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A Project of the Urban Consortium Energy Task Force of Public Technology, Inc.

City of Portland

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BEST

BUSINESSES FOR AN ENVIRONMENTALLY SUSTAINABLE TOMORROW

Portland Energy Office

Project Director
Susan Anderson

Project Manager
Curt Nichols

PUBLIC TECHNOLOGY, INC

URBAN CONSORTIUM

Funded through the U.S. Department of Energy

A Project of the Public Technology, Inc. Energy Program

CITY OF PORTLAND

BUSINESSES FOR AN ENVIRONMENTALLY SUSTAINABLE TOMORROW

URBAN CONSORTIUM ENERGY TASK FORCE

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PUBLIC TECHNOLOGY, INC.

URBAN CONSORTIUM

Background

URBAN CONSORTIUM

Public Technology, Inc. (PTI), is the non-profit technology organization of the National League of Cities (NLC), the National Association of Counties (NACo), and the International City/County Management Association (ICMA). PTI's mission is to bring technology to local governments. Through collective research and development efforts in its member jurisdictions, PTI creates and advances technology-based products, services, and enterprises for all cities and counties.

Four active task forces, each composed of members of PTI's Urban Consortium (UC)—which represents fifty of the nation's largest and most progressive cities and urban counties—drive PTI's research and commercialization efforts. One of these task forces is the Urban Consortium Energy Task Force (UCETF), which was established to address critical energy needs of urban America.

THE URBAN CONSORTIUM ENERGY TASK FORCE

The UCETF is the nation's most extensive cooperative local government program to improve energy management and technology applications in local governments. Its membership is composed of local government officials from America's large urban centers. The four major goals established by UCETF members are to:

1. Pursue collaborative solutions to interrelated energy, environment and economic development issues at the local level;
2. Improve energy efficiency, reduce costs and develop revenue from local energy assets;
3. Promote practices and efforts at the local level to assure that energy and environmental considerations are broadly integrated into local decision-making, and to address the interrelationships between energy, environment and economic policies; and
4. Act as the implementation arm for NLC and NACo policies.

Under an annual program partly funded by the U.S. Department of Energy (USDOE), a number of city and county projects propose to meet UCETF objectives. Projects selected for each year's program are organized in thematic units, such as Utilities/Buildings, Transportation, Sustainable Communities, and Technology Transfer, to assure effective management and ongoing peer-to-peer exchanges. The results of these research projects are documented in reports such as this one, and made available for broad dissemination among other local governments through PTI.

The research and studies described in this report were made possible by grants from the MUNICIPAL ENERGY MANAGEMENT program of the Office of Energy Efficiency and Renewable Energy of the U.S. Department of Energy.

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Section 1

Overview

Abstract

The sustainable business development program in Portland (OR) is known as BEST. BEST stands for Businesses for an Environmentally Sustainable Tomorrow. The Portland Energy Office operates BEST as a "one-stop service center" for business owners and managers. BEST provides information and assistance on resource efficient buildings and business practices.

Before BEST there was no single source of information or assistance for local businesses. Various City bureaus, State and regional agencies, and utilities each offered their own programs. They offered technical assistance, tax credits, loans, and other financial incentives. But, because the service delivery was fractured, comprehensive information was often hard to obtain. Businesses received confusing, sometimes conflicting, information which varied depending on who they talked to.

The solution was to develop a uniform information and assistance delivery mechanism. BEST was established to do that. The Energy Office, while usually not the service provider, became the service facilitator. BEST was created to broker the relevant information, assistance, and incentives available to Portland area businesses.

The major tasks of BEST were to: create (and maintain) a "resource library" of both general and program-specific information, develop a working relationship with the various service providers, educate business leaders on the reasons for resource-efficient activities, and help as needed to facilitate specific services on individual projects.

The results of BEST's two years of operation have been generally impressive. Nearly 150 new or expanding businesses have been connected with utility design assistance programs. Businesses have also received assistance with water conservation, telecommuting, construction debris recycling, and alternative fuel vehicles. BEST has received local and national publicity and BEST services have been the topic at more than a dozen conferences, meetings, or other speaking engagements. A guidebook for communities wishing to start a similar program will be available in early 1996.

"The solution was to develop a uniform information and assistance delivery mechanism."

Project Purpose

In short, the purpose of BEST was (and is) to help business. Businesses can realize a financial benefit from environmentally sustainable activities. Everyone benefits from cleaner air, more abundant water and energy supplies, less solid waste landfilled, and a better local economy.

Like many other US cities, the Portland metropolitan area expects quite dramatic growth in the next decades (500,000 more people by 2010). Most business and political leaders want to see this growth because of the positive impact it can have on the economy. However, many environmental leaders are concerned because of the increased demands on land, traffic, energy and water supplies that growth brings. Portland has a reputation for livability. Adverse air quality, additional traffic congestion, and higher costs for (and possibly shorter supplies of) water and energy would have a negative impact on that reputation.

BEST was established to point out the middle (higher) ground—sustainable development. With sustainable development, the positive economic benefits can occur without the negative environmental impacts. So, BEST shows businesses what they ought to do, explains why and how, and links them with the services—general information, technical assistance, or financial incentives—to help them do it.

Report Organization

This report is organized to document the process, the results, and the lessons learned during the development and first year's implementation of the BEST program. It is organized as follows:

Chapter 2, Concept—a discussion of the local conditions, program development, goal and objectives.

Chapter 3, Action—a discussion of the program implementation and results.

Chapter 4, Lessons Learned—the lessons learned from this program that may benefit other jurisdictions. The next steps are also discussed.

The appendices contain samples of informational and promotional materials used in this program, copies of BEST articles, and other related reference items.

Section 2

Concept

INTRODUCTION

Recognizing that growth may adversely impact Portland's quality of life, we initiated BEST to educate business owners and managers on the benefits of sustainable development practices. And, we offered them a way to get in touch with the services available to help them. We partnered with the various service providers to act as a marketing (and screening) agent for their services.

The guiding principle behind BEST is that businesses which operate in an environmentally sustainable manner have a financial advantage over the "business as usual" businesses. Businesses save money even without considering financial incentives like tax credits or rebates. And, once the benefit of the available incentive(s) are included, even many "bean counters" see that sustainable actions pay for themselves.

Nobody was providing this type of business assistance at one location. There were many interested parties—gas and electric utilities, City bureaus, and State agencies among others. We felt that they would be willing to pay us to assist them. We would help them get their message out to the business community, and get the most interested businesses involved in their services. Initially, we had financial support from UCETF. After the first two years, we planned for BEST to become self-supporting.

So, the Energy Office helps local businesses see the value of being BEST. We also help them obtain the needed information, the appropriate technology, and the available incentives. As a result, businesses are willing to invest more in sustainable actions. These leaders then provide local examples for other businesses to follow.

GENERAL BACKGROUND

Portland is facing a projected population growth that will tax the existing infrastructure—roadways; water, wastewater, and solid waste systems; power supplies; and more. BEST was developed to help prevent that. The goal is to encourage and assist businesses with a more sustainable style of development. This helps business, has a positive impact on the local economy, and minimizes impact on the local infrastructure and the environment.

Most businesses want to "do the right thing." They don't want to damage the communities they're located in. They'd like to have a better public profile and a healthier bottom line. It's not a question of intent. When businesses don't act in a sustainable manner, it's more likely a lack of knowledge. The knowledge they lack

includes: 1) What they should do, 2) How to do it, or 3) Who can help them (technical and/or financial assistance). BEST was designed to help at each step—general information, specific details, and assistance.

BEST was built on the premise that businesses will do what's best for the environment (and them!) when they know what to do. There is a positive result from bringing together the services that are offered and the businesses that need those services. By facilitating the building design, equipment specification, or maintenance and operation processes, BEST helps businesses help themselves, the economy, and the environment.

Most businesses want to "do the right thing."

BEST was planned and created as a partnership to educate business leaders. At the same time, it's a partnership with utilities, government agencies, and other service providers to market and facilitate the programs they offer. BEST proves the old adage—knowledge is power. BEST gives knowledge to businesses. They use that knowledge to take environmentally sustainable actions.

Section 3

Action

INTRODUCTION

The BEST program is a collaborative creation. BEST draws on ideas and expertise both inside and outside of the Energy Office. The result is a program that has been well received. Business, energy, and environmental leaders were on the focus group that helped plan BEST. Leaders from the same sectors make up a BEST advisory committee.

The result is a workable program. BEST is flexible to the needs of businesses and the intent of the service providers alike. An initial focus of BEST was publicity. Appendix A contains copies of some of the articles on BEST published over the past two years. These articles were included in both local and national publications.

BEST also uses the press in another way. Local business publications are monitored to track planned construction activities—new construction, expansions, or major renovations. The BEST program then contacts the businesses, their architects or construction managers, and the involved utilities to facilitate the services leading to sustainable business practices.

PROJECT DEVELOPMENT: THE FIRST YEAR

Before hiring a project manager for BEST, the project director and a contract employee undertook much of the preliminary research and planning. The basic framework of the BEST program was in place when the project manager arrived on the job in May '92. BEST's start-up was delayed slightly because key decisions were held off until hiring the project manager. This approach gave the manager full buy-in on the central precepts of the BEST program.

Initially, there were three primary areas of research: 1) What services were available to local businesses, 2) What businesses were planning for investment and construction, and 3) What technologies were in use in other parts of the country. This helped us determine the role that BEST could play. The services available were compiled into four BEST Service Matrices (see Appendix B). Business plans—and past practices—shaped our outreach and marketing efforts. The state-of-the-art technologies available were researched for availability and application locally.

These technologies covered a wide range of products. Among them were: electric energy-saving products not in wide use in Portland because of the Northwest's historically low electricity rates, water-saving products used in areas with drier climates, and clean air vehicles (or other transit options) not widely used in

Portland because of our relatively clean air. The low electric rates, abundant water, and clean air are not what they once were. And, without sustainable development practices, Portland will soon be in the same situation as many other cities.

Inspired to share what we'd learned from our research, we started marketing our service. That started when we announced the hiring of a program manager. This information was sent to all the local publications dealing with business, energy, or environmental issues. That was followed with the development of a BEST logo and program summary. This was developed into the BEST brochure—an introductory overview to our services. See Appendix B for a copy of this brochure.

Next, we put together the service matrices—an at-a-glance summary of information and assistance available. We felt a simple, easy-to-understand format was needed to show the variety of services available. These services were the centerpiece of a couple of public presentations on BEST. One event was a local area Property Managers Conference and the other was a Green & Clean seminar (co-sponsored by the local chapter of Building Operators and Managers Association, BOMA).

BEST presentations were scheduled wherever possible. Our first choices were business and professional association meetings. We made presentations to regular meetings of BOMA, American Society of Heating Refrigeration and Air Conditioning Engineers (ASHRAE), and Illuminating Engineering Society (IES). We also made presentations to NEWS (Northwest Electrical-Industry Women's Society) and the regional Hospital Engineers Association during the first year. Even when a BEST presentation wasn't on the agenda, our materials were on display. We had displays at a number of local conferences including: Institute of Real Estate Managers (IREM), American Institute of Architects (AIA), Environmental Management, and Water Conservation seminars.

Presentations were also made to utility staffs and economic development officers. They were both provided with multiple copies of BEST materials. They in turn provided these to their clients. They got our brochure and service matrices. We also provided four fact sheets with brief examples of significant actions by local businesses. Copies of these materials are included in Appendix B. Our research found that local examples would more effectively convince other businesses to take similar actions.

There was a lot of one-on-one contact with building owners and construction managers. We met and explained what they needed to do to be BEST. Most initial contacts were made by phone or mail. We initiated contact when we learned about planned new buildings, expansions, or major renovations. As BEST became more well-known, we got more calls from people that had heard of BEST or were referred to us.

Ongoing contact was maintained with business leaders and professional associations. New building project leads were passed on to the appropriate utilities. With this activity, BEST attained—and maintained—a relatively high profile with key business, energy, and environmental contacts throughout the Northwest.

We were contacted by cities, states, and other organizations outside our area. They too were interested in learning more about BEST. Many expressed an interest in trying something similar.

Project Development: The Second Year

The second year produced two significant expansions to our BEST efforts—awards and case studies. This approach was based on obtaining broader recognition for the most active businesses. And, we also saw an opportunity to provide more details of their efforts to other businesses that could do something similar.

We created the "BEST Business" awards to provide high profile recognition for local businesses that had made innovative accomplishments in one (or more) of the areas BEST focused on. We received award applications from 29 local businesses and selected seven winners. The BEST Advisory Committee served as the final review for the awards. Two businesses won awards for Energy Efficiency and two received recognition for Water Conservation. Two more were recognized for Waste Reduction or Recycling, and one won for Clean & Efficient Transportation activities.

The award ceremony was a high profile event. In an evening reception, prior to an international environmental conference, the winners were unveiled. The media and local political, environmental, and business leaders were invited. The winners received plaques signed by the Mayor and handed out by a City Commissioner. The print media and other press covered the event quite well.

After that, one page case studies were put together on the winners. Each case study—printed under the banner "BEST Results"—gave details on one winning business. They tell what was accomplished, how they did it, how much they saved, and who to call for more information. Each case study ends with a "How to" section that gives a step-by-step approach for other businesses to follow. Appendix B contains examples of the first five case studies published on the '93 award winners.

For the second year, our two utility partners approved contract extensions. They provided payment for us to continue providing information on their energy efficiency services and to provide business referrals to their staff. They were satisfied with our performance during the first year and wanted to extend the partnership. During the first eleven months of 1993 (through November) we provided 72 leads of new or expanding businesses to the utilities.

Most of the leads provided to the utilities were based on advance information obtained through the City's development commission or planning bureau. Others were based on contacts we initiated due to media reports of business developments. Appendix B contains a sample of the single page referral form that was faxed to the appropriate utility contact for each project. Appendix B also has a copy of one of two utility contracts and extension agreements we negotiated.

To assist us with tracking these contacts, a database was developed. It was created for Macintosh personal computers in File Maker Pro 2.0 software. It was designed to contain relevant data on each project. A file was started for each business when

"Inspired to share what we'd learned from our research, we started marketing our service."

"Cost savings was the most frequently mentioned result."

we started working with them. A sample of the information contained in the file of one business is included in Appendix B. The database was updated when follow-up contacts, referrals, or project milestones were reached.

The database augmented the paper files maintained on most—but not all—of the businesses we provided information to. The paper files were primarily receptacles for items such as copies of media reports, development plans, and corporate annual reports or other background information. The power of this kind of database has not yet been fully utilized. With a little effort we could sort the contacts out by a two digit Standard Industrial Classification (SIC Code). We could total building square footage that we've impacted or the cost of these projects.

This database could also be used to find the split between new construction, expansion, (major) renovation, or (minor) retrofit projects. This information will be helpful to quantify our activities to our partners. We have not yet had an opportunity to spend the time required to generate this information. But, as BEST continues, this will help us find where to expand or focus our efforts.

Another useful tool for evaluating our results is feedback from the businesses we've assisted. In June '93, after having BEST in place for a little more than a year, we sent a questionnaire to sixty businesses asking for their feedback. These businesses were ones we'd started working with early in our program. Because of involvement with them over a period of four months or more, it was felt that they could provide a more accurate perspective on our services than businesses with fewer contacts. They would also have had more opportunity to act on recommendations that we had made.

The questionnaire and a summary of the responses are contained in Appendix B. We found general satisfaction with our services. Of the sixty surveys sent out, we received back twenty-three (a 38% response rate). We asked them to tell us how we were doing, what they'd done so far, what they were planning to do, and how we could help more.

Nearly two thirds of the businesses responding knew about BEST from contact we initiated with them. The services they used most frequently were: information (38%), meeting (24%), or design assistance referral (17%). They all like what we're doing to help them; they said our service was 'Excellent' or 'Good' and appreciated our follow-up.

Businesses are interested in what they can do. Over two thirds acted on one or more of our recommendations. Energy efficiency (28%) was the most common single action. The most common reason cited for their action was to save money. And, cost savings was the most frequently mentioned result. The savings they quantified added up to $375,000 per year. If they took no action, they cited timing; their projects hadn't started yet. Nearly all (97%) businesses plan BEST actions in the future. Energy efficiency and waste reduction topped their lists.

When asked for comments on what BEST was doing right, they noted recognition and following-up. As for what more BEST could do, the most frequent comment was to expand BEST publicity. Incentives were mentioned too; they wanted more monetary incentives as well as more streamlined application procedures.

These responses indicate that businesses appreciate BEST. They want us to continue our efforts. And, where possible, encourage other programs to be as user-friendly. One questionnaire closed with a comment that seemed to sum up the general sentiment of them all. It said "Keep up the good work."

Since the questionnaire, we have offered expanded water conservation services and support. The City Water Bureau assigned one of their engineers to provide commercial and industrial waster conservation technical assistance. Our efforts are coordinated wherever possible. We have started to provide the Water Bureau with advance contacts like we do for the electric utilities. Now, pre-design information on water conservation opportunities are much more complete.

We joined forces with the Water Bureau and the City's Bureau of Environmental Services to have a "City services" booth at a local Responsible Environmental Management Conference in September '93. None of the bureaus would have had a booth on their own. Together we were able to show that City bureaus work together. Attendees that visited our booth were glad to see us there and expressed interest in what the City was doing to help businesses.

RESULTS/FUTURE PLANS

What did BEST accomplish in two years? We made a small start in changing the way business does business. Utilities that contracted with us for new business leads received 140 referrals—93 projects within Portland General Electric (PGE) territory and 47 in areas Pacific Power serves. See Appendix B for a listing of the businesses and their projects. These businesses were offered building design analysis/plan review. They also got more assistance and easier access to utility incentive programs.

By another measure, we maintain contact/progress files on the projects of more than 70 businesses. These are businesses that we have an ongoing relationship with. Some are included in the 140 mentioned above. Like the business referrals to the utilities, these encompass a wide variety of business types. We are working with retail stores, hotels, office buildings, restaurants, and manufacturing facilities.

Many of these projects have not been completed yet. Some haven't even started. But, they are in contact with us—and we with them. They are proceeding with the benefit of our information and assistance. In time, they may have a model project: saving energy and water, reducing waste, and using transportation alternatives. The bottom line results are inconclusive; that's why the BEST experiment will continue beyond the end of our UCETF contract.

For BEST's future, we plan more of what's already worked during the first two years—press visibility, informative publications, public speaking engagements, and one-on-one contact when we learn of new construction projects. The future will have annual "BEST Business" awards. The awards allow us to reward businesses for their BEST accomplishments. And to share what they've done to achieve it with others. We expect to recognize a few businesses every year—around Earth Day. Announcements were sent recently to solicit applications for the 1996 awards.

"They are proceeding with the benefit of our information and assistance."

Lessons Learned

Partnerships can get more accomplished than independent actions. The synergetic effect of the City working together with electric utilities, state and regional agencies, and the architectural/engineering community meant that our message was that much more powerful. We reinforced the "BEST Business" message through multiple channels. The response was more than we could have accomplished separately. At the same time, our contracts with the electric utilities provided them with additional information at a lower cost than they would have had to spend otherwise.

One lesson we were reminded of is: you can't change the way business does business overnight. First we taught business the BEST way. Then they got further design and cost details. After that, they budgeted for the project and scheduled it around their usual activities. Projects often got delayed due to financing constraints or various reasons. So, the end results took awhile to show up.

