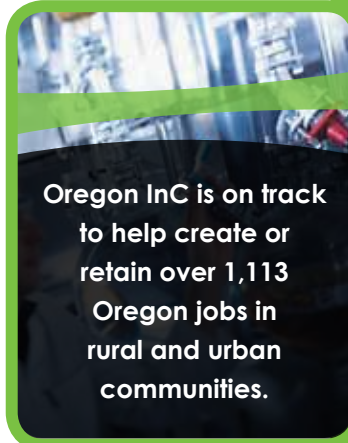
Oregon InC received 22 creative ideas from throughout the state for inclusion in the 2011-13 Innovation Plan. After a rigorous review process, the Council is **recommending \$18.95 million in Lottery Funds be invested in a portfolio of six initiatives that will continue Oregon's leadership** in nanoscience and green building, clean energy and bioscience – and create an exciting new opportunity that will establish Oregon as a world leader in the design, manufacture and integration of ultra efficient electric vehicles.

Included in the recommendation is **continued funding for Oregon's three Signature Research Centers**, which connect the state's research universities to businesses and provide research, mentoring and early stage “gap” funds that breathe life into innovations with strong commercial potential, such as creating building insulation from recycled styrofoam and a cost-effective water purification system that uses ultraviolet light and nano-materials to remove toxic pollutants from water.

The Innovation Plan also recommends industry-led initiatives that team Oregon's strong manufacturing sector with green energy ideas. Oregon InC's investment in wave energy will pay off in the coming months with the launch of a 150-foot buoy off Reedsport. In the coming biennium, nine more buoys will be linked to the state's electric grid, creating clean power and hundreds of living-wage jobs.

From its beginning, Oregon InC has tied its Innovation Plan to measurable, deliverable results. Before each of the proposed investments made the final cut, their ability to meet three specific performance measures was considered: **Will the investment create jobs; create companies, and increase the number of federal and private dollars flowing back to Oregon?** Successful proposals detailed a strong return on the state's investment and the backing of industry, both in material support and the active participation of its key leaders. As they get on their feet, successful proposals are weaned away from state funds, with new ideas and opportunities taking their place in Oregon's innovation ecosystem.

Every Oregonian who wants a stronger economy has a stake in innovation. It keeps existing businesses competitive by continually developing new products and improving existing ones. Innovation helps train the next generation of skilled workers. It makes our economy more diversified, so future downturns are less severe.



Oregon InC began in 2005, when the Governor and Legislature brought together more than 50 leaders from the private sector, the state's four research universities and government to create a new way to do business. The need to radically change how the state recognized, supported and funded technology-based economic development was obvious:

- Oregon was – and is – a small state, with a population and economy dwarfed by its high-tech neighbors to the north and south. The state couldn't spend its way to prosperity, but it could be competitive by concentrating key resources in areas where it already held unique advantages and for which there would be significant global markets.
- While Oregon's research universities were respected, they could not individually compete with national institutions or regional research clusters. But, by building one-of-a-kind shared labs open to all researchers from every Oregon university, and requiring collaboration between multiple campuses and faculties as a condition of funding, Oregon could become a national leader in select fields and better compete for research dollars.
- With the days of relying on its once abundant natural resources ending, Oregon needed a practical, business-led roadmap to building an innovation-based economy.

Over the next 10 months – and more than 1,200 hours of volunteer time – the Council pressed the lessons of the private sector onto an open, highly competitive process with the ultimate aim of supporting and funding only those cutting edge ideas that ultimately **create new jobs, new industries and a new innovation-based economy**. Each biennium, Oregon InC reopens the competition to identify and prioritize state investments that will drive Oregon's economy.

This ongoing scrutiny doesn't stop once an idea is chosen and funded by the Legislature. To ensure goals are met on a rigorous time schedule, Oregon InC empowered an audit committee of private sector leaders to track each initiative's progress, provide technical assistance and make changes if necessary – or stop funding altogether. Four Oregon legislators were asked to join the committee, which meets every quarter to review results.

Ultimately, like any private sector business, initiatives continue only as long as they can show they are operating at a “profit” for the state. Those helping Oregon industries become more competitive and sustainable are expected to “graduate” to economic independence eventually, while Oregon InC's research centers reduce the role of state funding needed as they mature.

Today, the Council remains an all-volunteer organization, driven by private sector leadership loyal to its key goals: Create jobs, create companies and bring outside dollars back to Oregon.



