

October 1, 2006

## WASHINGTON STATE DEPARTMENT OF LABOR & INDUSTRIES

### SUSTAINABILITY PLAN PROGRESS REPORT

July 1, 2005 through June 30, 2006

#### 1. Agency Contact Information and Responsible Agency Staff

Cynthia Harris, Assistant Director, Administrative Services (Executive Sponsor)  
Steve Morris, Program Manager, Facilities Services  
Carol Mathews, Risk Management  
Dean Heglund, Facilities Management (Energy/Water Conservation)  
Lance Yount, Procurement (Use of Recycled Paper/Environmentally Friendly Products)  
Judith Brainerd, Management Services (CTR/Vehicle Use)  
Francine Spahr, Facilities Services (Recycling)

#### 2. Sustainability Policy Statement

Institutionalize sustainable business practices that make the Washington State Department of Labor and Industries (L&I) a leader in contributing to the long-term protection and enhancement of our environment. We are committed to fulfilling our responsibilities under Executive Order 02-03, Executive Order 04-01, Executive Order 05-01, and new legislative requirements for alternative fuel use and High Performance Public Building bill. We are committed to implementing the actions specified in our plan, and to providing an annual report on our progress toward these goals

#### 3. Plan Overview

L&I's initial Sustainability Plan issued in 2003 documented the completion of major energy conservation projects completed the previous two years which resulted in a 23% annual reduction in energy use. It also identified the baseline for agency orders for paper containing recycled content, water consumption and commute trip reduction.

#### 4. Long Range Goals

L&I has identified the following long range goals. Activities related to each individual area may not be included in the Annual Progress Report.

- Institutionalize sustainability as an agency value
- Raise employee awareness of sustainability in the workplace
- Minimize energy and water use
- Shift to clean energy for both facilities and vehicles
- Shift to non-toxic, recycled and remanufactured materials in purchasing and construction
- Expand markets for environmentally friendly products and services
- Reduce or eliminate waste as an inefficient or improper use of resources

## 5. Establish Objectives and Performance Measures for the Biennium Plan

### 1. Fleets and Transportation

- A. Vehicle Miles Traveled, by agency fleet vehicles as well as personal vehicles**
- Approximately 477 L&I employees participate in Commute Trip Reduction.
  - Currently there are 77 telework agreements in L&I.
  - The number of state-owned vehicles increased from 353 in July 2005 to 369 in June 2006.
  - Employees used their own vehicles to drive 2,680,071 miles between 7/1/05-6/30/06.
  - Employees used state-owned vehicles to drive 5,707,932 in the same period.
  - Total mileage for both is 8,388,003.
- B. Fuel Purchases, by gallons and type of fuel**
- Information is not available on number of gallons and types of fuel.
- C. Average Fuel Efficiency of Vehicles in Agency Fleet**
- Between July 2005 and June 2006, L&I increased the state vehicle fleet by 63 hybrid vehicles through replacing current vehicles and requesting only hybrids when leasing additional vehicles.

### 2. Purchase of Goods and Services (Paper)

During fiscal year 2005 L&I purchased from GA Central Stores 53,131 reams of 8 1/2"x 11" white copy paper of which 40,913 (77%) reams contained 30% or greater post consumer waste content. However from January 06 to June 06 there was a decrease in virgin paper purchases by 22% while a 35% increase in recycled paper purchases.

All staff that had ordered "virgin white" paper (58 total) have been contacted and briefed on the agency's and Executive Order 05-01 sustainability goals. This review will be conducted quarterly to ensure continued employee awareness and the reduction in the use of "virgin white" paper.

Mfr	Part No.	Size	WT	Bright	Recycle %	Reams Ordered
Grays Harbor	7530-041-001	8 1/2"x 11"	20	92	0%	12,051
Hammermill	7530-331-080	8 1/2"x 11"	24	96	0%	120
Grays Harbor	7530-041-601	8 1/2"x 11"	20	92	40%	13,759
GP Spectrum	7530-041-603	8 1/2"x 11"	20	92	30%	22,671
Grays Harbor PCF	7530-081-190	8 1/2"x 11"	20	84	100%	4,498
Great White PCF	7530-041-705	8 1/2"x 11"	20	92	30%	32
					Total	53,131
					0% Recycled	12,218
					30% or Greater	40,913

					Recycled	
--	--	--	--	--	----------	--

**3. Facility Construction, Operation and Maintenance**, including new buildings and major remodels, building materials, recycling, cleaning products, and minimizing water and energy use.

