

**South Seattle Neighborhood Center
Carbon Footprint Baseline
2010**

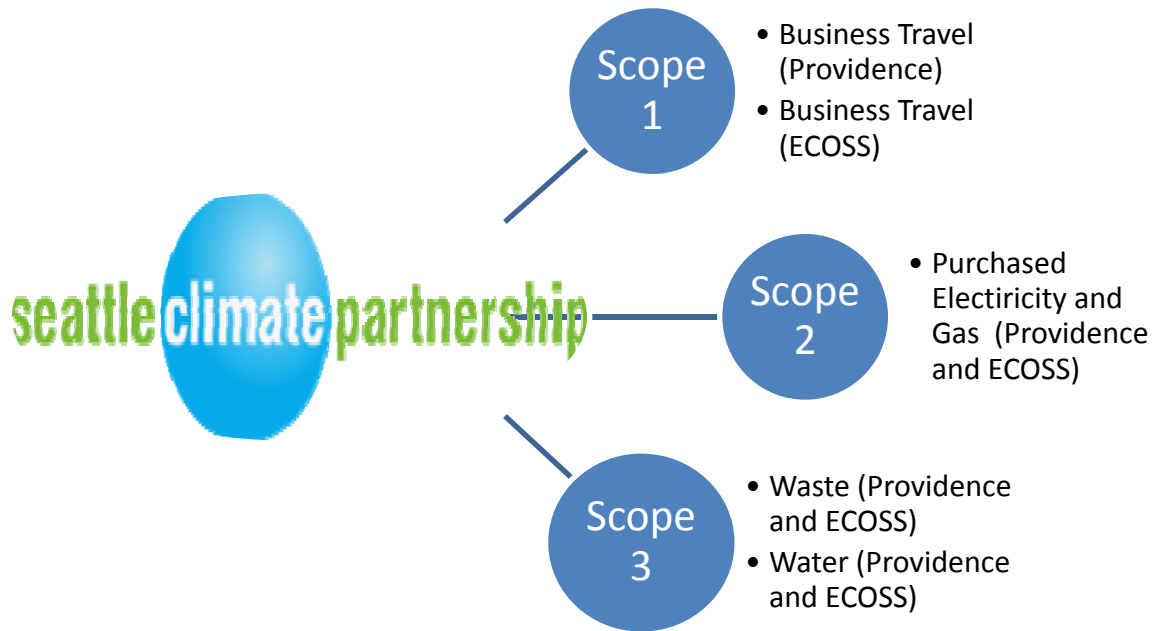
Introduction

In June 2011, ECOSS conducted a carbon footprint baseline for the South Park Neighborhood Center. As an environmental outreach organization that supports residents, businesses and the South Park community, ECOSS felt it was important to measure their operational effects and put actions into place to reduce their footprint.

Tenants of the building include Providence Regina House and Food Bank, ECOSS and the South Park Area Redevelopment Community. The building serves as a community center, senior service center, office for tax assistance program, food bank, commercial kitchen for meal service to the homeless, and offices for local non-profit organizations.

Inventory Defined:

The baseline conducted is collected from data from January 2010 to December 2010. Organizational and operational boundaries were carefully documented as this footprint has collected information from both tenants in the Neighborhood Center. Below summarizes what data was collected for the Seattle Climate Partnership carbon footprint. For more specific information, ECOSS created a notes tab in their spreadsheet. This included who provided the information, how it was gathered, etc.



Carbon Footprint Calculator 2010

Results



INSTRUCTIONS

This worksheet summarizes results of the carbon footprint assessment. The results below are intended to help you assess what activities of your business contribute the largest relative shares of greenhouse gas emissions. All results are reported as metric tons (or million grams) of CO₂. These figures should be interpreted as CO₂ "equivalents", because although most of these emissions are actual CO₂, some of the emissions are from methane (e.g., waste in landfills).

For assistance assessing the relative costs and impacts of CO₂ reduction options, please see the *Actions* worksheet. For more information on case studies of Seattle-area business actions on climate change and a list of resources on employer services and climate incentives, visit the Seattle Climate Partnership website (particularly the Seattle Climate Partnership *Resource Guide*) at www.seattleclimatepartnership.org.

Once you have finished reviewing the results of your footprint, please share this page with the Seattle Climate Partnership. You may either email this entire workbook or, if you have information that you would like to keep confidential in other pages, you may [create a PDF](#) of this results page and [email it to Charlie.Cunniff@seattle.gov](mailto:Charlie.Cunniff@seattle.gov). Sending your results to the Partnership will allow the Partnership to provide benchmarking information for how your emissions compare to those from other Seattle businesses. **Your results will not be shared without your permission.**

COMPANY FOOTPRINT: **62 metric tons of CO₂e annually, or** **4.8 metric tons of CO₂ per employee**

FOOTPRINT DETAILS

Transportation			
	Miles Traveled (Business Travel)	Miles Traveled (Commuting)	CO ₂ (Metric Tons)
Company Fleet	30,000	-	25.7
Other Car & Truck	19,693	-	7.8
Airplane	-	-	-
Train	-	-	-
Bus	-	-	-
Ferry	-	-	-
Subtotal	49,693	-	33.5

