

Addenda



Climate Advisory Team Members' Responses to CAT Report

The following responses were submitted by members of the Climate Advisory Team. They can also be found in Appendix N of this report.

Senator Delvin's response is in reference to an earlier draft of the Climate Advisory Team's report; therefore, the page numbers referenced in his response do not correspond to the page numbers in this document. The earlier draft, *Doing Our Share: A Comprehensive Approach to Reducing Greenhouse Gases in Washington state*, can be found on Ecology's Climate Change website at http://www.ecy.wa.gov/climatechange/cat_meetings.htm

Response from Senator Jerome Delvin January 22, 2008

› Doing Our Share: A Comprehensive Approach to Reducing Greenhouse Gases in Washington state: Recommendations of the Washington Climate Advisory Team. (Released: January 16, 2008)

This Minority Response (Response) is submitted to address the Washington Climate Advisory Team's report, *Doing Our Share: A Comprehensive Approach to Reducing Greenhouse Gases in Washington state*, released January 16, 2008 (Report).

Individuals joining in this Response include: Sen. Jerome Delvin

"While on a per capita basis transportation emissions are similar, emissions from electricity, RCI fuel use, and industrial processes are significantly lower than the U.S. average. This discrepancy... is attributable to the state's abundant hydroelectric resources, and the limited presence of large, emissions-intensive industrial sources.

- The Report, page 17

Introduction

The Climate Advisory Team (CAT) was created with an Executive Order signed by Governor Gregoire on February 7, 2007. The Department of Ecology (Ecology) and Department of Community, Trade and Economic Development (CTED) were charged with creating the CAT, which consists of leaders from business, academic, tribal, state and local government, religious and environmental leaders. CAT initially convened in March 2007 to advise the Directors of Ecology and CTED on the full range of policies and strategies that should be considered in order to achieve the goals of Governor Gregoire's Executive Order: reduce emissions, create clean energy jobs, and reduce expenditures on imported fuels. Resulting from their efforts, the Report seeks to identify areas for progress towards its goals, as well as means for achieving them.

This Response identifies inherent problems with the Report, along with the inadequateness of the Report in consideration of all relevant factors. More specifically, this Response succinctly highlights CAT's reliance upon bad science and its flagrant avoidance of alternative solutions that would better serve the citizens of Washington. It should be noted that this Response relies in part on an analysis from James M. Taylor, Senior Fellow of Environmental Policy of The Heartland

Institute, attached hereto as Exhibit A: Analysis of Final Draft Recommendations of the Washington Climate Advisory Team, released January 17, 2008.

Basis of the Report

The Report begins its assessment of the problem with reports provided by the United Nation's Intergovernmental Panel on Climate Change (IPCC). The IPCC analysis is based on global concerns and potential global mitigation efforts. Notably, the IPCC does not conduct any of its own studies; it merely publishes those of self-appointed scientists who are undoubtedly motivated by acquisition of research dollars¹ and their own agendas. The IPCC was charged with creating both a problem and solution, for which they could be credited, to be implemented by individual countries. CAT's reliance upon global studies as a confirmation of a problem that needs to be addressed in Washington is misguided at best.

The scientific conclusions for Washington provided by CAT were not peer reviewed. The only contributors to the Report were directed to measure the problem, identify the aggravating factors, and recommend solutions — all of which assume there is a problem that Washington can favorably address beyond maintaining its stellar emissions status highlighted in the opening quote of this Response.

Economic Considerations

The Report asks: What Will Meeting the state's Goals Cost? (see Report, p. 7) In its feeble attempt to address that question, the Report only highlights the projected savings in the long-term future via greater fuel efficiency and lesser reliance on imported fuel sources, yet never makes any indication of the actual costs of implementation of the recommendations of the Report. For example, the Report addresses how many jobs will be created by following their recommendations, yet makes no mention of how many jobs will be lost in turn.

Avoidance of Necessary Considerations

Not surprisingly, the Report repeatedly calls for “establishing pricing transportation pricing mechanisms that raise the cost of single-occupant vehicle travel.” In other words, artificially control the consumer market for automobiles to the point that nobody can afford one through the use of tougher emissions standards, reporting requirements by manufacturers, and incentives for manufacturing cost-prohibitive electric cars. The lack of confidence in consumers and consumer-driven automobile manufacturers to address the changing concerns of society are ignored completely.

