#### HOUSE COMMITTEE ON ENVIRONMENT

April 05, 2005 Portland State University

2:00 P.M. Tapes 29 - 32

MEMBERS PRESENT: Rep. Gordon Anderson, Chair

Rep. Phil Barnhart

Rep. John Lim

MEMBERS EXCUSED: Rep. Bob Jenson, Vice-Chair

Rep. Mary Nolan, Vice-Chair

**Rep. Bill Garrard** 

Rep. Diane Rosenbaum

STAFF PRESENT: John Houser, Committee Administrator

Mike Reiley, Committee Assistant

**MEASURES/ISSUES HEARD:** 

**Global Warming and Greenhouse Gases – Informational Meeting** 

These minutes are in compliance with Senate and House Rules. <u>Only text enclosed in quotation</u> <u>marks reports a speaker's exact words.</u> For complete contents, please refer to the tapes.

TAPE/# Speaker Comments

**TAPE 29, A** 

003	Chair Anderson	Calls the meeting to order at 2:06 p.m. Welcomes all in attendance.
006	Rep. Lim	House District 50. Introduces himself.
011	Rep. Barnhart	House District 11. Introduces himself.
014	John Houser	Committee Administrator. Introduces himself.
019	Christina Hulbe	Assistant Professor, Department of Geology, Portland State University (PSU). Submits and reads written testimony and welcomes the committee <b>(EXHIBIT A)</b> .
077	Rep. Barnhart	Inquires if Oregon is drying out and the oceans are getting wetter.
082	Hulbe	Answers that sea levels are rising and parts of Oregon are getting drier. Notes there is a shift in the timing of water delivery and the locations to which water is being delivered. Describes water chemistry findings in the Klamath Basin.
092	Rep. Barnhart	Questions whether changes in water patterns are due to reduction in the availability of water or an increase in utilization in the Klamath Basin.
095	Hulbe	Answers that it is still unknown.
102	Rep. Lim	Expresses concern about increasing sea levels and decreasing stream levels.
117	Hulbe	Describes the water balance and how it is affected by factors such as snow pack. Highlights work being done at the University of Oregon (UO) to better measure water.
135	Rep. Barnhart	Asks who is doing the work at UO.
138	Hulbe	Provides names.
141	Chair Anderson	Commends the work of universities in the sciences. Opens the informational meeting on Global Warming and Greenhouse Gases. Comments science is often overloaded to one side of an issue or

another. Notes today's panel will provide the other side of the global warming issue. Introduces Sandy Liddy-Bourne.

### **GLOBAL WARMING AND GREENHOUSE GASES – INFORMATIONAL MEETING**

235	Sandy Liddy-Bourne	Director of Legislation and Policy, American Legislative Exchange Council (ALEC). Submits and reviews an information packet including maps, the <u>Energy, Environment and Economics Guide for</u> <u>State Legislators, Climate Issues and Questions</u> from The Marshall Institute and four white papers from the ALEC. Notes present policy focus is being directed by state legislatures rather than the federal government. Discusses history of the Kyoto Protocol in the US. Explains the "Enacted Greenhouse Gas Regulations in the States 1997-2004" map (EXHIBIT B, Page 1) and "Proposed Greenhouse Gas Legislation in the States 2005" map (EXHIBIT B, Page 2). Discusses systematic progression toward a mandatory cap-and-trade program.
394	Chair Anderson	Clarifies which states are suffering budget deficits.
396	Liddy-Bourne	Clarifies the states promoting cap-and-trade are facing large budget deficits. Explains credit exchanges between states. Discusses Chicago Climate Exchange and its purpose.
<b>TAPE 30,</b> 2	A	
002	Liddy-Bourne	Reports the necessity of a diverse supply for sustainable energy. References California's recent energy crisis resulting from their self- limitations. Cites state regulations and power prices in the booklet "Energy, Environment, and Economics" (EXHIBIT B, Page 9). Explains the federal subsidies for dams built in Oregon that result in low energy prices. Discusses the carbon cap-and-trade program and its affect on regulation and the resulting "carbon cartel."
067	Chair Anderson	Requests a comparison to what took place in California.
068	Liddy-Bourne	States the California power problem was a "perfect storm." Explains California had a drought, a broken pipeline, had not maintained its infrastructure, and did not deregulate fully. Comments some power companies were involved in "disingenuous price setting."
072	Rep. Barnhart	Asks if it was fraud.