ONAMI

2009-11 Investment: \$5.65 million

Outcomes:

- On track to fund 10 projects creating new spinout companies such as Zaps Technologies, which can test polluted waters for multiple compounds at once rather than the current one-at-a-time method – saving time and money.
- Helped new start-up companies raise more than \$52 million, even in a tight market for venture capital.
- Helped bring \$68 million in federal and private grants to Oregon. The original milestone was \$60 million.
- On track to recruit 125 private sector companies to use ONAMI labs, generating \$1.5 million in fee revenue.
- Created 85 jobs* in private sector start-ups.

*Figures from the Audit & Accountability Committee report.

2011-13 Proposed Investment: \$5.5 million

Outcomes:

- Fund 7 additional new companies.
- Help start-ups leverage \$20 million from private sources.
- Bring \$70 million in federal and private grants to state.
- Create 105 jobs in start-up companies.
- Increase recruitment to 150 private sector companies to use ONAMI labs. Will provide first-time industry users with matching grants up to \$2,000.

In February, Oregon's first Signature Research Center received \$50 million worth of good news.

That's when Home Dialysis Plus (HD+) learned its portable kidney dialysis machine was being backed with as much as **\$50 million in private investment money** to bring its invention to the market. Company officials say that money will allow HD+ to hire **26 additional Oregonians at an average salary of \$90,000.**

Critical technologies for HD+ were developed in the ONAMI research labs in Corvallis, and a \$240,000 ONAMI "gap grant" enabled the company to build and test its prototypes.

ONAMI has quickly grown into a nationally recognized collection of laboratories, researchers and industries collaborating on cutting edge technologies that are creating a new generation of businesses and opportunities for Oregonians. ONAMI research and funding has helped create 15 companies, and brought more than \$100 million in federal and private research awards home to Oregon.

More than **115 Oregon businesses have taken advantage of ONAMI's unique R&D resources**, gaining access at competitive rates to basic research, technology development, clean rooms, prototyping and testing – all without the added cost to a growing business of in-house staff or facilities.

For instance, when McMinnville-based Northwest Unmanned Aerial Vehicle (NWUAV) needed to develop a unique fuel injection engine for drones that run on heavy jet fuels and must meet new federal regulations, it turned to ONAMI. Using ink-jet technology, ONAMI and NWUAV developed a prototype in only three months, with a design promising increased fuel efficiency, faster flight times, reduced emissions and **new jobs for Oregonians** building the engines.

As businesses nationwide search for R&D partnerships with universities, ONAMI provides the direct link between industry and Oregon's university system, helping lure new companies to the state.

ONAMI facilities include the Lorry I. Lokey Nanotechnology Laboratories in Eugene, an internationally-recognized facility with more than 20 advanced materials characterization and nanofabrication instruments; micro-level manufacturing and engineering research at the Microproducts Breakthrough Institute in Corvallis; and the Center for Electron Microscopy and Nanofabrication in Portland.

2009-11 Investment

\$5.65 Million

Oregon InC Signature Research Centers

OTRADI

Oregon Translational Research and Drug Development Institute
www.otradi.org

When DesignMedix needed a lab to test chemical compounds it believed could fight malaria – a disease that annually infects as many people worldwide as live in all of Europe, and kills one million of them – it turned to the unique facilities at OTRADI.

OTRADI is providing Oregon university researchers and small biotech companies with access to previously out-of-reach equipment and expertise, accelerating the time between a great idea in the lab and a new product on the market. **OTRADI is key to helping Oregon tap into the \$38 billion market in therapeutics, vaccines and diagnostics to fight infectious diseases like malaria, bacterial infections and West Nile virus.**

Drug screening and analysis that once would have taken a researcher six months to complete can now be finished in a week at OTRADI's "high-throughput screening" lab. As a result, researchers from Oregon universities and local biotech firms named OTRADI as a "supporting center" on federal and private grants totaling \$39 million this past year, meaning **OTRADI's experiments and data are helping win grants that might have otherwise gone out of state.**

OTRADI's role has only increased as state researchers scramble for a portion of the \$10 billion in National Institutes of Health (NIH) funding that is part of the federal stimulus plan.

OTRADI was a smart pick for DesignMedix, not only by confirming that their chemicals have the potential to make good anti-malarial drugs, but also by showing that they kill E. coli and Staph bacteria as well. Armed with the new data from OTRADI, DesignMedix has received additional funding from NIH and \$1 million in private funding, and is expanding its operations in Oregon.

OTRADI's labs act as a magnet, attracting 17 private clients this biennium. After a recent visit to OTRADI, the University of Utah suggested using OTRADI for all of their drug screening research rather than build their own similar high-throughput screening facility. And OTRADI's expertise extends far beyond the lab, offering scientific, business and financial planning in the broad biomedical arena. In the coming biennium, it will begin expanding its commercialization grants to help fund proof-of-concept studies and new start-up companies.



