

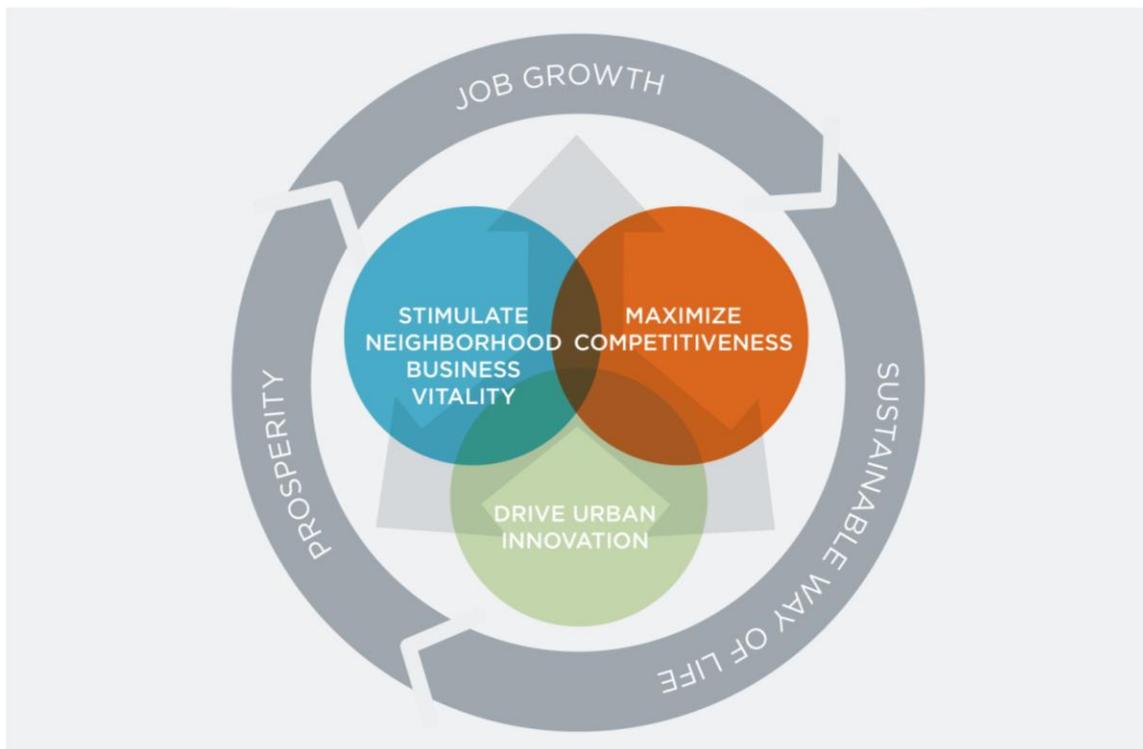
The Strategy

What follows is a strategy for directing the investment necessary to grow employment in the city by 10,000 jobs in five years. Portland embarks on this period of renewed focus on job growth and new business formation guided by three mutually-reinforcing principles:

- The economic benefits produced by our collective efforts must accrue to all Portland residents in the form of access to family wage jobs and opportunities at wealth creation through small business ownership;
- Portland's competitive position depends on vigilant maintenance of a vibrant Central City and thriving neighborhoods, as well as the sustainable way of life that now defines Portland both locally and throughout the world;
- Successful economic development is a collaborative effort encompassing not just business and the public sector, but organized labor, academia and the not-for-profit community.

Achieving the objectives of the sustainable economy requires an equal focus on job growth, innovation in sustainability and equality of opportunity. As the diagram below highlights, the strategy will:

- generate robust job growth by maximizing the opportunities to produce and sell products and services for existing, emerging and relocating businesses;
- maintain a leadership position in sustainability by constantly striving to produce an innovative urban setting that fosters creativity and invention; and
- achieve broad-based prosperity by equalizing opportunity and stimulating business activity in neighborhoods throughout the city.



The three components to the strategy, however, are not intended to be silos operating in isolation from each other. As with the objectives of the sustainable economy, these components overlap in many ways: effective workforce development increases employment opportunities for neighborhood residents; innovation from local projects morphs into expertise that can be sold abroad by Portland businesses; successful neighborhood-based businesses can access national and international markets and drive traded sector job growth.

1. Building the Sustainable Economy – Competitiveness

Achieving sustained job growth in the city over the next five years depends on the city maximizing the competitive environment for local businesses. This strategy embraces the belief that Portland’s unique competitive position as a leader in sustainability will translate into growth in revenues and profits for the city’s existing business base, and firms in its target industries in particular. Portland will focus its resources on enhancing the competitiveness of businesses in four industry concentrations - Clean Tech and Sustainable Industries (CTSI), Activewear, Software and Advanced Manufacturing. Each of these industries is thriving due to differing but equally unique economic attributes of the Portland region.

While the four target industries include firms across the spectrum of sectors in the local economy, firms in each of these clusters are part of and can prosper in a sustainable economy and are capable of furthering Portland’s leadership position in the green economy. High profile firms in clean tech sectors such as wind and solar power will help establish Portland’s brand, but the bulk of the growth in green jobs and widespread adoption of sustainable business practices will occur among sectors that are not typically viewed as part of the green economy.

Objective 1.1: Grow traded sector jobs through the implementation of a cluster strategy targeting four industries.

