



Oregon Sustainability Center



*Presentation to City Council
August 2010*

*Portland can lead the emerging global
clean economy revolution*

We have the opportunity to create jobs by making a catalytic investment in our sustainable economy

"We are excited the OSC will be the first step in a larger plan to make the region a center for the commercialization of truly cutting-edge innovations in the built environment."

Lorie Wigle, General Manager, Intel Eco-technology Programs



*"We're eager to help Oregon and the Portland metro region extend its leadership in creating livable communities and a green economy. SolarWorld is a natural partner in the Living Building Challenge's development of PV's significant role in the pursuit of **net zero energy**."*



Ben Santarris, Public Affairs Manager,
SolarWorld

WHY SHOULD THE CITY INVEST IN THE OSC?

The Oregon Sustainability Center will grow green jobs and promote innovations in sustainability

- **Establish Portland as the leader in next generation urban development and performance**
- **Create immediate market for Oregon products and services**
- **Incubate new products and services for export**



OREGON SUSTAINABILITY CENTER: NEXT STEPS

STATUS:

- Development team selected
- Feasibility Study completed
- Peer review of Feasibility Study
- Occupants committed
- Financing scoped

NEXT STEPS:

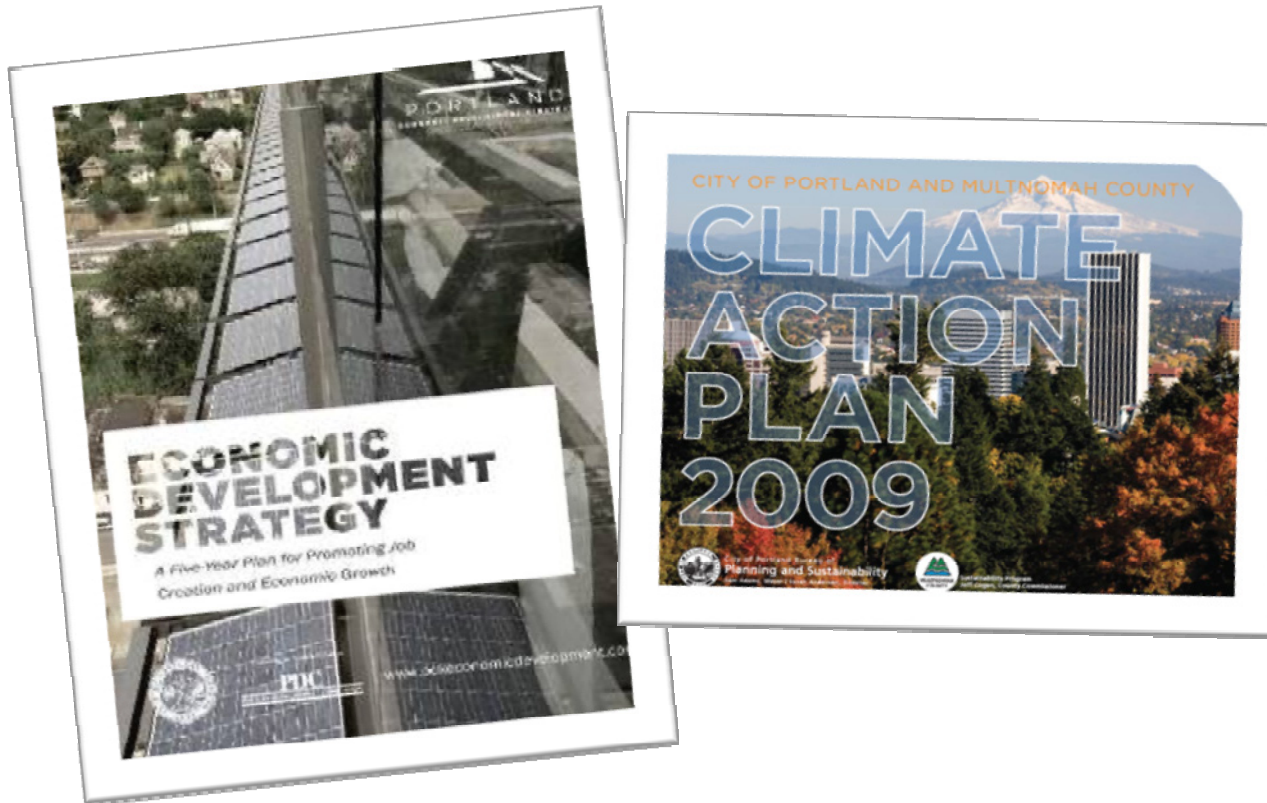
- Begin schematic design
- Outcome:
 - Refined building design
 - Refined cost

ACTIONS NEEDED:

- **City Council** approves contingent commitment for BPS as tenant of OSC and City as co-owner
 - Council action: August 4
- **PDC** allocates \$450k to schematic design
 - Approved in FY10/11 budget
 - PDC Board action: August 25
- **OUS** allocates \$450k to schematic design
 - Higher Ed Board, Finance Subcommittee action: September 10



POLICY FRAMEWORK



Next Generation Urban Development & Performance

Clean Energy Works – Ecodistricts – Oregon Sustainability Center

PORTLAND'S LEADERSHIP: WE'VE DONE IT BEFORE

OSC builds upon Portland's history of innovation in green building

In 1998 LEED Gold Ecotrust Building set a new standard for green building

- City's presence as a key anchor tenant helped legitimize and support the project
- Created a place to convene green minded partners and business

Ecotrust helped catalyze Portland brand & the green building sector

- Portland now boasts the largest concentration of green building professionals and wind energy and solar photovoltaic manufacturers in the US.

"Just as the Ecotrust Building helped catalyze green building in Oregon by broadening our thinking about what is possible, the OSC can be the game changer that marks Oregon at the forefront, leading the nation toward a new way of thinking about how to live, work and build communities."

– Jim Winkler, Winkler Development Corp.



NATIONAL PRIORITY, GLOBALLY COMPETITIVE



OREGON SUSTAINABILITY CENTER

- Public-private partnership
- Urban context
- Replicable
- Testing emerging markets
- At 150,000 square feet, would be the largest mixed-use project to pursue Living Building Challenge

DOE's ENERGY SHOWCASE (CO)

- Federal government (hoping commercial developers will follow its lead)
- Zero-energy office building, the nation's largest
- Construction complete

AMES RESEARCH CENTER SUSTAINABILITY BASE (CA)

- NASA
- Net-zero energy building
- Broke ground in August 2009 with planned completion by 2011

CASCADIA CENTER FOR SUSTAINABLE DESIGN AND CONSTRUCTION (WA)

- Bullitt Foundation
- Six story office building pursuing Living Building Challenge
- In the planning and feasibility stages

OSC: TECHNOLOGICAL INNOVATOR & LIVING LABORATORY

The Center will be hub for technological innovation and pursuit of net zero energy, net zero water, and use of local green materials

*“We are enthusiastic about showcasing a variety of **ecomagination**™ solutions within the OSC, a project that is consistent with GE’s global portfolio of groundbreaking endeavors to help solve some of the planet’s biggest environmental challenges” – Peter Foss, General Manager of Special Programs at GE*

Evolving Building: “Plug & Play” Features

- Photo Voltaic
- Lighting
- Radiant heat
- Transformers
- Water systems
- IT/ Data

Provides water to building through a 200,000-gallon tank

Uses smart design to reduce energy loads

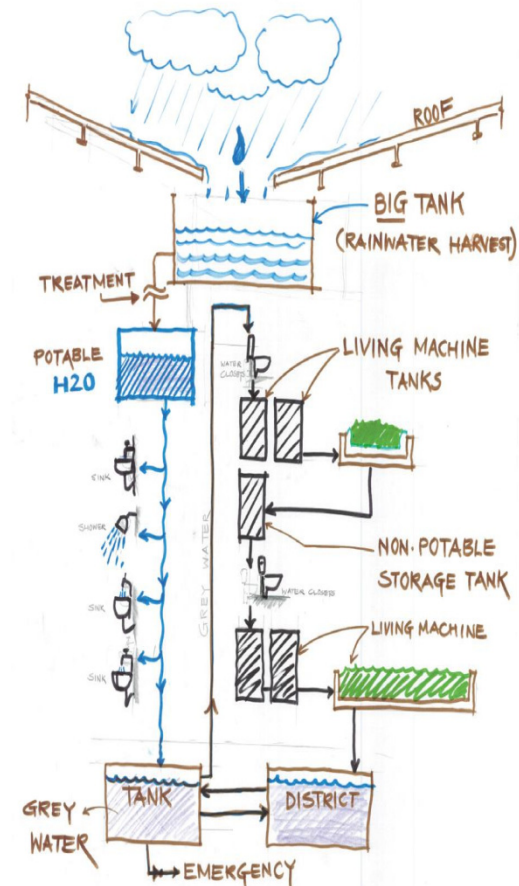
- “right-sized” and high efficiency systems

Uses a biological wastewater treatment system to clean blackwater

Optimizes energy use

- passive and natural energy sources

Replaces potable with treated graywater



OSC: WHERE PEOPLE MEET INNOVATION

A place to apply research, integrate design, incubate clean technologies & engage the public

Retail	4,000 SF
Exhibit/Action Center	3,000 SF
OUS Office	13,000 SF
PSU Office & Classroom	42,000 SF
Conference	7,000 SF
City of Portland	33,000 SF
Private & Nonprofit	48,000 SF
Total	150,000 Sq Ft

