HomeStreet Bank: A Carbon Footprint Measurement Case Study

Company Overview

Sector: Banking and Finance
Service Area: Washington, Oregon, Idaho, Hawai**i**
Employees: 345 (in City of Seattle facilities)

Summary of facilities in the scope of the footprint:

Five Seattle locations were included in the study: one home office and four bank branches. All space is leased, not owned, and all but one location are in multi-tenant buildings.

General Brand Strategy:

HomeStreet Bank, now one of the largest private banks in the Northwest and Hawaii, is a family and employee-owned business. Since its establishment in 1921, the bank has focused on building long-term relationships with its customers and providing ongoing support to its communities. Each year, HomeStreet Bank donates a minimum of two percent of its pre-tax profits to nonprofit organizations serving the community, primarily those working on housing and parks and open spaces.[1]

Why a climate strategy?

A climate strategy is very much part of HomeStreet Bank's overall business strategy. Richard Bendix, Senior Vice President and Director of Marketing, believes that the bank's commitment to the environment can be explained in the form of a fairly straightforward business equation—"People select the Northwest as a place to live, start businesses and raise families because of the beauty of the region, its mountains, lakes and clean air and water. If the region isn't able to provide the quality of life that attracts skilled workers and entrepreneurs, the economy and the institutions it supports, like HomeStreet Bank, will suffer."

With the issue of climate change taking on a new and urgent tone, HomeStreet Bank has become a member of the Seattle Climate Partnership and committed, as have other Seattle Climate Partners, to help fight climate change. The Seattle Climate Partnership is hosted by the City of Seattle's Office of Sustainability and Environment (OSE).

When OSE approached HomeStreet Bank, it was quick to agree to participate in conducting a carbon footprint of its facilities and operations. Bendix echoes CEO Bruce Williams when he says, "We determined early on that to be able to measure our progress and set realistic goals we needed to understand our current environmental impact. A carbon footprint study seemed like the best approach because it would help us identify areas in which our efforts could have the greatest impact."

> "We've been around for 86 years and we plan to stick around for another 86 years, and when you start thinking in that time horizon, the climate change issue becomes increasingly important."
>
> *Bruce Williams*
> *CEO, HomeStreet Bank*

[1] From http://www.homestreet.com/about/index.aspx

Developing the Footprint

1. Determine the Organizational Boundary

A carbon footprint process requires that a business determine what part(s) of the organization it would like to include. A business may choose to look at all operations in a particular geographic area, limit the measurement to certain types of operations such as those involved in manufacturing, include or exclude subsidiaries and contractors etc. Many factors influence these choices, including type of operations, ability to influence the activities producing emissions, number of employees, ease of data collection etc. HomeStreet Bank chose all facilities located in the City of Seattle because (a) more than half of all its employees work at facilities within the City, and (b) data for this region was easier to collect. As long as successive footprints use the same assumptions and boundaries, the results can be compared over time. In the long term, the bank plans to include all its locations in the measurement of emissions.

2. Establish a Baseline

The baseline year is that year against which a business will measure its progress over time. Businesses typically choose a year for which all or the majority of data is available. HomeStreet Bank chose 2006 for this reason.

"We're looking forward to having a carbon footprint because we like having goals, we like to measure progress, we like to see how we're doing…"

Bruce Williams
CEO, HomeStreet Bank

3. Identify Scope of Impacts

Businesses next decide which of their emissions-intensive activities to include and how to frame the data. For example a business may choose to include those activities over which it has the most direct control, those which it can measure, or those which are typically significant emissions sources in its industry. Emissions data for these activities can be presented in absolute terms or can be normalized to a variety of factors in order to account for organizational change. .A stable company can represent its emissions in absolute numbers, while an organization experiencing considerable growth may choose, for example, to normalize emissions to production levels or employee numbers (e.g., metric ton of CO_2/ton of product).

HomeStreet elected to use emissions normalized per employee. Although the bank tends to grow conservatively and chooses not to engage in mergers and acquisitions, Bendix explains that this measure helps the numbers remain relevant for them over a longer period of time.