Further, the Report identifies the biggest contributing sector to greenhouse gases as “transportation,” yet no distinction is made between forms of transportation, other than the type of fuel used. For example, there is no discussion of airplane or ferry emissions, much less, what will be done to curb the same.

› Lack of Alternatives Presented

The Report outlines twelve recommendations for mitigating the effects of climate change, none of which include alternate sources of energy except as pertaining to single-occupancy vehicles. This lack of consideration is erroneously predicated on the assumption that alternative fuels will sustain the energy consumption needs of the citizens of Washington and does not consider estimated population growth,

¹ To date, more than \$50 billion dollars has been spent on global warming research in the United States alone. Michael Duffy, *In Age of Reason, the Brouhaha over Global Warming Can Leave You Cold*, The Sydney Morning Herald, March 31, 2007, available at <http://www.smb.com.au/news/opinion/brouhahaover-global-warming-can-leave-you-cold/2007/03/30/1174761750896.html> (last visited Jan, 21, 2008).

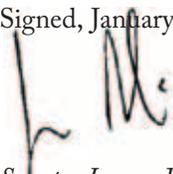
merely current needs and alteration of current power supplies. For example, no consideration was given to the efficiency nuclear energy.

Not only is it a reckless miscalculation to not consider growth in projected needs, no consideration is given to changes in availability of current power sources. For example, the current abundance of hydropower may come to an end with the removal of any dams for better fish passage.

Conclusion

It is the belief of those concurring in this Response that the Report itself is fatally flawed due to its politically-motivated reliance on scientific conclusions that do not represent a consensus in the scientific community and its failure to consider alternative, mitigating factors in its attempts to mitigate the perceived harmful effects of climate change.

Signed, January 22, 2008:



Senator Jerome Delvin

› Analysis of Final Draft Recommendations of the Washington Climate Advisory Team James M. Taylor, Senior Fellow of Environment Policy, The Heartland Institute January 17, 2008

The Final Draft Recommendations of the Washington Climate Advisory Team (CAT), released January 16, 2008, would impose significant economic hardship on the citizens of Washington while achieving virtually no real-world benefits. Even a full implementation of CAT's recommendations would have absolutely no real-world impact on global temperature, yet would take a tremendous negative toll on the economy, employment outlook, and standard of living of the citizens of Washington. Moreover, CAT relies on sloppy science (to put it charitably) to justify its prohibitively expensive, jobs-killing restrictions on the state's economy.

I. CAT's Recommendations Would Have No Measurable Impact on Temperatures

Let us start with a very brief summary of CAT's ability — or more accurately, inability — to achieve its desired purpose of fighting global warming.

According to the U.S. Environmental Protection Agency (<http://www.epa.gov/climatechange/downloads/sl766analysispart1.pdf>), the U.S. accounts for merely a quarter of global greenhouse gas emissions related to energy use. If we measure total greenhouse gas emissions, rather than just energy-related greenhouse gas emissions, the U.S. accounts for merely one sixth - or 17% - of global greenhouse gas emissions (<http://www.epa.gov/climatechange/downloads/sl766analysispart1.pdf>). Moreover, our percentage contribution to global emissions is shrinking every year.

Simple mathematics tell us that CAT's proposals will have absolutely no measurable impact on global temperatures. Washington is just one of 50 states, and accounts for less than 2% of national emissions (http://www.epa.gov/climatechange/emissions/download/Oad5/CO2FFC_2004.pdf).

Accordingly, the state of Washington accounts for only 0.003% of global emissions. CAT aims to reduce the state's greenhouse gas emissions by 50% by the year 2050. It should be noted that CAT's proposals are highly unlikely to achieve this stated goal, but let us assume for the sake of argument that they can somehow be achieved. We see that even under the best of circumstances, CAT's recommendations will reduce global greenhouse gas emissions by only 0.0015% (50% of 0.003%).

What we are left with, therefore, is merely a symbolic statement — nothing more, nothing less. No matter what CAT, the renewable power industry, or any other special interest group claims, CAT’s recommendations will have absolutely no measureable impact on global temperature, either now or anytime in the future.

