

*Science/Technology Committee
Oregon Global Warming Commission*

16 September 2008

Climate Change Research Institute

- OCCRI Director
 - Four candidates visiting Oregon
 - Phil Mote, Univ. of Washington
 - David Gutzler, Univ. of New Mexico
 - Dan White, Univ. of Alaska
 - David Easterling, NOAA
 - Expect finalist to come again for longer visit
 - Start in early 2009
- Institute funding
 - \$180K/year
 - OUS has proposed a policy option package to increase this substantially
 - College of Oceanic and Atmospheric Sciences is providing \$100K/year

Legislative Issues

- Oregon Climate Service established by Legislature in 1991 (SB 661)
 - ORS 352.245 outlines responsibilities of OCS
- OCCRI established by HB 3543
 - Similar to OCS with additional responsibilities in areas of climate change adaptation and mitigation
 - See ORS 352.247
- Should recommend that legislation resolve these issues

Science/Technology Committee

- Members from several OUS institutions, state agencies and NGOs
- Metrics for GHG
 - Draft report now circulating for comment
 - Focus on
 - GHG concentrations and emissions
 - impacts of climate change
 - state and local emission reduction policies
 - policy and non-policy impacts on behaviors
 - policy and non-policy impacts on emissions
- Knowledge to Action Networks
 - End-to-end process bringing together scientists, managers, decision makers at all stages
 - "Boundary" organizations bring groups together
 - Networks need to be sustained
 - Workshop focusing on rural watersheds as first step

A Sci/Tech Agenda

- Technology
 - Energy sources
 - Energy efficiencies
 - Materials
 - Water
- Science
 - Impacts (i.e., adaptation)
 - Mitigation (i.e., measuring emissions, etc.)
 - Evaluating models and risks
 - (More on this!)
- Education
 - Workforce training

But first, some reality

- Province of British Columbia establishes Pacific Institute for Climate Solutions with \$95M endowment
- California creates California Institute for Climate Solutions
 - Started with PUC but Legislature took over
 - \$60M/year with possibility of \$60M/year match for 10 years

How to set priorities

- Buy time
- Make better decisions
 - No regrets
 - Keep options open
 - Adaptive management
 - "Whole systems" thinking
- Long-term breakthroughs
- Invent the future, don't extrapolate the past
 - Most models of technology fail miserably
 - In 1980, AT&T thought market for cell phones would grow to 1 million by 2000
 - AT&T leaves cell phone business
 - Market grew to 109 million in 2000

Vinod Khosla's Recommendations

- Many technical approaches will be needed to maximize future reduction capacity
- Don't rule out promising options because of uncertain standards
- Encourage research support for all promising options
- Don't let the perfect be the enemy of the good