The Seattle Climate Partnership makes available several resources for its members, including a footprint calculator. The calculator focuses on four areas that account for the largest share of a typical business' carbon dioxide emissions. These are facility/operations energy use, travel (business and employee commuting), waste and recycling, and materials use. The tool converts activity data (miles driven, tons of recycling generated) into emissions data (metric tons of $C0_2$.) This tool was shared with HomeStreet Bank during the planning stage and it was decided that data for all four areas were relevant to the bank's operations, could be obtained without disrupting business operations, and represented areas where it could achieve the greatest emissions reduction.

4. Collect Data

Data was collected or estimated when direct data was not available for the four areas for which emissions were calculated. The four areas for which activity data is converted into emissions data are:

a. Energy Use

Energy use includes electricity and natural gas used by a company's facilities. Typically, energy data is available in kilowatt hours (kWh) for each month of electricity use for each meter, or in therms (thm) for natural gas use. Because the downtown home office and branch are in multi-tenant buildings, and therefore, not sub-metered, HomeStreet Bank enlisted the assistance of its property management firm (see Appendix B). The property manager calculated the bank's *approximate* energy use based on its square footage leased as a percentage of the total square footage of the building. For the branches in Ballard, Queen Anne and, Wedgwood which are individually metered, energy data was acquired through requests submitted to the local utilities (see Appendix C), i.e., either Seattle City Light or Puget Sound Energy.

b. Travel

Travel refers to business travel and employee commuting. According to HomeStreet Bank personnel, business travel was the most difficult area for data collection. This travel was split into air and ground travel. The accounting department ran a report on all reimbursements associated with travel for 2006, from which details such as the name of the employee, amount reimbursed, and details of travel (e.g. destination) were traced. HomeStreet Bank staff sometimes had to rely on destination information provided by personal assistants who maintain the calendars for those employees who travel. It is important to note that data for business travel could not be broken down for employees in each city or state where HomeStreet Bank has an office. Therefore, emissions data was generated for company-wide travel. Again, as long as the same measure is used in subsequent footprints, results will remain comparable over time.

Employee commuting was tracked through the 2006 survey conducted by the Washington Department of Ecology[2] under the state's Commute Trip Reduction (CTR) law. Total number of employee miles traveled by transport type was extracted from the Ecology survey[3]. Smaller businesses that are not required to have a CTR plan may use the employee commute survey available from the Seattle Climate Partnership to help calculate the same data (see Appendix A).

c. Waste and Recycling

Commercial lease agreements tend to encompass all operating expenses (e.g. waste disposal, recycling, energy use, and water). Tenant businesses do not, therefore, have information on the quantity of waste or recycling they generate. This was true for all locations for HomeStreet Bank in Seattle. The carbon footprint calculator, however, has been designed to help businesses get around this difficulty by providing them with various methods to estimate this data.

Waste: Waste data can be calculated by the tool in one of three ways. The first method is to enter actual quantity data for waste (from waste invoices when using of garbage compactors); the second is to enter cost of waste disposal (based on a calculated cost per ton to dispose of waste when using garbage dumpsters); the third is based on waste composition data for different industry types[4]. This last method was used to estimate waste generated by HomeStreet Bank based on the number of employees per location.

Mixed Recycling: The amount of mixed recycling consisting of cans, bottles, and paper, was also estimated based on the number of employees in each of the five HomeStreet Bank locations. Each

[2] Under Washington State law, businesses with more than 100 employees are required to generate a Commute Trip Reduction (CTR) plan, with the goal of reducing single occupancy commuting and vehicle miles traveled. Businesses must implement plans to increase car and van pooling, the use of mass transit (e.g. buses and trains), the use of alternative modes of transport such as bicycling and walking, teleworking, and compressed work weeks. Annual surveys by the Depart of Ecology track the impact of these business-instituted programs.

[3] The carbon footprint tool directs the user to extract specific pieces of data from the survey summary and enter it into appropriate cells in the tool.

[4] Based on data from businesses in the City of Seattle and studies conducted by neutral third-party consultants.

employee was assumed to consume and discard one aluminum can or one plastic bottle each day[5]. A simple factor (0.03 lbs = can; 0.065 lbs = bottle) was applied to the total numbers of cans and bottles over the course of 250 days (number of work days in a year). The annual weight of shredded paper was incorporated into this final figure. HomeStreet Bank's shredding service was able to provide this number.

d. Materials (paper use)

Paper use is singled out for emissions measurement in a paper use-intensive industry such as banking. The environmental and climate change impacts from paper are found throughout its entire life cycle – from forest to landfill or recycling. For HomeStreet Bank, paper is used both internally and to communicate with customers (bank statements[6]). Both types of paper were accounted for in the footprint analysis. Purchasing records formed the basis for calculating the total number of 8.5"x11" sheets of paper used (this is the most common size of paper used by HomeStreet Bank). The number of envelopes, each of which uses 14% less paper than an 8.5"x11"sheet, was also included in the final count.