II. CAT’s Recommendations Would Cause Tremendous Economic Pain

The next pertinent question is, “How much does CAT demand the citizens of Washington pay for such a symbolic gesture?” The answer, unfortunately, is a substantial amount of money, a substantial amount of lost jobs, and a substantial reduction in our standard of living.

Numerous leading economists and economic institutions have analyzed the costs of addressing greenhouse gases, even under the most economically favorable terms, and virtually all have reached the same conclusion; reducing greenhouse gas emissions through the greater use of renewable power will have substantial negative repercussions on the economy and on our standard of living.

This paper’s Appendix provides brief summaries of many of these studies. The consensus of studies by such economic experts at such places as the Massachusetts Institute of Technology, Yale University, the Congressional Budget Office, and the U.S. Energy Information Administration report that electricity prices are likely to rise by roughly 40 percent, and American households are likely to see a reduced standard of living totaling \$2,000 to \$5,000 per year, as industry-wide higher energy costs are passed along to consumers.

It should especially be noted that economic experts at CRA International released a study in November 2007 finding that in Colorado, a state with a near identical amount of greenhouse gas emissions as Washington, greenhouse gas limits similar to those proposed by CAT would cost each state household \$1,182 per year, would result in 57,000 people losing their jobs, and would cause a 2.3% reduction in the state’s annual gross state product. Importantly, greenhouse gas reductions would be more expensive and harder to come by in Washington than in Colorado, because inexpensive hydroelectric power in Washington has already replaced much of the low-hanging fruit of potential greenhouse gas reductions.

CAT spends a great deal of time talking about the jobs its recommendations would create in the renewable power industry, yet fails to mention the far greater number of jobs its recommendations would destroy in other sectors of the economy. Moreover, CAT’s vague claims that heavy state subsidization of renewable power industries lacks any substantive supporting economic data. These glaring shortcomings are especially pronounced when viewed in comparison to the numerous economic studies, cited above and summarized in this paper’s Appendix, that conclusively show CAT’s recommendations would take a substantial and painful toll on the state’s economy and on citizens’ pocketbooks.

III. CAT Relies on Discredited Science to Justify Its Expensive, Ineffective Plan

While the claims of current and imminent negative climate impacts contained in CAT’s recommendations are rendered largely academic by CAT’s total inability to change them, scientific integrity demands a brief mention of some of the many misleading and outright false assertions contained in CAT’s draft recommendations. Pages 13 and 14 alone contain an astounding number of misleading statements and outright falsehoods. Let us briefly examine some of them.

On page 13, CAT claims “Anthropogenic warming could lead to some impacts that are abrupt or irreversible.” However, the most comprehensive survey of the world’s leading climate scientists shows that less than half of climate scientists believe that climate change “will occur so suddenly that a lack of preparation could

result in devastation of some areas of the world” (<http://dowwloads.heartland.org/2086111.pdf>).

On page 14, CAT asserts that global warming increases the risk of food shortages. However, the UN Intergovernmental Panel on Climate Change (IPCC) predicts that global warming will cause North American farm output to increase for at least the next several decades (<http://ipcc-wgl.ucar.edu/wgl/wgI-report.html>). Indeed, crop yields in the real world continue to break all-time records as global warming brings more frequent precipitation and longer growing seasons.

On page 14, CAT asserts that global warming increases the risk of severe weather. However, scientists at the National Hurricane Center (<http://www.newsdaily.com/TopNews/UPI-1-20070502-I9042700-bc-us-hurricanes.xml>) and the National Oceanic and Atmospheric Administration (<http://www.magazine.noaa.gov/stories/mag184.htm>) report that global warming is causing no increase in hurricane activity. Moreover, IPCC reports no link between global warming and tornadoes (<http://ipcc-wgl.ucar.edu/wgl/wg1-report.html>).

On page 14, CAT reports that that “Observed changes in Washington state over the 20th century include warming of 1.5 degrees F.” However, most of this warming occurred early in the 20th century, before anthropogenic greenhouse gases could have been the cause. Indeed, most Washington temperature stations manned by the U.S. Historical Climatology Network show either cooler temperatures or essentially steady temperatures over the past several decades.