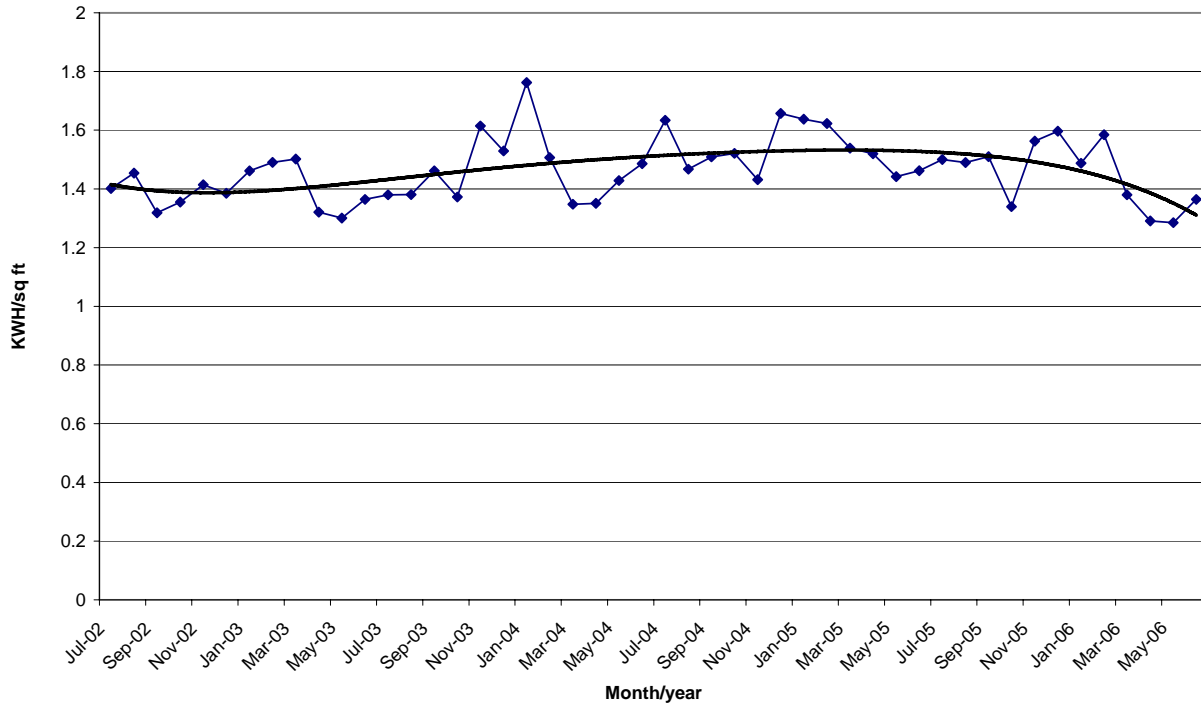
For fiscal year, the Department of Labor and Industries used 9,334,236 KWH of electricity in 546,118 square feet of space and 68,462 Therms of natural gas in 496,462 square feet of office space.

All Energy projects for the Tumwater central office identified for the 03-05 biennium were completed in April 2005. Most of the building upgrade work was done after normal business hours and HVAC systems were often times left in “occupied” mode to accommodate operational checkout and system commissioning. The result of the energy projects appear to be contributing to energy savings as indicated in the down ward trend in energy consumption starting in May and June 2005.

In addition to the energy savings projects, six variable air temperature control boxes were added to address specific comfort issues. These employee comfort improvements lessen the benefits of the overall energy project savings, but certainly improve area working conditions.

