The meeting was called to order at 1:50 p.m. in room 3200 of the Child Development and Rehabilitation Center on the Oregon Health & Science University campus. Director John von Schlegell welcomed the participants to the meeting. JEVS welcomed the participants to the meeting.

Mr. Jay Coalson, president, Green Buildings, Inc., is a sustainability consultant with what he termed a “sustainability development consultant company.” He noted that the System institutions’ competition have closed the gap with innovative curriculum, established sustainability R&D, and increased public/private exchanges over the state of Oregon. However, we are in a tremendous position to affirm Oregon’s leadership.

He mentioned the strengths of Oregon include: sustainability is engrained with people from other states often saying “of course, you’re into sustainability--you’re from Oregon;” Oregon is seen the leader in green building, land use, transportation, energy efficiency, etc. with pockets of innovation in select areas (wave energy, Purbond) and attracting some sustainability business interest. However, the weaknesses relevant to OUS include: education investment in integrated, innovative curriculum; sustainability R&D infrastructure “Centers of Innovation”—we have pockets of innovation but no centers; innovative partnerships and community engagement; and singular focus.

Mr. Coalson noted that many institutions in other states have promoted integrated, innovative curriculum (Carnegie Melon, ASU, University of Minnesota, Colorado State University, Texas A&M, and Yale). These institutions also have instituted programs that produce students prepared to compete in a rapidly integrating market and these programs tend to produce ‘archineers’ / ’engitects’ (programs that combine the fields of architecture and engineering), civil scientists, and ‘environomics’ (environmentalists and economics). However, OUS institutions are not providing the needed degrees and educational experiences that other states are providing their students. Universities that have established R&D in sustainability and sustainable development include: University of California, Berkeley and Lawrence Berkeley Laboratory, Pennsylvania State materials research, Stanford University, University of North Carolina, Arizona State University, and the University of Texas. These research facilities produce reference standards and technologies and, in turn, generate the reference standards that help drive sustainability forward. He added that the University of Minnesota has a strong program in sustainability design.

**Partnerships and community engagement**
A partnership that focuses on both education and “cracking the equity divide” is the “Noisette Development” in Charleston, SC; this is a partnership between two universities, community colleges, and K-12) and is the nation’s largest sustainable redevelopment project to showcase “green” planning and design. Several years ago, the University of South Carolina (USC), Clemson, and the Medical University of South Carolina (MUSC) established the Sustainable Universities Initiative (SUI), a consortium later expanded to include 13 other schools across South Carolina. Other partnerships include universities providing programs in correctional facilities to train inmates in jobs dealing with sustainability; the University of Virginia’s research and community outreach; and the University of Texas in research and community outreach.

**A vision of Oregon’s leadership:** Coalson pointed out the following:
- A true sustainable economy where Oregon is proof of concept…
We have an evolved context where we correctly engage natural systems and correctly apply value to natural resources

We have the capacity to locally/regionally research, invent, design, grow, manufacture, construct, operate—all within this context

All people have valuable roles to play where they understand their function within the “natural system.”

Mr. Coalson concluded his presentation by asking, “How will OUS respond to this challenge/opportunity?”

von Schlegell shared the following analogies: if we view our goal as a blanket that covers many avenues of sustainability (energy, sustainable community, economics, policy, environmental law, etc.) the question on how the System proceeds is three-fold: 1) Should each university create its own blanket? No, we cannot afford that approach. 2) Should it be a “patchwork quilt”—different patches supplied by different campuses? This approach is feasible, but difficult to coordinate and ensure continuity. 3) Can we weave a tapestry? Integrating our core strengths and funds to create a greater, more excellent System by taking this approach?

**Sustainability focus updates from the universities:**

President Lund advised that Eastern Oregon University is working with the local community colleges to build sustainability programs directed to rural regions (wind power for revenue and energy; education faculty are looking at sustainability curriculum geared toward grades 6 through 12, “great inventors/great discoveries,” focusing on a vision/research curriculum rather than building/green activities.

President Minahan advised that Western Oregon University is focusing on one project, “Luckimute watershed project” – two activities have affected the watershed: 1) communities have gone from using aqueduct systems that move water to the needed areas to pulling water from the aquifers, thereby lowering the water tables; and 2) flood water runoff from agricultural areas have contaminated the water tables with chemicals. WOU has initiated a project to look at reversing the issues of contaminants in the water, and predicting what is going to happen next due to the middle-valley population growth and the need for more water, and water storage (to produce clean runoff to refill the aquifer).