On page 14 CAT claims “an approximately 30% overall decline in the lower Cascades spring snowpack (from 1950-1997).” However, this assertion relies on a flawed study, using cherry-picked data, that has been soundly refuted by University of Washington scientists. Cascade Mountain snowpack is only marginally lower, if at all, than it was in the 1940s. Moreover, Cascade Mountain snowpack has been growing since the 1970s (<http://www.heartland.org/Article.efm?artId=21207>).

On page 14, CAT asserts a connection between global warming and droughts and forest fires. However, the overwhelming evidence is that droughts are becoming less frequent.

The July 2004 issue of International Journal of Climatology reports, “It is now clear that many places in the Northern Hemisphere, and in Australia, have become less arid.” The study concludes, “A good analogy to describe the changes in these places is that the terrestrial surface is literally becoming more like a gardener’s greenhouse” (http://www.rsbs.anu.edu.au/Profiles/GrabanEFarquhar/documents/214RoderickAustpan2004_000.pdf).

The May 25, 2006 issue of Geophysical Research Letters reports that for 20th century soil moisture, “An increasing trend is apparent in both model soil moisture and runoff over much of the U.S.” The study adds, “This wetting trend is consistent with the general increase in precipitation in the latter half of the 20th century. Droughts have, for the most part, become shorter, less frequent, and cover a smaller portion of the country over the last century” (<http://www.agu.org/pubs/crossref/2006/2006GL025711.shtml>).

The National Oceanic and Atmospheric Administration reports, “A number of tree-ring records exist for the last two millennia which suggest that 20th century droughts may be mild when evaluated in the context of this longer time frame” (http://www.ncdc.noaa.gov/paleo/drought/drght_data.html).

On page 14, CAT asserts that global warming is causing increases in forest and crop pests. While CAT provides little documentation for this assertion, the truth is that global warming is causing a significant expansion in global forests

(<http://www.gsfc.nasa.gov/topstory/20010904greenhouse.html> and <http://www.co2science.org/scripts/CO2ScienceB2C/articles/V5/N45/EDIT.i.sp>), and crop production is breaking all-time records on a near-yearly basis. An increase in forest and crop pests, if true, would merely be reflective of an increase in forests and crops for them to feed on. Indeed, alarmist assertions that forest and crop pests are on the rise are disingenuous and designed to put the worst possible face on the fact that global warming is extending growing seasons and causing forests and crops to be healthier and more productive than ever.

IV. Conclusion

The Draft Recommendations of the Washington Climate Advisory Team (CAT) are an extremely costly set of policy recommendations that would have absolutely no impact on real world temperatures. In short, CAT is asking Washingtonians to sacrifice a substantial amount of jobs, income, and economic production for nothing more than a symbolic statement regarding global warming. It would appear that there are other, more cost-effective ways to make symbolic statements.

Additionally, and disturbingly, CAT substantially distorts the scientific record in order to build a case for its alarmingly costly recommendations. Washingtonians deserve a fair and impartial recitation of the science, rather than half truths and outright falsehoods, when being asked to consider public policy recommendations of the magnitude suggested by CAT.

APPENDIX

◆ **2007 Congressional Budget Office Study:** According to a 2007 study conducted by the Congressional Budget Office (CBO) (http://www.cbo.gov/ftpdocs/80xx/doc8027/04-25-Cap_Trade.pdf), reducing greenhouse gas emissions by a mere 15 percent would cost the average household nearly 3 percent of its income. A family making \$50,000 per year would be forced to pay an extra \$1,400 every year for the same goods and services it purchases today.

“Most of the cost of meeting a cap on CO₂ emissions would be borne by consumers, who would face persistently higher prices for products such as electricity and gasoline. Those price increases would be regressive in that poorer households would bear a larger burden relative to their income than wealthier households would,” CBO determined.

Moreover, a “CO₂ cap would worsen the negative effects” of “existing taxes that dampen economic activity—primarily taxes on labor, capital, or personal income, such as payroll taxes and individual or corporate income taxes,” CBO reported. “The higher prices caused by the cap would lower real (inflation-adjusted) wages and real returns on capital, indirectly raising marginal tax rates on those sources of income.”

◆ **2007 MIT Study:** A 2007 study by the Massachusetts Institute of Technology (MIT) reached similar conclusions. According to the MIT study (http://web.mit.edu/globalchange/www/MITJPSPGQ_Rpt146.pdf), mandatory greenhouse gas reduction schemes similar to those most popular in Congress and the state legislatures would cost typical families of four close to \$5,000 each and every year.