We also found that it was harder to create a "BEST Resources Directory" than we thought. Part way into this project we had an idea of creating a "green pages" listing all the vendors, consultants, and other BEST product and service providers. There were a few problems that kept this idea from fruition: it would be expensive and time consuming to produce; it would be hard to keep unwanted companies out; the information would be out-of-date shortly after printing (and the categories with the fewest entries would have the most changes); and similar, though less comprehensive information resources were already planned or being developed.

Another lesson is a general marketing and service related axiom. You need to constantly have your product (BEST, in this case) out in front of your potential clients. We found it most effective to link our service with other related activities. That helped us be flexible to the differing needs of various clients. And, we found appreciation for our follow-through on promises.

Suggestions for Application

Any city, county, or state that wishes to package the services offered for the convenience of their business community could use the BEST approach. BEST works well where there are a wide variety of services available. In a jurisdiction where the utilities, the state, and others had no services or financial services to offer, BEST could not do quite as much.

BEST may be ideal for those municipalities where the city supplies the energy, the water, collects the waste, and manages the parking and transit systems. But, even

in Portland, where we need to coordinate the services of three energy companies, three state agencies, two regional agencies, and three city bureaus, BEST still works well.

After two years, BEST has created an example that other cities can replicate. We would be glad to discuss our efforts with cities that have an interest in BEST. In a couple years we plan to have a workbook available for other communities interested in offering assistance to encourage sustainable business activities.

If you would like to start a similiar program in your community, please contact PTI or the City of Portland and request a copy of "Sustainable Business: A Community Based Guide to Business Assistance." It is a 'how to' guidebook to help encourage more sustainable actions from businesses.

Appendix A

Marketing and Educational Materials

BEST published materials:

1. BEST Brochure (general information)
2. BEST Service Matrices
   a. Energy Efficiency
   b. Water Conservation
   c. Waste Reduction (Recycling)
   d. Clean & Efficient Transportation
3. BEST Fact Sheets (with local examples)
   a. Energy Efficiency
   b. Water Conservation
   c. Waste Reduction (Recycling)
   d. Clean & Efficient Transportation
4. BEST Results Case Studies (from '93 award winners)
   a. "Green Team" Cuts Waste At Kaiser Permenante
   b. Port of Portland Building Slashes Energy Use
   c. NIKE Encourages Alternative Commuting
   d. Elf Atochem Captures Impressive Water Savings
   e. Red Lion Hotels Uncover Energy and Water Savings
5. BEST Business Award Items (from '93)
   a. Award application form
   b. Award criteria (used by Applicants/Review Panel)
   c. Application review instructions (for Review Panel)
   d. Award press release
   e. Display advertisement listing award winners

Materials from BEST presentations:

1. Initial BEST program information pages
2. 1992 Property Management Conference text
3. Green & Clean agenda (showing BEST partnership with BOMA and the combination of messages—waste reduction, water conservation, etc.)
4. ASHRAE presentation outline
5. NEWS (Northwest Electrical-Industry Women's Society) presentation outline
6. Columbia River Hospital Engineers Association presentation outline
7. BOORA Architects "Brown Bag" lunch session notes
8. "Green Business Practices" panel discussion flyer

Award(s) earned by the BEST program

1. National Environmental Achievement Award (Renew America)


BUSINESSES FOR AN
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BEST

BEST Energy Efficiency Services

BEST — BUSINESSES FOR AN ENVIRONMENTALLY SUSTAINABLE TOMORROW

For more details on these services call the Energy Office at (503) 823-7418.

Services available July '92. Some restrictions apply. Compiled by the City of Portland Energy Office.

	Oregon Department of Energy (ODOE)	Portland General Electric (PGE)	Northwest Natural Gas	Pacific Power & Light (PP&L)	OSU Energy Extension Service
New Buildings and Expansions	Tax Credits & Loans	Design Assistance & Incentives	Energy Analysis	Design Assistance & Financing	Training
Existing Buildings - Commercial	Tax Credits & Loans	Energy Analysis & Incentives	Energy Analysis	Energy Analysis & Financing	Training
Existing Buildings - Industrial	Tax Credits & Loans	Energy Analysis & Incentives	Energy Analysis	Energy Analysis & Financing	Training & Energy Analysis
Existing Buildings - Institutional	Loans	Energy Analysis & Incentives	Energy Analysis	Energy Analysis & Financing	Training & Energy Analysis
Transportation and Fleet Vehicles	Tax Credits & Loans	—	Information & Financing	—	—

BEST Water Conservation Services

BEST — BUSINESSES FOR AN ENVIRONMENTALLY SUSTAINABLE TOMORROW

For more details on these services call the Energy Office at (503) 823-7418.

Services available July '92. Some restrictions apply. Compiled by the City of Portland Energy Office.

	Water Bureau	Department of Environmental Quality (DEQ)	Bureau of Environmental Services	Oregon Department of Energy (ODOE)	Oregon Department of Water Resources
Potable (Domestic) Water	Information	—	—	Tax Credits & Loans *	Information & Loans
Process Water	Information	Technical Assistance & Tax Credits	—	Tax Credits & Loans *	—
Stormwater Runoff	—	Technical Assistance	Incentives	—	—
Irrigation Water	—	—	—	Tax Credits & Loans *	Information & Loans
Sanitary (Sewer) Service	—	—	Incentives	—	—

* Limited to water conservation projects that save energy as well.

BEST Waste Reduction Services

BEST — BUSINESSES FOR AN ENVIRONMENTALLY SUSTAINABLE TOMORROW

For more details on these services call the Energy Office at (503) 823-7418.

Services available July '92. Some restrictions apply. Compiled by the City of Portland Energy Office.

	Department of Environmental Quality (DEQ)	Metropolitan Service District (Metro)	Bureau of Environmental Services	Oregon Department of Energy (ODOE)
Solid Waste and Recycling	Tax Credits, Information & Technical Assistance	Information & Technical Assistance	Information	Tax Credits (Recycling)
Wastewater	Tax Credits & Technical Assistance	—	Incentives (Discount Rate)	—
Air Emissions	Tax Credits & Technical Assistance	—	—	—
Hazardous Waste	Tax Credits & Technical Assistance	—	—	—
Construction Site Debris	Information	Information & Technical Assistance	Information	—

BEST Transportation Services

BUSINESSES FOR AN ENVIRONMENTALLY SUSTAINABLE TOMORROW

For more details on these services call the Energy Office at (503) 823-7418.

Services available July '92. Some restrictions apply. Compiled by the City of Portland Energy Office.

	Bureau of Traffic Management	Oregon Department of Energy (ODOE)	TRI-MET	Department of Environmental Quality (DEQ)	Northwest Natural Gas
Carpools and Vanpools	Information & Incentives	Information & Tax Credits	Information	—	—
Transit Passes	Information	—	Information & Assistance	—	—
Alternative Work Schedules	Information	—	Information	—	—
Telecommuting	Information	Information & Tax Credits	—	—	—
Alternative Fuels (Vehicles and Fueling Stations)	Information	Information & Tax Credits	—	Information	Information & Financing

BEST Fact Sheet: Energy Efficiency

BEST Services

BEST stands for Businesses for an Environmentally Sustainable Tomorrow. It is a service offered by the City of Portland Energy Office. *BEST* will show you a better way of doing business. One that is better for the environment and your bottom line.

Through *BEST* we offer information and hands-on help with your facility's energy efficiency options. We also offer services that promote water conservation, recycling and waste reduction, and clean and efficient transportation alternatives.

The new 23 story, class A office building, 1000 Broadway, not only looks good, it's energy efficient too. During the building design, Hillman Properties, the owner/developer, worked with their architect, the Oregon Department of Energy, and Pacific Power. The result was a design that saves 30% of the energy it would have used if it just met Oregon's Non-residential Building Energy Code. These savings come from state-of-the-art lighting (1.1 watts per square foot), an efficient heating and cooling system (and controls), and better quality, insulated walls and windows. This design saves Hillman $61,000 per year.

BEST Businesses

All metro-area businesses locating new facilities or renovating existing facilities are eligible for this service. We will help you make your business better than the rest.

Being one of the *BEST* means you save money at the same time you help the environment. *BEST* Businesses are leaders in four areas:

- Energy Efficiency,
- Waste Reduction,
- Water Conservation, and
- Clean and Efficient Transportation.

It is surprisingly easy and economical to be *BEST*. We can show you how.

BEST Technologies

Businesses are investing in better lighting, more accurate control systems, "free heating" with waste heat, more insulation, better windows, and much more. These businesses find their return on energy-saving investments are 15 to 40 percent or more! On top of energy cost savings, they can reduce maintenance costs too. Some even reduce their taxes. And, available financing options provide a net positive cashflow from the very first month.

BEST Help

Whether you're planning a new facility or renovating an existing one, *BEST* can help. We can show you how to do it, and how easy it is. You can obtain free energy efficiency design assistance. We can help you get long-term, fixed rate financing for energy projects. You will get information on appropriate and efficient technologies. We will help you apply for state tax credits that equal 35 percent of your energy efficiency investment. You can get rebates and incentives from local utilities. We will help you with this and more ... what it takes to be "*Best* in Energy Efficiency".

Two office buildings in Portland's Central Eastside have recently been upgraded to save energy. The **Lloyd 500 Building** and the **Lloyd 700 Building** now have better lighting, heating and air conditioning. The results are more satisfied tenants, lower energy costs, and tax credits from the state. The upgrades — for both buildings — cost $3.4 million. Together, the savings add up to $460,000 per year. So, the upgrades will pay for themselves in energy savings at a rate equal to a 13.4% simple ROI.

BEST Recognition

Today's consumers are looking for environmentally conscious businesses. *BEST* businesses receive official recognition from the city. We will work with the local and regional media to publicize your efforts. And, we will produce *BEST* Success Stories that feature "the *best* of the *BEST*".

BEST Leaders

You can be an environmental leader while improving your bottom line. Being *BEST* pays. *BEST* businesses see the economic -- and environmental -- benefits of energy efficiency. In addition, *BEST* businesses also practice waste reduction (recycling), water conservation, and clean and efficient transportation. Other *BEST* Fact Sheets have more details on each of these areas.

As part of an effort to upgrade the look of a US Bank branch in Southeast Portland, the main lobby lighting was replaced. This involved converting 25 fixtures from Mercury Vapor to Fluorescent. This saves US Bank over $300 per year for an investment of slightly more than $5,000. "Now the bank lobby costs less to light . . . and it looks better," according to US Bank's Facility Manager, Dan Green.

Small businesses can — and should — save energy too. One that is, is the Mill End Store in Milwaukie. By adding skylights and lighting controls to the store, they are saving as much as 70% of their prior energy use. The skylights with dimming sensors, and a light control system, maintain a constant light level. The same control system optimizes the building's heating and cooling. Together, the savings add up to more than $4,000 per year.

Producing dairy goods for stores located in Oregon and Washington, the Fred Meyer Dairy in North Portland uses a lot of energy for refrigeration and hot water. But, since they changed their pasteurization process, they now use less. The new efficient, regenerative pasteurization process saves both electricity and natural gas. The result? Fred Meyer cut their operating costs by almost $23,000 per year.

BEST Assistance

We can help you be BEST.

Technical and financial assistance is available. For more information, call the City of Portland Energy Office at 823-7418.

or write
Curt Nichols
BEST Program Manager
City of Portland Energy Office
1120 SW Fifth Ave. Room 1030
Portland, OR 97204

BEST Fact Sheet: Water Conservation

BEST Services

BEST stands for Businesses for an Environmentally Sustainable Tomorrow. It is a service offered by the City of Portland Energy Office. *BEST* will show you a better way of doing business. One that is better for the environment and your bottom line.

Through *BEST* we offer information and hands-on help with your facility's energy efficiency options. We also offer services that promote water-saving, recycling and waste reduction, and clean and efficient transportation alternatives.

Red Lion Inns are actively saving water at their local hotels. They have found ways to save water without impacting the comfort of their guests with showerhead, faucet, and toilet retrofits. Their water saving will add up to more than 12 million gallons per year in their five Portland hotels. That is a 36 percent water savings for the guest rooms and public rest rooms. This will cut an estimated $24,000 dollars from their water bills. They will also save energy by using less hot water. In addition, the Red Lion laundry uses a special water recycling system that saves about 20,000 gallons per day by using the final rinse water in the wash cycle of the next load of linens.

BEST Businesses

All metro-area businesses locating new facilities or renovating existing facilities are eligible for this service. We will help you make your business better than the rest. Being one of the *BEST* means you save money at the same time you help the environment. *BEST* Businesses are leaders in four areas:

- Energy Efficiency,
- Waste Reduction,
- Water Conservation, and
- Clean and Efficient Transportation.

It is surprisingly easy and economical to be *BEST*. We can show you how.

BEST Technologies

Water-saving technologies range from low flow faucets and low flush toilets to enhanced water treatment for boilers and cooling towers. For motels, there are high efficiency showerheads, sprinkler control systems, and swimming pool covers. For restaurants, there are more efficient ice machines and low water use dishwashers. Water-saving designs are available for production facilities too.

Studies done in California, Arizona, and other states show that many commercial water-saving investments can pay for themselves in less than one year. These economical and ecological investments set *BEST* businesses apart from the rest.

BEST Help

Whether you're planning a new facility or renovating an existing one, *BEST* can help. We can show you how to do it, and how easy it is. You can get information on efficient water systems. We will help you select appropriate and efficient technologies.

At the new Oregon Museum of Science and Industry (OMSI) location in southeast Portland, the landscape architect designed the grounds to minimize irrigation water use and vegetation maintenance. They included native plants that, once established, will sustain themselves without irrigation. They plan only a small lawn, and a water-saving sprinkler control system. One feature automatically lowers water use so the irrigation rate can be lessened as the years go on and vegetation matures.

You may be able to use state tax credits to offset your investment in water-saving equipment. We will help you with this and more . . . what it takes to be "*Best* in Water Conservation".

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BEST Leaders

You can be an environmental leader while improving your bottom line. *BEST* businesses recognize the environmental and economic benefits of water conservation. In addition, *BEST* businesses also practice energy efficiency, waste reduction (recycling), and clean and efficient transportation. Other *BEST* Fact Sheets have more details on these areas.

At Gunderson Inc., a railway car manufacturer, they use several large sprinklers to keep paint drums from reaching their flash point during hot weather. After an employee suggestion, they installed a recycling system. The used water now runs into a storage tank, and then is pumped back out and used again. Vice President Craig Coffey states, "We've only been using the system a short time, but it will save us a lot during the hot weather."

Zefiro Restaurant in northwest Portland, saves water as well as energy with its low temperature dishwashing machines. They now save at least 6,000 gallons of water annually compared to their old system. They also save water by eliminating rewashing because of a special flush feature which means the dishes rinse cleaner than they did before. In addition, they cut their energy costs by about $25 for each 1,000 loads.

Irrigation Management Systems (IMS) uses a special computerized "smart" system to control the water use for several clients, including four Fred Meyer locations in the Portland area, and the Gateway Shopping Center. The IMS computer "calls" weather stations. Depending upon the atmospheric readings, it signals the various locations to run the water for a certain time period (or not at all if appropriate). Ellen Beighley of IMS states, "The system conservatively results in a 35% water savings, but, in certain cases, could save as much as 70%, depending on the maintenance program and previous sprinkler system."

BEST Assistance

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BEST Fact Sheet: Waste Reduction

BEST Services

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Through *BEST* we offer information and hands-on help with your facility's waste reduction efficiency options. We also offer services that promote energy efficiency, water conservation, and clean and efficient transportation alternatives.

Standard Insurance in downtown Portland has a very successful paper recycling program. It has been in place since 1989. They recycle about 200 tons of office waste paper and cardboard annually. This saves money by reducing waste disposal fees. In addition, their printing operation recycles about 300 pounds of aluminum printing plates per year. Standard has also encouraged others to use recycled paper products. Because of their leadership, they are part of METRO's Recycling Task Force.

BEST Businesses

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BEST Technologies

Many offices now recycle their white office paper. Other materials can be recycled too. Retail stores recycle cardboard. Distribution facilities recycle pallets. Businesses are also recycling plastics and other materials. Many production facilities even reuse materials from their own operation, cutting their raw material costs.

Disposal costs are going up. The financial incentives of recycling are three-fold. You can cut your disposal costs, sell your recyclable materials, and take advantage of state tax credits and other incentives. *BEST* will show you how recycling pays!

Recycling at Providence Hospital began as a grass roots employee effort in 1989. It has since grown into a successful hospital-wide program. Providence recycles about 25 tons of paper and over 6 tons of plastics each month. They also recycle tin, glass and construction debris. Sam Nero, program coordinator, credits positive employee support, from the administration on down, for their success. Sam adds, "The program is very cost effective. We save over $20,000 a year in disposal costs just counting paper we no longer throw away. The revenue we receive is passed on to the Providence Foundation and helps support their charitable efforts. Employees can see their efforts pay off."

BEST Help

Whether you're planning a new facility or renovating an existing one, *BEST* can help. We can show you how to do it, and how easy it is. You can obtain job-site, construction debris recycling. We will help you select appropriate materials and supplies and effective technologies. You can take advantage of state tax credits that equal up to 50 percent of your waste reduction or recycling investment. We will help you with this and more . . . what it takes to be "*Best* in Waste Reduction".

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BEST Leaders

You can be an environmental leader while improving your bottom line. *BEST* businesses recognize the environmental and economic benefits of recycling and other waste reduction activities. In addition, *BEST* businesses also practice energy efficiency, water conservation, and clean and efficient transportation. Other *BEST* Fact Sheets have more details on these areas.

Metropolitan Service District (METRO) has gone beyond simply recycling construction debris at their new location. They are "closing the loop" by using products made from recycled waste where possible. METRO will have recycled content in their acoustical board, rubber mats and counter tops. They will have bathroom tiles made from old fluorescent lamps, and toilet partitions manufactured from recycled milk jugs. A lot of the paint used was once "thrown away" at METRO's Household Hazardous Waste dropsite. About 300 gallons per week is collected, and 60-70% is recyclable. The good paint is strained and reprocessed by a local paint company, put into recycled plastic buckets and used at the construction site.

Tektronix, an electronics firm in Beaverton, goes beyond office paper in their waste reduction plans. Their efforts earn them about $3 million per year. Since 1975 they have been recycling scrap and precious metals from their offices and manufacturing processes. They send old circuit boards, solder paste jars, and even cleaning wipes to a refiner, who pays Tektronix for the precious metals extracted. They also have a store where they sell used desks, computers, typewriters, and other items that they no longer need. Items that don't sell are dismantled and recycled.

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Rim Co, the developers of a new Safeway store and shopping complex at the former Rose City Fred Meyer location on Sandy Boulevard, wanted to reuse or recycle as much of the demolition material as possible. They contracted with Obrist Trucking and Excavation to crush the concrete into gravel to be used as fill. Dan Obrist says, "At least 12,000 tons of concrete have been diverted from the landfill. In addition, 200 tons of steel rebar have been recycled. Only about 150 tons of unusable debris (such as worn carpet) have been landfilled." They are also chipping waste wood products for recycling. And are selling, not dumping, the old store's light fixtures. The net savings for this development is estimated to be at least $100,000.

BEST Fact Sheet: Transportation Alternatives

BEST Services

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Through *BEST* we offer information and hands-on help with your facility and your employee's transportation options. We also offer services that promote energy efficiency, water conservation, and recycling and waste reduction alternatives.