A focus on traded sectors offer the most direct path to family wage job creation for local residents and increased business for the professional service firms, including those in the legal, financial, insurance and creative service sectors, that concentrate in Portland’s Central City.²¹ A cluster strategy is the logical organizing principle for growing traded sector industries because disparate efforts at retention, expansion, innovation, international trade, land assembly and workforce development can be coordinated in a manner that makes more efficient use of resources and captures synergies in otherwise unrelated activities (e.g.; coordinated training and research at local universities). In addition, in-depth knowledge of particular sectors fuels catalytic initiatives that move business development efforts beyond traditional assistance. A cluster strategy is especially critical for a market like Portland, where limited resources require selective investments in the groups of firms that demonstrate the most promise of growth.

²¹ This dynamic is referred to as the multiplier effect, which is the stimulative effect of economic activity in one sector on activity and jobs in other sectors through wages paid to workers and demand for services and inputs from other local companies.

Portland's four clusters are concentrated beyond national norms and adhere to widely accepted theories regarding the emergence and evolution of local clusters.²² In particular, the clusters have demonstrated growth equal to or beyond industry averages and have assembled the elements of tangible competitive advantage, including concentrations of talent, deepening supply chains and a proximity to customers or product feedback loops (e.g., local outdoor recreational culture informs product development in activewear).²³

Equally significant, each of the clusters demonstrates a strong correlation with job creation within the City of Portland. Clean Tech and Sustainable Industries and Software share a particular propensity for Central City job creation. This distinction is important for the strategy: the city can be confident that investments that produce new jobs in these clusters will reside in the city. The clusters also fit the city's small business profile. Cluster firms employ 26 workers on average, and over 80% of cluster firms have 20 or fewer employees.²⁴

Clean Tech and Sustainable Industries (CTSI)

CTSI, which comprises firms in the renewable energy, green building, environmental services and recycling industries, locate here due to an educated labor force (talent cluster at least 50% larger than average for similar regions), access to inexpensive energy and water, tax incentives for renewable energy products, quality of life and reputation as a leader in sustainability.

The city's CTSI cluster is notable for growing concentrations of market leading firms in wind and solar energy, green building and environmental consulting and energy efficiency. These firms include Skanska USA Building Inc, CH2M Hill, Vestas-American Wind Technology Inc., David Evans & Associates, Inc., Rejuvenation Inc., Ankrom Moisan Associated Architects, Boora Architects PC, Neil Kelly Co Inc., Parametrix, Inc., Glumac International, SolarWorld, Solaicx, Gerding/Edlen, and Siltronic Corporation.

The CTSI cluster is particularly concentrated in the City of Portland. In 2007, 64% of the cluster's 31,000 regional jobs were located in the city. With average pay nearly \$25,000 per year higher than the average for the city, growth in CTSI jobs should translate into more family wage opportunities in the city. In addition, 77% of the firms in this cluster have 20 or fewer employees.

²² An analysis of employment data for the City of Portland shows concentrations of employment in various industrial sectors, including truck manufacturing, asphalt manufacturing, professional services, transportation and wholesale and distribution. That analysis and a discussion of factors that led to the selection of the four target industries, is located at www.pdxeconomicdevelopment.com.

²³ Michael Porter's competitive advantage diamond is the most widely accepted explanation of cluster formation. The four elements to Porter's diamond are rivalry and cooperation, inputs, suppliers and customers. Additional criteria for identifying clusters include relative concentration (i.e., location quotient), relative growth, and relative wages.

²⁴ Quarterly Census of Employment and Wages QCEW, 2007

1.1 Cluster Strategy - Clean Tech and Sustainable Industries (CTSI)	Responsible Parties
Action 1.1.1: Facilitate employment growth of CTSI sectors through extensive cluster organizing and implementation of industry-driven action plans.	PDC, OECD, GGP

Over the next five years, the city will help organize clusters across a range of niches within the CTSI category to help retain and grow these local companies. Currently identified niches include renewable energy, green building, energy efficiency, electric vehicles, and waste reduction and recycling. The priorities established for each of these clusters will guide the city’s efforts in growing the CTSI target industry. The priorities are likely to differ for each niche: the city’s efforts with respect to the renewable energy sector have focused on recruitment, while early work with electric vehicle manufacturers and suppliers is concerned with mapping the regional supply chain and identifying gaps to growing the electric vehicle industry. The workplans for each sector will include specific actions, including entrepreneurial training, talent development and access to capital, to increase the level of start-up activity and internal job creation.

The city will continue to make recruitment of companies that grow the supply chain or otherwise complement existing cluster firms a priority for the CTSI industry. The coordinated recruitment efforts of the city, state and region have paid dividends by establishing anchor firms such as Vestas, Iberdrola and Solar World, for both the wind and solar energy industries. The presence of international leaders in these sectors, along with the city’s existing base of noteworthy green building firms, provides momentum for the city’s efforts to grow these clusters and attract additional CTSI firms to the region. To compete effectively for manufacturing operations in various CTSI sectors, the city, as part of the Harbor Redi initiative described later in this strategy, will complete an inventory of industrial lands and identify up to three sites for acquisition and remediation. The banking of these sites will provide the city with available land for possible recruitment and test the efficacy of investments in remediation.