◆ **2007 Charles Rivers Associates Study:**

A 2007 study by Charles Rivers Associates (http://www.crai.com/pubs/pub_7285.pdf) examined how reducing greenhouse gas emissions to 1990 levels by 2020, and how reducing emissions 80 percent by 2050, would impact California. According to the study, agricultural production, real wages, and the demand for labor will fall dramatically.

“The costs of GHG controls will worsen California’s terms of trade,” the study concludes. “For example, imposing GHG controls in California will increase in-state production costs thereby permitting out-of-state businesses to raise the prices that they charge California customers and still remain competitive. For California exporters, on the other hand, although GHG controls will increase their production costs, they will find it difficult to raise prices for their out-of-state customers, as long as their out-of-state competitors do not face the same policy-driven cost increases. These changes erode the purchasing power of Californians, which will decrease their consumption and economic well-being.”

By 2050, the greenhouse gas reductions are expected to cost Californians \$500 billion in lost income.

◆ **2004 University of Colorado Study:** Importantly, a 2004 study by economists with the U.S. International Trade Commission and the University of Colorado (<http://www.mines.edu/~ebalistr/Papers/C02004.pdf>) found that it would be more costly for most other states to meet greenhouse gas restrictions than it would be for Californians. This is due in large part to the fact that California has more abundant and cost-effective solar, wind, hydro, and geothermal resources than do other states.

◆ **2004 Charles Rivers Associates Study:** A 2004 study by Charles Rivers Associates (<http://www.crai.com/Showpubs.asp?Pubid=3694>) concluded that reducing greenhouse gas emissions to 1990 levels would force electricity prices up by 18 to 24 percent, resulting in families with \$200 per month electrical bills paying an extra \$480 per year in electricity costs. The same study found that reducing greenhouse gas emissions to 1990 levels would force a 32 to 45 percent rise in gasoline prices, resulting in \$3.00 per gallon gasoline being replaced by \$4.00 to \$5.40 per gallon gasoline.

The economy-wide effects of the mandatory greenhouse gas reductions would cost the average household \$1,200 per year by 2020, according to the study.

◆ **2003 Energy Information Administration Study:** A 2003 study by the U.S. Energy Information Administration (EIA) (<http://www.eia.doe.gov/oiaf/servicerpt/ml/pdf/summary.pdf>) found that mandatory greenhouse gas reductions similar to the most frequently proposed federal and state legislation would result in a 27 percent increase in gasoline prices and a 46 percent rise in electricity prices.

◆ **2003 Heartland Institute Study:** A 2003 state-specific analysis by The Heartland Institute (<http://downloads.heartland.org/1133.pdf>) made reached similar conclusions as the studies above, but additionally considered state-specific factors and broke down the expected costs on a state-by-state basis. The Heartland study found that cutting greenhouse gas emissions to 1990 levels would cost the average Ohio household more than \$7,000 per year.

◆ **2007 Nordhaus Study:** In 2007, Yale University economics professor William Nordhaus conducted an analysis of numerous proposals to reduce greenhouse emissions (http://nordhaus.econ.yale.edu/dice_mss_072407_all.pdf). Nordhaus discovered that substantial near-term reductions in greenhouse gas emissions are extremely costly while achieving little measurable benefit. “Because the initial emissions reductions are so sharp in the ambitious proposals, they impose much higher costs than are required to attain the same environmental objective,” Nordhaus concluded.

Even assuming alarmist projections of 3-degree Celsius warming in the upcoming century, “Climate change is unlikely to be catastrophic in the near term, but it has the potential for serious damages in the long run.” As a result, “the best approach is one that gradually introduces restraints on carbon emissions.”

In more tangible terms, Nordhaus observed that the optimal method of reducing greenhouse gas emissions would require only a 25 percent reduction by 2050, with more stringent reductions required — and more readily achievable — after that time.

