

Summary of April 2, 2010 meeting of the Clean Energy Leadership Council

Attendees

Council members present were:

- Ernesta Ballard, Weyerhaeuser
- Ash Awad, McKinstry
- David Benson, Stoel Rives LLP
- Marc Cummings, PNNL
- John Gardner, WSU
- Egils Milsberg, WEDC
- Bart Phillips, President, Columbia River Economic Development Council
- Rogers Weed, Department of Commerce
- Roger Woodworth, Avista
- Kim Zentz, SIRTI
- Peter Brehm, Infinia Corporation
- Jeremy Jaech, Verdiem
- Chris Coleman, Washington Technology Center

Council members unable to attend were:

- Kimberly Harris, Puget Sound Energy
- Margaret McCormick, Targeted Growth, Inc.
- Bert Gregory, Mithun
- Keith Phillips, Office of the Governor
- Senator Phil Rockefeller

- Senator Jerome Delvin
- Representative Shelly Short
- Representative John McCoy
- Michael Atkinson, AREVA T&D Inc.
- Michael Butler, Cascadia Capital

Non-Council members in attending were:

- Ron Nichols, Navigant Consulting
- Graham Stevens, Navigant Consulting
- Jim Gollub, E³ Institute
- Brian Young, Element Strategic Partners
- Mike Schwenk, PNNL and Chair of Tri-City Development Council
- Daniel Malarkey, Dept. of Commerce
- Jan Greylorn

Welcome and Opening

CELC co-chairs Rogers Weed and Marc Cummings opening the meeting and welcomed all participants.

Marc Cummings turned the floor over to Ron Nichols for the presentation of Navigant's Phase 1 report to the CELC.

Ron Nichols, Managing Director at Navigant, provided an executive overview of their Phase 1 report.

After in-depth analysis of Washington State's business landscape and taking into account the work of the CELC to date, Navigant has recommended the state focus on the following sub-segments of the clean tech sector:

- Green Buildings and Energy Efficiency

- Biofuels and Biomass
- Smart Grid
- High Efficiency Vehicles
- Intermittent Renewables – Wind and Solar

The Council was interested in the new categories that Navigant presented, namely high efficiency vehicles and intermittent renewables. Navigant pointed to Washington's growing expertise in developing lightweight materials for vehicles and increasing the efficiency of existing combustion engines. Navigant also sees a major opportunity in Washington's ability to lead the world in the integration of existing intermittent renewables with more traditional forms of energy. The energy mix in Washington State is unique in the United States, and the efficient integration of multiple energy sources will become increasingly crucial in the coming years. Washington State is ahead of most every other state in this area and Navigant feels it is an opportunity that needs to be exploited.

Jim Gollub, Director of E-Cubed Institute and Navigant sub-contractor, laid out the methods used by Navigant to determine the best "fit" for Washington State in the clean tech sector. Mr. Gollub explained the methods used to foment cluster development and discussed the inputs and platforms Washington has to develop clean tech sectors.

After Mr. Nichols executive summary, Graham Stevens, Associate Director at Navigant, presented on the data used to generate Navigant's conclusions. Mr. Stevens gave an overview of Washington's competitive advantages and described Navigant's down selecting from an initial 20 to the final 5 sub-segments Navigant believes Washington should direct its focus.

The Council was impressed with the work Navigant has completed to this point and was in general agreement with their conclusions. Some recommendations from Council members include:

- A closer look at the inherent capabilities in the state surrounding the biomass

sector including the existing expertise and resources surrounding forestry and agriculture.

- The Council feels that more emphasis should be focused on the fact that Washington State already has a developing cluster in the controls and instrument sector of smart grid.
- Additional focus on conversion, or how well research institutes take their patents and transform them into new companies.
- The Council discussed whether nuclear power fit under the rubric of clean energy and asked Navigant for an overview of the potential to expand the state's existing nuclear technology cluster to meet global demand for low-carbon energy.

Ron Nichols concluded Navigant's presentation by laying out the next steps in the process, specifically the work to be done in Phases II and III of the project. The focus is on producing an actionable roadmap that will guide Washington State to a position of leadership in the designated sub-segments and ensure economic development in the state.

The main steps in the to accomplish this roadmap are:

- Identify actions to address exogenous challenges to U.S. market growth;
- Explicate WA internal economic input gaps, to generate actions leading to more formation, expansion, and attraction in these clean energy sectors;
- Refine the sub-segments of the five target areas to be more specific in the technology areas and value chain components to be addressed in the strategy and the roadmap;
- Outreach to state experts in the identified sub-segments to further understand and incorporate existing expertise in the state related to the sub-segments.

Upon completion of the Navigant presentation, Director Weed addressed continuing Council business.

- Updated the progress of ESSHB 2658, concerning the restructure of the Commerce Department and specifically addressed the state energy

strategy aspect of the bill.

- Deputy Director Malarkey updated the Council of the overall goals and current progress in updating the state's energy strategy. The main goals of the strategy include:
 1. The preservation of the relative cost advantage of power in Washington State.
 2. An emphasis on meeting the state's GHG emission reduction goals.
 3. The stimulation of growth in the clean energy sector.
- Director Weed discussed increasing coordination with the Council on major upcoming initiatives. Topics included:
 - The Governor's upcoming trade mission to China;
 - The Nissan/ETEC pilot project;
 - The Energy Park Initiative;
 - How to better foment communications and idea sharing within the Council.
- Deputy Director Malarkey asked for the Council's view on holding a 2010 Energy Summit.
 - In general, the Council liked the idea of another Energy Summit; however, it was agreed that it should be a program that produces demonstrable outcomes.
 - The Council agreed to continue to help develop a strong program for the Summit.
- Co-chair Cummings updated the Council on the current state of the Energy Regional Innovation Cluster (E-RIC) joint proposal being lead by PNNL and consisting of partners throughout Washington and Oregon.
 - The program would represent \$130 million dollars over 5 years.
 - The program is unique in that it represents a multi-agency project lead by the DOE.

During lunch, the Council was given a presentation by Mike Schwenk, PNNL's Director of Technology Development and Outreach as well as the Chair of the Mid-Columbia

Energy Initiative. Mr. Schwenk outlined the opportunities that the group is pursuing related to the DOE's Energy Park Opportunity. The Tri-City region has large plots of land available through the changes occurring at the Hanford site. The community is invested in ensuring that this surplus land is used to develop a diverse portfolio of clean energy production and technology development in coordination with the DOE.

Finally, the Council was given a tour of PNNL's Energy Infrastructure Operations Center (EIOC) and a smart appliances demo.

- Mike Schwenk provided an overview of PNNL's major energy initiatives.
- Peter Christensen of PNNL provided the EIOC tour.

The next meeting will take place on May 14th at 9:00 AM. Location is TBD.