1.1 Cluster Strategy - Clean Tech and Sustainable Industries (CTSI)	Responsible Parties
Action 1.1.2: Spur broad cluster activity by establishing the Oregon Sustainable Economy Network (OSEN).	PDC, P+OSI, OECD, BPS

The Oregon Sustainable Economy Network (OSEN) will be the umbrella organization to serve as the organizing entity for cluster activity in the clean tech and sustainable industries sectors. In particular, OSEN will serve as a conduit between industry clusters and the region’s research and development infrastructure by tracking the supply chain and product development gaps within each of the clusters, working with Oregon BEST to track new technologies emerging from the state’s universities, and matching firms and entrepreneurs with commercial opportunities emanating from the state’s research in clean tech and sustainability. OSEN will also host PDX Lounge, the physical manifestation of Portland’s efforts to showcase the product innovation and technology emerging from the region’s economy.

OSEN will play a critical role in driving the business programming of the Oregon Sustainability Center (OSC), a planned “living building” intended to drive innovation in green building and serve as the hub for the region’s public and private sector efforts at leadership in sustainability. To achieve its mission, OSC should have an explicit tie to the business community to ensure that product and process discovery that

occurs in the design and development of the OSC is quickly converted into commercial opportunities for local businesses.

1.1 Cluster Strategy - Clean Tech and Sustainable Industries (CTSI)	Responsible Parties
Action 1.1.3: Expand demand for energy efficiency products and services through investment in retrofits of existing building stock.	BPS, PDC, P+OSI, Energy Trust

Retrofits of existing buildings offer a cost effective path for widespread reduction in energy use and job creation within a clean tech sector. The first initiative for this action item is the establishment of the Clean Energy Investment Fund, which will provide funding to catalyze mass-scale energy efficiency upgrades in existing homes and buildings on a district by district basis. Investments made by the fund, which will be repaid through a fee added to the utility bill, will serve two purposes: generate significant jobs for subcontractors and building specialists trained in energy modeling and energy efficiency capital upgrades, and achieve reductions in energy usage through increases in energy efficiency across a large subsection of Portland homes.

The Fund is scheduled to begin a test program in 2009 targeting 500 homes. An initial investment of Federal energy block grant funds will capitalize the fund, with an expectation that the fund will attract additional capital to expand the program beyond the test phase.

Activewear
<p>The Portland region has long been home to performance footwear and apparel companies and, with over 200 firms, is now the recognized home for activewear and outdoor gear firms throughout the business lifecycle. This cluster is anchored by Nike, adidas, and Columbia Sportswear, and now boasts a burgeoning group of firms with national standing, including Keen, Lacrosse Footwear, Yakima, Icebreaker, and Lucy. The cluster produced a regional payroll of \$950 million in 2007.</p>
<p>With 37% of the region’s nearly 10,000 activewear jobs, Portland is helping fuel growth in the regional cluster. Despite minimal growth nationally, the city’s activewear cluster experienced 50% growth in value added between 2001 and 2007. Firms in the city benefit from the concentration of talent (45% larger than national average), access to Asian markets, and outdoor and active lifestyle culture.</p>
<p>The challenge for the city is to grow wages in this cluster relative to the rest of the region. Activewear firms in in Portland pay an average annual wage of \$52,295 compared to an average annual wage in Washington County of \$128,096. In addition, 92% of the firms in this cluster have 20 or fewer employees.</p>

1.1 Cluster Strategy – Activewear	Responsible Parties
Action 1.1.4: Complete a cluster inventory and analysis and implement key recommendations for growing the cluster.	PDC, OECDD , GGP, Oregon Business Plan

Despite Portland’s long history as a center for activewear, the region has not performed an in-depth analysis of the industry. The inventory will answer key questions, including industry definition and populations, the genealogy of the local industry with key insights into the history and trends for innovation and entrepreneurial activity, and the primary challenges to and opportunities for growth.

The recommendations produced by the analysis will emphasize steps to increase Portland’s competitive advantage in this industry, and will guide work with the cluster, including roles and responsibilities for the public, private, education and non-profit sectors.

1.1 Cluster Strategy – Activewear	Responsible Parties
Action 1.1.5: Grow employment and revenues through an emphasis on retention and expansion of promising firms and improving the environment for business start-ups.	PDC, GGP, OECDD

The city will implement a combination of marketing, product innovation and entrepreneurial development initiatives to help grow firms in this sector. The city will assist firms with collaborative marketing at large trade shows and industry professional events. Portland’s success with collaborative marketing at national sustainability shows, highlighted by PDX Lounge, proved to be an effective model for assisting start-up and emerging firms in creating a virtual storefront that would otherwise be cost prohibitive. Such efforts not only help individual firms but also raise the visibility of the region’s activewear cluster, including local talent.

In addition to assistance in marketing, the city will help establish a product development program to facilitate innovation, particularly for entrepreneurs and start-ups that may not have access to the technology necessary to transfer a concept into a 3-D product. Entrepreneurs in the activewear industry will also be nurtured through training, access to capital, and collaborative network and intelligence sharing.