Franz Bakery originally changed its fleet over to propane fuel to help solve a maintenance problem. They converted 120 trucks at their Portland location. And, the maintenance problem has not recurred since. Tom Powers, Vice President/ Transportation is very pleased with the fuel. "Propane is about 98% efficient so almost nothing comes out the tailpipe. Since it burns so clean, we don't get as much engine contamination, and we almost literally don't even have to change the oil! In actual cash we may only save about 10% over gasoline, but the savings to the environment cannot be measured."

BEST Businesses

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BEST Technologies

Many employers subsidize bus passes for their employees. Some allow flexible work schedules. And, some encourage the work-at-home, telecommuting approach.

Some businesses are converting their cars and trucks to electricity or another clean fuel — propane, natural gas, ethanol, etc. Fuel and maintenance may cost less, too.

More employees using carpools, vanpools or mass transit means more parking spaces for your customers. And, consumers like to patronize businesses that are helping clear the streets and clean the air. Let *BEST* show you how you can benefit...and help the city at the same time.

A meter reader at Portland General Electric (PGE) came up with an idea to save fuel. He saw many neighborhoods where meter readers could park their trucks and use bikes to read individual electric meters. PGE liked the idea because they could save gasoline and avoid air pollution. They purchased some bikes in the spring of 1992, and now have a dozen meter readers using them. Dennis Lahmers, Manager of Customer Service Field Operations, estimates that PGE will save about $1,500 the first year. There are other positive effects, too. "Our customers like to see us using the bikes," Lahmers says. "Even our safety levels are improved, since we are backing trucks out of driveways less".

BEST Help

Whether you're planning new vehicles or considering changes to existing ones, *BEST* can help. We can show you how to select clean and economical vehicles. We can point you to state tax credits that equal 35 percent of your investment in vanpool or telecommuting equipment. You can also get tax credits for investments in alternative fuels. We will help you with what it takes to be "Best in Transportation".

BEST Recognition

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BEST Leaders

You can be an environmental leader while improving your bottom line. *BEST* businesses recognize the environmental and economic benefits of energy efficiency. In addition, they show their concern and leadership in other ways. *BEST* businesses also practice water conservation, waste reduction (recycling), and energy efficiency. Other *BEST* fact sheets have more details on these areas.

Nike Inc. has creatively encouraged employees at both their main headquarters in Beaverton and Nike Town in downtown Portland to "give up" their cars. Nike subsidizes Tri-Met transit passes for any employee who requests it. They also have readily available mass transit schedules and maps. A new twist rewards employees for carpooling, biking or running to work. Each day of participation, these employees receive $1 vouchers that can be used in any of the Beaverton Campus stores. The vouchers are also entered into a monthly drawing. The more vouchers an employee has, the better chance to win. Dan Wright, Project Manager, Facilities, analyzed the participation for the new program's first month, "Our participants kept cars off the road for 53,000 commuter miles, saved a total of over $10,000 in commuter costs, and kept 82 pounds of hydrocarbons out of the air."

Flightcraft General Aviation Co. uses two electric carts (or "tugs") to tow corporate aircraft that fly in and out of Portland International Airport. The tugs move airplanes between the runway and the terminals and hangars. Gary Zenzen, the Line Facility Manager, comments, "We are saving a minimum of 60 gallons of gasoline per week, and probably more. The electric tugs run quieter, and maintenance costs are less."

BEST Assistance

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or write
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Portland, OR 97204

U.S. Bank wanted to help their employees commute after 1,500 workers were relocated from downtown Portland to new office space in Gresham. They purchased four vans to be used in vanpools, taking advantage of a 35% tax credit from the Oregon Department of Energy. Approximately 10 people participate in each vanpool, some from as far away as Salem. The cost is based on the number of riders in their vanpool and the miles driven. The bank subsidizes the first $21 of their expenses. Curt Meyers, Vice President and Human Resource Officer, estimates "Using the vanpools should save over half a million commuter miles per year and more than 35,000 gallons of gasoline."

BEST

BUSINESSES FOR AN ENVIRONMENTALLY SUSTAINABLE TOMORROW

RESULTS

"Green Team" Cuts Waste At Kaiser Permanente

ONE IN A SERIES OF CASE STUDIES FEATURING BEST BUSINESS AWARD WINNERS

Kaiser Permanente is a health maintenance organization serving 375,000 people in Oregon and Southwest Washington. They have achieved dramatic results in waste reduction at their facilities. This effort is directed by an employee based "Green Team". Their activities cover a wide variety of actions that reduce, reuse, or recycle waste at their two medical centers and more than 30 medical and dental facilities in and around Portland.

Reduce

Kaiser Permanente cut their use of polystyrene cups by 16,000 per month — a reduction of more than 40 percent. To do this they give each new employee a reusable thermal mug (made from recycled plastic). Their purchasing agents work with suppliers to reduce excess packaging or switch to more environmentally friendly products. The emergency room at Bess Kaiser Medical Center uses biodegradable bedpans. These are made from recycled phone books and newspapers (creating a market for recycled goods). Both their medical centers have replaced the traditional plastic pitchers and polystyrene cups given to their patients. They now receive an attractive sip bottle the paitents can take home with them when they leave. The sip bottles also encourage paitents to drink more water — a medical benefit as well.

Reuse

Both Bess Kaiser and Kaiser Sunnyside medical centers have eliminated the use of over 40,000 disposable diapers each year by switching to reusable cloth diapers. Medical forms are now printed on recycled paper. They use business envelopes without plastic windows making them easier to recycle. Outside their medical facilities, they now use mulching lawn mowers, and chippers. This allows them to reuse their lawn clippings and prunings and cut yard debris landfilled by nearly 40 truckloads per year.

Recycle

All Kaiser Permanente employees are trained to recycle office paper, recycling about 360 tons of paper per year. They also recycle old magazines from patient waiting rooms: more than 300 pounds each month. In addition, all cardboard packaging they receive is recycled too — about 125 tons a

BEST

year. Other packaging materials are recycled where possible. That included more than 12,000 cubic feet of styrofoam "peanuts" in 1992, for example.

Employee Involvement

Kaiser involves all of their employees — more than 7,600 — in these efforts. Employees share their ideas on how to reduce waste and a 13 person team (known as the "Green Team") reviews the suggestions. The Green Team also oversees implementation of the suggestions, tracking the progress with monthly "Green Team Updates" for the employees. As you would expect, the updates are printed on recycled paper — both sides of a single page. "There is no level of this organization which isn't committed to the program," says Green Team co-chair Carol Winter-Behn. "We have very environmentally conscious people who believe in doing what they can. It feels good to be investing in the future," she added.

Rewards

A formal suggestion program encourages all employees to submit suggestions to improve everything Kaiser Permanente does. Many waste reducing suggestions have been received. If implemented, employees receive awards of cash or merchandise for their ideas. Kaiser Permanente has found waste reduction reduces their operating cost — a 'reward' every business manager can appreciate. They don't mind sharing a small part of the savings with the employees who submit good ideas. Kaiser Permanente is convinced that green thinking has a positive effect on their bottom line. They have found that they get positive feedback from their members too.

Awards

Kaiser Permanente has won awards for their recycling and waste reducing efforts. They received a Recycling Achievement award from Metro for recycling in the fall of 1992. In early 1993 they received a "BEST Innovation Award" issued jointly by the City of Portland and the Association for Portland Progress (APP). The "BEST" award recognized their innovative waste reduction activities.

For more information about Kaiser Permanente's earth-friendly efforts, contact Carol Winter-Behn at (503) 786-2601.

HOW TO...Get your employees involved

Front line employees are the closest to your day-to-day operations. They often see opportunities that nobody else can. If encouraged to do so, they can provide easy and effective solutions to problems in your organization.

There are six easy steps to helping your employees 'think green':

1) Publicly state top managements' commitment to efficiency, resource preservation, and employee involvement.
2) Create a review committee with key employees selected from across the organization.
3) Publicly solicit ideas/suggestions from all employees.
4) Review ideas and facilitate implementation of the best ones.
5) Reward employees based on the savings from their idea(s).
6) Publicize the results (for management/other employees).

You'll likely find — as Kaiser Permanente has — that when your employees 'think green' it means more green for your bottom line too!

ENERGY

To Find Out How Your Business can be "BEST" contact:

WASTE

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WATER

TRANSPORTATION

BEST

BUSINESSES FOR AN ENVIRONMENTALLY SUSTAINABLE TOMORROW

RESULTS

Port of Portland Building Slashes Energy Use

ONE IN A SERIES OF CASE STUDIES FEATURING BEST BUSINESS AWARD WINNERS

The Port of Portland building is a 16 story Class A office tower in the Lloyd District. The Port is a major tenant in the building owned and managed by Pacific Development, Inc. (PDI). The building was constructed in the early 1970s. It has 350,000 square feet of office and retail space. Recent changes have cut PDI's energy costs by nearly $200,000 per year.

Building Upgrade

In 1992 PDI retained a local consultant to manage an upgrade of the building. It is now among the most energy efficient in Portland. The primary goals were to reduce energy use while improving tenant comfort. They replaced the old lighting system. The single pane glass was changed to double pane and the heating and cooling system was upgraded. By performing the work at night, this was completed while the building was occupied -- without disturbing tenants.

Lighting

PDI replaced 3,200 old-style fluorescent fixtures with higher efficiency parabolic fixtures. They relamped and reballasted another 1,800 fluorescent fixtures. They upgraded the lighting in the offices and corridors. The fixtures now use high efficiency T-8 lamps. The new lighting controls include occupancy switches and after-hours "sweeps" to turn off lights inadvertently left on. These changes provide the needed light while saving energy and reducing glare on computer monitors. Tenants comment that eye strain has been almost eliminated.

Heating & Cooling

The building's heating and cooling system was updated to a more efficient type. The dual duct constant volume system was completely renovated and converted to a variable air volume (VAV) system. The new system combines an additional 3,000 control points with advanced strategies available in a package known as TRAV (terminal regulated air volume). Direct digital controls (DDCs) were also installed replacing the prior pneumatic control system. DDC allows full utilization of TRAVs capabilities. The entire system can be controlled by PC from either the Engineer's office or the security desk enabling instant response to tenant comfort requests. This flexibility to tenant demands is a key benefit.

Seven variable speed drives (VSDs) were

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also added. They were installed on the supply, return, and cooling tower fan motors. More than 400 mixing boxes were modified to operate as VAV boxes. The end result is that energy is not wasted to maintain high static pressures, conditioning spaces more than necessary or when unoccupied. The fan system has a low speed nighttime operation. This reduces simultaneous heating and cooling during the morning start-up. It also adds purge capabilities bringing in fresh air to improve indoor air quality (IAQ). Added CO_2 sensors are used to track the building's IAQ at all times.

Windows

The exterior of the building is largely glass — nearly 40,000 square feet. The windows were all single-pane in aluminum frames with a low insulating value. And, weatherstripping was nearing the end of its service life. PDI replaced 1,600 windows with double-pane insulating glass. The new windows included a low emissivity coating that further reduced the heat transfer.

Energy Savings

The equipment and operating changes cut PDI's energy use by 40 percent; saving nearly 5 million kilowatt hours and cutting demand by 750 kW. These savings add up to $180,000 per year. This change has kept over 1,000 tons per year of CO_2 from reaching our atmosphere — adding to global warming.

Waste Reduction

This project resulted in a large amount of waste. PDI recycled 90 percent of the 1,600 panes of glass, 3,000 light fixtures, lamps and ballasts, and other removed materials. This saved approximately 2,000 cubic feet of landfill space and cut their waste disposal costs by $10,000.

Results and Rewards

In March '93, PDI received a "BEST Innovation Award" for the energy efficiency and waste reduction efforts at the Port of Portland Building. According to tenants, the best reward is a more efficient, more comfortable building that has better lighting, more precise temperature control, and better indoor air quality. The efficiency gains, along with utility-provided financing, gives PDI a net positive cash flow. They also received a 35 percent tax credit from the State for their efforts.

For more details, contact PDI's Ralph Coppersmith, the Port Building manager or Stan Maier, chief building engineer at (503) 233-4048.

• •

HOW TO...recycle construction debris

An increasingly large component of the expense involved in any construction or retrofit project is waste disposal. Landfilling construction materials is costly and unnecessary.

There are four easy steps to recycling your construction materials:

1) Specify "removed material separation/ recycling" in your construction contract specifications.
2) Contact recyclers to determine materials that can be recycled and coordinate a pick-up schedule.
3) Create a secured area to locate bins and label each for acceptable materials.
4) Remind contractors and site workers of construction waste separation for recycling.

You'll likely find — as PDI did — that when you recycle your waste and surplus building materials, it saves money too!

ENERGY

WASTE

To Find Out How Your Business can be "BEST" contact:

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City of Portland Energy Office
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WATER

TRANSPORTATION

BEST

BUSINESSES FOR AN ENVIRONMENTALLY SUSTAINABLE TOMORROW

RESULTS

NIKE Encourages Alternative Commuting

ONE IN A SERIES OF CASE STUDIES FEATURING BEST BUSINESS AWARD WINNERS

NIKE, Inc. is a sport shoe and fitness company. Their corporate headquarters is located in the Portland area. They also have a retail outlet, NIKE TOWN, located in downtown Portland. Since 1992, they have reduced employee commute trips at their facilities. NIKE TOWN is a unique retail store. That store won an award for their efforts and is the focus of this case study. Their efforts encourage — and reward — almost any transit alternative to driving to work alone. The results are reduced fossil fuel use, cuts in air pollution, and less traffic congestion.

A Dollar a Day

NIKE offers employees an incentive to bike, run, walk, or skate to work. They receive a $1 voucher (a "NIKE Buck") every day they commute that way. NIKE Bucks are good at the employee store, the cafeteria, and their child care center. Each carpooling employee also gets a NIKE Buck. And, carpoolers get choice parking spots in NIKE's parking lots.

Transit Passes

NIKE has an incentive for public transit too. They joined forces with Tri-Met to provide reduced cost transit passes for their employees. These passes are available for as much as 75 percent off the regular price. The value of the discount is equal to the "NIKE Buck" option, $21 per month. So, whichever option employees choose, NIKE's level of support is the same.

Trip Reductions

Only a small fraction of NIKE employees work in downtown Portland. Seventy-five people work at NIKE TOWN and most of them used to drive to work in single occupant vehicles. Before they started promoting transit alternatives, only a few NIKE TOWN employees rode the bus or biked to work. Now, they have two car pools, along with 27 bus riders, and 20 employees that bike, run, walk, or skate to work each day.

NIKE's corporate-wide numbers are significantly higher. Commute changes at NIKE TOWN impact downtown traffic levels. Changes by NIKE TOWN employees have cut out trips by 26 single occupancy vehicles per day. Over a year that adds up to more than 6,700 avoided trips. NIKE TOWN's employees average 20 miles for a round trip commute. So, they have reduced vehicle travel by more than 135,000 miles per year. Fewer car miles mean less gasoline use and reduced air pollution.

BEST

Assuming an average vehicle city mileage of 18 miles per gallon, the trips that NIKE TOWN employees now avoid, save more than 7,500 gallons of gasoline per year. That equals nearly 4,700 pounds of air pollutants — carbon monoxide (CO), unburned hydrocarbons (HC), and oxides of nitrogen (NO_X). It also results in a reduction of carbon dioxide (CO_2) emissions by more than 150,000 pounds per year. CO_2 is a greenhouse gas that contributes to global warming.

Benefits

One benefit is that NIKE TOWN employees are now more fit than before. Using muscle power instead of fossil fuel to get to work helps in many ways. They cut gasoline use. They've eliminated hundreds of pounds of pollutants and global warming gasses. Now there's cleaner air, less congestion on the roads, and more space for downtown business customers to park.

Employees are having more fun too. One employee that never thought she would share a ride with anyone started carpooling for the "NIKE Bucks". Now she enjoys it so much that she would continue carpooling even if the incentives were discontinued. She said, "I enjoy the people I'm riding with and we're all having a lot of fun."

Awards

NIKE TOWN has won awards for its innovative approach to retailing. In early 1993 they received a "BEST Innovation Award" issued jointly by the City of Portland and the Association for Portland Progress (APP). They received an award in the "Clean & Efficient Transportation" category. The award recognized their innovative transit alternative activities.

For more information about NIKE's innovative transit efforts, contact Julie Papen at (503) 671-2961.

HOW TO...Start your transit program

Employee transportation may not seem to be part of your day to day operations. However, the stress of driving and parking hassles can impact your employees' work. If encouraged to do so, they will use the bus or another transit alternative to commute.

There are six easy steps to helping your employees use an alternative commute method:

1) Publicly state top management's commitment to mass transit, carpooling, and other alternatives.
2) Establish an employee transit coordinator and make it a high profile appointment.
3) Offer discounted transit passes and other rewards for alternative commuting to all employees.
4) Provide parking space for bicycles and reserve some choice parking spaces for carpools.
5) Stop paying for (or sell rights to) freed-up parking spaces, if any.
6) Track and publicize the results (for management/other employees).

Like NIKE, you'll find your employees appreciate your efforts and it will show up in their work.

ENERGY

WASTE

To Find Out How Your Business can be "BEST" contact:

Curt Nichols, Program Manager
City of Portland Energy Office
1211 SW 5th Avenue, Suite 1170
Portland, OR 97204
Phone: (503) 823-7418
Fax: (503) 823-5370

WATER

TRANSPORTATION

BEST

BUSINESSES FOR AN ENVIRONMENTALLY SUSTAINABLE TOMORROW

RESULTS

Elf Atochem Captures Impressive Water Savings

ONE IN A SERIES OF CASE STUDIES FEATURING BEST BUSINESS AWARD WINNERS

Elf Atochem North America operates a chemical manufacturing plant in Northwest Portland. They are one of the City's largest water users. Starting in 1992 they voluntarily cut water use at their plant by 15 percent. The savings add up to as much as 346,000 gallons per day, more than enough to supply 1,500 typical homes. The results are lower water — and sewer — costs and more water available for the rest of us.

Idea Origination

Elf Atochem employees suggested many of the water-saving projects. When they saw "water waste" they were encouraged by management to assess the impacts. As a result, a number of water-saving modifications were made at the plant.

Water Use Eliminated

In some cases, Elf Atochem found that they were using water where it wasn't needed at all. In one case they now shut off the cooling water for an air compressor when it is not useed. Since the air compressor serves as a backup, the water savings add up quickly. Other plant expansion and process changes were made with water use in mind. The Sodium Chlorate process — expanded in 1991 — eliminated all city water process use. They also cut water use by purchasing nitrogen rather than producing it themselves. The nitrogen production process was water intensive, using about 72,000 gallons per day.

Another Water Source

The plant also realized that paying for treated City water wasn't always necessary. Since they're located near the Willamette River, they had a permit to use its water. They now draw river water for their roof sprinklers and to run through an intercooler that provides cooling for an air dryer. The air dryer removes moisture from their compressed air. River water is pumped through the intercooler and then returned without contacting any impurities. This cut Elf Atochem's City water purchases by 120,000 gallons per day during the winter and as much as 220,000 gallons per day during the summer.

Savings Benefit City

Like most cities, Portland's water supply system has a summertime peak demand.