OTRADI is tapping into the \$38 billion market in fighting diseases like malaria and West Nile virus.

OTRADI

2009-11 Investment:

\$2.51 million

Outcomes:

- On track to generate more than \$40 million in federal, private and foundation dollars. Original milestone was \$15 million.
- Created a fee-for-service lab model that is on track to generate more than \$282,000.
- Created innovation gap grant fund to help commercialize promising ideas.
- On track to create 30 jobs*.

*Figures from the Audit & Accountability Committee report.

2011-13 Investment:

\$3.5 million

Outcomes:

- Fee-for-service lab will generate \$500,000 and help OTRADI operations become self-sustaining by the end of the biennium.
- Working with OUS and OHSU to build an Oregon Bioscience Entrepreneur Center in the Life Science Collaboration Complex on the South Waterfront in Portland that will take a coordinated approach to bioscience start-ups, delivering access to scientific expertise, core research facilities, venture capital and business management.
- Commercialize 4 OTRADI-affiliated technologies, or help current bioscience start-ups grow.
- Create 45 bioscience jobs.
- Generate \$25 million in grants.

The Green Building Lab at Portland State University uses thermal imaging cameras that capture colors seeping out of the windows of a home (see back cover). What builders see when they look at those colors is money vanishing into thin air. The colors are heat seeping through walls and windows, and the cameras are helping researchers discover new ways to make buildings more efficient and cost effective.

Oregon BEST's shared labs are helping Oregon become a national leader in developing green building research that is leading to new technologies, new products and new jobs in the construction industry.

Oregon BEST's 180 faculty researchers are testing solar simulators to determine the most efficient sunlight trajectories for gathering energy. They're measuring the insulating capacity of high-tech paints and using recycled Styrofoam as building insulation. And, researchers are transforming Oregon's expertise in wood products to turn fast-growing-but-brittle Poplar trees growing in Eastern Oregon into a dense, tough and sustainable construction material.

Oregon BEST

2009-11 Investment: \$2.75 Million

Outcomes:

- Helped build four state-of-the-art shared research labs providing critical tools and research to private companies and all university researchers.
- 6 patents already filed by Oregon BEST faculty in such areas as photovoltaics efficiency; chemical methods of hydrogen storage; and weather responsive shade controls for buildings to control temperatures and heating/cooling costs.
- On track to generate more than \$24 million in federal and private grants, five times the amount generated in the first biennium of funding.

2011-13 Proposed Investment: \$4.5 Million

Outcomes:

- Expansion of the Commercialization Grant Fund will help create 5 new, privately-backed green technologies.
- 30 new private sector jobs created.
- Entrepreneur-in-Residence program will hire experienced entrepreneur to work with both faculty and small businesses to accelerate commercialization.
- Grant writing help and other resources to increase number of SBIR/STTR grants by 20%.
- \$15 million in federal and private grants.

Oregon BEST provides private industry with access to a statewide network of research laboratories, facilities, test equipment and faculty expertise. The labs include:

- Green Building Materials Laboratory at Oregon State University, focusing on green building materials and connecting with companies in the architecture, engineering and building projects industries.
- Energy Studies in Buildings Laboratory at the University of Oregon, which is increasing understanding of how buildings and related transportation determine energy and resource use.
- Green Building Research Laboratory at Portland State

University, which features thermal characterization equipment, infrared cameras and a wind tunnel to help businesses analyze the efficiency of everything from green roofs to window glazing.

- SuNRise PV Laboratory at the University of Oregon and the Oregon Process Innovation Center (OPIC) for Sustainable Solar Cell Manufacturing at Oregon State University, which are working with the solar industry to help develop new



Recycled Styrofoam as building insulation? Oregon BEST is "greening" buildings

products and improve efficiency.

Oregon BEST is helping the building industries to embrace green principles, with R&D projects ranging from eco-districts to solar awnings; micro wind turbines to green roofs and smart transit. Oregon BEST's expertise and research are valuable tools for attracting renewable energy firms to Oregon.

In the coming biennium, its commercialization grants will help green building innovators get their ideas to market. A new entrepreneur-in-resident will offer hands-on advice and expertise to both faculty researchers and small businesses/entrepreneurs, helping with business plan development, identifying and overcoming technical hurdles and looking to connect with financing and markets.

And, Oregon BEST will provide technical advice that will boost by 20 percent the number of critical SBIR/STTR grants from the federal government to Oregon businesses to support research activities.

Consumer Seafood Initiative retained 350 jobs in coastal communities by funding programs to help fisherman and seafood processors.