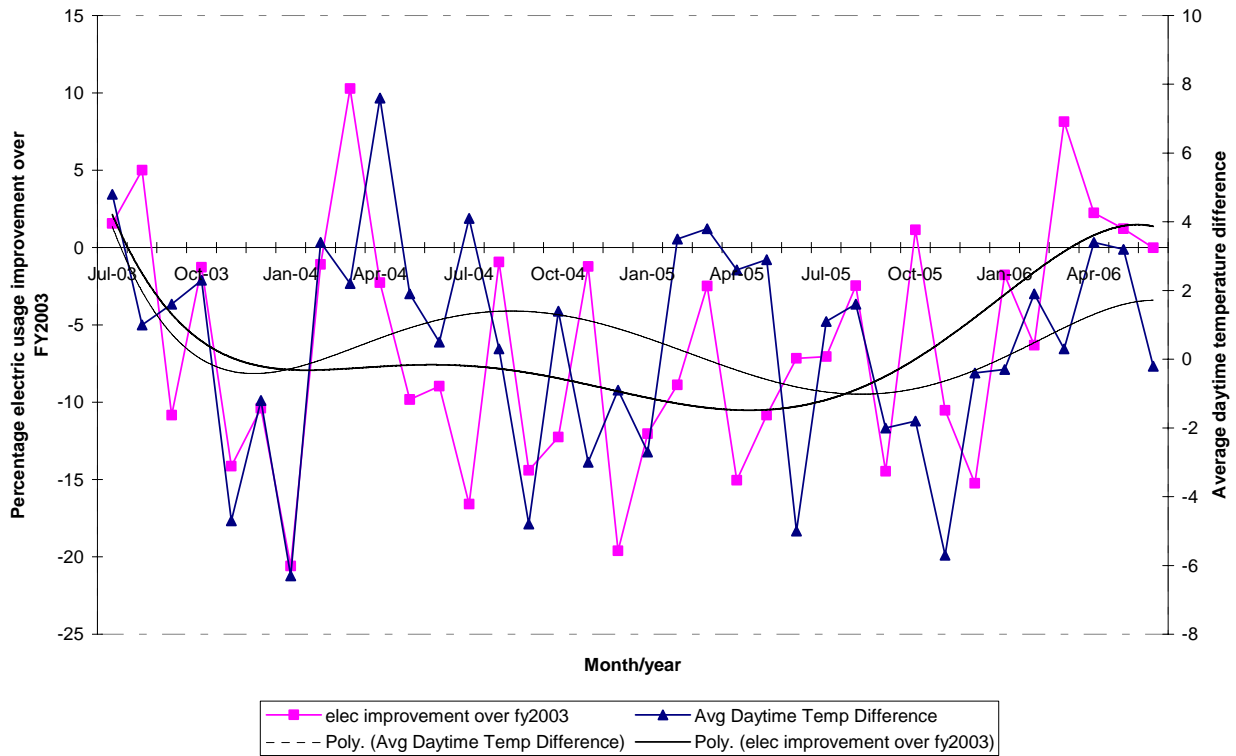
About 500 computer monitors were added to workstations during this reporting period to allow electronic access to insurance claims technical manuals instead of using paper books. This operational improvement of using dual monitors does increase electrical consumption, but allows faster access to reference information eliminates the need to maintain many sets of books and reduces the risk of staff injury by eliminating the handling of heavy binders.

KWH/sq ft in Labor and Industries Offices with Trendline



The following chart shows the percentage improvement with polynomial trend line in electric usage as well as temperature difference and polynomial trend line over the same period in fiscal year 2003.

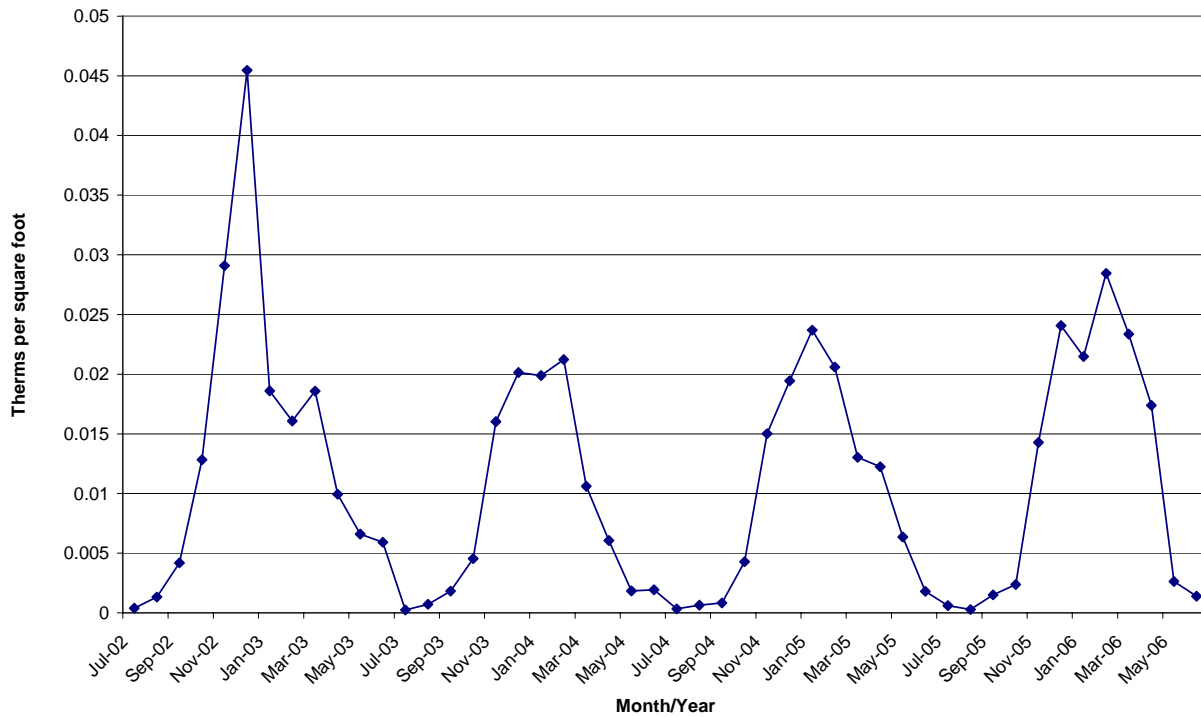
Electricity percent improvement and temperature difference compared to FY 2003