074	Liddy-Bourne	Confirms, yes. States California's governor was oblivious. Argues partial market deregulation was part of the problem.	
083	Rep. Barnhart	Inquires if separating the power distribution system from the generation system allowed the fraud to occur.	
087	Liddy-Bourne	Emphasizes the problem of California's partial deregulation. Cautions against the cap-and-trade system.	
100	Chair Anderson	Requests comments on the production of bio-fuels be offered later in the meeting.	
136	George Taylor	Climatologist, State of Oregon. Submits and reviews a presentation on anthropogenic global warming <b>(EXHIBIT C)</b> . Explains the greenhouse effect is necessary for maintenance of life. Notes lack of consensus among climatologists. Discusses disparities in data and climate models. Mentions the degree of change required worldwide to stabilize greenhouse gases. Reviews historical models of climate changes. Comments on the increase in sea ice around Antarctica.	
451	Chair Anderson	Inquires why the upper stratosphere should be warming.	
452	Taylor	Reports increased warming of the surface causes convection, leading to rising of warmer air.	
461	Rep. Barnhart	Questions whether the convection would also increase air pressure at the higher levels as well as temperature, effectively increasing the diameter of the atmosphere.	
TAPE 29, B			
002	Taylor	States probably not. Explains an increase in temperature pressure would expand the height of the atmosphere, but air pressure is caused by the weight of all the molecules in the atmosphere in a column, and the number of molecules would not be changed.	
006	Rep. Barnhart	Requests confirmation that air pressure would not change, but the diameter of the troposphere would.	
007	Taylor	Answers, possibly. Continues presentation moving to discussion of historical temperatures around the world. Describes the Michael Mann "hockey stick" temperature model and later differing	

		temperature models. Relates the impact on assumptions of CO2 impact if temperatures are recognized to not be unprecedented.
076	Chair Anderson	Inquires how temperatures were recorded 1000-1500 years ago.
077	Taylor	Notes the thermometer was invented 300 years ago. Explains how proxy methods such as tree rings, ice cores, and sediments help determine probable climate. Continues presentation describing historical temperatures in Oregon (EXHIBIT C), noting the decade of 1930 was the warmest in recent history. Discusses the urban heat island effect in urban communities and the relation of land use to temperature change. Describes growing season models from Bend, Paulina and Sisters arguing the differences are due to land use changes. Discusses processes that affect climate, including solar variability, sunspots and volcanoes. Concludes natural variations impact climate more than people.
321	Chair Anderson	Reads George Taylor's vitae. Introduces Dr. Margo Thorning.
386	Dr. Margo Thorning	Senior Vice President and Chief Economist, American Council for Capital Formation (ACCF). Discusses the members and purpose of the ACCF. Submits and summarizes written testimony regarding the central themes of global warming (EXHIBIT D). Comments on the tool of cost/benefit analysis.
TAPE 30, I	3	
003	Thorning	Continues testimony. Discusses the projected ratio of carbon emissions produced by developing versus developed countries over the next century. Explains economic models used to measure the impact of regulation changes.
047	Rep. Barnhart	Requests clarification on the baseline for determining change in the gross domestic product (GDP).
054	Thorning	Confirms the forecast is calculated on the baseline absent the regulation. Continues presentation. Compares the different approaches to CO2 reduction under the Clinton and Bush administrations and the impacts of the policies. Relates Kyoto targets are only the beginning of incremental targets leading toward an 80% reduction in carbon emissions for the US by 2050. Moves to discussion of impacts on Oregon.

