THEODORE R. KULONGOSKI Governor



ANSWERING THE OREGON CHALLENGE

# **CLIMATE CHANGE**

**Problem:** The effects of global warming have serious implications for Oregon's economy and environment. Because of increased carbon emissions, temperatures are rising, snow packs are shrinking, storms and forest fires are becoming more severe, water for agriculture is becoming more scarce, while the risk of coastal flooding increases. Annual emissions of carbon dioxide have increased by almost 80% between 1970 and 2004, and experts predict a faster rate of global warming in the next 100 years than experienced in the last 10,000 years. At the same time, Oregon's population will continue to grow, increasing demands for efficient transportation and reliable energy.

**Solution:** Governor Kulongoski proposes a comprehensive legislative package that aggressively mitigates the impacts of global warming and puts Oregon on track to achieve our goal of reducing greenhouse gas levels to 10% less than 1990 levels by the year 2020. This package will make key investments in greenhouse gas reduction, energy efficiency and conservation, renewable energy, and sustainable transportation.

- Greenhouse Gas Reduction: The Governor will introduce legislation to advance Oregon's reduction of greenhouse gas emissions, including a bill authorizing the design of a regional cap and trade market system to cap carbon emissions from the state's largest sources, establishing greenhouse gas performance standards for all new electricity generation sources and strengthening state tools to regulate the emissions of greenhouse gases.
- Energy Efficiency: The Governor will build on Oregon's strong energy efficiency and conservation programs including a program for net zero emission buildings in the commercial and residential sectors, energy performance certificates for new buildings, broad-based energy efficiency financing tools for families and businesses, and new funding for energy efficiency for low income families.
- <u>Renewable Energy</u>: The Governor will advance Oregon's position as a national leader in renewable energy manufacturing and energy production by focusing on expanding solar energy projects, further progress on meeting the goal of 100% renewable energy for state government, and strengthening the Business Energy Tax Credit to increase investment in renewable energy projects statewide.
- Sustainable Transportation: In collaboration with his transportation initiative, the Governor will focus on encouraging low carbon fuels, establishing vehicle mile reduction goals and strategies to achieve those goals, and coordinating with utilities, automakers and developers to commercialize new technologies like plugin electric vehicles.

## **Greenhouse Gas Reductions**

As part of his comprehensive climate change legislation, the Governor will propose major new greenhouse gas emission reduction strategies. These strategies will put Oregon on a course to achieve its greenhouse gas reduction goals, strengthen Oregon's opportunity to become an economic center for clean technology businesses and services, and reduce the long-term threats to our economy and community posed by global warming.

- Cap and Trade Program: As part of a regional effort, this legislation will authorize Oregon's participation in a regional cap and trade program and expand the state's existing greenhouse gas reporting system. A citizen led public process will be established to assist the Department of Environmental Quality in developing the detailed design recommendations needed to participate in the program. Those recommendations will be brought back to the 2011 Legislature for consideration and review, prior to the regional program going into effect in 2012.
- Emissions Performance Standard: As part of achieving Oregon's long-term reduction goals, the state must ensure that no new sources of high-emitting greenhouse gases (particularly conventional coal) are added to our existing electricity production. This legislation will authorize the Public Utility Commission and the Department of Energy to develop an emissions standard that will require new energy production sources to be at least as clean as natural gas.
- Strengthening State Tools to Reduce Greenhouse Gases: This legislation authorizes the Environmental Quality Commission (EQC) to develop and implement regulations as part of a comprehensive program to assist in achieving the state's greenhouse gas emission reduction goals. Options the EQC could consider include: 1) development of a low carbon fuel standard to ensure vehicles are burning the cleanest fuel available; 2) restrictions on the use of substances that emit greenhouse gases, if alternatives are available; and 3) restrictions on idling commercial vehicles to prevent unnecessary exhaust and greenhouse gas emissions.

## **Energy Efficiency and Conservation**

Investing in energy efficiency is by far the most cost-effective way to meet our growing energy needs and reduce greenhouse gas emissions. It is more than four times cheaper than investing in new energy generation. Oregon already is ranked second in the nation for investing in energy efficiency, but much more can and must be done.