The Footprint

In 2006, HomeStreet Bank generated 1,155 metric tons of CO_2 ($MgCO_2$), which translates to 3.3 ($MgCO_2$) per HomeStreet Bank employee (see Appendix D). Absolute emissions associated with each of the four activities for the five Seattle offices (in addition to business travel and paper used for customer statements company-wide) are presented below in Table 1:

Table 1

Emissions Source	Annual Consumption	CO_2 Metric Tons
Car & Truck	1,333,361 miles	530.08
Bus	1,546,319 miles	359.62
Garbage	322 tons	135.19
Airplane	599,612 miles	108.10
Paper	9,413,705 sheets	52.72
Train	107,423 miles	17.51
Ferry	28,364 miles	10.49
Gas	109 therms	0.58
Recycling	124 tons	-59.60[7]
TOTAL EMISSIONS	**1,155 metric tons of CO_2 ($Mg CO_2$)/year**	
EMISSIONS/EMPLOYEE	**3.3 metric tons of CO_2 per employee/year**	

[5] Assumption made for this measurement in the absence of additional data.

[6] Amount of paper used for customer statements could not be broken down by location; therefore, this number represents statements sent to customers in all four states in which HomeStreet Bank operates.

[7] Recycling is assumed to reduce emissions because recycled materials, when used as feedstock, displace the use of virgin materials. Virgin materials are associated with higher carbon dioxide emissions, both in acquiring them in nature and in processing them prior to the manufacture of usable goods.

The footprint tool further provides results in two forms. The first result (Fig. 1) gives a company's total emissions while taking into account the fact that, through the purchase of carbon offsets, Seattle City Light, the electric utility for HomeStreet Bank, is carbon-neutral[8]. This result shows zero emissions from electricity. The second result (Fig. 2) re-introduces emissions from electricity generation because conservation is the biggest source of excess electricity for the utility. When businesses conserve energy, clean hydro power, the primary source northwest electricity, is freed up for use elsewhere and the need for a fossil fuel plant to run to meet demand is also reduced. This second result indicates the potential that businesses have to reduce their footprint through energy efficiency retrofits.