OTRADI lab can perform thousands of drug action screenings per day, keeping research dollars and researchers in Oregon and positioning state to take advantage of \$10 billion in new National Institutes of Health stimulus funding.

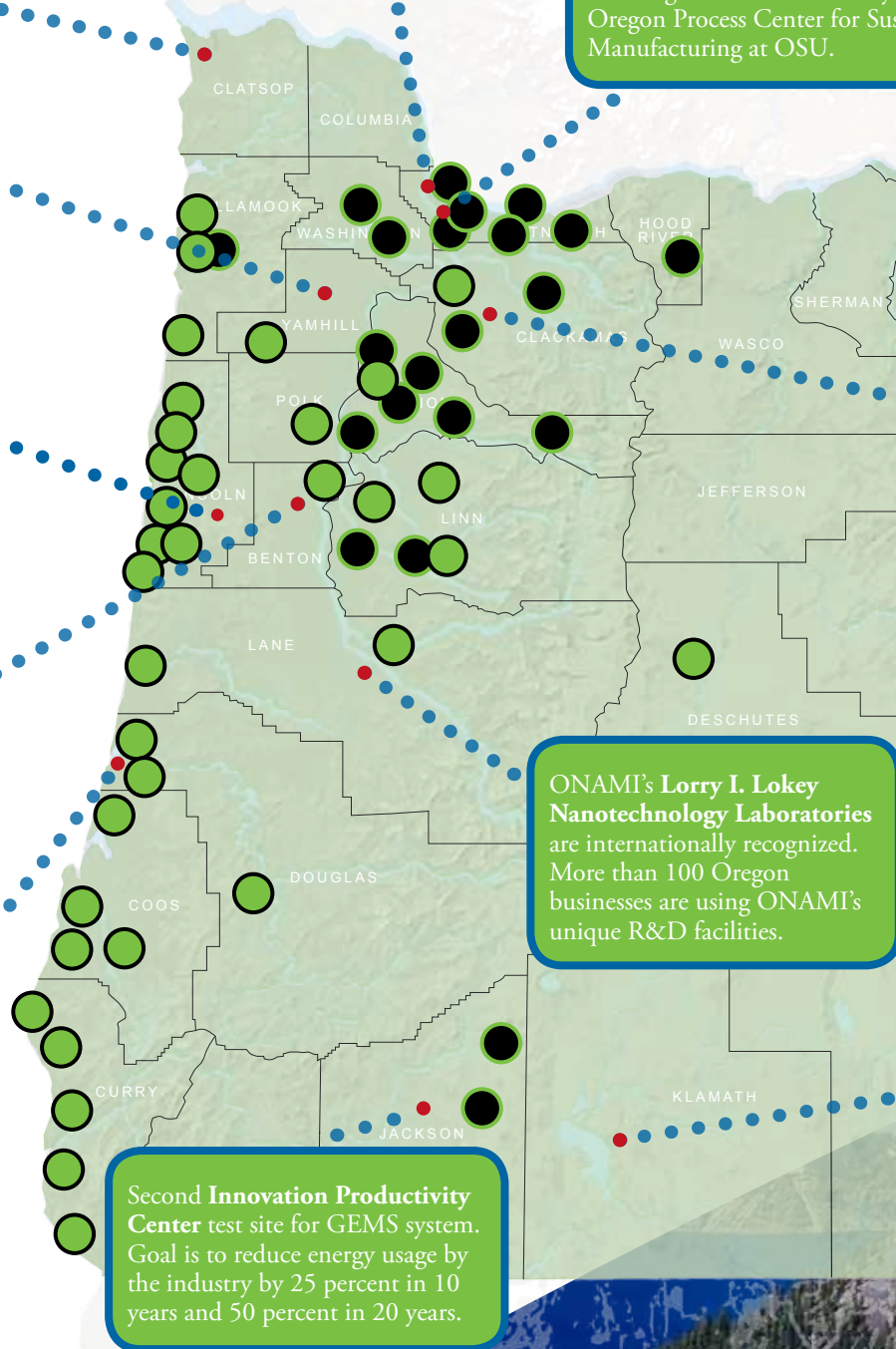
The Oregon BEST shared network is **building research laboratories** with state-of-the-art equipment and faculty found nowhere else: SuNRISE Photovoltaic Research Center in Clatsop; Energy Studies in Building Research Laboratory at the University of Oregon; Oregon Process Center for Sustainable Manufacturing at OSU.

Northwest Unmanned Aerial Vehicles used ONAMI labs for critical R&D on engines; company has grown from seven employees to 40.

Microproducts Breakthrough Institute is one of three ONAMI labs that have spawned 14 start-ups like Home Dialysis Plus, which has created a portable kidney dialysis machine that improves patient lives with reducing health care costs.