171	Rep. Lim	Questions why natural gas prices increase at a higher rate than those of electricity for industry.
179	Thorning	Explains due to multiple uses of natural gas, demand will increase as use of fossil fuels subsides.
182	Rep. Barnhart	Asks if the energy price figures are based on baselines with and without regulation.
185	Thorning	Confirms, yes.
186	Chair Anderson	Asks why the European Union (EU) favors CO2 reductions when they will face challenges similar to the US.
195	Thorning	Relates the EU strives to lead in environmental policy and needs the US to join them to remain competitive. Discusses pushback on the Kyoto Protocol by EU nations. Explains the difficulty EU nations have had maintaining the requirements of the EU Stability Pact with respect to budget deficits. Notes the EU is not on track to meet their emission reduction targets under the Kyoto Protocol.
258	Rep. Lim	Asks how many nations have joined the Kyoto Protocol.
260	Thorning	Answers many countries have joined, but have not necessarily adopted emission reduction targets. Comments penalties will not be imposed for those who fail to meet targets. Argues for investment in new technology such as hydrogen and carbon sequestration. Discusses the correlation between economic freedom and economic growth and reductions in energy intensity per dollar of output. States the best way to address climate change policy is to remove barriers to economic growth, facilitate access to energy and encourage economic reforms in the developing world. Concludes the presentation.
377	Chair Anderson	Introduces Christopher Horner.
398	Chris Horner	Senior Fellow, Competitive Enterprise Institute (CEI). Submits and summarizes prepared testimony <b>(EXHIBIT E)</b> . Explains the history of US involvement in the Kyoto Protocols.
TAPE 31, A		

002 Horner

		Continues testimony. Relates countries participating in the Kyoto Protocol and the inequities due to those exempt. Discusses EU countries in violation of their target reductions and their desire to back out of Kyoto commitments. Notes the premise of the Kyoto Protocol is the theory of catastrophic manmade global warming, requiring an all or nothing response by all parties. Discusses the participation of Enron in the Kyoto Protocol. Relates enhancing wealth creation in poorer countries is the most effective way to tackle climate issues. Notes the limitations the Protocol places on addressing climate issues. Discusses the impact of Russia's closing of cold-weather stations on the average surface temperature.
298	Rep. Barnhart	Inquires regarding the importance of developing energy policies around factors other than global warming.
315	Horner	Answers the only reason to create a greenhouse gas regulatory regime is to respond to the greenhouse warming theory. Addresses the issue of security of supply, which is not tied to the climate theory.
338	Rep. Barnhart	Questions whether Dr. Thorning's economic models include jobs generated from carbon emission reduction processes.
349	Dr. Thorning	Explains the relationship between new jobs and renewable technologies.
378	Rep. Barnhart	Questions concern regarding the rapid obsolescence of capital goods.
389	Dr. Thorning	Explains decreased efficiency in production processes when capital stock becomes obsolete. Explains the study that determined the Kyoto Protocols would send a portion of US business offshore by the year 2015, resulting in loss of competitiveness and jobs.
407	Rep. Barnhart	Inquires regarding the primary source of funding and travel expenses for each panel member.
430	Liddy-Bourne	Explains the composition of ALEC, noting it is a 501(c)3 bipartisan organization consisting of 2,400 state legislators and 325–350 corporate members focusing on economic policy issues.

# **TAPE 32, A**

Discusses the policy process, reporting ALEC takes the Jeffersonian free market approach to policy making. Comments the budget is formed from dues of members. 028 Rep. Barnhart Asks what proportion of the ALEC budget is paid for by the legislative members versus the corporate members. 030 Liddy-Bourne Relates approximately 80 percent is paid for by the corporate sector. 036 Horner Explains CEI is a 501(c)3 organization and his airfare was paid for by ALEC. 038 Rep. Barnhart Asks Horner how his 501(c)3 is supported. 039 Horner Responds it breaks down annually into thirds: about one-third from individuals, one-third foundations, and one-third corporate. 041 Rep. Barnhart Requests a list of corporate contributors. 042 Horner Responds anyone can access a list under the IRS rules by phoning. Agrees to provide the list. 044 Explains ACCF is a 501(c)6 and 501(c)3, and the Center for Policy Dr. Thorning Research is a 501(c)3. Notes ACCF is comprised of about 140 private sector companies and individuals and 35-40 trade association members. States ACCF receives no government funding. Offers to provide a list of members. 054 Taylor Explains Oregon is paying his salary and he is paying his own transportation costs. 060 Rep. Lim States if every country belonged to the Kyoto Protocols, it might be possible to affect world global warming issues. Notes the value of commitment, if only to send a message. 087 Responds that Kyoto is used as a bargaining tool by other nations. Horner States the acknowledgment of the Protocol that failure to grow economically is a greater threat to mankind than the threat of catastrophic global warming. Notes sending a signal has merit, but the EU has used the US stance as an excuse to refuse to cooperate on Iraq. Comments on the need to check rhetoric, acknowledge the

threat and have a sincere scientific and policy debate.