Sustainability's Front Door

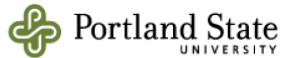
Action & Education Center with interactive exhibits



OSC: A HUB FOR COLLABORATION

A living laboratory of green building innovation and commercialization

OREGON UNIVERSITY SYSTEM



SHARED-USER RESEARCH FACILITIES

Green Building Research
Laboratory

Portland State University

Green Building Materials
Laboratory

Oregon State University

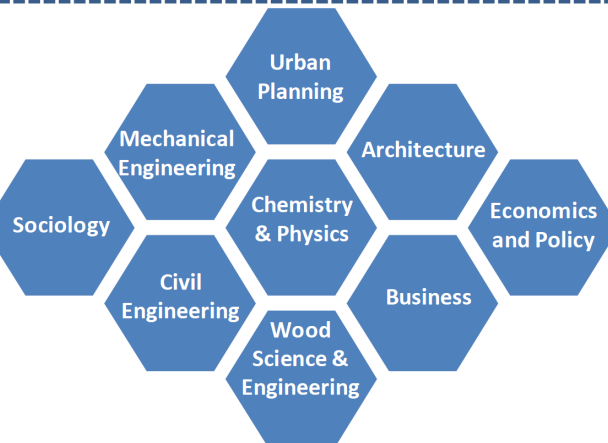
Energy Studies in
Buildings Laboratory

University of Oregon

Oregon Renewable Energy
Center

Oregon Institute of Technology

Disciplines



OSC RESEARCH AREAS

1. Net-zero Energy Building
Technologies and Strategies

2. Water Use and Rainwater
Retention

3. Material Utilization,
Waste, and Life Cycle
Environmental Impacts

4. Occupant Health and
Performance

5. Integrated Performance-
Based Design, Construction,
and Operation

ENGAGED
INDUSTRY
PARTNERS

OSC: A HUB FOR COLLABORATION

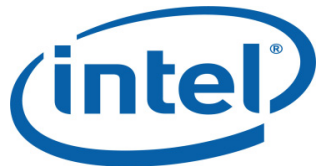
A unique mix of businesses, educational institutions, non-profits & public agencies



Oregon
University
System



Interface®



GROWING SKILLS, EXPERTISE AND JOBS



Jobs and Job Training: skill development in high tech, design, engineering, and high performance construction

- More than **1,300 jobs** created through design and construction
- Creating a **well-trained workforce** with first-hand experience in innovative prototype building

Business Growth: clean tech and sustainable industries

- **Showcase products** and services to gain access to markets outside Oregon
- Determine best fit technologies and innovations for the Center with **valuable R&D** opportunities



GROWING OUR COMPETITIVE ADVANTAGE

Research Agenda: world class universities, faculty and students

- Help design, research and monitor the efficiency of the building's mechanical systems with private partners
- Find hands-on experience for students with the technologies and real-world case studies onsite



Brand Portland: the leader in sustainability

- Symbolic & tangible center of sustainable leadership
- Separate and elevate us from competitors like Chicago, Seattle and Denver
- As an anchor tenant the city maintains position as a key partner to business
- A destination for thousands of visitors to learn about sustainability

REQUIRED INVESTMENT

COSTS	
Construction Hard Costs	\$50,200,000
Construction Soft Costs	\$14,700,000
Financing Costs	\$4,500,000
TOTAL BUILDING	\$69,400,000
Potential Add Package	\$6,000,000
Exhibit & Resource Center and Streetcar	
TOTAL	\$75,400,000
SOURCES	
OUS Bonds	\$45,800,000
OUS Funds	\$3,000,000
City Bonds	\$7,000,000
PDC Tax Increment Financing	\$6,700,000
NMTC	\$2,000,000
ETO/BETC Incentives	\$2,400,000
Living Building In-Kind Requests*	\$2,500,000
<i>Private Solar In-Kind Requests: \$3,000,000</i>	
<i>Federal Approp. Request/Water Systems: \$2,000,000</i>	
TOTAL BUILDING	\$69,400,000
Potential Add Package	
Exhibit & Resource Center and Streetcar	
<i>Connect OR Streetcar Grant</i>	<i>\$2,000,000</i>
<i>Foundations and Private Requests</i>	<i>\$4,000,000</i>
TOTAL	\$75,400,000
<i>* current gap</i>	