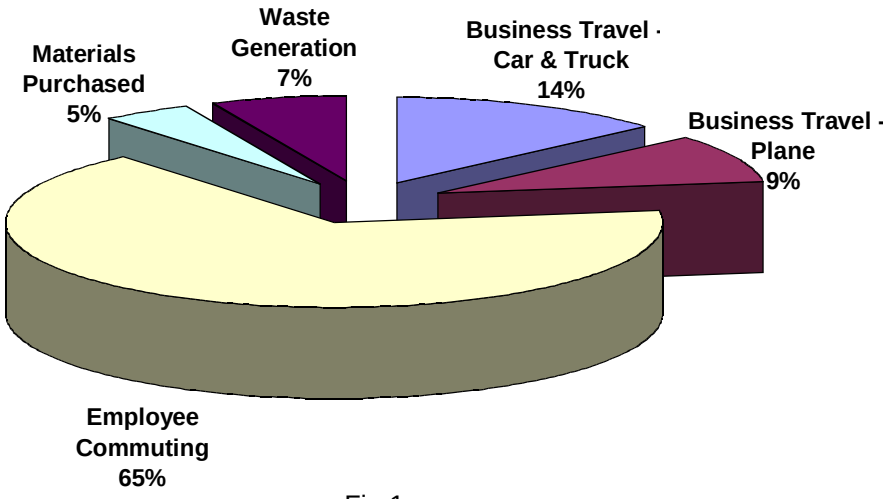


Fig.1

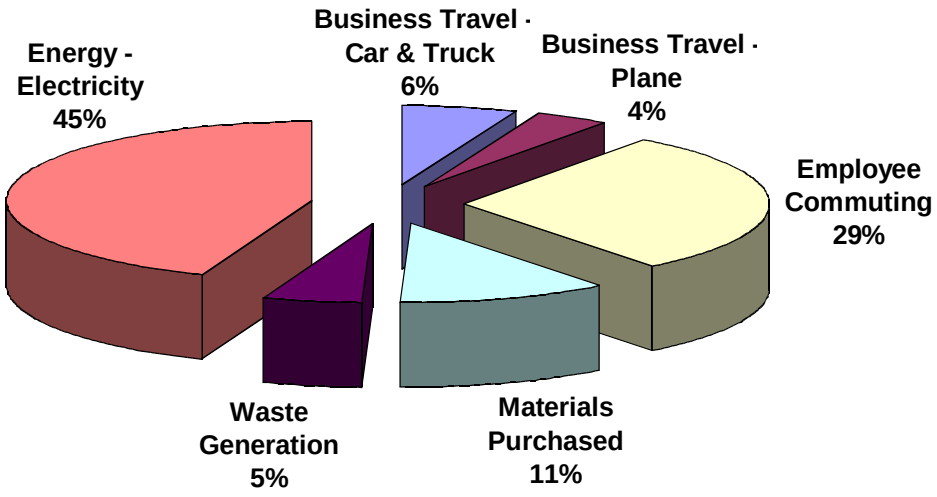
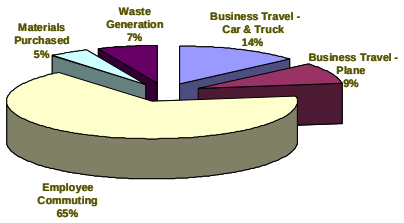


Fig. 2

[8] Seattle City Light is a carbon neutral energy provider, which means that any emissions resulting from its supply of power are offset by emissions reductions elsewhere.

Planning for Reduction

HomeStreet Bank used its carbon footprint to identify the greatest opportunities for reducing its carbon dioxide emissions - employee commuting and paper consumption[9]. Bank management is currently in the process of setting targets. It is developing reduction strategies which maximize emissions reduction and minimize impacts on business operations. Progress will be measured over time to evaluate the effectiveness of this approach. Bendix thinks that reductions in these areas are very achievable because, "in 2007, [*HomeStreet Bank*] cut [*paper use*] by 20% without specific goals (but through raising awareness among employees and through beginning to convert some processes away from paper). In 2008 we hope to cut the amount of paper used by another 10% through education, more electronic distribution of internal reports and increased use of electronic statements by banking customers."



Of employee commuting, the bank's second big opportunity, Bendix says, "We will continue to promote commute programs, compressed work weeks, telecommuting and virtual meetings to reduce our transportation footprint." In 2007, the bank made several updates to its commute trip reduction program, adding on to existing benefits (bike racks, lockers, showers, and bus passes) available to employees choosing modes of transport other than single-occupancy commuting. Employee-owners now have four hours of Zipcar use (car-sharing) per month and a "guaranteed ride home" if they car-pool or use mass transit. The bank has also renewed its focus on compressed and flexible work schedules and telecommuting options. "Commute fairs" are another way that the bank encourages smart commuting. On the other side of the equation, the bank has begun re-evaluating the company's parking policy to discourage single-occupancy commuting. HomeStreet Bank management is hoping that this will go some ways towards overcoming the challenge that many businesses face – that of making commuting a viable option for employees who live far from work and without adequate transit service. Business travel is under review as well and the company now uses the "Go To Meeting" interactive conference technology.

Alternatively, businesses may first set overall emissions reduction goals and then identify specific activities to meet those goals.

Communicating with employees

Engaging employees in a carbon reduction strategy can lead to innovative solutions and because it is in line with a widely-held value in this region (environmental commitment), to greater employee loyalty as well. HomeStreet Bank, bronze winner of the Puget Sound Business Journal's 2007 Washington's Best Workplace award, clearly values its employee-owners and is currently determining the best ways to solicit employee input and engage its staff as its best advocates for change. HomeStreet Bank uses a variety of means including its intranet site, brown bag lunches, staff meetings, and signage to share its goals with employee-owners and seek their ideas. Targets will likely be broken down by business units, departments, and/or employees to help HomeStreet Bank meet its overall reduction goals.