BEST

Many of Elf Atochem's voluntary water-saving projects directly reduce this peak. They save water year around, but during the summer they save an additional two-thirds of the total daily water savings. That leaves more water available just when people use it the most. This is especially beneficial during dry summers like Portland experienced in 1992.

Benefits

One benefit is the additional water available for the Portland water system. Another benefit is the cost savings to Elf Atochem. They cut their water costs. They also reduced their wastewater charges for water discharged to the sewer. The total savings for both add up to more than $110,000 per year.

Awards

In early 1993, Elf Atochem received a "BEST Innovation Award" issued jointly by the City of Portland and the Association for Portland Progress (APP). The "BEST" award recognized their innovative water conservation activities.

For more information about Elf Atochem's innovative water-saving efforts, contact Bill Robbins at (503) 225-7271.

HOW TO...Analyze water use

Your businesses water use may not seem to be a large part of your overhead. However, you pay for that water twice — once as water (coming in) and again as sewer (going out). When you know how much it costs to use water in various parts of your operation, you'll see just how much you can save.

There are five easy steps to analyze your water-saving potential:

1) Keep records of water use. Remember the old rule — "You can't save what you don't measure."
2) Publicly state top management's commitment to water conservation.
3) Use in-house experts - or bring in consultants - to provide a technical and financial analysis of potential water saving options.
4) Specify "water efficient fixtures" in all purchase and construction specifications.
5) Track and publicize the results (for management/other employees).

Like Elf Atochem, you'll find you can easily find ways to save water once you know where it's being used. You may be surprised at the high return on your water-saving investments.

ENERGY

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To Find Out How Your Business can be "BEST" contact:

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Portland, OR 97204
Phone: (503) 823-7418
Fax: (503) 823-5370

WATER

TRANSPORTATION

BEST

BUSINESSES FOR AN ENVIRONMENTALLY SUSTAINABLE TOMORROW

RESULTS

Red Lion Hotels Uncover Energy and Water Savings

ONE IN A SERIES OF CASE STUDIES FEATURING BEST BUSINESS AWARD WINNERS

Red Lion Hotels & Inns own and operate 55 hotels in eleven western states, including five in Portland. Their Portland hotels have nearly 1,600 guestrooms. Recent changes are saving Red Lion more than $290,000 per year in lower energy, water, and sewer costs at their Portland properties.

Cost Cutting

Over the past few years, Red Lion has upgraded their Portland area hotels. Each hotel director is given specific energy use goals and a reward for reaching them. They want to reduce energy use and maintenance costs while improving the "look" of their facilities. They replaced old lighting and improved their heating and cooling systems. And, they changed guestrooms to cut water use. Red Lion's customers save too. Bob Brewer, energy management coordinator, noted, "Lowering our utility costs through improved efficiencies helps us maintain more favorable rates for our guests."

Lighting

Red Lion retrofitted nearly 3,000 old-style incandescent light fixtures with more efficient compact fluorescent lights. These changes were made to each hotel's corridor, lobby, and exterior lighting. They cut the lighting energy use in these areas by 80 percent or more. They also upgraded existing fluorescent lighting in more than 500 fixtures to use more efficient lamps and ballasts. The new lamps and ballasts cut the lighting energy use by nearly 50 percent.

Heating & Cooling

The hotel's heating and cooling systems were updated to be more energy efficient. The changes made varied with each hotel, depending on the specifics of their systems. In some cases they added economizers to take advantage of outside air for "free" cooling. They added thermostats to control the guest room fans. Each hotel was linked to a central energy management control system. This allows the systems to be controlled by PC from the engineer's office, enabling instant response to guestroom comfort. They save energy while providing flexibility to guest requests.

Controls

Several variable speed drives (VSDs) were added to supply, return, and cooling tower fan motors. The result is that energy is not wasted to run fans more than needed when

BEST

minimal heating or cooling is required or the rooms are unoccupied. The fan system changes save thousands of kilowatt hours per year, increase fan motor and belt life, and enhance space comfort.

Water-Saving Fixtures

Standard showerheads use 5 gallons per minute (gpm). Red Lion had 3 gpm showerheads. But, with the drought in 1992, they replaced them with 2.5 gpm models. They also added sink faucets aerators that save 40 percent. Together these save 3.5 million gallons of hot water per year. They cut toilet water use too (from 5 gallons per flush to 2.5). Their total water savings — hot and cold — is more than 12 million gallons per year.

Energy Savings

Red Lion's new equipment and operating changes cut their energy use by more than 10 percent and save over 4.8 million kilowatt hours and 16,000 therms of natural gas each year. Their savings add up to $260,000 per year. This is enough energy to supply 400 typical homes. It also keeps nearly 1,000 tons of CO_2, a global warming gas, from reaching our atmosphere each year.

Water Use Reduction

Red Lion's improvements had a significant impact on their water use. They cut water use in their hotel rooms by 38 percent. The 12 million gallons they no longer use saves them more than $13,000 each year. Less water use also means lower sewer costs. Their sewer bill savings are nearly $29,000. And, they use less natural gas for hot water.

Results and Rewards

In March '93, Red Lion received a "BEST Innovation Award" for the energy efficiency and water conservation efforts at their Portland hotels. However, the best reward is more efficient, more comfortable buildings that have better lighting, more precise hot water temperature control, and more efficient ventilation systems. The savings, along with the state tax credit and utility rebates, gave them a net return on investment of better than 100 percent!

For more details, contact Red Lion's Bob Brewer, Energy Management Coordinator, at (503) 283-5141 x4272.

HOW TO . . . Track Energy Use

Tracking energy use is a starting point for saving energy. Without some monitoring of energy-saving projects, you can't be sure of the impacts of your investments.

Here are six easy steps to track your energy use:

1) Request building energy use history (for the past two years) from your utility or fuel supplier.
2) Correlate energy use between buildings on a per square foot basis.
3) Normalize energy use based on temperature to account for weather variations.
4) Take meter readings daily (or per shift) for more precision.
5) Consider sub-metering — available from utilities or energy consultants — for even more detail.
6) Graph energy use at least monthly and share progress with management and employees.

You'll likely find — as Red Lion did — that when you track your buildings energy use, it helps you save money too!

ENERGY

To Find Out How Your Business can be "BEST" contact:

Curt Nichols, Program Manager
City of Portland Energy Office
1211 SW 5th Avenue, Suite 1170
Portland, OR 97204
Phone: (503) 823-7418
Fax: (503) 823-5370

WASTE

WATER

TRANSPORTATION

W A R D S

APPLICATION CELEBRATING SPECIAL INNOVATIONS IN:

- Energy Efficiency
- Waste Reduction (Recycling)
- Water Conservation
- Clean & Efficient Transportation Alternatives

BEST

Sponsored by
City of Portland Energy Office and the Association for Portland Progress.

BEST Award Criteria and Application Details

BEST Business awards are co-sponsored by the City of Portland and the Association for Portland Progress. The awards are site-specific. They are for business facilities located within Portland with notable energy/environmental accomplishments. The award-winning facilities will be recognized for their efforts and featured as examples for others. The award guidelines below are only examples of what the Review Panel is looking for. They are not absolute requirements.

Award Categories

- **BEST Success**
  Significant accomplishments in all four sectors targeted by BEST: Energy Efficiency, Water Conservation, Waste Reduction (Recycling), or Clean & Efficient Transportation.
  See guidelines below for examples.
- **BEST Innovation**
  Notable single achievement in one of the four sectors below.

Award Guidelines

BEST Success awards are for facilities where the business: has energy/natural resource conservation goals, trains employees, solicits ideas from employees and suppliers, rewards employees for their ideas/accomplishments, and monitors progress towards goals and reports results. They will have documented accomplishments in each of the four sectors listed below. BEST Success awards will weigh results over process. Applications without quantified results will be at a disadvantage. The criteria below are for reference only.

- **Energy Efficiency**
  - Building energy use below other similar buildings
  - Projects receive utility incentives, State tax credits
  - Facility uses energy efficient technologies
  - Business is an EPA "Green Lights" partner
- **Water Conservation**
  - Uses efficient potable water plumbing/fixtures
  - Uses efficient process water systems in production
  - Uses efficient irrigation system and controls
  - Rainwater runoff collection and reuse system in place
- **Waste Reduction (Recycling)**
  - Trains employees to reduce, reuse, and recycle
  - Purchases recycled content paper and other products
  - Receives tax credits for reduction/reuse/recycling
  - Uses recycled products as feedstock for manufacturing
- **Clean & Efficient Transportation**
  - Purchases fuel-efficient vehicles for business "fleet"
  - Provides alternative transit incentives for employees
  - Operates vehicles on cleaner, alternative fuel
  - Encourages flexible work schedules for employees

BEST Innovation awards are for businesses with significant and unique achievements in one of the sectors listed above. The Innovation awards are meant to recognize unique and creative approaches to energy and environmental issues

Application Details

The application form is flexible to allow you to emphasize what you feel is most noteworthy. Please fill it out completely, detach, and mail. Concise applications are appreciated. Applications are due at the Portland Energy Office by the date posted at the top of the opposite page. They can be mailed or faxed, but will not be considered if the deadline is missed.

Judging

The judging will be done by an independent panel of business energy and environmental professionals. The decisions of the Review Panel will be final. The panel is the sole and final judge of each applicant's merits. The number of awards to be issued is limited. Because of this, not every good projects can be rewarded. These awards are for the "best".

Award Winners

Applicants will be notified of the Review Panel's decisions within three weeks after the application deadline. Award winners will be invited to a press conference or reception. Winners may be featured as "BEST Success Stories" subject to applicant approval.

More Information

For more details on the BEST program, assistance for your facilities, or questions about the application process, contact the City of Portland Energy Office, 1120 SW Fifth Ave. #1030, Portland, OR 97204. The phone number is 823-7418.

BEST Business Awards

APPLICATION FORM

Please type or print all information requested in the spaces provided. Attach supporting information if available. For questions, contact the Portland Energy Office at (503) 823-7418. Mail completed application to City of Portland Energy Office, 1120 SW Fifth Ave. #1030, Portland, OR 97204. Faxed applications will also be accepted. The fax number is (503) 823-5370.

Applications must be received by

1. Applicant:

Business Name

Facility Address

City, State, Zip

Mailing Address (if different)

Contact Person Title

Phone No. Fax No.

2. Application for: (Check One)

- ☐ BEST Innovation. Complete specific section (3 4 5 or 6) and give details in section 7 below.
- ☐ BEST Success. Overall accomplishment in all four areas. Complete sections 3 - 7 below.

3. Energy Efficiency Accomplishments:

Savings /Benefit = (Give Details Below)

4 Water Conservation Accomplishments:

Savings /Benefit = (Give Details Below)

5. Waste Reduction (Recycling) Accomplishments:

Savings/Benefit = (Give Details Below)

6. Clean & Efficient Transportation Accomplishments:

Savings /Benefit = (Give Details Below)

7. Accomplishment Details:

7. Accomplishments (Cont.):

ATTACH ADDITIONAL PAGES (IF NECCESARY)

8. List Other Supporting Material Attached:

9. Project Partners: (Who else was involved)

Name Organization Phone

Name Organization Phone

Name Organization Phone

10. Certification of Authenticity:

By signing below, I certify the information above is true and accurate to the best of my knowledge. I understand that this material will be shared with the members of the BEST Review Panel. I understand their decision will be final and agree to abide by their decision. If chosen as an award winner, I agree to allow my activities and accomplishments to be publicized and shared with others.

Signature Date

Ideas for BEST Award Criteria

Award Categories:

- BEST Innovation -- notable single achievement
- BEST Success -- significant accomplishments in all four sectors
- BEST Success + Innovation -- combination of both above

Award Criteria Minimums:

- Energy Efficiency
  - Used the state's Business Energy Tax Credit
  - Used incentives offered by their Utilities
  - Signed on as a "Green Lights" partner
  - Reward employee(s) for their energy-saving accomplishment(s)
  - Monitor energy use/report results to owners/employees
  - Or equivalent accomplishments

- Water Conservation
  - Efficient potable water use in facility plumbing/fixtures
  - Efficient process water use (and/or re-use) in production
  - Efficient irrigation system/controls for grounds
  - Rainwater runoff collection and reuse
  - Monitor water use/report results to owners/employees
  - Or equivalent accomplishments

- Waste Reduction
  - Train employees/provide mechanism to recycle office paper
  - Purchase office paper, other products with recycled content
  - Reward employee(s) for their waste-reducing accomplishment(s)
  - Use BETC or DEQ tax credits for reuse/recycling projects
  - Reuse recycled product(s) in manufacturing process(es)
  - Or equivalent accomplishments

- Clean & Efficient Transportation
  - Purchase energy-efficient vehicles (ex. life-cycle cost)
  - Operate vehicles on cleaner, alternative fuel
  - Offer discounted bus passes for employees
  - Provide "priority parking" for carpools
  - Encourage flexible work schedules for employees
  - Or equivalent accomplishments

- Other (Overall) Considerations
  - Solicit ideas from employees/suppliers
  - Reward employee(s) for their accomplishment(s)
  - Monitor progress/report results
  - Received prior recognition for accomplishments

1993 BEST Business Awards
Review Panel Decision Criteria

Success Awards are Reserved for Outstanding Overall Accomplishment
(i.e. they could win an Innovation Award in all four categories)

For **Innovation Awards,** Consider the Following Criteria:

- Significant Environmental Benefits
- Economic Benefit to the Company
- Unique Project/Innovative Technology
- Change/Benefit at Their Own Facility
- Other Awards Received/Recognition Earned
- Example for Other Local Businesses
- Business with a "Clean" Record

Also give consideration to:

- "Downrating" Success Award Applicants
- Documentation Provided with Application
- Evidence of Employee Involvement
- Responsive to Customers/Clients

And try to:

- Issue at Least One Award per Category (if Possible)
- Balance Commercial and Industrial Winners
- Recognize Businesses of All Sizes (Small, Medium, and Large)
- Avoid Awards for Same Business, Same Category

BEST

BUSINESSES FOR AN ENVIRONMENTALLY SUSTAINABLE TOMORROW

P O R T L A N D

BEST BUSINESS AWARD

BEST INNOVATION

Energy Efficiency

In recognition of the accomplishments of the staff and management of

Red Lion Hotels & Inns

for their innovations that promote the wise use of Portland's natural resources through establishing high standards of energy efficiency for their business.

This award is presented by the City of Portland and the Association for Portland Progress in recognition of decisions that benefit the business, the community, and the planet.

March 9, 1993

Vera Katz
Mayor, City of Portland

Ruth Scott
President, Association for Portland Progress

CITY OF
PORTLAND, OREGON
ENERGY OFFICE

Mike Lindberg, Commissioner
Susan Anderson, Director
Suite 1170 Pacwest Center
1211 S.W. Fifth Avenue
Portland, Oregon 97204-3711
(503) 823-7222
FAX (503) 823-5370

FOR IMMEDIATE RELEASE

For More Information Contact:

Curt Nichols
Portland Energy Office
at (503) 823-7418

MARCH 15, 1993

CITY OF PORTLAND ISSUES "BEST BUSINESS" AWARDS

PORTLAND -- Seven Portland (OR) businesses received recognition for their actions that protect the environment and preserve natural resources. The awards were issued jointly by the City of Portland and a community group, the Association for Portland Progress (APP). Portland's City Commissioner Mike Lindberg and APP's Executive Vice-President Rick Williams presented the awards at a reception last week.

The City and APP selected the "BEST Business Award" winners from 29 applicants. They were recognized for environmentally sustainable innovations in:

- Using energy efficiently
- Conserving water
- Reducing waste (recycling)
- Using clean & efficient transportation

The award-winning businesses were: Continental Brass, Co; Elf Atochem North America; Fred Meyer, Inc; Kaiser Permanente; NIKE Town; Pacific Development, Inc; and Red Lion Hotels & Inns. Each business was recognized in a single category -- Energy, Water, Waste, or Transportation. Their actions save them money and help maintain Portland's livability. BEST stands for Businesses for an Environmentally

- more -

Sustainable Tomorrow. BEST is a no-cost service offered by the City of Portland Energy Office to help area businesses.

Continental Brass, an electroplating facility in N.E. Portland, was given an award for their success reducing toxic materials. They reduced toxic use by more than 117,000 pounds from 1990 to 1991 while increasing production. By 1992 their product-to-waste ratio was more than double 1990 levels. Their waste reduction efforts save over $140,000 a year paying back their investment in about 10 months.

Elf Atochem, a chemical production plant in N.W. Portland, received an award for their water conservation activities. They made many operational changes last summer to respond to the water shortage -- saving water for the rest of Portland when we needed it most. They've saved more than 346,000 gallons per day (about 15 percent of their total water use).

Fred Meyer's Gateway store received an award for water conservation . When built a couple years ago, this store included an irrigation management system for their landscaped areas. Using computerized controls, they cut their irrigation water use by 50 percent. This saves them $800 in an average summer. Most new Fred Meyer stores use the same controls.

Kaiser Permanente, a health maintenance organization with two medical centers and more than 30 medical/dental facilities in and around Portland, was issued an award for waste reduction. They enacted dozens of waste reducing and recycling suggestions; many based on ideas from employees. They have reduced waste in many innovative ways and recycle more than 650 tons a year.

The NIKE store in downtown Portland received an award for clean & efficient transportation. They recently started an innovative effort to reward employees who

- more -

use public transportation, carpools, vanpools, or muscle power to commute. Employees receive either a reduced rate bus pass or a $1 voucher (a "NIKE Buck") every day they use one of the alternatives. This has reduced employee vehicle miles driven by 91,000 miles in eight months saving over 5,500 gallons of gasoline.

Pacific Development, Inc. (PDI) received an award for energy efficiency at the Port of Portland building, a 16 story office building in the Lloyd District. The building was upgraded to make it more energy efficient. They replaced the single pane glass, the old lighting, and improved their heating and cooling system -- and recycled 90 percent of the waste material. The changes cut their energy use by more than 5 million kilowatt hours (a 45 percent savings).

Red Lion has five full service hotels at various locations in Portland. They have made a number of changes in their operation to save energy. The changes include better lighting, controls, low-flow showerheads and faucets, and more. Together, they've saved over 4.8 million kilowatt hours, and cut their operating costs by more than $200,000 a year.

Curt Nichols, the BEST Program Manager, said, "If you ask these award winners about their projects, they'll modestly say they're just doing what's best for their business. And they're right. All seven of these businesses are 'BEST' -- Businesses for an Environmentally Sustainable Tomorrow. What they're doing is best for all of us." For more details on the award winners or information on the BEST program, call Curt Nichols at (503) 823-7418.