In addition to comparative usage to fiscal year 2003, this data provides some insight into the effects of weather on electricity usage. The trend lines of electric usage improvement over fiscal year 2003 and difference in average daytime temperature show distinct correlation. This indicates, as one might expect, the weather is a significant factor in the variation electricity usage. Changing building temperature set points and the impact on employee comfort will be discussed for additional electricity savings in the future.

Following is a chart showing natural gas usage in agency buildings. As shown by the chart, natural gas is almost exclusively used for providing building heat.

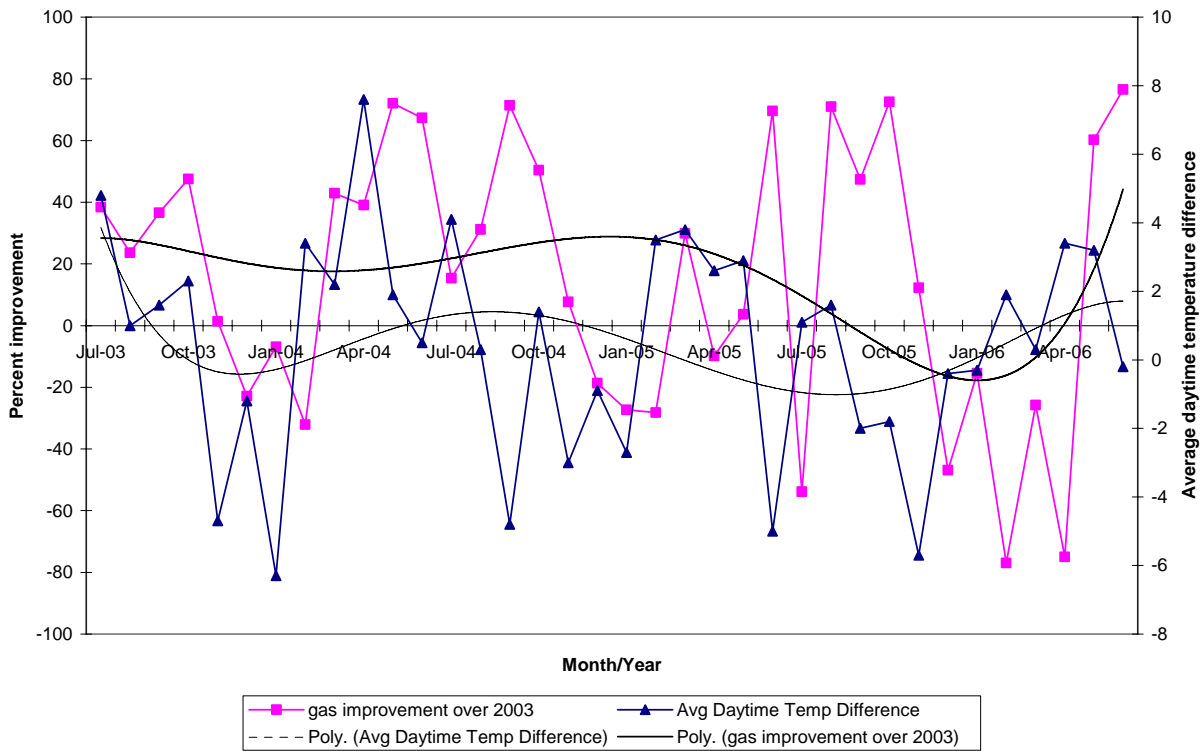
**Gas Usage in Labor and Industries  
Buildings**