Tracking

The bank is committed to tracking its performance against targets and is considering repeating the measurement of the carbon footprint again in another two years. The footprint will most likely use the same organizational boundary, scope of impacts, and data collection methods in order to facilitate comparison across time. In preparation for this second measurement, HomeStreet Bank has already

[9] HomeStreet Bank has already undertaken several energy conservation measures including ensuring that all computers are Energy Star-rated, shutting down computers automatically at the close of business, consolidating servers into fewer, more efficient ones, retrofitting lighting, and setting thermostats to save energy. Additional conservation decisions rest with building owners or property managers.

expanded the travel information that employee-owners record to include number of miles and destination(s) in its electronic reimbursement forms.

Reflection: Was this process helpful?

Bendix says that the carbon footprint process gave HomeStreet Bank's environmental policy team "a concrete tool to use as a starting place for future discussions." He says, "As an example, I think many people were stunned by the amount of paper we use as an institution!" and adds, "personally it has increased my awareness of how HomeStreet can make the biggest impact and where to focus."

Contact Information

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Senior Vice President & Director of Marketing
HomeStreet Bank
Ph.: 206-389-4426

Appendix A

Information Needs Matrix to guide the data collection process (page 1 of 2).

Data points (Baseline Year)	Status	Action plan	Goal
Energy usage (electric, gas and steam)			
Address 1	No data yet	Follow up with (property manager)	Total kWh, Therms, or Pounds for (*baseline year*)
Address 2	No data yet	Follow up with Seattle City Light	Total kWh, Therms, or Pounds for (*baseline year*)
Address 3	No data yet	Follow up with Puget Sound Energy	Total kWh, Therms, or Pounds for (*baseline year*)
Address 4	No data yet		Total kWh, Therms, or Pounds for (*baseline year*)
Address 5	No data yet		Total kWh, Therms, or Pounds for (*baseline year*)
Waste and Recycling			
Address 1			
Waste, recycling & compost quantities	No data yet	Review waste/recycling bills/ Contact property manager	Total cubic yards or tons for (*baseline year*)
Shredded paper quantities	No data yet	Contact shredding company	Total cubic yards or tons for (*baseline year*)
Address 2			
Waste, recycling & compost quantities	No data yet	Review waste/recycling bills/ Contact property manager	Total cubic yards or tons for (*baseline year*)
Shredded paper quantities	No data yet	Contact shredding company	Total cubic yards or tons for (*baseline year*)
Address 3			
Waste, recycling & compost quantities	No data yet	Review waste/recycling bills/ Contact property manager	Total cubic yards or tons for (*baseline year*)
Shredded paper quantities	No data yet	Contact shredding company	Total cubic yards or tons for (*baseline year*)
Address 4			
Waste, recycling & compost quantities	No data yet	Review waste/recycling bills/ Contact property manager	Total cubic yards or tons for (*baseline year*)
Shredded paper quantities	No data yet	Contact shredding company	Total cubic yards or tons for (*baseline year*)
Address 5			
Waste, recycling & compost quantities	No data yet	Review waste/recycling bills/ Contact property manager	Total cubic yards or tons for (*baseline year*)
Shredded paper quantities	No data yet	Contact shredding company	Total cubic yards or tons for (*baseline year*)

Information Needs Matrix to guide the data collection process (page 2 of 2).

Data points (Baseline Year)	Status	Action plan	Goal
Transportation			
Employee Commute Data	No data yet	Extract relevant data from Department of Ecology-administered Commute Trip Reduction survey OR administer a pre-made survey (contact Tracy Morgenstern at tracy.morgenstern@seattle.gov to gain access to the Surveymonkey survey)	Miles/Mode of transport for (*baseline year*)
Business air travel	No data yet	Contact travel agent/ Review travel reimbursement records	Number of flights to each destination for (*baseline year*)
Materials			
Address 1			
Paper use (office paper)	No data yet	Review paper purchasing log	Sheets/reams/boxes/pounds of paper for (*baseline year*)
Paper use (customer statements)	No data yet	Contact processing vendors for records	Sheets/reams/boxes/pounds of paper for (*baseline year*)
Address 2			
Paper use (office paper)	No data yet	Review paper purchasing log	Sheets/reams/boxes/pounds of paper for (*baseline year*)
Paper use (customer statements)	No data yet	Contact processing vendors for records	Sheets/reams/boxes/pounds of paper for (*baseline year*)
Address 3			
Paper use (office paper)	No data yet	Review paper purchasing log	Sheets/reams/boxes/pounds of paper for (*baseline year*)
Paper use (customer statements)	No data yet	Contact processing vendors for records	Sheets/reams/boxes/pounds of paper for (*baseline year*)
Address 4			
Paper use (office paper)	No data yet	Review paper purchasing log	Sheets/reams/boxes/pounds of paper for (*baseline year*)
Paper use (customer statements)	No data yet	Contact processing vendors for records	Sheets/reams/boxes/pounds of paper for (*baseline year*)
Address 5			
Paper use (office paper)	No data yet	Review paper purchasing log	Sheets/reams/boxes/pounds of paper for (*baseline year*)
Paper use (customer statements)	No data yet	Contact processing vendors for records	Sheets/reams/boxes/pounds of paper for (*baseline year*)