####

P O R T L A N D' S

BEST BUSINESSES

1993 BEST Innovation Award Winners

Energy Efficiency

- Pacific Development, Inc.
  Port of Portland Building
- Red Lion Hotels & Inns

Waste Reduction (Recycling)

- Continental Brass Co.
- Kaiser Permanente

Water Conservation

- Elf Atochem North America
- Fred Meyer, Inc.
  Gateway Store

Clean & Efficient Transportation

- Nike Town

BEST

BUSINESSES FOR AN ENVIRONMENTALLY SUSTAINABLE TOMORROW

Awards Sponsor:
City of Portland Energy Office
1120 S.W. Fifth Ave, #1030
Portland, OR 97204
(503) 823-7418

Awards Co-Sponsor:
Association for Portland Progress
530 S.W. Yamhill St, #1000
Portland, OR 97204
(503) 224-8684

BEST Fact Sheet

NEW SERVICE HELPS "GREEN" BUSINESS CUT COSTS

The City of Portland Energy Office now offers BEST. BEST stands for Businesses for an Environmentally Sustainable Tomorrow. This new program is a comprehensive package of services to help businesses cut operating costs and make environmentally sensitive business decisions. Working hand-in-hand with the Portland Development Commission and City Buildings Bureau the goal of this program is to **help local businesses use energy and water efficiently, create less solid waste and reduce air pollution, while improving their bottom line.**

The Energy Office will help businesses take advantage of energy and environmental services available to them. When firms decide to remodel existing facilities, expand, or move to a new location, they face a myriad of questions about how to "do the right thing". There are a number of agencies and utilities that can help. But, only the Energy Office is a "one stop service center" for information and assistance on all these services. The Energy Office's timely assistance will promote environmental sensitive business practices.

The Energy Office will act as a broker with a comprehensive package of information and project specific assistance for clients, such as:

1. Energy Efficient Design Assistance
2. Energy Loans, and Tax Credits.
3. Construction Site Recycling.
4. Office Paper and Other Material Recycling.
5. Pollution Control and Recycling Tax Credits.
6. Low Water Use Landscapes/Other Water Conservation Practices.
7. Low Energy/Environmentally Safe Building Materials.
8. Employee Use of Vanpools/Other Mass Transit Modes.
9. Convert Fleet Vehicles to Cleaner Fuels.

Each business will receive a custom tailored package suited for their needs. And, BEST businesses will be recognized for their efforts. The Energy Office will publicize BEST success stories as an example for other local businesses.

CALL THE ENERGY OFFICE FOR MORE DETAILS ABOUT BEST.
796-7418

TRENDS & RESOURCES

by Jeff Fletcher

Portland's "B.E.S.T"

The Portland, Oregon Energy Office has started B.E.S.T.—Businesses for an Environmentally Sustainable Tomorrow—to help local companies cut operating costs and make environmentally sound business decisions. The city's Energy Office acts as a broker to provide firms that are relocating or remodeling with customized, comprehensive packages of information on such topics as energy efficiency technical assistance and loans, construction site recycling, office recycling practices, water conservation, environmentally safe building materials, alternatively fueled fleets, and employee mass transit incentives. Details: Susan Anderson, (503) 796-7222.

Marina Management Software

The city of Monterey, Calif., which operates a 425-slip marina, now uses a sophisticated marina management computer graphics software program to meet the high demands from boaters for use of the facility. The "Total Harbour Management" package from Ark Systems of Bothell, Wash., includes six programs to handle complex slip scheduling, security monitoring, and customer billing functions. Details: (800) 877-4275.

St. Paul Breaks Ground on District Cooling

Construction has begun on an $8.8 million district cooling system in St. Paul, Minn. The new system, to be built and operated by nonprofit District Energy Services, Inc., will provide chilled water for air conditioning to eight buildings by April of 1993, and to more than fifty downtown buildings when fully completed. Approximately 4,000 feet of 30-inch pipeline will be laid for the project. System benefits: no use of ozone-depleting CFCs, no groundwater depletion (system water is returned to a central plant, re-chilled, and re-circulated), lower capital and operating costs, improved tenant comfort, and less space required for cooling equipment. Financing: $5.8 million in revenue bonds secured by long-term customer contracts and a $3 million subordinated loan. Since the mid-1980s, St. Paul also has operated one of the largest U.S. district heating systems. Hartford, Indianapolis, and Minneapolis currently have district cooling systems, and Cleveland is scheduled to add a system soon. Details: Trudy Sherwood, (612) 297-8955.

Car Bumper Recycling

In Germany, 875 Nissan Motor Co. dealerships are collecting old polypropylene car bumpers for recycling. The effort should divert 47,000 bumpers from German landfills. Metal bumpers already are recycled by the company, and polyurethane bumpers will be added to the program soon. Plastic bumpers can be re-made into air ducts, foot rests, transport pallets, and ground mats. A similar bumper recycling effort is underway in Japan. Details: Shuji Kawasaki, (313) 393-1893.

Recycling Takes Off at LAX

Los Angeles city officials got a surprise when they looked inside the trash bins at Los Angeles International Airport (LAX). The waste audit revealed that LAX is one of the largest single waste generators in the city, contributing some 47,000 tons annually, or one percent of the city's total disposed waste. Airline pillowcases comprised nearly 14 percent of the airport waste stream. As a result of the study, airport managers will start a recycling program. Copies of the waste audit executive summary and technical findings are available for $25 and $75, respectively. Details: Elizabeth Hill, (213) 237-1444.

Trends & Resources is a round-up of news about innovative city programs and the latest in equipment, services, and technologies for local governments. The column appear on a regular basis in the Weekly. Send news releases to the column editor, Jeff Fletcher, at NLC, 1301 Pennsylvania Avenue, N.W., Washington, D.C. 20004. □

Gonzalez intro reauthorizing (

by Julio Barreto

Rep. Henry B. Gonzalez (D-Tex.) has introduced a housing reauthorization bill that increases funding for the Community Development Block Grant (CDBG) program and provides relief from matching requirements for communities experiencing fiscal distress.

The Housing and Community Development Act of 1992 is a one year re-

RENEW AMERICA

June 15, 1993

Mr. Curt Nichols
City of Portland Energy Office
1120 SW 5th Ave, # 1030
Portland, OR 97204

Dear Mr. Nichols,

Thank you for applying to Renew America's National Environmental Achievement Awards program. It is our pleasure to inform you that your program entitled **BEST - Businesses for an Environmentally Sustainable Tomorrow** has undergone a rigorous judging process by leaders of the environmental community and is recognized as a model of environmental excellence. Your program will be listed in the 4th edition of the *Environmental Success Index*, and is eligible to become one of twenty National Winners.

Of the 1600 programs currently verified for inclusion in the *Index*, 20 outstanding programs will be selected by the leaders of the National Environmental Awards Council, comprised of 30 national environmental organizations. The National Winners will be given awards at our Fall Conference and Awards Presentation to be held October 13-15 in Washington D.C. We will notify you in September as to the status of your program.

To symbolize your national recognition, we are enclosing your Certificate of Environmental Achievement endorsed by the Awards Council. To encourage local media announcements about your program, we have also enclosed a one-page sample press release which you may edit and send on your letterhead. We would appreciate seeing any articles written about your program.

Being part of the *Environmental Success Index* enables your program to be promoted as a model for others, because it will include a brief description of your program, your name and telephone number so others may contact you for information.. The *Index* is a unique resource of information that is made available to policymakers, private and public organizations, the media and individuals interested in finding solutions to environmental challenges.

Congratulations on the success of your program! We hope you will be an active member of Renew America, and we have enclosed our Spring Renew America Report for your interest. If you have any questions, please don't hesitate to call Nicolin Girmes or Katie Martin at (202) 232-2252.

Sincerely,

Dale A. Didion
Executive Director

Enclosures

1400 Sixteenth Street, NW ■ Suite 710 ■ Washington, DC 20036 ■ (202) 232-2252 ■ FAX (202) 232-2617 ■ 1-800-922-RENEW

THE
NATIONAL
ENVIRONMENTAL
AWARDS COUNCIL

Alliance to Save Energy
American Council for an Energy-Efficient Economy
American Farmland Trust
American Forests
California Planning and Conservation League
Center for Science in the Public Interest
Citizens Clearinghouse for Hazardous Waste
Defenders of Wildlife
Environmental Action Foundation, Inc.
The Garden Club of America
Global Tomorrow Coalition
The Humane Society of the U.S.
Institute for Local Self Reliance
Izaak Walton League of America
National Audubon Society
National Parks and Conservation Association
Natural Resources Defense Council
The Nature Conservancy
Rails-to-Trails Conservancy
Renew America
Rodale Institute
Sierra Club
Society of American Foresters
Soil and Water Conservation Society
Trout Unlimited
Trust for Public Land
Union of Concerned Scientists
The Wilderness Society
World Wildlife Fund/ The Conservation Foundation
Zero Population Growth

EXECUTIVE
COORDINATOR
RENEW AMERICA

The National Environmental Awards Council

presents

"BEST - Businesses for an Environmentally Sustainable Tomorrow"

with a

Certificate of Environmental Achievement

and recognizes this outstanding program
in the fourth edition of the

Renew America
Environmental Success Index

Jack Lorenz
Co-Chair, National Environmental Awards Council
Writer-in-Residence, Izaak Walton League of America

Susan Weber
Co-Chair, National Environmental Awards Council
Executive Director, Zero Population Growth

Ralph Grossi
Co-Chair, National Environmental Awards Council
President, American Farmland Trust

1992 PROPERTY MANAGEMENT CONFERENCE
Tuesday, September 15th 1992

BEST: A New Service For Portland Area Businesses

Introduction

The most profitable businesses are usually the ones that specialize in some narrow niche where their services outshine the competition. These businesses may be experts in their area, but they may be missing a chance to excel in the big picture. Businesses today find that Economy, Ecology, and Efficiency all need to be balanced. Duffy's face shows what can happen when balanced, reasoned decisions are not made.

Economy, Ecology, and Efficiency: How should business owners, property managers, and designers/developers factor all three into their decisions? Until now, that hasn't been easy. Environmental issues are getting more complex. Business managers are faced with a myriad of sometimes conflicting requirements. Even when they want to "do the right thing", they only have enough time and information to "just do it".

Now, with a new program, the City of Portland Energy Office can help. We want Portland area businesses to be BEST. By BEST we mean Businesses for an Environmentally Sustainable Tomorrow *ie* businesses development and expansion that doesn't harm the environment. And, doesn't harm their bottom line either.

I'm here today to give you an overview of this new, no-cost service. You'll see that being BEST pays. And, with our help, it's easier than ever.

BEST Overview

First off, let me say that I don't have all the answers. We will operate as facilitators, finding the right person to answer your questions. We can help you get the answers to technical, procedural, or regulatory questions about: Energy Efficiency, Waste Reduction (Recycling), Water Conservation, and Transportation Alternatives.

Businesses that excel in all four of these areas will be officially designated 'BEST Businesses' (a green seal of approval from the City of Portland). Our role is to help where needed. Our clients will likely be: 1. Businesses that don't know what to do, 2. Businesses that know what to do but aren't sure they can afford it; or 3. Businesses that are already "doing the right thing" but not getting credit for it.

As a practical matter, we can have the most impact when working with businesses that are planning new facilities, expansions, or major renovations. But, we can work with anyone that's interested. Where building managers are doing a lot of good things already, we can help them with the little extra they need to be BEST.

What will we do for these businesses? We can provide general information, technical assistance, and help with financial assistance applications. In general, we can serve as a facilitator to help businesses make BEST decisions. We can help with:

1. Energy Efficient Design Assistance
2. Energy Loans, and Tax Credits.
3. Construction Site Debris Recycling.
4. Office Paper and Other Material Recycling.
5. Pollution Control and Recycling Tax Credits.
6. Low Water Use Landscapes/Other Water Conservation Practices.
7. Low Energy/Environmentally Safe Building Materials.
8. Employee Use of Vanpools/Other Mass Transit Modes.
9. Fleet Vehicle Conversions to Cleaner Fuels.

The City Energy Office will serve as a "One Stop Service Center". We will help new and expanding businesses with the information, technical and financial assistance they need to be BEST. With the incentives available, many energy-saving, waste-reducing, or cleaner transit options can pay for themselves quickly. This has been proven by local businesses already "doing the right thing". More businesses are making plans to join them soon. Let me give you some examples.

Good Examples

To save energy, Fred Meyer stores feature state-of-the-art lighting and controls. The new 1000 Broadway Building won awards for it's energy-saving design. Precision Castparts has added heat recovery to their furnaces. And, recent renovations at 200 Market St, the two Lloyd Buildings', and others dramatically cut their heating and cooling energy use.

US Bank is one of many local business that supplies transit passes to their employees. They also have vans for employee vanpooling. Transit passes are available for faculty, staff and students at Reed College. These efforts mean cleaner air, less congestion, and more parking available. Because it burns cleaner, Franz Bakery uses propane fuel in all its delivery trucks. And, TRI-MET has a couple natural gas powered busses on order.

About 85 percent of downtown office buildings recycle their waste paper. This includes this building here -- the PacWest Center -- the Portland Building, and many more. Tektronix has a comprehensive waste minimization effort that goes beyond office paper. PGE is expanding their recycling efforts. Nike is developing a new shoe made from recycled shoe waste that otherwise would be landfilled.

To save water, Red Lion Inns use low-flow showerheads, recycle water in their laundry, and install other water-saving measures. Intel reduced landscape irrigation at its facilities. Boeing has modified one of their spray paint booth to avoid using any water and added equipment to help cut their process water use.

So, what can you do? How can BEST help you and your clients? Each situation is different. But, one thing is consistent . . . outside information and assistance makes it easier and, often, less expensive. Your expertise may not include water-saving technologies, alternative fueled vehicles, or some of the other BEST technologies. We can help your business find the best way to be BEST.

Many of the prior examples benefited from utility rebates, state tax credits, long-term, low-interest loans and more. In some cases, they received more than one. We can help you find out what you can qualify for. We can help you with the paperwork. We can help you analyze the technologies available and choose what's BEST. And, we can publicize the fact that you are one of Portland's BEST.

BEST Pays

With consumers today looking for green products to purchase and green businesses to patronize, there's one more reason to be BEST. The good publicity from the City's seal of approval can't hurt. It's another way it pays to be BEST. Some of the ways BEST pays are:

- Free Energy Efficiency Design Analysis
- Energy Tax Credits (35%)
- Utility Rebates and Other Incentives
- Financing Options
- Pollution Control Tax Credits (up to 50%)
- Lower Energy Bills
- Reduced Waste Disposal Costs
- Construction Site Debris Recycling
- Employee Vanpool Incentives
- Stormwater Drain Discount (now up to 100%)
- Better Business Profitability
- Employee/Customer Satisfaction
- Improved Local Economy
- Positive Global Impact

To sum up what's available, we put together a service matrix for each of the four sectors: Energy, Waste, Water, and Transportation. These service matrices are included in your handout. They show potential sources of general information, technical assistance, and financial assistance. Taking advantage of these services can cut your cost of being BEST.

Conclusion

To paraphrase an old saying; 'Everybody wants to be the BEST, but nobody wants to put any time or effort into it'. Now, you <u>can</u> have it both ways; almost like having your cake and eating it too. BEST services are only a phone call away. We can help anyone that is interested. Just have them call me at 823-7418. This is a new prefix. For those of you that used to call 796-, note the change. Both numbers will work until October . . . then you'll have to use 823-.

Now, if you have any additional questions, I'd be glad to try and answer them.

BOMA Green & Clean Property Management

Co-sponsored by City of Portland Energy Office

September 24, 1992 — 8:00 to 11:30 am

AGENDA

8:00 am	Welcome
8:05 am	**Environmentally Sensitive Building Materials** Steven Loken Center for Resourceful Building Technology
8:45 am	**Construction Site Debris Recycling** Debbi Palermini Palermini & Associates
9:10 am	**Water Conservation Opportunities** Cindy Dietz City of Portland Water Bureau
9:35 am	**Indoor Air Quality** Ron Petti PBS Environmental
10:00 am	Break
10:15 am	**Office Waste Recycling** Lissa West City of Portland Bureau of Environmental Services
10:40 am	**"Green" Cleaning Techniques** Mike Gabrion Janitor Supplies
11:05 am	**Incentives to be "Green"** Curt Nichols City of Portland Energy Office
11:30 am	Conclusion

For more information on other trainings for Property Managers
contact BOMA at 228-9124

ASHRAE Listening Post
October 15th, 1992

- **What does BEST stand for?**
  - BEST = Businesses for an Environmentally Sustainable Tomorrow
  - "Green" services for businesses:
    - Energy Efficiency
    - Water Conservation
    - Waste Reduction (Recycling)
    - Clean & Efficient Transportation

- **Why was BEST developed?**
  - Energy/Environmental issues are becoming more closely related
  - The Portland Energy Office saw a niche they could fill
  - The Urban Consortium Energy Task Force wanted to test the idea

- **What is BEST?**
  - An information resource
  - A technical/financial services broker
  - A source of recognition for businesses that "do the right thing"

- **How can BEST benefit you?**
  - Get recognition for innovative designs (energy/water saving)
  - Get tax credits/other incentives (for your business/your clients):
    - CFC recovery/recycling equipment
    - Possible R11 chiller replacement -- new alternative refrigerant chillers (.65 kW/ton) vs. older equipment (.9 kW/ton)
    - Water treatment that reduce boiler/cooling tower blow-down and make-up
  - Help talk your boss into letting you telecommute

- **For further BEST details...**
  - Contact Curt Nichols @ 823-7418

BEST Presentation at NEWS Luncheon
Wed 11/18/92 @ Noon

OUTLINE

I. Thank you/Introduction

II. What is BEST?
   A. A resource to help businesses "do the right thing"
   B. An example of the close link between energy and environmental issues
   C. An experiment - if it works in Portland, it may be repeated elsewhere

III. Why is the City involved?
   A. Sustainable development - key to growth/economic expansion without adverse impacts on livability
   B. Funding for this experiment provided through UCETF (grant)
   C. Additional financial support offered by PGE, PP&L, and EPA (contracts)
   Our efforts are focused on BEST's four goals... Energy Efficiency, Water Conservation, Waste Reduction (Recycling), and Clean & Efficient Transportation.

IV. How can BEST help you?
   A. Assistance for you - information, incentives, other resources, and case studies [Matrices, Fact Sheets]
   B. Assistance for your clients - information, incentives, other resources, and case studies [Matrices, Fact Sheets]
   C. Can recognize you/your client/your role through "BEST Business" awards [Award App.]

V. What are the awards for?
   A. BEST Successes - overall accomplishments in all four categories
   B. BEST Innovations - notable accomplishments in one category
   C. Awards ceremony will be part of the reception prior to the CO_2 Conference (International Global Warming Solutions Symposium)

VI. Legislative watch/related items
   A. BETC Rule Revisions - hearing today, written comments due Friday
   B. PCTC Dismantling - bill introduced by the Environmental Quality Commission
   C. Global Warming Solutions Symposium (March 10, '93) - kick-off to the Portland area effort to reduce CO_2 impacts

VII. Questions? Ask now or call me in the future

BEST Presentation to the Hospital Engineers Association
Thur 1/21/93 @ 7 pm

OUTLINE

I. Remember the "good old days" of hospital engineering? Back when all you had to do was keep the lights on, fans running, and the roof sealed? Those days are gone....

II. Engineers today are required to...
   A. Keep equipment running without spending money on maintenance
   B. Manage energy
   C. Reduce water use/sewage costs
   D. Keep fleet operating costs down
   E. Keep CFCs out of the atmosphere

   It's hard to do...that's why we're here to help. A resource for Portland area hospitals and other businesses that want to "do the right thing".

III. What is BEST? A resource for... [BROCHURE]
   A. General information - Energy, Water, Waste, and Transportation
   B. Facilitation for more specific technical assistance (energy/waste audits)
   C. Assistance with application for financial incentives (rebates, discounts, tax credits)

   Our efforts are focused on BEST's four goals... Energy Efficiency, Water Conservation, Waste Reduction (Recycling), and Clean & Efficient Transportation.