1.1 Cluster Strategy – Activewear	Responsible Parties
Action 1.1.6: Establish Creative Exchange, a materials library and design center, to solidify Portland’s standing as a leader in sustainable design.	OUS, OECDD, PDC, private sector

The Creative Exchange will be a center of excellence for Portland’s design and creative services industries and communities. Such a center will foster innovation and the development of new materials, support the exchange of ideas within the business community, foster collaboration between businesses and higher education on curriculum development and access for students to valuable practical information and resources. The exchange will house the first materials library on the West Coast and the only library with a specialty in sustainable materials for green buildings and soft goods. The library will house a wide selection of sample materials in addition to providing consulting services and R&D focused on the development of new materials through the Oregon Nano and Microtechnology Institute (ONAMI) and other higher education institutions.

The development of the Creative Exchange is the core of a broader initiative to position Portland as a international design and creative services center and source of creative talent. The work of the Exchange will be augmented with educational offerings, lecture series and partnerships with higher education institutions, including the University of Oregon and Pacific Northwest College of Art and internationally renowned leaders in the design industry.

Long term, the Exchange will lead the effort to develop a world class design program by enhancing existing educational programs through strategic partnerships with the University of Oregon’s well-respected architecture and product design programs. The design program will provide a spectrum of educational and career opportunities, linking higher education and industry to ensure industry needs are met and provide internship programs for students and/or graduates of those programs.

Software

Portland possesses a promising software cluster with firms across a range of sub-clusters, including embedded software, web-based applications and mobile applications. Included in the cluster are firms that specialize in search engine marketing and optimization as well as email marketing. Firms in these sectors are attracted to city's diverse, technology-oriented labor force, with a regional concentration of software talent that is 20% larger than national average. The city's software cluster includes Saber, Coaxis, Fios, Tripwire, Cd Baby, Jive, eROI, Meridian Technology Group, Webtrends, DB Professionals, Imagebuilder Software, Extensis.

Portland's software cluster also benefits from the region being the unofficial home of the open source software movement and the presence of the Open Source Lab at Oregon State University.

The city of Portland is home to over half of region's 15,700 software jobs employment was located in Portland in 2007. Software contributed \$3.2 billion in aggregate wages to the regional economy in 2007, with average annual wage of \$67,764. In addition, 90% of the firms in this cluster have 20 or fewer employees.

1.1 Cluster Strategy - Software	Responsible Parties
Action 1.1.7: Conduct an in-depth study of the industry to identify significant trends and opportunities for expansion.	PDC, OECDD, GGP, SAO

The emerging nature of Portland's software cluster necessitates that the city undertake a quantitative assessment of the firms that are located in the city and the markets in which these firms operate. Such a study would highlight the competitive advantages for various segments of the software industry, and help the city gain a better understanding of the revenue and employment growth potential for these segments. One such segment is the open source software that coalesced in the Portland area with the establishment of the Open Source Development Labs (since merged into the Linux Foundation) and the arrival of Linus Torvalds, founder of Linux. Because pure open source companies are typically loosely affiliated networks of independent contractors or freelancers, understanding how to help such firms or activities and what the likely benefits to the Portland economy are from this type of business model is critical to developing a relevant action plan.

Once the city has completed its analysis of the industry, the resulting inventory of firms and intelligence about the industry will assist the city in facilitating collaboration between firms, as well as with other organizations and institutions, including universities and community colleges.

1.1 Cluster Strategy - Software	Responsible Parties
Action 1.1.8: Support entrepreneurial districts within Portland, with a focus on areas with existing technology incubators.	PDC, SAO, PSU, private incubators

Portland's software cluster is heavily concentrated in the Central City due to the appeal or "cool factor" of particular districts in the Central City. These districts include the Central Eastside and the Old Town/Chinatown Neighborhoods. Software firms find many benefits to these locations: availability of less expensive space, proximity to other firms of similar size or growth stage, and the attractiveness of such districts to employees. This last attribute cannot be underestimated. Young, creative talent continues to migrate to Portland and this talent wants to live and work in the Central City.

The city will support the growth of such “venture” districts by working with property owners and businesses to make targeted investment of urban renewal fund to increase the supply of inexpensive commercial space within a concentrated geographic area and maintain the look and feel of such districts. Existing incubators, including the PSU Business Accelerator, CubeSpace and Ned Space could serve as anchors to these districts and help fill the continuum of space needs for startups and emerging firms.

1.1 Cluster Strategy - Software	Responsible Parties
Action 1.1.9: Grow employment and revenues in the software cluster by improving the environment for business start-ups and emerging firms.	PDC, SAO, OEN, TechAmerica

Stimulating growth in the software cluster requires a dramatic improvement in the environment for entrepreneurs and start-up. Entrepreneurs looking to start or grow firms in Portland face disadvantages relative to competing locations in terms of access to capital and management-level talent. While the city has little control over the supply of experienced software executives, by increasing the size and success rate of the local software industry, the city can, over time, increase the depth of high level talent in the area. Furthermore, as successful firms proliferate, opportunities for software managers will increase, attracting additional talented managers to the city.

The city will work with existing associations and assistance providers, including the Software Association of Oregon (SAO), the Oregon Entrepreneurs Network (OEN) and TechAmerica, a national technology trade association, to enhance the competitive environment for emerging firms. A priority task is to increase the supply of investment capital for firms by expanding the scope and size of city and state funding vehicles, including the Oregon Investment Fund, and encouraging the investment of the alternative investment allocation from city and state managed retirement funds in locally-managed venture firms with a commitment to invest in Portland firms.

Advanced Manufacturing

Advanced manufacturing is the largest of the four targeted industries, with over 21,000 employees and 700 firms in Portland in 2007. Advanced manufacturing firms are strong partners in region’s sustainability culture, recycling more materials than any other industry.