President Frohnmayer said that the University of Oregon has prepared a study assessment that contains a sustainability database and is listed on the UO website. He noted that the UO was recognized as a national leader in sustainability. The University continues to look at buildings, transportation, and conservation of fuel or developing new programs for sustainability of energy (green architecture). The UO’s environmental programs were rated in the top ten by *U.S. News & World Report*. Programs on campus that are not particularly categorized as “sustainability programs” also include sustainability in their curriculum.

Provost Hallick advised that Oregon Health & Science has promoted an environment that has forged ahead in innovative partnerships; examples include the Center for Research on Occupational and Environmental Toxicology; the Center for Coastal Margin Observation & Prediction (CMOP) that deals with the observation of data collection and mathematical modeling to predict environmental health in the margin between rivers and the ocean, physics—changes in the tidal waters/marshland; and engaging students in the changes in the environment of the ocean science (western and native American science) that is a collaboration between OSU, the University of Washington, PSU, University of Maryland, and others.
President Reardon advised Portland State University has programs on invasive species, climate change impact, business on supply change management and sustainability, development of metrics for sustainable business practices, transportation partnerships with the UO and OSU, and water issues. PSU is currently hiring new faculty to reach their sustainability goals; outreach and service learning in general education programs (learning goals and outcome). To enhance their strengths they will be looking for faculty to couple with sustainability communities, creating a policy center, and developing mechanisms for change (environmental and social), and metrics to evaluate what is sustainable and what is not.

President Reardon asked, “What is needed to do this and what are the impediments?” and then answered, the structures in which the institutions are divided; the institutions must recognize a concentrated effort to move into interdisciplinary and interinstitutional areas. If sustainability is going to be the way of the future for higher education, then the fact is, just as we all have to have the same disciplines to be reputable institutions, then we are all going to have to address these issues in the same way. He is concerned with the metaphor of a tapestry in that if what businesses are looking for the students as are coming from our competitors, then we are going to have to change the ways in which we educate our students in sustainability.

President Cullinan advised Southern Oregon University is strong on undergraduate research and that the sustainability theme is throughout the curriculum of the institution. Southern’s reorganization last year added benefit to the various programs. The campus is particularly interested in a number of applied research programs; students are working on projects looking at zero-scaping on the campus; the Siskiyou field institute is working on water and fish habitat issues, that include student projects from freshmen seminar and biology studies; partnership with Crater lake, faculty are coordinating programs wherein grades 4-5 are going to Crater Lake to look at water and environmental issues. In June, the Council of Public Liberal Arts Colleges held a conference on sustainability for liberal arts colleges.

President Woodall advised that Oregon Institute of Technology has a strong focus on application, hands-on projects in sustainability areas (e.g., energy systems, renewal energy transportation, and manufacturing). One of the three strategic planning focuses is on sustainability. OIT has a history of renewable energy due to the geothermal resources in the Klamath basin (over 30 years with federal agencies) with the foundation of the creation of the Oregon Renewable Energy Center, which has broadened the vision, to include the creation of the renewable energy systems program offered in Portland. OIT has been delivering manufacturing disciplines to Boeing for the past decade in undergraduate and graduate programs on sustainability. OIT is in the process of drilling a deep geothermal well to capture more geothermal energy in order to become energy independent and also be able to provide energy to local communities and manufacturers.

President Ray advised that OSU is currently focusing on initiatives that are in partnerships with other OUS universities. (I didn’t get this one as I was drawn into another conversation/question at this time)