IV. How can BEST help you? We facilitate services...
   A. Detailed information on services available/contacts [MATRICES]
   B. Information on technologies and local examples [FACT SHEETS]
   C. Opportunity to be awarded for your accomplishments [AWARD APP.]

V. How can you access BEST? Pick up materials and...
   A. Call us anytime -- 823-7418
   B. Utility energy analysis facilitation
   C. Waste minimization assistance - esp. Construction Debris
   D. Water conservation information
   E. Vans for employee vanpooling
   F. Alternative fuel vehicle - CNG, Propane, Electric, etc
   G. Incentives (Utility rebates, Tax credits, Stormwater discounts)

VI. Any questions?

BOORA Architects Brown Bag Lunch Session
Tue 4/27/93 @ Noon

Topics:
Portland Energy Office/Sue
CO_2 Reduction Strategy/Sue
BEST-Environmental Businesses/Curt

BEST OUTLINE

We're here to help businesses:

- **Confusion** about what they should do (lack of clear-cut answers on energy and environmental issues) -- In those cases we can provide general information [Us]
- **Uncertainty** about applying new ideas or technologies at their facilities (site specific application questions) -- In those cases we can facilitate more technical assistance [Us or Others]
- **Limitations** to investing in the equipment/operation changes recommended for their facilities (financial constraints) -- In those cases we can help them obtain financing, rebates, and/or tax credits (financial assistance) [Others]

A lot like Economic Development agencies "broker" their abilities to save and create jobs, we "broker" our assistance to:

- Save Energy
- Conserve Water
- Reduce Waste (Recycle)
- Encourage Clean & Efficient Transportation

We provide them with the right information -- and the right contacts -- so they can "do the right thing".

We also recognize the businesses that are "BEST". We recently gave awards to seven businesses for "BEST Innovations". There have been articles, awards notes, and announcement advertisements locally. We're now putting together a series of "BEST Results" case studies featuring these businesses activities.

What does all this mean for BOORA? You're often the first point of contact for new or expanding businesses. Help us help them and help yourself at the same time -- call us directly or send your clients our way. We'll be glad to work with you and your clients.

The Solar Energy Association of Oregon (SEA of O)
and the
City of Portland Energy Office
proudly present a Panel Discussion on

GREEN BUSINESS PRACTICES

Saturday, October 16th from 10:00 to 11:45 am
at the
World Trade Center Two Conference Center
25 SW Salmon St.
Portland, OR

Learn what local businesses are doing to be "Green"
Find out how they do it, what the benefits are,
and what you can do too.

Listen to and ask questions of representatives from:

- NIKE, Inc.
- Ecoprint
- Intel Corporation
- Red Lion Hotels & Inns
- Deja Shoe

Moderated by: Curt Nichols, Portland Energy Office

To reserve your space complete and return the registration form in the back of the SunWorks '93 publication or call 224-7867. Registration costs $30 ($20 for SEA of O members).

Your registration fee also gets you into all other seminars, workshops, and events during the two-day conference. Some of what you can see and hear include:

- Renewable Energy product displays
- Efficient Home Lighting Design
- New Energy Technology Update
- Water Efficient Landscaping
- Electric Vehicle displays

Come to the SunWorks '93 conference. Learn what it means to be "Green." The tips you'll hear can help your company be more profitable and be an environmental leader.

If you have questions please call: 823-7418 or 224-7867.

Appendix B

Operational Materials

Sample contract with electric utilities for BEST assistance:

1. Portland General Electric (PGE) Contract for 1992
2. PGE Contract Extension for 1993

Business lead database/Referrals to utilities through BEST

1. Utility lead referral (fax) page
2. Utility lead referral summary
3. Database input form
4. Sample database records (three examples)
   a. Gratziano Produce (new construction)
   b. MacKenzie River Products (renovation)
   c. Oregon Arena Corp. (new construction)

BEST Advisory Committee/Review Panel

1. BEST Awards Review Panel members
2. BEST Award Criteria (Ideas for Businesses)
3. BEST Awards Standards (Review Panel Instructions)

BEST Evaluation

1. Questionnaire
2. Summary

AGREEMENT No. 27760 (Apr 3, '92)

AGREEMENT FOR PROVISION OF ENERGY EFFICIENCY INFORMATION

This Agreement is made between the City of Portland, Oregon (City) and Portland General Electric Company (PGE).

RECITALS:

1. The City of Portland Energy Office (Energy Office) has been awarded a grant by the Urban Consortium Energy Task Force to help reduce the energy use and operating costs of new or expanding businesses in the City (the Consortium Grant). This effort serves the City goals of improved energy efficiency and encouragement of business development and job creation.

2. During the first year under the grant, the Energy Office will disseminate information to businesses in the Portland area on government and private programs for improving the efficiency of energy use. These programs include technical assistance and financial aid, such as low-interest loans and tax credits, for achieving energy improvements. In the second year, the Energy Office hopes to expand its grant work to include information on other energy-saving measures available to businesses, such as recycling, water conservation, mass transit resources and alternative vehicle fuels. The Energy Office has committed under the Consortium Grant to use its best efforts to provide individualized energy

efficiency assistance, advice and guidance to 50 new or expanding businesses by December 31, 1993. It is likely that these businesses will be located throughout the City.

3. The Energy Office under the Consortium Grant goal is to develop a "one-stop" center for information on business energy efficiency and sustainable business practices, providing direct and individualized assistance to new or existing Portland businesses in the identification and implementation of energy efficiency improvement.

4. PGE sells electrical energy in the City. As part of its obligation to meet the electrical needs of its customers through development of least-cost energy resources, including conservation measures, PGE provides technical and financial assistance to commercial and industrial customers interested in improving the efficiency of their energy use.

5. PGE believes that the Energy Office efforts under the Consortium Grant can provide useful assistance in informing existing and potential PGE business customers of the availability of utility energy efficiency programs and encouraging their participation in energy saving activities and that it would therefore be beneficial to PGE to support the Energy Office's efforts.

Now therefore, the City and PGE hereby agree, as follows:

OBLIGATIONS OF THE PARTIES

1. As part of its operation as an energy efficiency information service to new and expanding Portland businesses, the Energy Office will, based on information provided by PGE, familiarize itself with the energy

efficiency assistance programs offered by PGE. Where appropriate to the circumstances, the Energy Office will provide information on those programs to businesses whom the Office consults under the Consortium Grant.

2. A. The Energy Office shall refer businesses to PGE which may benefit by participation in PGE energy efficiency programs.

B. In determining whether to refer businesses to PGE, the Energy Office may consider, among other factors: 1) PGE's ability to serve the business in its present or proposed location; 2) the business's present or projected energy needs; and 3) the scope and timing of the business's plans for establishing, upgrading, remodeling or retrofitting its facilities.

C. The Energy Office's referral of business to PGE shall include, whenever feasible: 1) information on the business's name and location; 2) the names of persons at the business to contact; and 3) the technical and financial aspects of the energy projects recommended by the Energy Office.

D. Unless PGE otherwise indicates in writing, referrals will be provided to Dave Ford (691-3950), program manager of existing commercial/industrial programs, and Gary Heikkinen (691-3984), program manger of new commercial/industrial programs.

E. The Energy Office Project Manager shall be Susan Anderson or such other person as the Energy Office shall designate in writing.

3. The Energy Office shall provide training to PGE sales representatives and program personnel on federal, state, and local energy

efficiency program options. The scope of the training shall be determined from time to time by mutual agreement of the parties during the term of this Agreement and, as such agreements are reached, they shall be committed to writing and made appendices of this Agreement. However, the scope of the training provided by the Energy Office shall in no event include training on energy efficiency programs offered by PGE.

4. PGE will pay $10,000 to the City of Portland (for the use of the Energy Office) within 21 days of the approval of this Agreement by both parties.

TERM OF THE AGREEMENT AND RENEWAL

A. This Agreement shall terminate on December 31, 1992, unless renewed at the option of PGE.

B. PGE may renew the Agreement for one additional year by providing written notice of its intent to renew the Agreement to the Energy Office by December 15, 1992. Should PGE elect to renew the Agreement, it shall pay an additional $10,000 to the City for the use of the Energy Office by no later than January 21, 1993.

OREGON LAW

This Agreement shall be construed according to the law of the State of Oregon. Any litigation arising under this Agreement or out of work performed under this Agreement shall occur, if in the state courts, in the Multnomah County court having jurisdiction thereof, and if in the federal courts, in the United States District Court for the District of Oregon.

NOTICES

Notices issued under or required by this Agreement shall be directed as follows:

To the City:

Director, Energy Office
1120 SW 5th Avenue
Portland, OR 97204

To PGE:

Bob Helm
121 SW Salmon Street
Portland, OR 97204

INDEMNIFICATION

PGE agrees to indemnify, defend and hold harmless the City for the negligent or intentional acts of PGE's officers, employees, and agents arising out of the performance of this Agreement. To the extent permitted by Oregon law and subject to the limits of the Oregon Tort Claims Act, the City agrees to indemnify, defend and hold harmless PGE for the negligent acts or omissions of the City's officers, employees, or agents arising out of the performance of this Agreement, including but not limited to any negligent misstatements about PGE programs or energy savings available from PGE programs.

OWNERSHIP OF DOCUMENTS

A. The City shall own any and all data, documents, plans, copyrights, specifications, working papers, and any other materials the Energy Office produces in connection with this Agreement.

B. The Energy Office shall furnish copies of any documents produced under this Agreement to PGE, when necessary in connection with a referral of a business to PGE.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by duly authorized representatives as of the date of their signatures.

For:

THE CITY

_____

_____
(Title)

_____
(Date)

_____

_____
(Title)

_____
(Date)

For:

PORTLAND GENERAL ELECTRIC

_____

_____
(Title)

_____
(Date)

_____

_____
(Title)

_____
(Date)

APPROVED AS TO FORM

By_____
City Attorney)

D015/SF030492

AGREEMENT EXTENSION

AGREEMENT No. 27760
AGREEMENT FOR PROVISION OF ENERGY EFFICIENCY INFORMATION

This extension exercises an option in a prior agreement between the City of Portland, Oregon (City) and Portland General Electric Company (PGE).

RECITALS:

1. The City of Portland Energy Office (Energy Office) has been awarded a grant by the Urban Consortium Energy Task Force for a second year to help reduce the energy use and operating costs of businesses in the City (the Consortium Grant).
2. PGE and the City signed Agreement No. 27760 (Agreement) to allow coordination of energy efficiency activities for calendar year 1992 in April 1992.
3. The Agreement clause B under the "Term of the Agreement and Renewal" section allowed the Agreement to be renewed for a one year extension at PGE's option.
4. PGE is satisfied with the City's performance of Agreement and now desires to exercise option to extend the term of the agreement.

Now therefore the City and PGE hereby agree, as follows:

OBLIGATION OF THE PARTIES

Agreement term shall be extended for a second year with all other conditions of Agreement remaining unaffected.

TERM OF AGREEMENT

This Agreement shall terminate on December 31, 1993, unless renewal is mutually agreed upon by the City and PGE prior to that time.

IN WITNESS WHEREOF, the parties hereto have caused Agreement No. 27760 to be extended by duly authorized representatives as of the date of the signatures below:

For: PGE	For: THE CITY
[signature]	[signature]
(Title)	MAYOR CITY OF PORTLAND (Title)
1/4/93 (Date)	2/4/93 (Date)

BEST Referral FAX
for Utility Design Assistance

To: _____ No. of Pages: _____

From: Curt Nichols Phone Number: 823-7418

Referral Date: _____ Business Type: _____

Business Name: _____

Site Address: _____

Contact Person: _____ Title: _____

Contact Address: _____

Contact Phone No: _____

Notes: _____

For More Information Contact BEST Program Manager:

Curt Nichols
City of Portland Energy Office
1120 SW Fifth Avenue, Room 1030
Portland, OR 97204
Phone: (503) 823-7418
Fax: (503) 823-5370

11/30/93

BEST REFERRALS - UTILITIES

Company Name	Address	Referral given to	Referral	Notes
Cogan Corp	SW 14 and Taylor	Dean Funk PGE	3/2/92	Daniel Werner - Medical Equip. Sterilization
Fred Meyers - Corp Hdqtrs	3800 SE 22nd S of Powell	Jack Majors PGE	2/26/92	Michael Don - 97,000 sq ft office expansion
Bob Orians	NE MLK BLVD & Russell	Lee Kuhl PP&L	2/26/92	Bob Orians - start up businesses/restaurant
Russell Development	SW Yamhill/Taylor-5/6th	Lee Kuhl PP&L		28 story office connected to old Pacific Bldg.
Morrison Tower	SW Morrison/Alder-2/3	PGE		25-32 story,design approved 11-21-91
Melvin Mark Properties	1400 SW 5th	PP&L		Remodel of old State Office Bldg.
Howard Weiner	520 SE Salmon	PGE	3/2/92	Turn Bldg into indoor skateboard arnea
METRO Bldg	NE Grand and Irving	Lee Kuhl PP&L	2/28/92	Remodel Old Sears Bldg. Berit Stevenson
Gateway Shopping Cntr	NE Halsey & 102nd	Timber Stevens PP&L		Westwood Construct 2nd phase of new const
New Federal Crthouse	SW Salmon/Main-2/3	PGE		Hamilton Hotel Block
Natures NW	4026 SE Hawthorne	PGE		Natural Foods & Bakery
Nordstrom - Washington Sq	Washington Square	PGE		Former Frederick & Nelson store
Westland Invest	232 SE Oak	Toby Anderson PGE	2/25/92	Warehouse space for various small bus.
Yamhill Market Place	SW Taylor/Yamhill-1/2nd	PGE		Remodel by new owner Koji Okuno
Lewis & Clark College	SW Palatine Hill Rd	PGE		Master plan for bringing order to campus
Tyco Toys	Rivergate Area	Bob Liddell PGE	3/20/92	Two 250,000 sq ft warehouses
Silver Cloud Inns	1924 NW 24th	Bob Liddell PGE	3/20/92	80 Unit Inn
PAMCO	Portland Intern. Airport	Tom Van Liew PP&L	4/6/92	Aircraft maintenance facility
Holiday Inn Portland DTN	NE Holladay & Grand	Lee Kuhl PP&L	4/27/92	100 Room addition on East side of Grand
Center for Self Enhancement	Unthank Park (N Shaver)	Lee Kuhl, PP&L	5/29/92	Ray Leary - 58,000 sq ft, $8.4 million Community C
Crossroads Square	123 NE 3rd Ave	Dave Ford, PGE	6/3/92	John Neimeyer - 80,000 sq ft, 5 story office bldg re
Kaiser-Permanente	Lake Oswego	Gary Heikkinen, PGE	6/3/92	John Wood - Already working with Terry Roberts
Hot 'n' Now	SE Division & 126th Ave	Rick Stone, PGE	7/8/92	Larry Richey - 1,010 sq ft food drive thru facility
Old Rosemont School	9911 SE Mt Scott Blvd	Rick Stone, PGE	7/8/92	John Kyle, Architect (Res. care facility)
(?)	13130 NE Airport Way	Rick Stone, PGE	7/8/92	12,000 sq ft cold storage addition
(?)	4529 SE 40th	Rick Stone, PGE	7/8/92	6,900 Apts or Care Facility
(?)	303 - 321 NW Park	Rick Stone, PGE	7/8/92	16,000 sq ft Office/Whse renovation
Jackson Park Development	SW Jackson Park Rd @ Marquam	Rick Stone, PGE	7/8/92	3-12 story apt bldgs (240 units)
Parkrose Tabernacle	5750 NE Holman	Lee Kuhl, PP&L	7/8/92	4,814 sq ft addition (auditorium)
Hot 'n' Now	1525 NE MLKing Blvd	Lee Kuhl, PP&L	7/8/92	Larry Richey - 1,010 sq ft food drive thru facility
Widmer Brewing Co	929 N Russell	Lee Kuhl, PP&L	7/8/92	7,000 sq ft brewery expansion
Gratziano Produce	NW Front St & 17th Ave	Gary Heikkinen, PGE	7/16/92	Joe Gratziano - 25,000 sq ft produce distribution fa
Intel Corp	Fab 5 facility (Aloha)	Dave Ford, PGE	7/18/92	35,000 sq ft retrofit
Donnerberg Moorage	NE Marine Drive near 181st	Rick Stone, PGE	7/22/92	George Donnerberg - planned 41 unit houseboat moora
First United Methodist Church	1838 SW Jefferson	Rick Stone, PGE	7/22/92	David Fisher - add 10,000 sq ft to existing church
Del's Care Center	319 NE Russet St	Tom Van Liew, PP&L	7/28/92	Carol Cook - 60 unit expansion to assisted care facil
Energy Reclamation, Inc	544 N Columbia Blvd	Dave Ford, PGE	8/17/92	Steve Donovan - 64,000 sq ft MRF (exitsing whse re