121	Dr. Thorning	Mentions Figure 3 in her testimony (EXHIBIT D, page 9) comparing the reduction in energy intensity between the EU and the US over the last 15 years. States reducing energy intensity globally would allow growth, the ability to begin reducing CO2 emissions and time to develop new technologies. Attributes Europe's slower pace in reduction of energy intensity to slower growth. Economic growth is a key component to moving toward more energy efficient production processes.
143	Horner	Comments on the role Kyoto plays in international negotiations, relating it is dishonestly used as an excuse for most anti-American claims or foreign policy positions.
155	Liddy-Bourne	Explains the importance of diversity of supply such as hydropower, natural gas and coal. Suggests Oregon consider adding nuclear power. Cautions regarding the need for backup hydro, coal or natural gas power for a nuclear plant. Discusses the higher electrical costs during droughts. Comments on Oregon's wealth of forests that can be used for carbon sequestration and bio-mass research. Mentions consideration of tax incentives or credits and the job of legislators to encourage technological innovation.
217	Horner	Addresses the security supply issue and the complications with the availability of natural gas, purported by Alan Greenspan to have hindered our economic recovery. Discusses Californiacation of the country if forced off coal by regulations. Relates his conversation with a utility representative who commented any cap is a cap on growth.
238	Chair Anderson	Invites audience members to ask questions of the panel or make a statement. Requests audience speakers representing an organization provide the source of their organization's funds.
267	Vernon Groves	Retired United Methodist Pastor. Submits and reads written testimony in opposition to HR 3. Testifies in favor of reduction of carbon dioxide produced by burning fossil fuels (EXHIBIT F).
332	Fred Heutte	Oregon Chapter, Sierra Club. Mentions his participation on a national global warming and energy policy committee. Submits written testimony in opposition to HR 3, reports on "Fuel Efficiency and the Economy" and "Potential Long-Term Impacts of Changes in US Vehicle Fuel Efficiency Standards" and a press release relating to Canadian automakers (EXHIBIT G). Encourages action on the Governor's Global Climate Task Force Report. Paraphrases portions of his prepared statement and reviews contents of the reports.

## **TAPE 31, B**

006	Heutte	Comments he is surprised by statements made opposing carbon cap- and-trade. Reports Sierra Club members are not supportive of an emissions trading system, which is a tool that should be considered in conjunction with other approaches. States critical elements of an effective cap-and-trade system. Gives positive example of the sulfur dioxide emissions market and negative example of the California reclaim market. States the need to take immediate steps regardless of the timing of climate change impacts.
032	Chair Anderson	Comments on the need to take a long view and not contain ourselves to the last several decades of information.
048	Eban S. Goodstein	Professor of Economics, Lewis and Clark College. Reviews his credentials. Submits and summarizes written testimony in opposition to HR 3 (EXHIBIT H). Addresses the end of HR 3, noting why a blanket prohibition on all other policies is not wise. Discusses other policies and their relationship to the Oregon economy. Mentions the value of wind power in rural Oregon. Comments on bio-diesel. Reviews the cost savings from future clean cars. Discusses job development from expansion of clean energy. Discusses Kyoto compliance and other costs. Relates the value of Oregon partnering with other states in developing reduction strategies. States technology transfer is the ultimate solution to climate change. Encourages Oregon to push such transfer in wealthier countries. Discusses the economic impact from the loss of snow pack in Oregon this year, and the expectation this climate trend will continue.
180	Chair Anderson	Invites Thorning to respond to comments by Goodstein.
183	Dr. Thorning	Responds Goodstein erroneously characterized model simulations from her testimony <b>(EXHIBIT D).</b> Explains Figure 2 on page 3 of her testimony. Resists disparaging results of models funded by industry unless the models are determined to be flawed. Recommends her own testimony before the Senate Government Affairs Committee on July 18, 2001, which analyzes the Clinton administration's estimate of impact on the GDP and the flaws in their analysis.
221	Liddy-Bourne	Relates states that adopted the California bill did so with provisions to opt out. Discusses implementation of the California bill which includes a potentially litigious zero emissions bill. Reviews trading possibilities and the toxic impact on human health of other elements compared to CO2.