This sector includes firms from the region’s historically strong value added metals cluster, including PCC Structurals, Inc., ESCO Corporation, Evraz Oregon Steel Mills Inc., Schnitzer Steel Industries, Inc., Precision Castparts Corp., Blount Inc., Gunderson Rail Services, Columbia Steel Casting Co., and Leatherman Tool Group Inc. The cluster also includes the region’s well-known concentration of electronics and advanced equipment manufacturers, including Intel, Tektronix, Inc., Welch Allyn Inc., Merix Corporation, Lattice Semiconductor Corp., Triquint Semiconductor, Siltronic Corporation, and Xerox Corporation.

The city’s metals manufacturing expertise serves as the foundation for additional niche clusters that fit with the sustainable practices of the city, including bicycle frame manufacturers.

Regional employment in advanced manufacturing contributed \$4.9 billion in regional payroll in 2007, with an average annual wage in Portland of \$56,817. The multiplier effect for manufacturing is particularly compelling: for every \$1 of manufacturing product sold, \$1.37 is invested in the local economy. In addition, 66% of the firms in this cluster have 20 or fewer employees.

1.1 Cluster Strategy - Advanced Manufacturing	Responsible Parties
Action 1.1.10: Increase the supply of industrial land through the implementation of the Harbor-Redi Initiative and other efforts to reclaim brownfield sites.	PDC, DEQ, EPA, BES, OHWR, Working Waterfront Coalition and property owners

The limited supply of developable industrial land threatens the city’s ability to recruit new businesses to Portland and meet the expansion needs of existing companies. The city currently has 400 non-contiguous acres of unoccupied or unimproved brownfield sites, and each acre holds the potential of creating an average of 55 manufacturing jobs. Implementation of Harbor-Redi will release pent-up demand for the redevelopment of industrial sites by providing a path for investors concerned about the cost and liability of contaminated sites, with particular actions for separating upland contamination from in water liability, while continuing to hold responsible parties liable. If not addressed, the limited supply of industrial land furthers the need to expand the urban growth boundary to accommodate industrial expansion, requiring heavy investment in new infrastructure and jobs and tax revenues outside the city.

1.1 Cluster Strategy - Advanced Manufacturing	Responsible Parties
Action 1.1.11: Pursue opportunities for local manufacturers to fill supply chain gaps and replace imported components for the clean tech industry.	OECCDD, PDC, BPS,

The city will build on existing work²⁵ in identifying opportunities to manufacture locally components for clean technology and green building industries. This work will involve both outreach to existing manufacturing firms as well as new business formation and expansion, and will be jump started by three initiatives at import replacement:

- 1) Identifying local suppliers for some of the 8,000 component parts of wind turbines - The largest wind turbine companies are building U.S. supply chains and the development of extensive wind farms in the western U.S. makes the Portland region an ideal location for suppliers. According to the Renewable Energy Policy Project, Oregon can retain 8,329 jobs and create 1,202 jobs by getting existing fabricated metal product manufacturers involved in manufacturing rotors, generators, towers and other components needed for wind turbines. Opportunities to provide repair services for wind turbines exist as well.
- 2) Identifying local suppliers for “red-listed” building components as part of the development of the Oregon Sustainability Center (OSC), the city’s first living building - An initial inventory of these components and their substitutes has been prepared and a task force has been established to pursue replacement opportunities.
- 3) Replicating the success the Oregon Iron Works streetcar project to supply transit and transportation equipment and infrastructure throughout the U.S. and abroad - Portland’s expertise in bicycling manufacturing is an example of where the city is positioned to become an exporter of products in increasing demand by the rest of the country.

²⁵ In 2005, PDC performed a study of emerging sustainable sectors to gather data on companies with capabilities to serve or compete in these sectors.

The city will be aided in this effort by the work of the Pacific Northwest Defense Coalition (PNDC) in cataloging the capabilities of existing manufacturing firms.²⁶ The reach of this program will be expanded to all primary industry segments in the Northwest, and will allow local manufacturers to market their capabilities to one another and officials in the region to quickly identify supply chain possibilities for Northwest manufacturers.

1.1 Cluster Strategy - Advanced Manufacturing	Responsible Parties
Action 1.1.12: Improve the industrial efficiency of the manufacturing sector through the provision of lean manufacturing services, zero waste and other form of process improvement.	PDC, OMEP, ZWA, Mfg 21, private firms

The city will expand its relationships with the Oregon Manufacturing Extension Partnership and Zero Waste Alliance to cover 50% of the cost for consulting services to help promulgate lean manufacturing techniques to reach 50 firms per year for each service. In addition, PDC will continue to collaborate and provide financial support to the Manufacturing 21 Coalition, a center of excellence and networking organization for the advanced manufacturing industry. Manufacturing 21 is a vehicle promoting a range of process improvements, including lean manufacturing, sustainable business practices, and state-of-the-art technologies derived from local research.

In addition to the above services, the city will explore providing other forms of industrial efficiency consulting, including energy management services to improve the cost effectiveness of existing industrial facilities.

Objective 1.2: Implement a multi-faceted international strategy to expand export of local products and expertise and attract foreign investment.