(?)	SW 11th (N of SW Woods St)	Teresa Wilson, PGE	8/17/92	Planned 24 unit apartment complex
(?)	9011-9019 N Lombard St	Rick Stone, PGE	8/24/92	Robert Watkins - planned 5 bay self-service car wasl
(?)	11547 NE Glissan	Timber Stevens, PP&L	8/24/92	John Wilson - 22,000 sq ft adult foster care (40 res
(?)	2929 NW 31st (@ Guam)	Rick Stone, PGE	9/28/92	John Burlingham - 15,000 sq ft office expansion
Hot 'n' Now	N Oatman St (S of Lombard)	Lee Kuhl, PP&L	9/28/92	Larry Richey - 1,010 sq ft food drive thru facility
Dr John Rosenthal, DDS	1110 SW Salmon St	Rick Stone, PGE	9/28/92	John Rosenthal - 670 sq ft Dental office addition
The Mann Home	1021 NE 33rd (@ NE Sandy)	Timber Stevens, PP&L	9/28/92	Peter Fry - remodel facility for group living for 75 p
PayLess Drug Store	900 N Tomahawk	Rick Stone, PGE	9/28/92	Frank Schmidt - demolish/rebuild 16,600 sq ft store
Charles Dotter Radiology Lab	630 SW Gaines	Rick Stone, PGE	9/28/92	Gordon Ranta - add 3 levels (4,700 sq ft) to existing
Shriners Hospital	3101 SW Sam Jackson Park Rd	Rick Stone, PGE	10/6/92	Add a 5 level (169 space) Parking Garage
Kaiser-Permanente	226 SE 102nd	Rick Stone, PGE	10/6/92	New medical/dental facility -129,300 sq ft
Natures Fresh NW	3016 SE Division	Dave Ford, PGE	10/13/92	Stan Amy - remodel old Smith's Home Furnishing sto
Safeway, Inc	NE 122nd & Glisan	Timber Stevens, PP&L	10/13/92	Jim Stevenson - demolition/new 53,000 sq ft store
Central Nazarene Church	SE Powell E of I-205	Gary Heikkinen, PGE	10/20/92	New church - 20,700 sq ft in Phase I
Capitol Park	10634 SW Capitol Highway	Teresa Wilson, PGE	10/22/92	41 unit apartment bldg (29,800 sq ft)
Act III Theaters	118th Ave & Evergreen Blvd	Gary Heikkinen, PGE	10/29/92	32,500 sq ft Theater off Sunset Hwy
Hot 'n' Now	SE 36th Ave N of Powell Blvd	Rick Stone, PGE	10/29/92	Larry Richey - 1,010 sq ft food drive thru facility
Irvington Covenant Church	NE MLKing Blvd N of Fargo St	Lee Kuhl, PP&L	10/29/92	New church - 9,000 sq ft in Phase I
Gold's Gym & Aerobics Center	4121 NE Halsey St	Lee Kuhl, PP&L	11/10/92	Jean Lamott - 22,000 sq ft facility
Fifth Avenue Building	1420 SW 5th Ave	Lee Kuhl, PP&L	11/19/92	Major renovation to former State Office Building
Mt. St. Joseph's Nursing Home	3060 SE Stark Blvd	Dave Ford, PGE	11/19/92	Art Oliver - requested a "full scale" audit
Holiday Inn Crowne Plaza	521 SW 5th Ave (5th & Alder)	Dave Ford, PGE	11/24/92	Renovation of old Frederick & Nelson store into hotel
Oil Can Henry's	1530 NE MLKing Blvd	Lee Kuhl, PP&L	11/30/92	Remodel existing car wash, add quick lube facility
Office Depot	Hayden Meadows Shopping Ctr	Rick Stone, PGE	12/28/92	New N Portland Store (Grubb & Ellis Co)
Office Depot	2595 SW Cedar Hills Blvd	Rick Stone, PGE	12/28/92	Remodel of old Pay 'n' Pak Store (Grubb & Ellis Co)
Kienow's Food Stores	8336 N Ivanhoe	Dave Ford, PGE	12/28/92	Expand, remodel former Sprouse, Thriftway stores
DHPP Elderly Housing Project	1529 SW 12th Ave	Teresa Wilson, PGE	12/28/92	A 52,500 sq ft elderly housing project
German-American Cultural Ctr	7901 SE Division Ave	Dave Ford, PGE	12/28/92	Remodel, expand Altenheim Retirement Ctr (20,000
Costco Wholesale	4849 NE 138th Ave	Dave Ford, PGE	1/25/93	Add 23,300 sq ft to existing Costco bldg
Nationwide Insurance	847 & 919 NE 19th Ave	Dave Ford, PGE	1/25/93	Complete upgrade of One Nationwide Plaza bldg
Hoyt Street Lofts	NW Hoyt to Lovejoy	Teresa Wilson, PGE	1/25/93	Walker Road Partners - condo lofts/parking
Mallory Hotel	1504 - 1530 SW Yamhill St	Gary Heikkinen, PGE	2/1/93	Parking structure, retail, etc.
Holgate Baptist Church	11242 SE Holgate Blvd	Dave Ford, PGE	2/16/93	Renovate, expand 3,000 sq ft
Intercity Properties	1306 NW Hoyt	Dave Ford, PGE	3/15/93	Jim Brunke - Uninsulated comm'l building w/ elect he
Tamarack Community Center (?	E of 8940 N Woolsey	Dave Ford, PGE	3/15/93	Comm'l use community ctr for Columbia Villa
300 SW 6th Ave Bldg	300 SW 6th Ave	Teresa Wilson, PGE	3/15/93	Addition to an apartment bldg (126 units)
Open Book Bible Study Group	4402 NE Killingsworth	Lee Kuhl, PP&L	3/15/93	New church - 5,405 sq ft Phase I & 4,130 sq ft Phas
Texaco, Inc	5636 NE Sandy Blvd	Lee Kuhl, PP&L	3/15/93	Add mini convenience store, re-open lube bays
(?)	NE Cornfoot Rd E of 63rd Ave	Lee Kuhl, PP&L	3/15/93	Comm'l parking facility/auto rental (3,000 spaces)

(?)	6031 NE 92nd Ave	Tomber Stevens, PP&L	3/15/93	Add 5,000 sq ft to connect to existing warehouses
Shogren House Bed & Breakfast	401 NE 63rd Ave	Dave Ford, PGE	3/15/93	Convert historic home to bed & breakfast, conferenc
Hanset Stainless Steel	(somewhere in N/NE Portland)	Lee Kuhl, PP&L	3/15/93	Dee Hanset - working w/ PDC to relocate their opera
St Mary's Academy	1615 SW 5th Ave	Dave Ford, PGE	3/15/93	Two exterior additions - new 3rd floor, entry court
(?)	1111 NE 82nd Ave	Timber Stevens, PP&L	3/15/93	Hanh Nguyen - pot'l expansion to small grocery store
Knecht's Auto Part	SE 115th Ave & Division St	Gary Heikkinen, PGE	3/15/93	Gregory Knecht - new 9,800 sq ft auto parts store
MacKenzie River Products	(somewhere in N/NE Portland)	Lee Kuhl, PP&L	3/15/93	Alan Young - planning move to Portland, working w/ I
West Hills Christian School	7823-7831 SW Capitol Hill Rd	Dave Ford, PGE	3/15/93	Gordon King - convert adjacent five plex into classro
Pay Less Drug Store	NE Cully Blvd, S of Prescott	Timber Stevens, PP&L	3/15/93	New 17,300 sq ft drug store
John A Schrag & Son, Inc	9227 NE Levee Rd	Lee Kuhl, PP&L	3/18/93	Planned 142 unit mobil home park
Costco Wholesale Corp	Marine Dr (near Delta Park)	Gary Heikkinen, PGE	3/23/93	Jack Foyt (Costco) or Al McInnis planning $12.5 M p
Fred Meyer, Inc	6615 NE Glissan St	Dave Ford, PGE	3/23/93	Steve Pearson - plans to remodel existing store
BPM Associates	SW 6th Ave @ Washington St	Dave Ford, PGE	5/5/93	Nancy Durso - Demolish Hibernia Bldg for parking gar
(?) Old Shriners Hosp	8200 NE Sandy Blvd	Timber Stevens, PP&L	5/5/93	Remodel/expand into elderly care facility
Delta Management Co	S of NE Marine Dr, W of 13th	Timber Stevens, PP&L	5/5/93	Steven Harrison - Planning a 277 space RV park
Holladay Investors	NE Holladay St @ MLK Blvd	Lee Kuhl, PP&L	5/5/93	Alan Peters or William Ruff - 500-700 Rm Hotel
Workforce Training Center	SE 1st & Clay Sts	Dave Ford, PGE	5/5/93	PCC plan to renovate/expand existing bldg
NeuroSensory Research Center	3181 SW Sam Jackson Park Rd	Dave Ford, PGE	5/5/93	Gordon Ranta - add 125,000 sq ft at OHSU
Columbia Sportswear Co	N Leadbetter Rd (Rivergate Dist	Dave Ford, PGE	5/20/93	Tim Boyle - plan a 150,000 sq ft distribution facility
Federal Express	N Going St & N Port Center Way	Dave Ford, PGE	5/20/93	Brett Wilson, Trinity Properties - 69,000 sq ft sort
Motif, Inc	27700-A SW Parkway (Wilson	Dave Ford, PGE	5/24/93	Kai Carlson - $20 million mfgr/clean rm facility
Lake Oswego Jehovah's Witness	SW Boones Ferry Rd S of Carla I	Gary Heikkinen, PGE	5/24/93	Bud Henrici - new 5,072 sq ft church bldg
Pacific Power	410 NE Clackamas	Lee Kuhl, PP&L	6/2/93	Steve Chandler - convert USWest training ctr to PP&
Magno-Pacific, Inc	(in N/NE Enterprise Zone)	Paul Wood, PP&L	6/2/93	Bruce Deschner - moving to Portland from Tigard
Neighborhood Health Clinics, Inc	4945-4947 NE 7th Ave	Lee Kuhl, PP&L	6/7/93	Renovate two abandoned homes into NHC office space
(?)	1616-1636 SE 39th Ave	Gary Heikkinen, PGE	6/7/93	Remove 3 houses and build 18,400 sq ft commercial s
Days Inn - Portland South	9717 SE Sunnyside Rd	Gary Heikkinen, PGE	6/15/93	Lloyd Huskey - interested in PGE audit focusing on r
Southeast Mental Health, Inc	8714 & 8728 SE Lafayette St	Gary Heikkinen, PGE	6/22/93	32 unit disabled housing complex; 2 bldgs, 11,320 sc
Fred Meyer Day Care Ctr	2215 SE Gladstone	Gary Heikkinen, PGE	6/22/93	Mike Don - 7,500 sq ft facility near corp HQ
West Hills Covenant Church	5815 SW Gillcrest	Gary Heikkinen, PGE	6/22/93	Planning a 4,000 sq ft expansion to existing church
A & L Tavern	5933 NE Glisan Ave	Gary Heikkinen, PGE	6/28/93	Planning expansion into adjacent space (2,880 sq ft)
Goodwill Industries of Oregon	SE 6th Ave from Mill to Lincoln	Gary Heikkinen, PGE	7/7/93	New 3 block complex; 60,000 sq ft total
TNT/Reddaway Truck Lines	SE 122nd @ Ford St	Dave Ford, PGE	7/12/93	New $6 million terminal inc 3 story corp office comp
Motel(?) & Dennys Restaurant	NE Airport Way @ 112th	Timber Stevens, PP&L	8/16/93	Planning to construct a 4 stroy, 100 unit motel
(?)	1423 SE 37th Ave	Gary Heikkinen, PGE	8/16/93	Corey Brunish - planning new commercial store (2,1
Coffee House(?)	5045 N Lombard Blvd	Rick Stone, PGE	8/16/93	Convert existing house to coffee house/restaurant
Sisters of Providence of Oregon	5641 NE Alberta	Lee Kuhl, PP&L	8/16/93	Construct 2 story, 30 unit elderly care facility
Montessori Earth School	14333 NE Sandy	Gary Heikkinen, PGE	8/16/93	Convert office building into a school for 150 students
Venerable Properties, Inc	1901-1915 NW 26th Ave	Dave Ford, PGE	8/16/93	Art DeMuro - Restore storefront sites into retail sp

Home Depot	NE 112th Ave, S of Marine Dr	Timber Stevens, PP&L	8/18/93	130,000 sq ft store (Francis Chue, Architect)
Dr Michael Eilers, DDS	7130 SW Garden Home Rd	Rick Stone, PGE	8/18/93	Michael Eilers - planning 350 sq ft expansion
Cole & Weber bldg	55 SW Yamhill	Rick Stone, PGE	8/18/93	Ron Beltz Property Mngr requested energy audit
Holy Rosary Church	NE 3rd Ave @ Halsey	Lee Kuhl, PP&L	9/8/93	Thomas Ryan - planning 5,500 sq ft expansion
St Mark Presbyterian Church	9750 SW Terwilliger Blvd	Dave Ford, PGE	9/8/93	Molly Deating - planning 2,600 sq ft expansion
Hughes Methodist Church	NE 111 Failing St	Lee Kuhl, PP&L	9/23/93	Neal Anderson, Architect - 10,560 sq ft expansion
Mariner's Gale	NE Marine Dr @ 13th Ave	Paul Wood, PP&L	9/23/93	Asgar Sadi, Developer (Delta Mgmt) - 146 space RV
Jehovah Witness Kingdom Hall	107 NE 139th Ave	Gary Heikkinen, PGE	9/30/93	Planning to build a new 4,500 sq ft hall
Ralph Schlesinger Co.	NE 138th Ave (N of Sandy Blvd)	Carol Brown, PGE	10/12/93	Barry Schlesinger - Indus park w/ 2 100,000 sq ft b
Vintage Motoring Services	4243 SE Belmont St	Carol Brown, PGE	10/12/93	Full scale renovation of 10,000 sq ft bldg
Islamic Center of Portland	SW 43 Ave, S of Alfred	Carol Brown, PGE	10/12/93	Brian Carlton, Architect - 8,000 sq ft new mosque
Carriage Park Development Co	NE 3rd Ave, S of Bridgeton Rd	Paul Wood, PP&L	10/12/93	Jennifer Bolen - planning 60 space mobil home park
Commerce Building	225 SW Broadway	Lee Kuhl, PP&L	11/2/93	Gerald McAleese - planning to add parking, add'l floo
Washington Park Zoo	SW Kingston Rd	Carol Brown, PGE	11/2/93	Fred Herbold - planning a 1,300 sq ft research ctr
North Portland Bible College	250 N Alberta	Lee Kuhl, PP&L	11/2/93	Remodel 2 homes into offices, meeting space
One Washington Center	SW Stark Ave btwn 1st & 2nd	Carol Brown, PGE	11/2/93	Melvin Mark Co - 15 story, 254,000 sq ft bldg
Shedrain Corp	83rd & Killingsworth	Timber Stevens, PP&L	11/2/93	Stan Blower, Pres - bldg rehabilitation (inc electrica
Sivers Industrail Park	Airport Way, E of 112th Ave	Timber Stevens, PP&L	11/2/93	Dennis Sivers - planning a 30,000 sq ft indus bldg
Institute for Christian Comm	6012 SE Yamhill	Carol Brown, PGE	11/8/93	David Fisher, Architect - renovate 30,000+ sq ft bld
Vann & Vann Funeral Directors	5211 N Williams Ave	Paul Wood, PP&L	11/9/93	Planning a 3,400 sq ft addition
Pacific Gas Transmission (PGT)	SW Moody/Harbor Dr	Lee Kuhl, PP&L	11/22/93	Jeff Reeves, Architect - 180,000 sq ft office bldg
(Esquire Hotel Bldg)	620 SW Park	Lee Kuhl, PP&L	11/22/93	Remove bldg's top 5 floors, modify HVAC sys

TOTAL REFERRALS (through 11/30/93) = 137 (88 to PGE / 49 to PP&L)

FOR '92 = 65 TOTAL (45 PGE / 20 PP&L)

FOR '93 = 72 TOTAL (43 PGE / 29 PP&L)*

* THROUGH 11/93

BEST DATABASE INPUT FORM

NAME _____ ADDRESS #1 _____

TITLE _____ CITY/STATE _____ ZIP _____

COMPANY _____ ADDRESS #2 _____

PHONE ( ) _____ CITY/STATE _____ ZIP _____

PROJ.CODE _____ COST $ _____ SQ.FT. _____ SIC CODE _____

LEAD FROM	DATE	NOTES
CONTACT	DATE	NOTES
REFERRED TO	DATE	NOTES
REFERRED TO	DATE	NOTES
FOLLOW UP #1	DATE	NOTES
FOLLOW UP #2	DATE	NOTES
FOLLOW UP #3	DATE	NOTES
FOLLOW UP #4	DATE	NOTES

STATUS _____

ACCOMPLISHMENTS _____

OTHER _____

XP30/SA070993

BEST DATABASE

DON CHAPMAN	735 SE ALDER
Name	**Address #1**
PROJECT MANAGER	PORTLAND, OR 97214
Title	**City State #1** / **Zip Code #1**
GRATZIANO PRODUCE	NW FRONT AVE @ 17TH
Company	**Address #2**
331-1964	PORTLAND
Area Code / **Phone Number** / **FAX Number**	**City State #2** / **Zip Code #2**

NEW CONST	$1.5 - 2.5 MILLION	25,000 +	20
Proj.Code	**Cost**	**Sq.Ft.**	**SIC Code**

CHRISTOPHER, PDC	6/1/92	JOE IS HEAD OF NAT'L PRODUCE ASSN
Lead From	**Date #1**	**Notes #1**
JOE GRATZIANO (234-8556)	6/1/92	ASKED ME TO WORK WITH DON CHAPMAN
Contact	**Date #2**	**Notes #2**
GARY HEIKKINEN, PGE	7/16/92	FAXED REFERRAL FORM
Referred To #1	**Date #3**	**Notes #3**
GARY HEIKKINEN, PGE	8/31/92	F/U CALL TO GARY RE: SITE SELECTION
Referred To #2	**Date #4**	**Notes #4**
DON CHAPMAN	8/31/92	CALL FROM DON ABOUT DESIGN ASSISTANCE
Follow Up #1	**Date #5**	**Notes #5**
DON CHAPMAN	5/10/93	SENT F/U NOTE W/ BEST PR MATERIALS
Follow Up #2	**Date #6**	**Notes #6**
DON, JOE, MIKE PURCELL	6/23/93	MTG W/ ENGRS, CONTRACTORS RE: DESIGN
Follow Up #3	**Date #7**	**Notes #7**
DON CHAPMAN (CC: MIKE PURCELL)	6/25/93	SENT F/U NOTE W/ DESIGN IDEAS, ETC
Follow Up #4	**Date #8**	**Notes #8**

7/93 - PENDING APPROVAL FOR FINANCING (NEED DESIGN FOR APPRIASAL PURPORSES
Status

Accomplishments
MIKE PURCELL, R A GRAY/PURCELL 639-6127
Other

BEST DATABASE

ALAN YOUNG	408 NW 5TH AVE
Name	**Address #1**
CO-OWNER W/ WIFE FELICIA	PORTLAND, OR 97209
Title	**City State #1** / **Zip Code #1**
MACKENZIE RIVER PRODUCTS	
Company	**Address #2**

	295-4002			
Area Code	**Phone Number**	**FAX Number**	**City State #2**	**Zip Code #2**

RENOV	?	10,000	23
Proj.Code	**Cost**	**Sq.Ft.**	**SIC Code**

CHRISTOPHER, PDC	3/14/93	LOOKING TO MOVE FROM LK OSWEGO
Lead From	**Date #1**	**Notes #1**
ALAN YOUNG	3/16/93	CALLED, SENT BEST INFO
Contact	**Date #2**	**Notes #2**
LEE KUHL, PP&L	3/18/93	FAXED LEAD FORM
Referred To #1	**Date #3**	**Notes #3**
DAVE FORD, PGE	4/1/93	
Referred To #2	**Date #4**	**Notes #4**
CHRISTOPHER	3/31/93	LOOKING AT A NW SITE
Follow Up #1	**Date #5**	**Notes #5**
ALAN	3/31/93	CALLED ALAN WITH INFO ON PGE PRGMS
Follow Up #2	**Date #6**	**Notes #6**
ALAN, CHRISTOPHER, ETC	4/2/93	BUILDING WALK-THROUGH
Follow Up #3	**Date #7**	**Notes #7**
ALAN	4/5/93	SENT NOTE W/ RENNOVATION SUGGESTIONS
Follow Up #4	**Date #8**	**Notes #8**

7/93 - MOVED IN (NEW ADDRESS, PHONE NO NOTED ABOVE)
Status

Accomplishments
ALAN HIKED THE ENTIRE PCT IN 1979
Other

BEST DATABASE

BOB COLLIER
Name

825 NE MULTNOMAH, #270
Address #1

PROJECT MANAGER
Title

PORTLAND, OR 97232
City State #1

Zip Code #1

OREGON ARENA CORP
Company

Address #2

Area Code **Phone Number** **FAX Number**

City State #2

Zip Code #2

NEW CONST
Proj.Code

$205 MILLION
Cost

? (20,000 SEATS)
Sq.Ft.