**General Discussion:**

Chancellor Pernsteiner said that the sustainability meeting came about because of a session that he and Mark Edlen had with an editorial board. Edlen talked about the “challenge and opportunity in Oregon and at OUS in sustainability,” adding that “it is the next big thing.” That means that institutions are going to have to think, act, and be different than they have been for the last 50 years. This is Oregon’s competitive advantage and the only way Oregon can take full advantage of that is for higher education, in its education and research areas, to take the lead.
“This is our time. This is our opportunity, our subject, our challenge.” Pernsteiner noted that the editorial believed that and quoted Edlen. He added that "We have a business community that is ready, a political environment that is ripe, all of the advantages are aligning except for one thing—we don’t have the momentum. We are living on the laurels of public beaches, the bottle bill, and the snow pack on Mt. Hood. Those laurels won’t translate into a sustainable competitive advantage. Each campus has done an excellent job of harnessing individual activities and programs that say they have expertise, but haven’t established a System philosophy, framework, plan, and programs in a way that can make sense for ‘Brand Oregon.’ We organize ourselves by discipline (for the past 120 years) but when an employer is looking for talent, it isn’t under the auspices of “von humbolt.” Many of the California campuses are making a mark in what used to be considered as interdisciplinary activities. That is where the future is. The question is: how are we going to think differently? Act differently? Live differently? In order to provide the leadership that needs to be provided over then 20 years. This is not a flash in the pan opportunity—it is a fundamental advantage that we need to grab. Approached deliberately, directly, persuasively, intelligently—we can compete, succeed—and the advantage is ours to gain. If we don’t, we will lose the advantages of the current programs; all of us must develop an overarching framework, philosophy, and approach that will allow us to say that sustainability is the brand of Oregon and its universities. This session is for us to recognize that this can be our competitive advantage (not just in legislative funding) but in the way we think about ourselves. We cannot be ‘all things to all people.’ We must identify the rewards, the impediments, and make plans for dealing with the impediments, and craft the philosophy and focus that will animate the tapestry that we hope to weave. Can we identify what it will take to weave the tapestry John talked about?

“If the marketplace wants us to be all things to all people, how do we approach that? How do we become world class? It’s not enough to be “good” we have to be world class. How do we approach it once it’s identified? Are there other things that we may be able to do if we remove the impediments? Are there areas in which we are the best or could be the best in the world?”

Provost Brady asked concerning the list of institutions that Mr. Coalson shared; were they systems or individual institutions? (Referring to the University of North Carolina and the University of Texas.) Or are they systems that have designed programs? Coalson replied that they are institutions but recognized that the institutions are massive compared to OUS institutions. He did note that the University of Colorado is not large but it is the way in which they are developing their programs that makes them stand out.

President Minahan asked if there are ways of accelerating cooperation from people in many disciplines and programs? “How can we, as a System, help people who are finding colleagues to work with, that we couldn’t predict, and accelerate the process? (This can be both an impediment and an opportunity.)

President Ray said that “it’s not as if we are clueless about how we would work together. ONAMI is a poster child of how we do it right.” The chancellor agreed but added that the ONAMI example is a research example and asked is there one in education? President Woodall said that a matrix needs to be created that lists the key areas and spires of excellence, in order to aid in bringing in people who have specific interests into common-interest areas. Frohmayer added that we should facilitate opportunities for interinstitutional faculty to have discussions on matters of substantive areas (e.g., giving OIT $25,000 to have a conference to bring in people from other institutions to look at the sustainable-energy focuses on OIT campus). “We want to graduate students who are more sustainable; a citizenship that is deeper and richer than can be taught in any one individual course.” He added that campuses have “purchasing power” and
asked how can it be used in our communities? (E.g., why are we buying plastic bags for use on our campuses?)

President Reardon mentioned that “we all have groups contacting us from outside U.S. who want to come and find out about something here.” He agreed that an inventory (or matrix) for each campus listing what those requests are, what groups, and what they want to see, will provide stronger information resources to the campuses.

Director Francesconi said that there are basic strategies that have to happen at all institutions and those strategies are up to the presidents (special efforts such as conferences, the watershed-focus, and sustainability institutes to incent money). But the question is, how do we put this together to get support from state, local, and businesses?

Gail Achterman advised that it comes down to a competitive advantage. She recently met with Toyota America they said they spend $1 million per hour, worldwide, on research. They are looking for a place that they can use as a “petri dish” for sustainable mobility. Oregon is what they are looking for due to the diverse sizes of communities, driving habits, etc. Sustainability engineering (in mobility) in curriculum in K-20 education is also what they are looking for.

Mark Edlen added that the challenge is funding in Oregon (“what's the big stupid idea?”). Money follows ideas and the focus should not be only on the Portland community or state but how we market ourselves to the world. He noted that there is an unbelievable opportunity in Viet Nam—an opportunity for joint ventures—they are hungry for information. The same holds true for China. Oregon higher education institutions should follow the jobs—there is an opportunity to bring students into the industry/business and let the business community train them, to fill the potential demand for knowledgeable people in sustainable businesses. Director von Schlegell agreed and said that “the money will follow big ideas” (venture capital).