As the 14th largest exporting region in the US, trade plays a critical role in the growth of Portland’s economy. Trade-related employment accounts for a third of total employment in the region, and over 44,000 jobs are attributable to foreign direct investment (FDI) in Oregon.²⁷ Traded sector industries, which account for 43% of all gross exports in the region, have a heightened impact on the regional economy; jobs in these industries average approximately \$50,000 per year, compared to the average wages in the region of \$44,000.²⁸

Nationally, trade is projected to grow faster than the economy as a whole. The combined value of US imports and exports increased from 28% of real GDP in 2001 to 33% of in 2008. Trade’s share of real GDP is projected to grow to 58% in 2030. Oregon is following this trend, with export shipments increasing from \$10.3 billion in 2003 to \$19.3 billion in 2008.²⁹ Most of those exports must travel through the Portland region for access to market on one of four modal systems: road, rail, air and water.

The city will implement an international trade and investment strategy that incorporates an intensive schedule of international visits with coordinated promotion of both the region and firms located here. A

²⁶ PNDC worked in partnership with the Connector, a Defense Logistics Agency funded program that tracks domestic manufacturing capabilities.

²⁷ Organization for International Investment, <http://www.ofii.org/or.htm>

²⁸ U.S. Dept of Commerce, Bureau of Economic Analysis, <http://www.bea.gov/>

²⁹ U.S. Dept of Commerce, Bureau of Economic Analysis, <http://www.bea.gov/>

primary focus of the city’s international strategy will be leveraging the region’s legacy trade assets to expand export and foreign direct investment opportunities for local businesses with expertise in sustainability as well as those seeking opportunities to supply the growing demand for clean technology products, components and services.

1.2 International Strategy	Responsible Parties
Action 1.2.1: Coordinate promotion of Portland’s sustainable economy through an expansion of the city’s aggressive international trade show plan, targeted marketing campaigns, and strategic business development trips.	PDC, Team Oregon, GGP, OECD, Port of Portland, ODA, U.S. Dept of Commerce, Int’l Marketing Partners

Targeted trade shows are a major source of investment leads both domestically and globally. By partnering with other municipalities in Oregon, as well as OECD and Greenlight Greater Portland, the city can leverage limited trade show dollars and maximize its annual participation in trade shows for the targeted industries.

Strategic business development trips will focus on Oregon’s significant base of foreign investors, which accounts for 44,000 jobs, or 3% of Oregon’s private-sector workforce. Over 25%, or 11,600, of these jobs are in manufacturing industries.³⁰ Existing foreign investors, which include companies such as SolarWorld, AREVA, Inc., and Saint Gobain, are a primary target for expansion opportunities in the Portland region. Business development trips would target markets with a history of investing in Oregon, including Canada, Germany, United Kingdom, Spain, France, Japan, China and Korea.

Maintenance of Portland’s direct air service to Asia and Europe, through the leadership of the PDX International Air Service Committee, is critical to maintaining the city’s attractiveness to foreign investors.

1.2 International Strategy	Responsible Parties
Action 1.2.2: Create an annual International Road Show of Oregon foreign representatives, and initiate the Mayor’s Export and International Investment awards program.	PDC, OECD, GGP, Port of Portland, ODA, U.S. Dept of Commerce

The international road show will match Portland’s export-ready small businesses with the foreign representatives capable of helping them find partners in these major international markets to assist in increasing export sales. The initial program will target representatives in Japan, Canada, Mexico, & Saudi Arabia, and will add representatives from China and Europe by the end of 2009. The success of this event will be measured by actual export sales and actual jobs created.

The Mayor’s awards program will recognize existing exporters who will share their success stories globally during public events during the International Road Show. New potential exporters will be recognized and will be given fast track access to the Oregon foreign trade representative services. International investors will also be recognized for leadership in community development and job creation.

³⁰ Organization for International Investment (www.ofii.org/or.htm)

1.2 International Strategy	Responsible Parties
Action 1.2.3: Develop and implement a site selection consultant strategy.	PDC, GGP, OECCD, Port of Portland, ODA, U.S. Dept of Commerce

The Mayor, in cooperation with Greenlight Greater Portland, will host events in major U.S. cities for consultants who manage the bulk of investment projects in the U.S. and abroad. San Francisco, New York, Chicago, & Atlanta are key target cities.

Objective 1.3: Support the efforts of higher education institutions to serve as the innovation engine of our sustainable economy.

Portland’s status as a center of innovation in sustainability depends on the frequent introduction of new technologies and a continued infusion of entrepreneurial, management and engineering talent into the workforce. Entrepreneurial regional economies such as Silicon Valley and the Research Triangle depend on local universities to drive innovation. The region’s higher education institutions, including state universities, private colleges and community colleges, will play the lead role in fueling innovation in the target industries. To do so, the research and development work of these institutions must be enhanced by creating an entrepreneurial culture within higher education that rewards professors and researchers for work with commercial applications. More explicit connections between higher education and firms in the target industries are needed, whereby universities help solve technological challenges faced by cluster firms, and firms help commercialize the innovation that occurs within school walls. This type of symbiotic relationship benefits both sides financially and through the notoriety that accrues to regions known for innovation.