In the fall of 2005, the boilers in the Tumwater central office were thoroughly cleaned. At that time, the cleaning contractor reviewed some new gas jet and heat transfer technologies that may improve boiler efficiency. Those improvements will be considered as a future energy savings project.

The following chart shows the percentage improvement with polynomial trend line in gas usage as well as temperature difference and polynomial trend line over the same period in fiscal year 2003.

Natural gas percent improvement and temperature difference compared to FY 2003



Like with electricity usage, the trend line indicates correlation of gas usage with average daytime temperature. Again, if future gas savings are to be realized beyond that provided by favorable weather conditions, lowering of indoor temperature set points in the winter months is likely required.

**4. Grounds Maintenance**, including chemical use reduction, watering, low impact or native plant landscaping, and storm water management.

The Department of Labor and Industries is tracking water consumption on a monthly and annual basis to determine long range use and identify opportunities for reduction.

Month	Cubic Feet Used 1999	Cubic Feet Used 2001	Cubic Feet Used 2002	Cubic Feet Used 2003	Cubic Feet Used 2004	Cubic Feet Used 2005	Cubic Feet Used 2006
January					1,000		
February							
March							
April						3,000	1,000
May				1,000	2,000	3,000	1,000
June	21,000	36,000	12,000	22,000	52,000	2,000	29,000
July	87,000	56,000	72,000	91,000	128,000	29,000	47,000
August	110,000	67,000	88,000	125,000	116,000	54,000	
September	105,000	77,000	78,000	118,000	88,000	59,000	
October	79,000	43,000	46,000	44,000	1,000	41,000	

November			13,000		2,000	12,000	
December	1,000	3,000					
<b>Annual</b>	403,000	279,000	309,000	401,000	390,000	203,000	

Note: All water is measured in cubic feet

100 Cubic Feet = 748 Gallons

### Irrigation Use

L&I participated in the City of Tumwater's Commercial Irrigation Audit program in 2005. The audit dated September 14, 2005, included a comprehensive assessment of the irrigation system design and potential improvements. These included items such as sprinkler head placement, excessive water pressure in the irrigation lines as well as turf and shrubs sharing the same zones.

From May 2004 through May 2005 irrigation water consumption was 395,000 cubic feet of water at a cost of \$8,200. Measures implemented in the fall of 2004 to reduce water consumption included deactivating zones, reprogramming automatic irrigation clocks, repairing broken sprinkler heads, and reducing water pressure in the irrigation lines. Four outdated program controllers have been replaced. These will improve flexibility in water application and reduces watering of non-grass areas.

From May 2005 through May 2006, annual irrigation water consumption was reduced to 202,000 cubic feet. This resulted in a 48% reduction and a savings of \$3,300. The major contributor in this savings was the deactivation of some watering zones. This resulted in most grass areas toward the back of the central office building to go dormant in the summer. Unfortunately some of these areas received moderate pedestrian traffic and the grass may now be dead. The approach not to water certain grass areas will be re-evaluated before the irrigation season begins in the spring of 2007.

L&I is also reviewing the feasibility of incorporating an off-site irrigation monitoring system which would allow General Administration to adjust the watering schedule based on the weather.

- 5. Waste Management and Organics Recycling**, including ways that to reduce waste, increase recycling, and new opportunities in recycling organic material such as food or grounds waste.

The Department of General Administration (GA) provides services for L&I. Recycling barrels that are placed throughout the Tumwater facility are serviced on a weekly basis. Also, each employee is provided a desk side recycle container. L&I's recycling program includes paper, cardboard, bottles, cans, plastic, compact disks, video tapes, microfiche, and printer toner cartridges.

### 6. Communication and Education

L&I management created a sustainability task force consisting of those staff directly involved in the areas of procurement, motor vehicles and facilities management. These individuals have been responsible for the communication of the agency goals.