- Energy Performance Certificates: Energy performance certificates will serve a function similar to miles per gallon ratings for vehicles. With escalating energy prices, a homeowner or small business person has a right to know the energy performance of a home or building they invest in. These certificates will be generated at little cost and great benefit to potential building owners and tenants.
- Net-Zero Emissions Buildings: This legislation establishes a goal of net-zero emissions homes and buildings by 2030, with a first step of increasing energy efficiency in commercial and residential building codes by 30 percent and 15 percent respectively. The legislation creates a new concept called a "reach code." When a new code is published, the "reach code" or the next code to come into effect is also made public. This process will provide predictability to new building code requirements by publishing the next code three years in advance.
- Financing: This legislation gives local governments, both municipal and county, bonding authority to finance energy efficiency projects. One goal is to make residential energy efficiency projects financially viable by allowing local governments to create one large-scale project. Participating homeowners will be able to pay for the energy efficiency upgrades over time.
- Energy Efficiency Tax Incentives: Oregon can build on the success of the Business Energy Tax Credit (BETC) program by expanding the incentive to apply to large-scale energy efficiency investments. This legislation will expand the tax credit from 35 percent to 50 percent of the total costs of the project, up to \$20 million - similar to what was done in the 2007 session for renewable energy.
- Electric Vehicle Tax Incentives: The BETC and Residential Energy Tax Credit programs also will be adjusted to eliminate the existing tax credit for hybrid vehicles (\$1500) due to the large market penetration of those vehicles in Oregon, and shift an expanded tax credit (\$5000) to the purchase of plug-in electric and all-electric vehicles. This adjustment will encourage the purchase of zero and low-emission vehicles. The legislation also authorizes the Department of Energy to make future adjustments to the program as technology changes and the alternative fuel vehicle market expands.
- Low-Income Support: A new "Energy Matchmakers" account in the Department of Housing will be created and funded to provide assistance to improve energy efficiency for low-income households. This fund will leverage federal and private sector investments. Because of this effort, 800 low-income homes in Oregon each year will become more energy efficiency, saving approximately \$316 per year, per home in energy costs.

## **Renewable Energy**

The Governor will advance Oregon's position as a national leader on renewable energy production and manufacturing of renewable energy products by focusing on expanding solar energy projects, meeting the goal of 100% renewable energy for state government, and strengthening the Business Energy Tax Credit to increase investment in renewable energy projects statewide.

- Expand Solar Pilot Projects: To accelerate and expand the use of solar energy in Oregon, this legislation will create a production incentive pilot program that will pay for the electricity produced by a solar project, rather than for the capital investments. Known also as a feed-in tariff, this type of incentive program has led to the installation of more than 2,500 megawatts of solar electricity in Germany. The objective of Oregon's pilot program is to determine if production payments make it more affordable for individuals and communities to invest in solar energy, which could lead to the acceleration and installation of renewable projects.
- Strengthen Incentives: Oregon has been tremendously successful in incentivizing renewable energy through the Business Energy Tax Credit (BETC) program. The Governor is committed to making BETC even more effective by creating a BETC Energy Fund that would create up-front funding options under the BETC. Citizens would be able to donate money into the fund and take a tax credit on the donation, much like the Cultural Trust program.
- Lead by Example: The Governor established in 2006 a goal of 100% renewable electricity use for state government. Already, state agencies and universities are developing innovative and ambitious projects to further this objective, such as the ODOT solar highways initiative and a geothermal campus for the Oregon Institute of Technology. To help meet this goal and have the state lead by example, we need to increase our investment in state renewable energy projects and green power, as well as give the state clear authority to engage in those efforts.

# **Sustainable Transportation**

The Governor recognizes the dual need to both invest in transportation while also advancing options that reduce greenhouse gas emissions. That's why the Governor's climate change and transportation packages must be complementary, addressing the state's growing transportation needs while also takings actions to reduce carbon. The Governor's package will put forward several sustainable transportation measures that focus on reducing vehicle miles traveled, expanding transportation options, and encouraging new vehicle technologies.

- Encouraging Alternative Vehicle Technologies: The Governor's transportation initiative will encourage the use of alternative technologies like plug-in hybrid and all-electric vehicles. The state will shift its business and residential energy tax credits from widely used hybrid vehicles to new vehicles that produce less carbon. As vehicle manufacturers introduce new technologies, the state will pursue public and private partnerships to ensure Oregon is the place to implement new vehicle technologies, such as charging stations for electric vehicles.
- Adopting Low Carbon Fuels: This will authorize the Environmental Quality Commission to develop a low-carbon fuel standard similar to standards in Washington and California. This standard will require fuel providers to reduce the average carbon intensity of fuels sold by 10% over time. A low-carbon fuel standard will help reduce greenhouse gas emissions but also provide companies with flexibility to meet the standard through innovation and new technology.
- Expanding Transportation Options: The Governor is committed to setting an overarching vehicle miles traveled (VMT) reduction goal for the state. Reducing discretionary trips in single occupancy vehicles will be a high priority, particularly in urban areas where more transportation choices exist. This will include an expanded Transportation Options program to help provide relief from high fuel prices and enhance community livability through expanded pedestrian and bicycle programs, increased numbers of carpools and vanpools, a statewide rideshare program, education and marketing, and incentive programs designed to reduce cars on our roadways.
- Accounting for Carbon in Transportation Planning: This legislation directs the Oregon Department of Transportation (ODOT) to develop a least cost planning model similar to what utility companies currently use that will be applied when solving transportation problems. This modeling directs ODOT to consider the least cost option, such as increased investments in rail or transit, in order to relieve congestion, rather than just building additional capacity.