OWET helped create **Northwest Marine Renewable Energy Center**, one of just two new federal marine renewable energy centers in the nation. The Center will build a floating "test berth" to test wave energy devices.

OWET research and funding helping launch a **wave energy buoy**, creating 30 family wage jobs. Phase Two is expected to create 150 jobs in the fabrication, assembly, installation and maintenance for the new industry.



Second Innovation Productivity Center test site for GEMS system. Goal is to reduce energy usage by the industry by 25 percent in 10 years and 50 percent in 20 years.

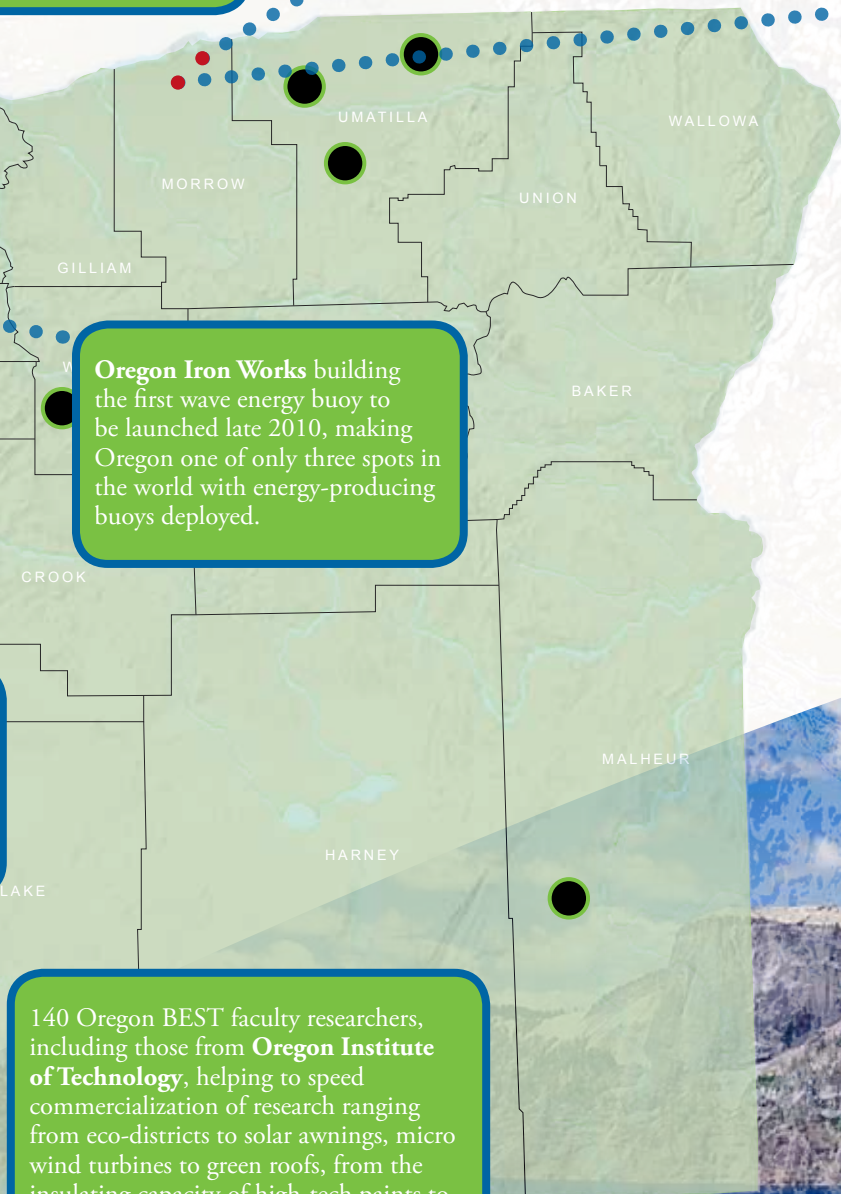
ONAMI's **Lorry I. Lokey Nanotechnology Laboratories** are internationally recognized. More than 100 Oregon businesses are using ONAMI's unique R&D facilities.

Diverse Economy For All Oregonians

work of green
es, facilities, test
nowhere else in the
Lab at University of
Buildings Laboratory
Oregon BEST Green
at Portland State;
ustainable Solar Cell

Innovation Productivity Center
testing **Green Energy Management
System (GEMS)**, innovative software
enabling companies to track water,
air, natural gas, electricity and
steam use, as well as greenhouse gas
emissions.

Innovation Productivity
Center has saved 365 jobs
by helping 47 Oregon food
processors such as **Boardman
Foods**, where it designed and
implemented a performance
measurement system for the
onion processing operations.