Low Confidence Estimate

CITY OF PORTLAND INVESTMENT

Partnering to Lead

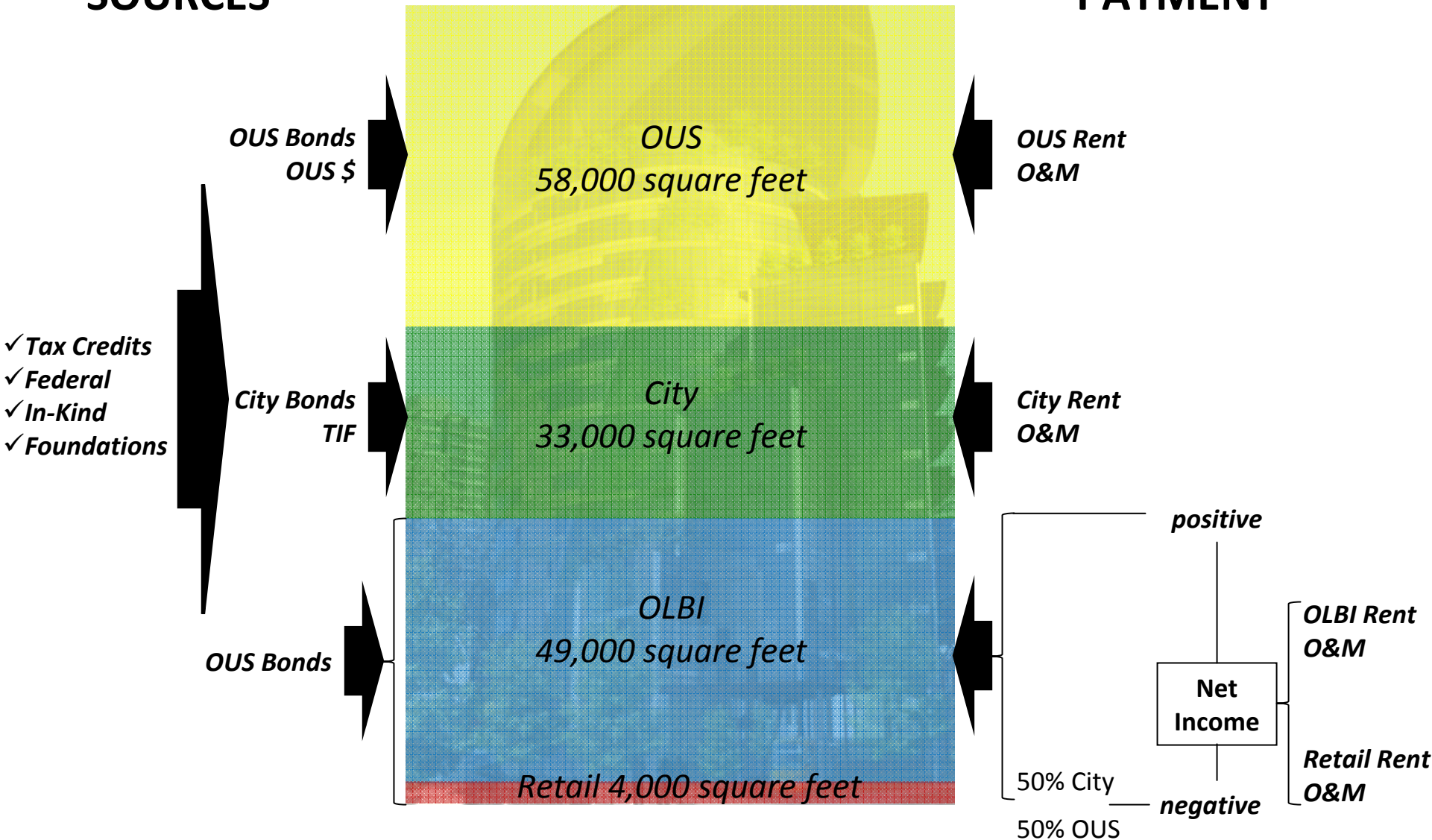
- The contingent commitment by the City of Portland is for approximately 33,000 gross square feet of the 150,000 square foot building to be tenanted by the Bureau of Planning & Sustainability (BPS).
- The Oregon University System (OUS) already has contingent commitments in hand for the remainder of the commercial space by OUS and private/nonprofit partners.

Bureau of Planning and Sustainability offices		Years 0-9	Years 10-19	Years 20-29	Total	Net Present Value
Options	Current (1900 Building)	\$8.8M	\$7.5M	\$10.1M	\$26.4M	\$14.8M
	Comparable Class A office (lease)	\$11.5M	\$13.9M	\$18.6M	\$44.0M	\$23.6M
	Comparable Class A office (acquisition)	\$9.1M	\$12.4M	\$9.3M	\$30.8M	\$17.2M
	Oregon Sustainability Center (w/o TIF)	\$9.0M	\$13.1M	\$10.2M	\$32.3M	\$17.9M

OUS/CITY COST SHARE COMMITMENT

SOURCES

PAYMENT



TIMELINE AND NEXT STEPS

