

# **Sustainable Practices, Public Buildings, and Jobs**

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## BACKGROUND AND ACKNOWLEDGMENTS

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As the year 2001 comes to a close, the citizens of Washington and Oregon face an increasing number of important challenges. An economic downturn has placed the economy, communities and workers at risk. The recession has reduced government revenues and forced potentially drastic cuts in public agency budgets. Volatile energy supplies and prices have caused havoc in the regional economy. The events of September 11 dramatically increased concerns about personal safety and the security of our transportation systems, water resources, energy systems, food supplies and other issues that were previously taken for granted. These issues have emerged at a time when our environment continues to be a concern. The Oregon State of the Environment Report, released in September 2000 by the Oregon Progress Board, said Oregonians can expect continued problems under current policies and programs in: poor water quality, especially in urban and agricultural areas, inadequate water supplies, loss of wetlands, degraded riparian areas, depleted fish stocks, invasion of exotic species, diminished biodiversity, and waste and toxic releases. Similar problems exist in Washington State.

How can we maintain and enhance our economic security and protect workers and communities while also conserving the environment? The way the region answers this question may turn out to be one of the most important challenges facing the Northwest for years to come.

In the spring of 1999, The Center for Watershed and Community Health (CWCH), an education and research institute affiliated with the Mark O. Hatfield School of Government at Portland State University, initiated a project to help decision makers throughout the region better understand the economic issues and facts associated with developing a more environmentally sustainable economy. The PSU CWCH's aim is to provide accurate, objective, and easy-to-understand information about the potential costs and benefits associated with adopting policies and practices that can resolve pressing economic, social and environmental problems and lead to a more environmentally efficient and sustainable economy. The PSU CWCH has developed collaborative research partnerships with a number of academic institutions in Washington and Oregon, provides grants to a number of leading economists, and completes its own research, to accomplish this goal. This document is one in a series of reports produced as a result of this effort. The project is an integral part of PSU CWCH's focus on developing new, more effective and efficient approaches to environmental governance and sustainable development.

## WHO PREPARED THIS REPORT?

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Ernie Niemi and Jessica Knight, economists at ECONorthwest, prepared this report for The Center for Watershed and Community Health (CWCH), and, although others provided valuable insights and assistance, they remain solely responsible for the report's contents.

We have prepared this report based on our general knowledge of the economy of the Pacific Northwest, as well as information derived from government agencies or other sources believed to be reliable. Any statements nonfactual in nature constitute our current opinions, which may change as more information becomes available. As time passes, the results of this report should not be used without accounting for more recent data and relevant assumptions.

## ACKNOWLEDGMENTS

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## SUSTAINABLE PRACTICES, PUBLIC BUILDINGS, AND JOBS: SUMMARY

During the past decade, a growing number of businesses, non-profit institutions, and governmental agencies in the Pacific Northwest have reaped the rewards of adopting sustainable practices that eliminate the use of toxins and reduce wasteful consumption of energy, water, and other raw materials. From the cost savings resulting from the sustainable practices, firms have realized demonstrably higher profits; similar cost savings for institutions and agencies have resulted in higher levels of service for the public or savings for taxpayers. So far, however, the implementation of sustainable practices has been scattered and uncoordinated.

During the past year, though, the sustainability landscape has changed dramatically, as the governors of Oregon and Washington and the Oregon legislature have called for initiatives to accelerate the movement toward a sustainable economy, one in which meeting the needs of the current generation does not deny future generations the opportunity to meet theirs. With these state-level initiatives, it appears the time has come for coordinated, extensive efforts to investigate, test, and, where appropriate, adopt sustainable practices throughout broad sectors of the economy.

As broader sustainability initiatives are implemented, however, public officials, the media, and the public must overcome the ambiguity inherent in the concepts, issues, and significance of different sustainable practices. As with other aspects of economic change, concerns about jobs and communities will be prominent. Hence, it is important that assessments of sustainability initiatives incorporate the potential impacts on workers, neighborhoods, and communities.

### SUMMARY OF FINDINGS

One reasonable place to begin is with public buildings. This report demonstrates that public buildings represent a substantial opportunity to take a major step toward a sustainable economy, to demonstrate the feasibility of sustainable practices applicable throughout the region, and to promote employment in sustainable industries.

Numbering in the thousands and with a history of unsustainable practices, the application of sustainability principles to the design, construction, and operation of public buildings in Washington and

Oregon could yield significant reductions in the use of toxic materials, energy, water, and other raw materials. Workers in the buildings can benefit insofar as sustainable practices enhance workers' health, safety, and productivity. Savings resulting from the sustainable practices also can help insulate workers from bearing the brunt of budget cuts occasioned by rising energy prices, recessionary reductions in funding for public programs, and other factors.

For example, studies indicate that currently available technologies and building-management techniques have the potential to reduce energy consumption by 22-50 percent, with the lower end of this range applying to retrofitting existing buildings and the higher end applying to new ones. Reducing energy consumption has become especially important, given recent crises in West Coast electricity markets and instability in global energy markets. To illustrate the potential impacts, our analysis of hospitals, state government buildings, and schools in Oregon and Washington indicates there is a potential to realize annual energy-cost savings exceeding \$100 million. These potential energy-cost savings, alone, could help protect existing jobs, or create new ones, for about 2,000 workers. These outcomes could be expanded through cost savings associated with reductions in the use of toxins, water, and other raw materials.

The positive impacts of sustainable practices applied to public buildings would ripple throughout the regional economy. The sustainable practices, themselves, would generate jobs in the buildings and with vendors of goods and services. Cost savings passed along to business taxpayers would increase their competitiveness relative to competitors in other areas. By implementing sustainable practices in the near future, building managers would stimulate local development of firms in industrial sectors that appear to be on the verge of rapid growth globally. By demonstrating the feasibility of sustainable practices, managers of public buildings would encourage private building owners to take similar steps, thus reinforcing the development of sustainability-related industries.

These findings indicate that aggressive implementation of sustainable practices applied to public buildings would take Washington and Oregon an important step closer toward their goals of having a sustainable economy in the foreseeable future.