Oregon Iron Works building
the first wave energy buoy to
be launched late 2010, making
Oregon one of only three spots in
the world with energy-producing
buoys deployed.

The **Food Innovation
Productivity Center** has
engaged 47 Oregon food
processors in projects
throughout the state.

Denotes IPC project

The **Community Seafood
Initiative** has provided
direct product and market
development support to 34
businesses in Oregon.

Denotes CSI project

140 Oregon BEST faculty researchers,
including those from **Oregon Institute
of Technology**, helping to speed
commercialization of research ranging
from eco-districts to solar awnings, micro
wind turbines to green roofs, from the
insulating capacity of high-tech paints to
using recycled Styrofoam as insulation.

Oregon InC Strategic Investments

OWET

Oregon Wave Energy Trust
www.oregonwave.org

In a world where it seems that almost anything can be outsourced, one look at the 150-foot steel buoy being assembled in Reedsport makes it obvious that this thing isn't going anywhere except in the water.

The huge buoy being built by Oregon Iron Works for New Jersey-based Ocean Power Technologies (OPT) is a down payment on Oregon's future of clean, renewable electricity. Within a few months, this test buoy will be in the ocean. It will be joined next biennium by nine others and hooked to the electrical grid, providing power to 300 Oregon homes. Phase 3 will see 100 buoys, providing power to 10,000 homes.

Oregon is lucky to possess the three key ingredients needed to become a **global leader in extracting clean, sustainable energy from the restless motion of ocean waves**: coastal access, technological knowledge and the ability to supply the energy created to the existing electrical grid. The crucial fourth ingredient is OWET, which is **bringing together the federal, state and local resources needed to make wave energy a reality**.

OWET played a key role in luring OPT to Oregon. OWET helped fund and develop the research necessary to make OPT's project a reality – research that is now publicly available to any prospective developer, shortening the timeline for future wave energy installations. OPT received a \$200,000 OWET matching grant for permitting and development expenses. And OWET is bringing together coastal residents and fishermen, making sure they have a voice in decision-making that affects their homes and livelihoods.

OWET-funded research and analysis has built a regulatory roadmap, attracting the attention of wave energy developers around the world; including Scotland, New Zealand, Norway, Finland, Sweden and Spain. Its support helped win a national competition to create the **Northwest Marine Renewable Energy Center in Newport, one of just two new federally-designated and funded marine renewable energy centers in the nation**. The Center will build a floating "test berth" for wave energy buoys as well as fund extensive environmental impact studies, community outreach and other initiatives.

In the coming biennium, OWET support and matching grants will help developers tap **\$38 million that the U.S. Department of Energy has just funded for ocean energy R&D**. That money will help lure even more ocean energy developers to Oregon; 12 recruited by OWET have already expressed interest, ranging from site visits

to filing development permits and federal applications.

With these developers will come not only clean, renewable energy, but jobs for Oregon's strong manufacturing sector, as well as companies like Sause Brothers Ocean Towing, which has the contract with OPT to build the anchoring and mooring materials and deploy the 150-foot buoy waiting now in Reedsport.

The first commercial-scale buoy of its type launches in Reedsport in the Fall of 2010

OWET

2009-11 Investment:

\$3.01 million

Outcomes:

- 150-foot buoy owned by New Jersey-based Ocean Power Technologies is being built by Oregon Iron Works; will be deployed in coming months.
- 12 wave energy companies recruited by OWET have expressed interest in Oregon, ranging from site visits to filing development permits and federal applications.
- \$11.5 million generated in federal and private grants. Original milestone was \$7 million for the biennium.
- Scientific studies commissioned by OWET and offered at no cost to developers; critical in accelerating application and permitting process.
- Helped fund the Mobile Ocean Test Berth site off of Newport, which allows companies to test their buoys in ocean conditions.
- 45 private sector jobs* created in manufacturing, transportation and green technology.

*Figures from the Audit & Accountability Committee report.

2011-13 Proposed Investment: \$2.5 million

Outcomes:

- Second phase of OPT buoy development, with 9 additional buoys deployed off Reedsport coast and hooked to electrical grid, supplying electricity for 300 homes. Phase 3 will eventually power 10,000 homes.
- 150 private sector jobs created; at least three companies: AquaMarine, WaveGen and Wave Power A/S, are actively talking with coastal communities about opportunities to deploy buoys, which will be constructed in Oregon.
- Matching grant program to at least 10 wave developers to leverage R&D grants from U.S. Department of Energy's \$38 million wave energy program.