266	Taylor	Reviews article from USA Today which noted after leaving office the Clinton administration backtracked and acknowledged Kyoto costs. Discusses funding sources of no-costs advocacy spanning Enron to the windmill industry. Relates the same alarmist groups reporting the advance of global warming previously touted a coming ice age. States the entire premise of Kyoto is that addressing these issues is costly.
298	Chair Anderson	Relates his recent conversation with a vehicle emissions tester who commented on the fraud by competitors in California.
335	Chris Hagerbaumer	Oregon Environmental Council. Submits and reviews written testimony in opposition to HR 3 ( <b>exhibit i</b> ). Believes evidence indicates human beings are impacting the environment. Relates scientific consensus statement issued in Oregon last summer on likely impacts of climate change on the Pacific Northwest. Relates findings. Notes the impact of climate change on human health. Discusses economic costs of climate changes.
438	Chair Anderson	Reiterates desire to look at the long term (the last 2000 years) rather than the shorter term.
TAPE 32, 1	В	
002	Hagerbaumer	Recommends another scientific expert address his concerns. Relates her understanding the information on global cooling was disseminated by the press and not scientists.
021	Jenny Holmes	Program Director, Ecumenical Ministries of Oregon. Submits and reviews written testimony in opposition of HR 3 ( <b>exhibit j</b> ). Discusses stewardship of creation and the need to take responsibility for the harm our nation is creating for our international neighbors.
090	Kathyrn VanNatta	Governmental Affairs Manager, Northwest Pulp and Paper Association. Asks the panel about the impact on capital investment in companies located in states with more restrictive environmental regulations.
116	Liddy-Bourne	Discusses illustration of power plants built by Arizona along the Arizona/California border, who then sells power to California and other western states. Provides second illustration of forestry regulation in Maine leading to the depopulation and closing of towns. Mentions the immigration of California companies to Colorado.

		Notes jobs outsourced to other countries, and monetarily-strapped states that can't afford to enact stricter legislation. Explains why Oregon can afford to enact legislation.
169	Horner	Relates the real issue is about leveling the playing field for businesses worldwide as evidenced by the move toward protectionism as long as it is done in the name of green. States this is rationing: a weakly- disguised effort at redistribution of jobs and wealth.
199	Dr. Thorning	Explains manufacturing jobs and industry will leave Oregon if regulations are tightened. Responds to Holmes' and Groves' testimony by relating climate change is not among the top ten global problems killing people, some of which can be alleviated with economic growth.
244	Horner	Mentions and recommends inclusion of the Cornwall Declaration in the record.
255	Holmes	Comments on the groups who funded the Declaration. States addressing climate change should not be an either/or decision – but both, simultaneously. Believes climate change exacerbates the other problems.
276	Chair Anderson	Thanks the panel. Adjourns the meeting at 5:40 p.m.

### EXHIBIT SUMMARY

- A. Global Warming and Greenhouse Gases, written testimony, Christina Hulbe, 2 pp
- B. Global Warming and Greenhouse Gases, information packet, Sandy Liddy-Bourne, 158 pp
- C. Global Warming and Greenhouse Gases, written presentation and CD, George Taylor, 20 pp
- D. Global Warming and Greenhouse Gases, written testimony and charts, Dr. Margo Thorning, 32 pp
- E. Global Warming and Greenhouse Gases, written testimony, Chris Horner, 14 pp
- F. Global Warming and Greenhouse Gases, written testimony, Vernon Groves, 1 p
- G. Global Warming and Greenhouse Gases, information packet, Fred Heutte, 24 pp
- H. Global Warming and Greenhouse Gasses, written testimony, Eban S. Goodstein, 23 pp
- I. Global Warming and Greenhouse Gases, written testimony, Chris Hagerbaumer, 2 pp
- J. Global Warming and Greenhouse Gases, written testimony, Jenny Holmes, 2 pp