Appendix B

Template for a letter to building managers requesting information on utility meters.

Dear (*building management company*),

As part of our commitment to our community, employees and customers, (*company name*) continues to implement programs to reduce our environmental impacts. As part of that effort, we have joined the Seattle Climate Partnership and are undertaking a carbon inventory for our operations in the Seattle area. I am writing to request your assistance in obtaining facility energy use data. We will use this information to help us better understand the relative impact of the different sources of carbon emissions associated with our activities so that we can plan reduction measures.

We will need account and meter numbers for the following (*company name*) facilities:

(*Address 1*)

(*Address 2*)

(*Address 3*)

I have attached the release of information form required to obtain data from Puget Sound Energy (account/meter information needs to be completed). We will also need the account and/or meter numbers for Seattle City Light services as well but they do not require a release form.

If it is not possible to break out consumption information for us specifically, we would appreciate your assistance in estimating our energy consumption based on the space we occupy as a percentage of the building's total square footage.

If you have any questions, please contact me at (*contact name and information*). Thank you for your assistance.

Appendix C

Letter requesting energy consumption data from Puget Sound Energy (PSE).

Please return via fax to 425-456-2731

To: **Jeff Mitchell**
Puget Sound Energy - Energy Efficiency Services
425-456-2459 (phone)

Subject: AUTHORIZATION TO RELEASE ENERGY USE AND BILLING INFORMATION

To Puget Sound Energy:
Please release energy use and billing information – electric and/or natural gas to:

__(*Name of Recipient*)__ of _____(*Company or Organization*)

for the purpose of assessing energy use and/or savings.

The account/meter number(s), including service address(es) is/are:

☐ Release historical billing data for all company facilities and meters.

☐ Provide monthly downloads of utility billing information.
Download expiration date: _____

☐ Provide access to Energy Interval Service if available. (meter pulse data)
Access expiration date: _____

X☐ Provide historical billing data for these sites, accounts, or meters: (attach list if necessary)
Data is requested for calendar year 2006

_____ (*Service Address 1*)
PSE Acct. or Meter # _____

_____ (*Service Address 1*)
PSE Acct. or Meter # _____

_____ (*Service Address 1*)
PSE Acct. or Meter # _____

_____ (*Service Address 1*)
PSE Acct. or Meter # _____

Please contact me if you have any questions. Thank you for your cooperation.
Sincerely,

_____ _____
PSE Customer Signature Date
Printed name: _____ Title: _____
Telephone: _____ E-Mail: _____
Mailing Address: _____
City, State, Zip: _____

Appendix D

Results for HomeStreet Bank using the Seattle Climate Partnership's Carbon Footprint Calculator.

Carbon Footprint Calculator

Results

This worksheet summarizes results of the carbon footprint assessment based on inputs entered on the *Company Info*, *Transportation, Energy, Materials,* and *Waste* worksheets. Emission estimates from current practices are directly below, followed by options to test the impacts of possible CO_2-reduction scenarios. (further below). All results are reported as metric tons of CO_2. These figures should be interpreted as CO_2 "equivalents", because although most of these emissions are actual CO_2, some of the emissions are from methane (from waste disposed in landfills). For more information about climate change, emissions, and a list of resources on employer services and climate incentives, visit the Seattle Climate Partnership Resource Guide at www.seattle.gov/climate/SCPresources.htm.