In Ashland, Brammo is making electric motorcycles that go over 100 mph. Arcimoto of Eugene makes a 2-seat electric car that can go 50 miles on a charge – and you can get air conditioning as an option. And, Barefoot Motors manufactures electric ATVs in Ashland.

Oregon is becoming a national leader in the design and manufacture of ultra efficient electric vehicles (EVs), parts and charging station infrastructure. The first of more than 2,000 quick charging stations expected to be installed in Oregon over the next two years is already in downtown Portland. [More than 40 Oregon companies are currently working on EV-related technologies](#), from batteries to motors, charging stations to electronic components.

DRIVE Oregon

2011-13 Proposed Investment: \$2.45 million

Outcomes:

- Leverage federal and private financial support for research and commercialization of EVs and component part developers and manufacturers.
- Create 166 direct jobs in first biennium.
- Identify and match federal grant and loan programs with specific Drive Oregon/OUS initiatives, and offer administrative support and advocacy for their successful completion.
- Help establish the regulatory and testing framework for the next generation of ultra efficient vehicles and components.
- Build the EV supply chain both locally and globally by creating synergies between Oregon's existing clean tech, advanced manufacturing, software and high technology sectors.
- Facilitate collaboration between Oregon University System institutions, utilities, state and local government entities and Oregon electric vehicle industry stakeholders to develop and commercialize next-generation transportation technologies and products.

Drive Oregon is a new initiative that in the coming biennium will take advantage of this momentum by creating an organization that will drive commercialization efforts across the state; help researchers and fledgling companies compete for billions in federal and private grants; work with Oregon's research universities to support R&D that leads to new jobs and new companies, and foster collaboration around EVs among Oregon's innovative leaders in the clean tech, advanced manufacturing, software and high technology sectors.

While Oregon has a strong manufacturing sector that will be crucial in the development of EVs, [Drive Oregon's mission isn't to create a Northwest version of Detroit](#). With other states already spending tens of millions to build large-scale manufacturing plants, Drive

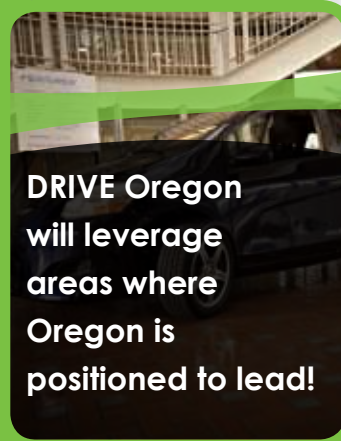
Oregon instead will leverage areas where Oregon is uniquely positioned to lead, including high-end embedded electronic components, engineering, design, software and semiconductors. All of these are critical to EV development no matter where vehicles are ultimately assembled.

Drive Oregon will also tap into the surge in federal funding to develop electric vehicles, part of the Obama Administration's pledge to have 1 million electric cars on the

road by 2015. [The U.S. Department of Energy already has more than \\$20 billion in EV funds available](#), and invested over \$6 billion in smart grid related research, demonstration and deployment projects in 2009 alone.

The federal Departments of Energy, Education and Transportation are making grants available for everything from scientific and engineering research on improved battery chemistries to smart grid communication. Drive Oregon will provide state researchers and new start-ups with matching grants that will make them more competitive nationally, as well as help absorb prohibitive application costs.

Drive Oregon will also work closely with Oregon's research universities on product development, prototyping and testing. The timing is right: In 1908, a Model T got better mileage than today's SUVs. Drive Oregon will help Oregon create a new generation of cleaner, more efficient vehicles that are [good for our environment and great for our economy](#).



DRIVE Oregon will leverage areas where Oregon is positioned to lead!

Oregon InC Strategic Investments

IPC

Northwest Food Processing Innovation Productivity Center
www.foodipc.com

Food processing is the state's **third largest manufacturing sector**, employing more than **200,000 Oregonians**. In its first two biennia, the IPC has reinvigorated Oregon's highly competitive food processors, sharing best practices and the latest research, identifying emerging opportunities and new trends while helping make an old industry more energy efficient and sustainable - and thus more competitive and profitable.

IPC has worked with 47 Oregon processors on projects that range from helping Bear Creek in Jackson County (the owners of the iconic Harry & David's) to evaluate their production and warehousing efficiency, to designing and implementing a performance measurement system for the onion processing operations of Boardman Foods in Umatilla County.

The payoff: the IPC is on track to help these companies **retain or create 565 Oregon jobs** in the past two biennia.

IPC has tapped the accumulated knowledge of more than 650 industry workers from 146 plants to create The Knowledge Exchange, a 24-hour web-based source of best practices, training workshops and tips designed to make plants more efficient and productive.