79
SIC Code

NEWS ARTICLES, CONTACT FROM LINDBERGS OFC
Lead From

BOB COLLIER
Contact

DEBI PALERMINI
Referred To #1

Referred To #2

BOB COLLIER
Follow Up #1

MISC OTHER NOTES, PHONE CALLS
Follow Up #2

BOB COLLIER
Follow Up #3

Follow Up #4

Date #1 8/18/92
Notes #1 MET W/ BOB, INCLUDED DEBI PALLERMINI

Date #2
Notes #2 CONTACT FOR CONST DEBRIS RECYCLING

Date #3
Notes #3

Date #4 8/18/92
Notes #4 MAILED INFO REQUESTED IN MTG

Date #5
Notes #5

Date #6 9/9/93
Notes #6 SENT INFO ON EV CHARGING IN PARKING LOT

Date #7
Notes #7

Date #8
Notes #8

FORMAL GROUNDBREAKING - JULY '93
Status

CONTRACTED W/ DEBI FOR CONST DEBRIS RECYCLING PLAN ($500,000 SVGS)
Accomplishments

PLANS REVIEWED BY PP&L AND ODOE
Other

BEST Advisory Committee/Review Panel

Advisory Committee Role:

- Give advice/direction to BEST marketing/implementation activities

Review Panel Role:

- Evaluate business applications for "BEST Practice" awards

Advisory Committee/Review Panel Members:

• Associated Oregon Industries	Jim Whitty
• Association for Portland Progress	Rick Williams
• Audubon Society	Lynne Das
• Business Journal	Anita Marks
• METRO	Genya Arnold
• Northwest Natural Gas	Brian McCabe
• Pacific Power & Light	Carl Talton
• Portland Chamber of Commerce	Ruthann Dotson
• Portland General Electric	Gregg Kantor
• Tri-Met	Kathy Richford
• Urban League	Mike Pullen
• City of Portland	
- Mayor's Office	Jessica Marlitt
- Development Commission (PDC)	Christopher Juniper
- Environmental Services (Recycling)	Lee Barrett
- Traffic Management	Janice Newton
- Water Bureau	Cindy Dietz

Ideas for BEST Award Criteria

Award Categories:

- BEST Innovation -- notable single achievement
- BEST Success -- significant accomplishments in all four sectors
- BEST Success + Innovation -- combination of both above

Award Criteria Minimums:

- Energy Efficiency
  - Used the state's Business Energy Tax Credit
  - Used incentives offered by their Utilities
  - Signed on as a "Green Lights" partner
  - Reward employee(s) for their energy-saving accomplishment(s)
  - Monitor energy use/report results to owners/employees
  - Or equivalent accomplishments

- Water Conservation
  - Efficient potable water use in facility plumbing/fixtures
  - Efficient process water use (and/or re-use) in production
  - Efficient irrigation system/controls for grounds
  - Rainwater runoff collection and reuse
  - Monitor water use/report results to owners/employees
  - Or equivalent accomplishments

- Waste Reduction
  - Train employees/provide mechanism to recycle office paper
  - Purchase office paper, other products with recycled content
  - Reward employee(s) for their waste-reducing accomplishment(s)
  - Use BETC or DEQ tax credits for reuse/recycling projects
  - Reuse recycled product(s) in manufacturing process(es)
  - Or equivalent accomplishments

- Clean & Efficient Transportation
  - Purchase energy-efficient vehicles (ex. life-cycle cost)
  - Operate vehicles on cleaner, alternative fuel
  - Offer discounted bus passes for employees
  - Provide "priority parking" for carpools
  - Encourage flexible work schedules for employees
  - Or equivalent accomplishments

- Other (Overall) Considerations
  - Solicit ideas from employees/suppliers
  - Reward employee(s) for their accomplishment(s)
  - Monitor progress/report results
  - Received prior recognition for accomplishments

1993 BEST Business Awards
Review Panel Decision Criteria

Success Awards are Reserved for Outstanding Overall Accomplishment
(i.e. they could win an Innovation Award in all four categories)

For **Innovation Awards,** Consider the Following Criteria:

- Significant Environmental Benefits
- Economic Benefit to the Company
- Unique Project/Innovative Technology
- Change/Benefit at Their Own Facility
- Other Awards Received/Recognition Earned
- Example for Other Local Businesses
- Business with a "Clean" Record

Also give consideration to:

- "Downrating" Success Award Applicants
- Documentation Provided with Application
- Evidence of Employee Involvement
- Responsive to Customers/Clients

And try to:

- Issue at Least One Award per Category (if Possible)
- Balance Commercial and Industrial Winners
- Recognize Businesses of All Sizes (Small, Medium, and Large)
- Avoid Awards for Same Business, Same Category

7. If no actions have been taken yet, why not?

- ☐ Too expensive/up-front capital requirments too high
- ☐ The technology is not available/still unproved
- ☐ Too much time would have been required to change plans
- ☐ Didn't meet the requirements needed to qualify for incentives
- ☐ Other _____

8. What are the benefits from the actions you've taken?

- ☐ Operating cost avoidance. Savings estimate = $_____ per year
- ☐ Awards or other recognition. Received from _____
- ☐ Tax credit/Incentive. Received from _____
- ☐ Other _____

(Fold Here)

9. Are you planning (additional) BEST actions in the future?

- ☐ Yes, energy efficiency
- ☐ Yes, water conservation
- ☐ Yes, waste reduction/recycling
- ☐ Yes, clean & efficient transportation
- ☐ No, none of the above

10. What is BEST doing right? _____

11. What more could BEST do to help you/ other businesses? _____

12. Any additional suggestions or comments? _____

(Fold Here)

Place
Stamp
Here

Portland Energy Office
1120 SW 5th Avenue, #1030
Portland, OR 97204

Attn: BEST Evaluation

Portland Energy Office
Evaluation of Service Provided by BEST

Please complete both sides. Answer the questions by marking the appropriate box(es) and add comments if desired. When complete, fold and mail the questionnaire to the Energy Office. Please return this form by July 1, 1993. Thanks for your assistance!

1. How did you hear about BEST?

- ☐ A local media story in (or on) _____
- ☐ From your Architect, Engineer, or another Consultant
- ☐ A call or letter from the Portland Energy Office
- ☐ A presentation at a business or professional association meeting
- ☐ Other _____

2. What services did you receive from BEST staff?

- ☐ Information on _____
- ☐ Meeting with representative from the Portland Energy Office
- ☐ Referral to local utility for Energy Analysis/Design Assistance
- ☐ Assistance with state tax credit/utility incentive paperwork
- ☐ Other _____

3. How would you rate the initial assistance you received?

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ Comments _____

4. Did you receive adequate follow-up?

- ☐ Yes
- ☐ No
- ☐ Comments _____

5. Have you acted on any BEST recommendations? If so, give details.

- ☐ Yes, energy efficiency _____
- ☐ Yes, water conservation _____
- ☐ Yes, waste reduction/recycling _____
- ☐ Yes, transportation alternative _____
- ☐ No, none of the above

6. If you have taken recent actions, what were the reason(s)?

- ☐ To respond to corporate (management) directives
- ☐ To save money through reduced operating costs
- ☐ To respond to customer/client/employee concerns
- ☐ To obtain "BEST Business" or other award(s)
- ☐ Other _____

(Over)

BEST Service Evaluation

Here's a summary of the questions asked and responses received when we asked 60 businesses we've worked with what they thought about our service and BEST practices. We sent out 60 questionnaires and received back 23 (a 38% response rate). Here's what they said:

1. How did you hear about BEST?

15% A call or letter from the Portland Energy Office
9% From an Architect, Engineer, or another Consultant
9% A presentation at a business or professional association meeting
4% Other (from METRO, Utility, etc.)
0% A local media story

2. What services did you receive from BEST staff?

38% General information on BEST/BEST practices
24% Meeting with representative from the Portland Energy Office
17% Referral to local utility for Energy Analysis/Design Assistance
14% Assistance with state tax credit/utility incentive paperwork
7% Other (application form for "BEST" awards, etc.)

3. How would you rate the initial assistance you received?

53% Excellent
47% Good
0% Fair or poor

4. Did you receive adequate follow-up?

100% Yes
0% No

5. Have you acted on any BEST recommendations?

28% Yes, energy efficiency
28% No actions taken yet
17% Yes, transportation alternative
14% Yes, water conservation
14% Yes, waste reduction/recycling

6. If you have taken recent actions, what were the reason(s)?

41% To save money through reduced operating costs
28% To respond to customer/client/employee concerns
13% To respond to corporate (management) directives
9% To obtain "BEST Business" or other award(s)
9% Other (Utility programs, etc.)

7. If no actions have been taken yet, why not?

62% Other (Too soon, haven't started yet, etc.)
17% The technology is not available/still unproved
17% Didn't meet the requirements needed to qualify for incentives
0% Too expensive or Takes too much time

8. What are the benefits from the actions you've taken?

40% Operating cost avoidance (Savings estimate = $375,000 per year)
30% Tax credits/Utility, Other Incentives
15% BEST Awards or other recognition
15% Other (better site location, community good will, etc.)

9. Are you planning (additional) BEST actions in the future?

31% Yes, energy efficiency
31% Yes, waste reduction/recycling
19% Yes, water conservation
16% Yes, clean & efficient transportation
3% No, none of the above

10. What is BEST doing right?

Open comment; frequent responses included: Offering recognition (17%), Follow-up (17%), Outside opinion (13%), Information on incentives (13%), Responsive, friendly employees (9%), Keeping us informed (9%), Getting players together (4%), etc.

11. What more could BEST do to help?

Open comment; frequent responses included: Expand publicity (13%), Offer more incentives (9%), Streamline incentives (9%), and More information (9%).

Summary

What can we learn from these comments? Nearly two thirds heard about BEST directly from our contact with them. The services they most frequently received were: information (38%), meeting (24%), or design assistance referral (17%). They like what we're doing to help them. They all said our service was 'Excellent' or 'Good' and everyone said our follow-up was adequate.

Businesses are interested in what they can do. Over two thirds acted on one or more of our recommendations. Energy efficiency (28%) was the most common single action. The most frequent reason for their actions were to save money. If they took no action, the most common reason was timing; they hadn't started their planned project. If they acted, the most frequently mentioned result was cost savings. Their savings added up to $375,000. Nearly all (97%) businesses plan BEST actions in the future. Energy efficiency and waste reduction were noted most frequently.

When asked for their comments on what BEST was doing right, the most typical responses were offering recognition and following-up. When asked what more BEST could do, they said expand BEST publicity. Incentives were mentioned too; they wanted more monetary incentives and more streamlined application procedures.

Based on the response from these businesses we have worked with over the first year or more of BEST, it appears that they appreciate our efforts and want us to continue more of the same. One closed with a note that seemed to sum up the sentiment of them all. It said "Keep up the good work".

Appendix C

BIBLIOGRAPHIC REFERENCES

Bottom Line on Commercial Lighting, The

An 8 page introductory booklet covering commercial lighting options—lamps, ballasts, controls, etc.—and their relative efficiency levels.

Produced by: Pacific Power, Portland, OR

Business and the Earth: Global Ideas for Local Solutions *by Lee Wessman*

A 65 page, magazine-style booklet with information and examples for business recycling, energy conservation, air pollution reduction, thinking green/buying green, and staying green. Much of this information is specific to the Sacramento, CA area. But, it contains a lot of useful, general information.

Produced by: The Business Journal Serving Greater Sacramento, Sacramento, CA

Buy Recycled

A 90 page booklet listing the products available manufactured with recycled content. Product listings cover: packaging and containers, paper and office products, building and construction materials, landscaping and agricultural products, road building and traffic devices, and more.

Produced by: The Metropolitan Service District (METRO), Portland, OR

Construction Site Recycling: A Guide for Architects, Builders and Developers

A 32 page booklet covering why to recycle and recyclers of various construction debris in the Portland area.

Produced by: The Metropolitan Service District (METRO), Portland, OR

Do It Yourself Vanpool Guide

A 69 page booklet with information on how businesses can establish a successful vanpooling program for their employees. While this is specific to the State of Washington, it contains a lot of useful, general information.

Produced by: Washington State Ridesharing Organization, Olympia, WA

Guide to Resource Efficient Building Elements

An 83 page booklet that contains a listing of resource efficient building efficiency. These are mostly products for residential construction, but many are also applicable to light commercial construction.

Produced by: Center for Resourceful Building Technology, Missoula, MT

How to Reduce Your Energy Costs (Second Edition)

A 72 page book with a system-by-system approach to commercial building energy use. It emphasizes the cost-savings from efficient energy use. It includes information on energy audits, operation and maintenance, and setting up an Energy Action Plan.

Produced by: Center for Information Sharing, Inc., Boston, MA

Industrial/Commercial Drought Guidebook for Water Utilities

A 31 page booklet covering why and how to put commercial and industrial water conservation programs into place.

Produced by: The California Department of Water Resources, Sacramento, CA

Keeping your Company Green *by Stefan Bechtel*

A 92 page book on business activities that can benefit the environment. This contains many specific ideas and examples.

Published by: Rodale Press, Emmaus, PA

Priority #1: Waste Reduction (A Waste Reduction Handbook)

An 8 page booklet covering 50 ways to reduce, reuse, and recycle the waste a business generates. It features a five step method with resources in the Portland area referenced.

Produced by: The Department of Environmental Quality (DEQ), Portland, OR

Small Business Success (Volume V)

An 82 page magazine-style booklet covering a variety of ways to become a successful business. One chapter focuses on the Environment; it is titled "Energy Efficiency Makes Good Business Sense." This magazine also contains a 20 page Resource Index (for more assistance).

Produced by: Pacific Bell, San Francisco, CA

Think Green! A Retailer's Environmental Idea Book

A 38 page booklet explaining the issues behind green retail businesses and ideas on how to attain "green" goals. It has sections on how to conduct an environmental audit, how to develop goals, how to put together a corporate policy, and how to track results.

Produced by: Illinois Retail Merchants Association, Chicago, IL

Tips for Saving Energy in Small Businesses

A 26 page booklet that gives an easy-to-understand overview of the various ways to save energy in commercial buildings. It also has a number of energy myth/fact items.

Produced by: The Solar Energy Research Institute (SERI), Golden, CO

Telecommuting: How to make it Work for you and your Company *by Marcia M. Kelly and Gil E. Gordon*

A 228 page book that explains the benefits of telecommunication systems for business and how to enact them.

Published by: Prentice-Hall, Englewood Cliffs, NJ

Worms eat my Garbage *by Mary Appelhof*

A 100 page book on how kitchens can use worms to turn kitchen food waste into compost.

Published by: Flower Press, Kalamazoo, MI

50 Simple Things Your Business can do to Save the Earth

A 120 page book on 50 different things that businesses can do to have a positive impact on the environment.

Published by: EarthWorks Press, Berkeley, CA

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AUSTIN, TX - *Sustainable Systems Rating Program*
The city of Austin, long a pioneer in sustainable research planning and practice, developed a sustainability rating system that can be used as a marketing tool to encourage high levels of resource conservation, appropriate usage, and economic development through residential building.
91-302. $15.00

PTI - *How to Save Thousands - Even Millions of Dollars Through Energy Efficiency (Video)*
Looking for ways to save energy and money? This Urban Consortium Energy Task Force Video shows several cost-conscious and earth-minded methods to do so. Examples include how Phoenix saved $32 million through retrofitting and how New York City built a natural-gas-powered fleet to comply with the Clean Air Act.
92-402 FREE!

SAN JOSE, SAN FRANCISCO, CA, & PORTLAND, OR - *Sustainable Energy for Local Governments*
With scarce resources and environmental concerns mounting, how can local governments move toward a sustainable system? This practical workbook identifies key components of sustainable energy.
Call Conservation and Renewable Energy Inquiry and Referral Services(CAREIRS) at 1-800/523-2929 for a copy.

SEATTLE, WA - *Coordination of Energy and Air Quality*
Learn how Seattle City Light (SCL) worked with industry to reduce air pollution emissions with positive economic effect. The study conducted during 1991 and 1992 resulted in a working relationship between two agencies (Seattle City Light and the Puget Sound Air Pollution Control Agency) with the same objective - to improve air quality and reduce energy consumption. Read about some of the difficulties encountered and lessons learned by SCL in accomplishing energy conservation among residential and commercial customers.
92-318. $20.00

TUCSON, AZ - *Tucson Solar Village—Project Management*
The City of Tuscon's 820-acre Solar Village project seeks to provide a sustainable community for up to six thousand residents, using solar energy to reduce energy needs by 75%, water conservation methods to reduce usage by 65% per capita, and recycling programs to reduce landfill solid waste.
91-304. $12.00

TUCSON, AZ - *Local Government Involvement in Long Term Resources Planning for Community Energy Services*
Tucson has also developed a program to coordinate government research, utility, and business energy saving efforts. Results show that by taking a state-wide perspective on resource planning, additional savings and environmental benefits can be achieved through conservation and demand management.
91-313. $20.00
ALSO AVAILABLE:

ST. LOUIS, MO - *A Case Study in the Pursuit of Urban Energy Efficiency*
89-315. $15.00

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87-310. $15.00

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88-309. $18.00

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88-319. $15.00

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Building professionals obtain guidance through this technical support document for Austin's Green Builder Program, aimed at changing conventional building practices.
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MONTGOMERY COUNTY, MD - *Energy Efficient Building design: A Transfer Guide for Local Governments*
A proven "how to" guide for local governments and the private sector on the implementation of energy efficient construction programs.
91-317. $7.50

SAN FRANCISCO, CA - *Energy Management Action Plan*
The City/County of San Francisco has developed a methodology for local government energy offices to use in designing Energy Management Action Plans (EMAP). The guide walks readers through the process of creating an EMAP: identifying barriers; researching a setting for the project; and generating ideas to remove specific barriers. Help create more effective facilities in your jurisdiction via a holistic methodology.
92-310. $20.00
ALSO AVAILABLE:

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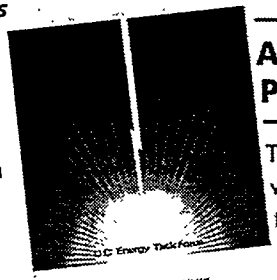
92-306 $20.00



ABOUT THESE PUBLICATIONS

These publications were produced through research conducted by the Urban Consortium Energy Task Force (UCETF) of Public Technology, Inc. Many of the research projects were funded through a grant from the U.S. Department of Energy.

The task force was established to address critical energy needs of urban America. The UCETF acts as a laboratory to develop and test solutions and share the resulting products or management approaches with the wider audience of both large and small local governments, states, and local authorities around the world.

UCETF membership includes elected officials, management, and technical professionals from urban cities and counties. It links through the Urban Consortium and PTI to national organizations, such as the National Association of State Energy Officials (NASEO), the National League of Cities, the National Association of Counties, and the International City/County Management Association to ensure the widespread exchange of information and technology.

For more information about the Urban Consortium Energy Task Force (UCETF) or these guidebooks, contact Jack Werner, PTI Business Director, at 202/626-2421.

NEW ORLEANS, LA - *Low- and Moderate-Income Residential Energy Conservation*
89-321 $15.00

SAN JOSE, CA - *Energy Master Planning: Innovative Design and Energy Analysis for New Commercial Construction*
92-311. $18.00

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89-306. $15.00

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CONEG - *Refueling Alternatives Fuel Vehicles: Lessons Learned from the Marketplace*
A study supported by DOE, public officials and energy companies has been conducted by the Coalition of Northeast Governors (CONEG) Policy Research Center, Inc. The findings conclude that information and refueling are two critical needs if fleet managers are to operate alternative fuel vehicles. The study surveyed fleet operators in Northeast states. This report provides useful quantitative information for decision makers to make preliminary assessments of potential market demand for the development of refueling infrastructure to serve alternative fuel vehicles.
Copies of the report are available from CONEG at (202)624-8450 for $50 for the two volume set, $20 for Volume I and $40 for Volume II.

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