◆ **2007 Wake Forest Survey:** In 2007, Wake Forest University Economics Chair Robert Whaples surveyed a random selection of American Economic Association Ph.D. economists. Whaples asked the economists what the impact of projected global warming will be on U.S. Gross Domestic Product by the end of the 21st century. Fully 59 percent projected that even 100 years from now global warming will have a neutral or positive impact on the U.S. economy

◆ **2004 Mendelsohn Study:** In 2004, Yale University economics professor Robert Mendelsohn (http://www.copenhagenconsensus.com/Admin/Public/DWSDownload.aspx?File=Files%2FFiler%2FCC%2FPapers%2FOpponent+notes%2FOpponent_Note_-_Climate_Change_-_Mendelsohn.pdf) concluded that the benefits of global warming will outweigh the harms until temperatures surpass 2.5 degrees Celsius warmer than they are today. Scientists do not expect temperatures to surpass 2.5 degrees Celsius until at least the 22nd century.

◆ **2007 IPCC Report:** In 2007, the United Nations Intergovernmental Panel on Climate Change (http://www.ipcc.ch/WGI_SPM_7Apr07.pdf) analyzed agricultural output in a warming world and reached the same conclusion as Mendelsohn; agricultural production in places such as the American Midwest should experience a net benefit from projected global warming for at least the next several decades. Efforts to reduce greenhouse gas emissions will not only cost American farmers substantial money in out-of-pocket mitigation costs, but they will also cost American farmers substantial money in reduced agricultural output.

◆ **2004 Copenhagen Consensus:** In 2004, the Danish government convened many of the world’s leading economists and presented them with the following scenario: Assuming a budget of tens of billions of dollar to address global health and environment concerns, where would the money best be spent? From a list of more than a dozen health and environmental issues, the world’s leading economists ranked addressing global warming as dead last in terms of benefits accrued per dollar spent, even assuming IPCC global warming scenarios. Significantly, the economists concluded that spending such money on preventing global warming actually did more harm than good, as the minimal human welfare benefits accrued by such expenditures failed to equal the human welfare benefits that are would accrue simply by leaving the money where it currently is.

Response from Gregory J. Nickels, Mayor of Seattle February 4, 2008

Dear Governor Gregoire:

Thank you for the opportunity for Seattle to serve on your Climate Advisory Team (CAT) and to lend my support to your report. As you know, climate protection is one of my top priorities as Mayor, and I believe it needs to be a top priority for Washington state as well. I appreciate the work to date to put the state on a path of climate protection, but I believe that stronger state action will be essential to ensure our ultimate success in reducing global greenhouse gas emissions and controlling the impacts of global warming.

For instance, I ask that you reconsider strengthening the greenhouse gas emission targets outlined in the CAT report and in pending legislation. It is my firm position that the state's long-term greenhouse gas emissions reduction goal should be in sync with the current scientific consensus (and the goal embraced by US mayors) on the level required to avoid catastrophic global climate change: 80% below 1990 levels by 2050.

The CAT's interim report is a first step toward leadership on climate change by laying out nearly 50 climate protection actions; however, I have concerns about the extent to which this report will lead to the kind of strong, swift actions that are necessary.

The report, while comprehensive, does not sufficiently stress the importance of early action, or lay out a timeline and framework to implement actions. Also, I am concerned that there is insufficient funding in your proposed 2008 budget to support implementation of the CAT recommendations. We need stronger assurances that these actions will be funded and implemented in the near-term (2008-2012).

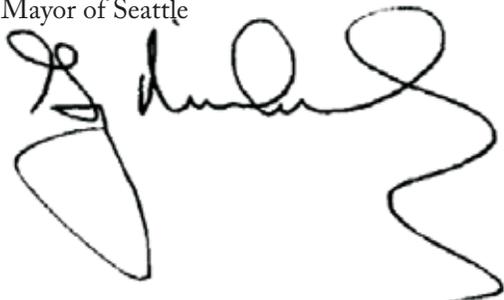
Specifically, I believe that the following ten recommendations have the greatest potential and are the most important for near-term action:

- ◆ Shift state's priorities/funding to moving people and goods vs. moving vehicles (T-O);
- ◆ Increase funding for more climate-friendly alternatives such as transit, biking and walking (T-1 and T-8);
- ◆ Develop and implement a strong, coherent, state-wide road-pricing system (T-3);
- ◆ Support the City-proposed carbon tax on vehicles based on fuel efficiency;
- ◆ Develop and implement a low-carbon fuel standard that accelerates our state's transition to clean fuels and clean vehicles (T-1 1);
- ◆ Develop and implement Zero Emission Vehicle Standards for WA (T-12);
- ◆ Continue and increase investment in diesel emission reduction strategies;
- ◆ Accelerate the use of plug-in hybrid vehicles in WA (T-10);
- ◆ Develop and implement a state-wide requirement for energy efficiency assessments and upgrades in existing buildings at the point of sale (RCI-4);
- ◆ Significantly improve the energy efficiency of new buildings through targeted financial incentives and instruments (RCI-2), and strengthened commercial and residential energy codes (RCI-3)

I urge swift action to fund and implement the recommendations of the CAT, especially the "Top 10" described above.

Thank you again for the opportunity for Seattle to be represented on this important body and to support the CAT report. I look forward to opportunities for continued partnership as we move forward to advance climate protection efforts in Washington.

Greg Nickels
Mayor of Seattle

A handwritten signature in black ink, appearing to read 'Greg Nickels', with a large, stylized flourish extending from the end of the name.

cc: *Steve Nicholas*, Seattle Office of Sustainability and Environment;
Juli Wilkerson, Washington Community Trade and Economic Development;
Jay Manning, Department of Ecology; *Bill Ross*, Ross and Associates;
Senator *Jerome Delvin*; Representative *Doug Ericksen*; Representative *Kelli Linville*;
Senator *Craig Pridemore*; Seattle City Council President *Richard Conlin*;
32 Washington Mayors signatory to the US Conference of Mayors
Climate Protection Initiative

CHRISTINE O. GREGOIRE
Governor



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EXECUTIVE ORDER 07-02

WASHINGTON CLIMATE CHANGE CHALLENGE

WHEREAS, there is scientific consensus that increasing emissions of greenhouse gases are causing global temperatures to rise at rates that have the potential to cause economic disruption, environmental damage, and a public health crisis;

The drivers of climate change are global, but the effects of climate change on Washington are local and unique, including our dependence on snowpack for fresh water, our reliance on hydropower for energy, and our significant amount of shoreline;

According to the University of Washington's Climate Impacts Group, the effects of climate change are already being felt in the state of Washington in the form of average yearly temperatures rising faster over the 20th Century than the global average, mountain glaciers in the North Cascades losing up to a third of their area since 1950, snow pack in the Cascades declining by 35%, peak spring river runoff occurring 10 to 30 days earlier and the proportion of stream flow that arrives in summer decreasing as much as 34% in sensitive river basins; and

WHEREAS, Washington has taken significant actions to address climate change, including:

- Adopting the 2005 Clean Car Act requiring certain automobiles to meet tougher emissions standards beginning with 2009 models;
- Retrofitting 50% of school buses and 20% of local government diesel engine vehicles to reduce highly toxic diesel emissions;
- Leading the nation in requiring fuel suppliers to ensure that 2% of the fuel they sell is biodiesel or ethanol;
- Leading the nation in adopting high performance green building standards and having one of the most energy efficient building codes in the nation;
- Implementing the best energy efficiency standards for appliances;
- Passing a clean energy initiative to increase the amount of energy efficiency and renewable resources in our state's electricity system;

- Purchasing hybrid and low emission vehicles for state agency use;
- Adopting the Columbia River Water Management Act, which will work toward meeting the water storage needs for agriculture, communities, and salmon; and

WHEREAS, Washington has tremendous opportunities to build a healthier and more prosperous future by embracing the challenge of climate change through expanding our clean energy economy;

Washington's rural communities can gain economic benefit through the production of renewable fuels, keeping more of the money Washington residents spend on imported fuels here at home; and

WHEREAS, Washington has worked closely with California and Oregon in establishing the West Coast Governors' Global Warming Initiative and is working with other western states to address climate change in a coordinated effort and through the Western Governors Association; and

WHEREAS, Washington's vast hydroelectric system must be taken into account in any regional or national climate program; and

Washington State must continue its work to be prepared for the inevitable impacts of climate change.