Its Green Energy Management System (GEMS) test sites use innovative software to help companies track their water, air, natural gas, electricity and steam use, as well as greenhouse gas emissions – contributing to the IPC's goal to **reduce the industry's energy use by 50 percent in 20 years**.

IPC's work has drawn national attention as a model of helping an industry transition from highly competitive to highly collaborative. A final biennium of funding will cement these gains, allowing the IPC to become a sustainable, industry-funded initiative.



IPC technology helps
food processors
become more efficient
in using water, air,
natural gas, electricity
and steam



IPC

2009-11 Investment:

\$1.62 million

Outcomes:

- On track to create/retain 565 jobs* over two biennia.
- Developed and launched The Knowledge Center, a 24-hour web-based source of best practices, training workshops and tips designed to make plants more efficient and productive. The Center was developed with the involvement of more than 650 food processing workers and 146 processing plants.
- Completing 10 energy efficiency audits, which measure energy usage at a plant and develop documented plans to reduce waste, increase profits.
- Completing 16 productivity audits with an annual savings to companies of more than \$3 million. The productivity audits track and measure such processes as harvesting practices and eliminating waste in packaging.
- Generating at least \$2 million in federal and private funding.

*Figures from the Audit & Accountability Committee report.

2011-13 Proposed Investment:

\$500,000

Outcomes:

- Final biennium of state funding for this initiative. Grants and industry-funded support will cement gains made over the last two biennia that have helped turn a highly competitive industry into one with greater collaboration and sharing of best practices and opportunities.
- Transition funding will continue developing educational workshops and providing forums for both processors and suppliers to learn innovation best practices, models and techniques, and help them to identify emerging opportunities and trends.
- Hire project manager and an innovation specialist to create and deliver innovation strategy, diagnostics and models, courseware, run forums and otherwise disseminate innovation content.

Oregon InC Members and Their Affiliations

Voting Members

David Chen, Chair, Equilibrium Capital Group LLC
Ryan Deckert, Co-chair, Oregon Business Association
Ted Wheeler, Oregon State Treasurer
Tim McCabe, Business Oregon
Rich Bader, EasyStreet Online Services
Matt Donegan, Forest Capital Partners LLC
John Morgan, HemCon Medical Technologies Inc.
George Pernsteiner, Chancellor, Oregon University System
Camille Preus, Oregon Community Colleges
Steve Pawlowski, Intel Corporation
Tim Stout, Oregon Health & Science University

Non-Voting Members: Legislators and Ex Officio

Senator Betsy Johnson, State Senate District 16
Representative Vicki Berger, State House District 20
Senator Frank Morse, State Senate District 8
Representative Tobias Read, State House District 27
Wally Van Valkenburg, Stoel Rives and Oregon Business Development Commission
Ann Bunnenberg, Electrical Geodesics, Inc.
Kirby Dyess, State Board of Higher Education
Brent Wilder, Oregon Independent College Foundation
Duncan Wyse, State Board of Education and Oregon Business Council

Technical Advisors

David Almodovar, Credit Suisse
Chandra Brown, Oregon Iron Works
Scott Dawson, Portland State University
Dan Dorsa, Oregon Health and Science University
Steve Eichenlaub, Intel Capital
Bill Feyerherm, Portland State University
Don Gerhart, University of Oregon
Michelle Girts, EnTranRight LLC
Gordon Hoffman, Northwest Technology Ventures
Ilene Kleinsorge, Oregon State University
Donald Krahrmer, Jr., Schwabe Williamson & Wyatt
Rich Linton, University of Oregon
Sheila Martin, Portland State University
Bill Newman, Northwest Technology Ventures

Mike Kluse, Pacific Northwest National Laboratories
Steve Rice, Umpqua Bank
Adrian Roberts, Battelle
Rick Warren, IBM
Lawrence Rentz, Climax Portable Tools
Richard Spinrad, Oregon State University
Darcy Winslow, DSL
Dan Bates, Thorn Run
Robert Wiltbank, Willamette University
Robert Frisbee, Strategic Solutions Inc
Erin Flynn, Portland Development Commission
Mark Frohnmayer, Arcimoto
Josh Kardon, Tonkon Torp





The Green Building Lab at Portland State University helps builders see the heat seeping through walls and windows as captured by a thermal imaging camera. The camera is helping researchers discover new ways to make buildings more efficient and cost effective.

OREGON INC

121 SW Salmon Street, Suite 205
Portland, OR 97204
Ph: 503.229.6051
Fax: 503.222.5050
www.oregoninc.org

business oregon®

775 Summer Street, NE
Salem, OR 97301
Ph: 503.986.0050
Fax: 503.581.5115
www.oregon4biz.com