1.3 Higher Education	Responsible Parties
Action 1.3.1: Create an inventory of statewide higher education resources to support the sustainable economy.	PDC, GGP, OUS Schools, OHSU, private colleges, community colleges

The city is hampered by the lack of an inventory of the assets of its higher education institutions. With the help of higher education, the city will map the capabilities and ongoing initiatives of each institution with an emphasis on 1) research and development capacity that can keep Portland’s sustainability economy on the cutting edge of innovation; 2) programs and curricula that supply the engineering and creative talent to meet the needs of the strategy’s target industries. Each of the target industries has a discrete universe of higher active education institutions, ranging from the design work of PNCA and the University of Oregon’s architecture program, to the range of sustainability curricula offered by Oregon Institute of Technology, Concordia University, University of Portland and Lewis & Clark, to training and apprenticeship programs for manufacturing careers offered by Portland Community College and Mt. Hood Community College.

Like the inventory work proposed for the activewear and software industries, an inventory of higher education resources will begin the process of more closely integrating disparate activities – in this case, regional economic development and higher education objectives - and identify the opportunities to leverage heretofore isolated activities.

1.3 Higher Education	Responsible Parties
Action 1.3.2: Expand the efforts of Oregon Inc and OUS schools to fund and commercialize research and development at state universities .	PDC, OECD, OUS, BEST, PSU, ONAMI

The State of Oregon, in partnership with Oregon University System (OUS), has established the Oregon Innovation Council (Oregon Inc) to oversee collaborative research and innovation throughout OUS schools. Oregon Inc funds eight target industry initiatives, including four with significant application to this strategy: green building and renewable energy, manufacturing competitiveness, nano and microtechnology and forestry. Oregon Inc has already established two research centers – Oregon BEST and the Oregon Nano and Microtechnology Institute (ONAMI) – that will serve as collaborators with the city in the implementation of the strategy. The city will work with Oregon BEST, which targets green building and sustainable technologies, to target promising research in the fields of renewable energy, biofuels and sustainable forestry products for the building industry. ONAMI provides the city with a research and materials development capacity for industries, such as activewear, seeking to improve the character and quality of their products. Oregon Inc is also supporting Advanced Manufacturing by funding a Metals Initiative matching grant program and increased research and development capacity in the form of enhanced training opportunities and new laboratory equipment within the Oregon University System.

The city will seek to add value to these initiatives by: 1) building connections to the local business community; 2) including the funding needs of the research centers in its plans for meeting the resource needs of the strategy; and 3) cultivating the entrepreneurial and management talent necessary to move new technologies from academia to the business world.

1.3 Higher Education	Responsible Parties
Action 1.3.3: Assist PSU in its efforts to become a center of excellence in sustainability research, innovation and talent development.	PSU, OUS, PDC

For the city to achieve its objective of creating the most sustainable economy in the world, Portland State University must embrace the vision of becoming one of the leading academic institutions in the world in the field of sustainability. Spurred by a \$25 million grant to promote sustainability, PSU is examining the extent to which sustainability will become the defining mission for the university. The city is participating in the development of PSU’s economic development strategy and will advocate that the university establish as its economic development priorities: 1) the development of curricula specifically targeted to careers in the clusters that comprise the CTSI industry, with a focus on the engineering expertise required of the clean tech industry; 2) a radical change in the culture around research, resulting in an increase in the funding and other support for practical research that supports sustainable industries; and 3) a commitment to continue to partner with the city in using the university’s campus development as a showcase for innovation in sustainable design, construction and living.

Objective 1.4: Align workforce development efforts to match the skill needs of targeted industries.

The availability of skilled labor at all job levels may be the most critical component to a competitive business environment and is essential to fueling growth in market share and revenue for local firms. Delivering a consistent supply of job-ready applicants depends on an integrated workforce development

system that includes the public schools,³¹ community colleges, job training organizations, and higher education institutions. The funding of this system must also be coordinated to leverage investments made throughout the workforce development process and match economic development priorities.

In addition to meeting the needs of an expanding economy and increasing the city’s competitiveness, job growth creates employment opportunities for local residents. Salaries for the target industries are higher than Portland’s average and offer career ladders for more opportunities. An analysis performed by the Oregon Workforce Investment Board indicates that renewable energy and clean tech industries will generate growth in primarily traditional occupations and that many of these occupations are technical in nature. Occupations like electricians, plumbers, machinists, and assemblers are predicted to comprise a significant part of the green economy. In addition, traditional office occupations, including clerks, accountants, customer service representatives and engineers, will experience growth under a sustainable economy. The similarities with “old” economy occupations hold promise for establishing a reliable pipeline for Portland residents to sustainable economy jobs.

The city will work with the Regional Workforce Investment Board and WorkSystems, Inc. to align resources to support the city’s sustainable economy, and ensure the quality and efficiency of the system.

1.4 Workforce Development	Responsible Parties
Action 1.4.1: Align the Workforce Investment Board’s 2010-2012 Strategic Plan with the Portland’s Economic Development Strategy.	WSI, WIB, PDC

The primary challenge in meeting the workforce needs of the sustainable economy is achieving coordination across the range of service providers and within the funds invested in system. A 2007 study of the workforce development expenditures for the Portland metropolitan region indicated that \$150 million is being spent annually across the spectrum of education and training providers.³² The study identified 80 separate providers of some form of workforce development services, including state and local government agencies, not-for-profits, community colleges, public schools and private companies.

The first step in aligning regional workforce development efforts is for the Regional Workforce Investment Board to match the WIB’s strategic plan with the objectives of this strategy. By aligning the strategic plan and the city’s economic development strategy, the WIB will signal the need to target the region’s \$150 million in workforce investments with the economic development efforts of the city, state and other regional partners.