SUMMARY OF CURRENT ANNUAL PRACTICES

Overall emissions: **1,155 metric tons of CO_2** ($Mg\ CO_2$) annually, 3.3 metric tons of CO_2 per employee

COMPANY EMISSIONS FOOTPRINT

Transportation

	Miles Traveled (Business Travel)	Miles Traveled (Commuting)	CO_2 (Metric Tons)
Car & Truck	392,000	941,361	530.08
Airplane	599,612	-	108.10
Train	-	107,423	17.51
Bus	-	1,546,319	359.62
Ferry	-	28,364	10.49
Subtotal	*991,612*	*2,623,466*	*1,025.81*

Energy Use

	Quantity	Units	CO_2 (Metric Tons)
Natural gas	109	therms	0.58
Electricity	1,920,959	kWh	-
Steam	-	thousand lbs	-
Subtotal			*0.58*

Materials Purchased

	Quantity	Units	CO_2 (Metric Tons)
Paper	9,413,500	sheets	52.72
Other	-	pounds	-
Subtotal			*52.72*

Waste Generation

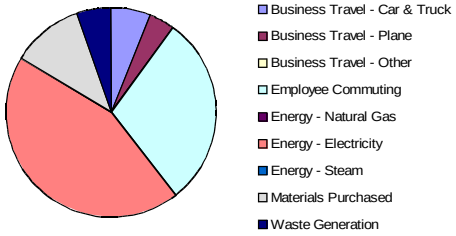
	Quantity	Units	CO_2 (Metric Tons)
Disposed	322	tons	135.19
Recycled	124	tons	(59.60)
Composted	-	tons	-
Subtotal	*446*	*tons*	*75.59*

EMISSIONS REDUCTION POTENTIAL*

Footprint and Reduction Potential

	Footprint (Metric Tons CO_2)	Reduction Potential* (Metric Tons CO_2)	Relative Reduction Potential (% of total)
Business Travel - Car & Truck	155.8	155.8	6%
Business Travel - Plane	108.1	108.1	4%
Business Travel - Other	0.0	0.0	0%
Employee Commuting	761.9	761.9	29%
Energy - Natural Gas	0.6	0.6	0%
Energy - Electricity	0.0	1152.6	44%
Energy - Steam	0.0	0.0	0%
Materials Purchased	52.7	291.9	11%
Waste Generation	75.6	135.2	5%
Total	1154.7	2606.1	100%

Relative Reduction Potential



***Emission reduction potential** is the amount of greenhouse gas emissions that can be reduced through actions taken by your organization. Note that the reduction potential for electricity, materials, and waste may be higher than your footprint in these categories. For example, for electricity, the electricity emission factor (multiplier) for an organization's reduction potential is typically higher than the one for its footprint because the impact of load reduction is to reduce the operation of a fossil fuel generating plant in the region while load is served by a mix of resources including non-emitting hydroelectric power.

Seattle City Light is a carbon neutral energy provider, which means that any emissions resulting from its supply of power are offset by emissions reductions elsewhere. However, electricity saved through energy efficiency measures still reduces greenhouse gas emissions in the Northwest because reduced energy use frees up clean hydro power to provide to another utility. This will result in an existing fossil fuel plant running less (usually a combustion turbine). Every kilowatt hour saved through efficiency reduces the need, on the margin, for a fossil plant to run. So, the GHG emissions reduction value of energy efficiency for SCL is actually quite significant when viewed from this regional perspective.

Energy efficiency measures implemented by Puget Sound Energy electricity customers also reduce the need for fossil fuel power generation in the region. Therefore, the actual greenhouse gas impact of conservation is not the emissions generated from PSE*s or SCL*s current energy portfolio, but the GHG intensity of the current market mix of power that would be purchased, on the margin. Therefore, a factor of 0.6 kilograms per kilowatt hour is used to calculate the greenhouse gas reduction potential of energy efficiency measures for both Seattle City Light and Puget Sound Energy supplied electricity.

For materials, the reduction potential lies primarily in the ability to sequester carbon in forests by using fewer trees for paper. The emission reductions associated with reducing virgin paper use or switching to a higher recycled content paper are substantial.

For waste, the reduction potential is primarily in recycling, and is also due in large part to the benefits of forest carbon sequestration. By supplying recycled paper to markets, businesses can help avoid the use of trees for paper, thereby sequestering carbon. However, because the fraction of each business' waste that is recyclable paper (or other recyclables) is unknown, the "reduction potential" for waste is set simply as the emissions from disposal.