Chancellor Pernsteiner asked what are the areas that, if we brought our faculty together, would facilitate and identify how we would develop an infused curriculum? How do we build them? If we want to provide an opportunity to build something together, the best way is to have the faculty build it together—across institution and discipline lines.

- Explore nuclear engineering in terms of acceptance of nuclear power, management, and waste issues. (Weiss)
- Pick disciplines that have ties with industries in Oregon (metal manufacturing, etc.). (Woodall)
- Distributed energy (Edlen)

Director Sohn asked, “How do you get to a focus? What is the criteria? How narrowly do you focus, define focus, and is there inertia?” He advised that “we need to decide how we’re going to decide, if we’re going to decide, the focus.” Pernsteiner asked is there an intermediate step between process and content? Is there a synergy with business or resources of Oregon; is there an opportunity for employment and jobs here? Is there criteria and what is the content of the criteria?

Dr. Linton advised that the role of the Research Council—these themes, criteria, partnerships, and focus—are at the heart of the business of the Council. At the heart of the mission of the Research Council is the collaboration and partnerships among campuses and the Council is focusing on four aspects that connect well; three of which have had legislative support and seed funding to launch them.
Jennifer Allen (representing BEST—Oregon Bioeconomy and Sustainable Technologies) asked how does this fit with workforce and education? What are the educational programs needed to support this? She advised that BEST could bring together faculty from the campuses to discuss these issues. Provost Randhawa agreed and opined that the best faculty group to engage in the curricula discussion would be the Interinstitutional Faculty Senate. President Frohnmayer added that it would be a mistake to narrow the focus in the beginning and leave out the humanities; engaging the faculty early on would aid in broadening the footprint of sustainability in the curricula. Provost Hallick gave examples of the synergy created by bringing together people from unrelated disciplines who have passion for solving challenges. This can be very powerful, whether looking at medical, natural resources, or energy issues, Director Sohn added that the unifying concept of a laboratory model—the state of Oregon or the University System—interdisciplinary gatherings can and will generate new, fresh ideas. Gail Achterman mentioned how food systems—from field to processing to market to table—is another area in which sustainability can be applied. Ken Williamson opined that the state has a list of grand challenges: no oil supplies from which to draw; a mandate to reduce CO² levels by 80% by 2010; a mandate against polluting the Willamette River; etc., all solutions involve sustainability.

Susan Bragdon said that the Toyota company representatives were interested in organizing a conference around “grand challenges” that would have international appeal. She noted that, with the anticipated influx of people and climate changes, challenges may result. Mr. Williamson agreed and added that there is an urban challenge with the population growth—how do we build a sustainable urban environment? Edlen asked “how do you take that to the next level, to net-zero?” President Frohnmayer said that the use of video technology may ultimately replace travel, thereby reducing the carbon footprint. In other words, connecting people without driving or flying to meetings. It was suggested that one Board meeting per year be videoconferenced as an example to other public and private entities.

In conclusion, Director von Schlegell listed the topics that were discussed:

- Distributive renewed energy, water, sewage
- Sustainable transportation
- Water resources
- Geothermal and alternative energies
- Materials in green chemistry/buildings
- Sustainability as a value/humanities
- Food systems and genetic diversity
- Sustainable urban environments
- Video conferencing vs. traveling to meetings
- Interinstitutional interest groups working on issues (faculty, students, business communities)
- Students as a moral imperative and as a product/workforce for the future
- Oregon universities is where sustainability is taught, tested, and practiced
- Creating a recyclable industry? Encouraging recycling
- International dimension on all of these mentioned topics
- Focus on leadership and service; educational and service-learning, students working with faculty/staff to improve the nature of the environment and with counterpart cities in the world
- Natural push-down to K-12
- Needs to be a thread of sustainability in every course and in every university
- How do we prioritize or create a time profile for future projects? We already have groups that are heavily invested in this topic (Research Council, ONAMI, BEST, etc.), where do
we find new areas? What’s there that we have inadvertently overlooked in the past? How are we going to assign the various elements so that we “have a lot of trains moving down the track at the same time”?

Von Schlegell advised the Board will create a steering committee to begin the work. Chancellor Pernsteiner adjourned the meeting at 5:07 p.m. by reiterating that the System must be a place where sustainability is “taught, lived, and practiced.”