³¹ This strategy recognizes the strong relationship between successful economic development and a fully functioning public education system. A separate, parallel strategy to address the needs of the public education system is under development which will complement the recommendations in this strategy.

³² *Workforce Development System Resource Mapping*, ECONorthwest, April 2007.

1.4 Workforce Development	Responsible Parties
Action 1.4.2: Convene industry skill panels to design and evaluate curricula to ensure that the training meets targeted industry needs.	WSI, private sector, training providers

Industry Skill Panels are the essential component to ensure that the training needs of target industries are met. WSI will convene additional skill panels comprising a cross section of companies in particular industries to prioritize occupations necessary for continued growth of the industry and identify the unique training needed to prepare workers for those positions. These panels will select the training providers to ensure the classes meet their specific needs. The skill panel model is also ideal for adding skill needs in targeted recruitments and expansions. WSI already has established panels to address skill needs for occupations in three of the four target industries. In particular industries, trade unions will participate in identifying needs and opportunities and advocating for increased training in emerging sustainable fields.

Once targeted training programs are producing job-ready graduates, WorkSource Metro Portland can serve as the conduit from this system to the job market for skilled workers and employers with openings. This system can also serve graduates of other educational institutions and training agencies.

1.4 Workforce Development	Responsible Parties
Action 1.4.3: Enhance and align services to prepare local residents for occupational training in the target industries.	WSI, PBA, WorkSource Portland Metro, community colleges, PDC, Industry Associations

Portland’s workforce development system should provide a continuum of training services to prepare local residents for occupational training and post secondary education, including pre-apprenticeships. The range of youth apprenticeship and summer jobs programs that exists through alternative schools, community colleges, apprenticeship coordinating council, and BizConnect, will be coordinated to ensure that as aspiring target industry employees move through the workforce system, they will receive the proper preparation for each stage in the education process. Exposure to jobs through summer jobs and apprenticeships are critical to fostering commitment to the multi-year training process.

The preparation process will also depend on the widespread use of WSI’s Prosperity Planner as a career planning tool. Prosperity Planner assists individuals in making informed career and training choices, and provides useful data and feedback to help target regional training investments.

2. Building the Sustainable Economy – Urban Innovation

Portland is widely recognized as a magnet for creative talent and entrepreneurial activity due to its leadership in sustainability and quirky urban character. Portland’s unique status is the result of a range of investments in and policies promoting a sustainable yet distinctively urban way of life. These elements – which include transit, land use, bicycling use, high density development, green building and recycling – combine to form a culture and knowledge base that perpetuates Portland’s sustainable lifestyle.

The city’s distinctive urban setting and sustainable way of life have become economic assets and advantages over peer cities. Portland enjoys the unique position of being the most fully functional

urban laboratory for innovation in sustainability in the U.S., while simultaneously possessing the livability that results from an unrelenting commitment to sustainability. This combination is a powerful draw for green entrepreneurs and an educated, creative workforce.

Maintaining this cutting edge distinctiveness and reputation for sustainability is vital to growing the local economy. To do so, Portland must embark on the next generation of innovation and investment in green building and sustainable living, and complement those investments with equal attention to quality of the experience downtown for arts, culture and retail.

Objective 2.1: Create the Next Generation Built Environment

Portland cannot rest on its laurels as the international leader in green building. The rest of the world has embraced LEED construction standards and LEED certification will soon be the norm. Cities and countries around the globe are racing to uncover the next achievement in sustainable building practices and, while widespread adoption of these practices is an encouraging development, Portland must work to retain its leadership position. The city’s green building industry has a global presence built on the combination of its unrivaled expertise and Portland’s reputation for innovation in green building. A commitment to remain at the forefront of sustainable building practices will produce the dual benefit of enhancing the city’s image and providing local firms with a continuous flow of new ideas and services to export outside of the region.

2.1 Next Generation Built Environment	Responsible Parties
Action 2.1.1: Establish the Oregon Sustainability Center to foster the next wave of innovation in sustainable building and living.	PDC, P+OSI, PSU, OUS, BPS

The Center, which is expected to be the first commercial living building in the U.S., will be established through a collaborative effort by the city, state, PSU and the Oregon University System, Portland + Oregon Sustainability Institute (P+OSI), and a consortium of businesses and non-profit organizations, as part of a larger sustainability district on the PSU campus. Key cluster initiatives, including the Oregon Sustainable Economy Network, will originate from the center. The center will also be a living laboratory for sustainable building materials, test new office environment norms, and serve as a first stop showcase and exhibition space to hose visitors seeking the latest in sustainable building practices.

2.1 Next Generation Built Environment	Responsible Parties
Action 2.1.2: Establish eco-districts in three catalytic locations.	PDC, BPS, P+OSI

Eco-districts offer the opportunity to put in to practice the latest innovations in green building, infrastructure and collaboration. Each site will be different in character and composition but will test new techniques in district-wide power generation, waste and water treatment, and shared infrastructure. The districts will also include experimentation with living buildings, the logical evolution from the LEED standard that has defined Portland leadership in green building in the past.

The catalytic impact of an eco-district is significant: over the next five years, the city is likely to focus its investments in large redevelopment projects in eco-district sites, with an emphasis on the Central City.