NOW, THEREFORE, I, Christine O. Gregoire, Governor of the state of Washington declare the state's commitment to address climate change by:

1. Establishing the following greenhouse gas emissions reduction and clean energy economy goals for Washington State:
 - By 2020, reduce greenhouse gas emissions in the state of Washington to 1990 levels, a reduction of 10 million metric tons below 2004 emissions;
 - By 2035, reduce greenhouse gas emissions in the state of Washington to 25% below 1990 levels, a reduction of 30 million metric tons below 2004;
 - By 2050, the state of Washington will do its part to reach global climate stabilization levels by reducing emissions to 50% below 1990 levels or 70% below our expected emissions that year, an absolute reduction in emissions of nearly 50 million metric tons below 2004;
 - By 2020, increase the number of clean energy sector jobs to 25,000 from the 8,400 jobs we had in 2004; and

- By 2020, reduce expenditures by 20% on fuel imported into the state by developing Washington resources and supporting efficient energy use.
2. Implementing the significant policy actions taken in 2005 and 2006 to reduce greenhouse gas emissions. These actions will move Washington State to at least 60% of the 2020 goal and grow the clean energy economy by:
- Working to ensure cars sold in Washington meet stringent emission standards beginning with 2009 models;
 - Retrofitting the most polluting diesel engines in school buses and local government vehicles;
 - Working with farmers, entrepreneurs, fuel distributors and retailers to assure that biofuel feedstocks are grown in Washington; that refiners, blenders and distributors of biofuels create family wage jobs in Washington; and that the public can purchase fuel blends that reduce our dependence on imported fuel;
 - Constructing high performance green buildings;
 - Maintaining the highest levels of efficiency in our state's energy code and regularly updating and enhancing those standards;
 - Examining compliance with appliance efficiency standards and updating and enhancing those standards;
 - Implementing the requirements of the Energy Independence Act by adopting rules that help utilities to succeed in meeting their renewable energy targets;
 - Pursuing new water resources in Eastern Washington, including water conservation projects, developing new storage and new creative water management alternatives; and
 - Reducing energy use by state agencies by achieving the goals established in Executive Order 05-01, Establishing Sustainability and Efficiency Goals for State Operations.
3. Achieving at least the remaining 40% toward the 2020 goal for Washington State and planning for our future, **I, FURTHER**, order and direct:
- A. The Director of the Department of Ecology and the Director of the Department of Community, Trade and Economic Development in consultation with a broad range of stakeholders to develop a climate change initiative, Washington Climate Change Challenge, to achieve the goals of this Executive Order. Executive Cabinet agencies

are directed to provide their full assistance and support in developing Washington Climate Change Challenge. I invite the Office of the Insurance Commissioner, the Commissioner of Public Lands, institutions of higher education, and members of the Legislature to assist in this effort.

- B. The Director of the Department of Ecology and the Director of the Department of Community, Trade and Economic Development shall include representatives from business, including transportation, forestry and energy sectors, agriculture, local, county and regional governments, institutions of higher education, labor unions, environmental groups and other interested residents as appropriate in the development of Washington Climate Change Challenge.
- C. Washington Climate Change Challenge shall address the following elements and process steps:
 - i) Consider the full range of policies and strategies for the state of Washington to adopt or undertake to ensure the economic and emission reductions goals are achieved, including policy options that can maximize the efficiency of emission reductions including market-based systems, allowance trading, and incentives;
 - ii) Determine specific steps the state of Washington should take to prepare for the impact of global warming, including impacts to public health, agriculture, the coast line, forestry, and infrastructure;
 - iii) Assess what further steps the state of Washington should take to be prepared for the impact of global warming to water supply and management;
 - iv) Initiate active involvement by the state of Washington in the development of regional and national climate policies and coordination with British Columbia;
 - v) Recommend how the state of Washington, as an entity, can reduce its generation of greenhouse gas emissions;
 - vi) Work with the state of Washington's local governments to maximize coordination and effectiveness of local and state climate initiatives; and
 - vii) Inform the general public of the process, solicit comments and involvement and develop recommendations for future public education and outreach.

- D. The Director of the Department of Ecology and the Director of the Department of Community, Trade and Economic Development shall submit Washington Climate Change Challenge to the Office of the Governor within one year of the signing of this Executive Order.

This Executive Order shall take effect immediately.

Signed and sealed with the official seal of the state of Washington, on this 7th day of February 2007, at Olympia, Washington.

By:

Christine O. Gregoire
Governor

BY THE GOVERNOR:

Secretary of State