Energy Use			
	Quantity	Units	CO ₂ (Metric Tons)
Natural gas	2,916	therms	15.5
Electricity	67,191	kWh	1.0
Steam	-	thousand lbs	-
Other fuels	-	gallons	-
Subtotal	48,851	kBtus	16.4

Materials and Services			
	Quantity	Units	CO ₂ (Metric Tons)
Paper	-	reams	-
Other materials/services	-	-	0.0
Subtotal	-	-	0.0

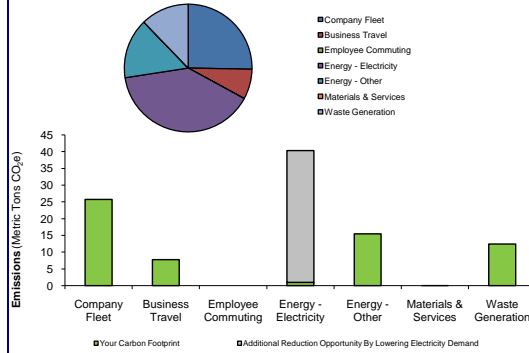
Waste Generation			
	Quantity	Units	CO ₂ (Metric Tons)
Disposed	30	tons	12.4
Subtotal	30	tons	12.4

Company Footprint (Total of Above)	62.4
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EMISSIONS REDUCTION POTENTIAL*

Footprint and Reduction Potential			
	Footprint (Metric Tons CO ₂)	Reduction Potential* (Metric Tons CO ₂)	Relative Reduction Potential (% of total)
Company Fleet	25.7	25.7	25%
Business Travel	7.8	7.8	8%
Employee Commuting	0.0	0.0	0%
Energy - Electricity	1.0	40.3	40%
Energy - Other	15.5	15.5	15%
Materials & Services	0.0	0.0	0%
Waste Generation	12.4	12.4	12%
Total	62.4	101.7	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, 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, not to reduce supply from non-emitting hydropower. This issue is described in more detail below.

AVOIDED EMISSIONS

In addition to the activities listed above, which create emissions, some of the actions you have taken have resulted in reduced emissions. Without these actions, your footprint would be higher. Recycling, composting, and buying recycled paper are three activities that reduce your footprint. If you have taken other actions this year, you may list them on the right. Note that you will need to perform your own calculations to quantify these actions, although some quantification tools are provided on the *Actions* worksheet.

Waste Generation

	Quantity	Units	Emissions Reductions CO ₂ (Metric Tons)
Recycled	1	tons	(1.3)
Composted	2	tons	(0.1)
Subtotal	1	tons	(1.3)

Recycled Paper

	Quantity	Units	Reductions CO ₂
Recycled Paper	-	reams	-
Subtotal	-	reams	-

Other Actions

Describe Action(s)	Estimated Reductions (MTCO ₂)
1	
2	
3	
4	
5	
Subtotal	0.0

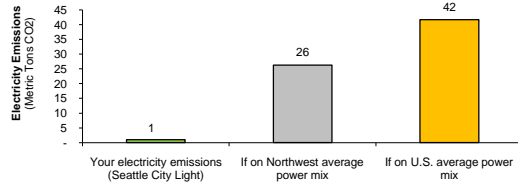
Total Emissions Avoided (1.3)

Results

SEATTLE CITY LIGHT'S CARBON-NEUTRAL ELECTRICITY

In most parts of the country, a significant fraction of many business' emissions are due to fossil-fuel production of electricity. In the Pacific Northwest (and particularly at Seattle City Light), a significant fraction of electricity is produced via hydroelectric dams with no direct greenhouse gas emissions.

The following chart compares your electricity emissions to what they would be if on other utilities.



In addition, Seattle City Light offsets all emissions resulting from its supply of power by reducing emissions elsewhere, effectively making the electricity emissions for its customers zero. Regardless of your current electricity provider, however, actions to reduce electricity consumption will reduce regional greenhouse gas emissions. In the Northwest, reductions in electricity demand free up clean hydropower to provide to another utility, resulting in an existing fossil fuel plant running less and a resulting reduction in greenhouse gases. In the "Reduction Potential" column above, emission reduction calculations account for this reduction using an emission factor of 0.6 kg CO₂ per kwh of electricity saved, which are the emissions avoided by not powering up a natural-gas-fired combustion turbine, the dominant marginal source of electricity supply in our region.

Note also that despite the potential implication of the graph above, this carbon footprint calculator is not intended to assess the relative impacts of either locating your business in Seattle versus other locations nor the relative impacts of alternative building heating sources (i.e., gas, electric, or steam). Assessing the greenhouse gas impacts of new electricity loads would require an analysis that looks at the *marginal* impacts, not the *average* impacts used to conduct a footprint and represented in the graph above. Similarly, assessing alternative heating systems requires multiple considerations, including questions such as what fuels will be used (whether on-site or by an energy provider) to meet the new, *marginal* energy demand.

RESULTS ACCURACY

The accuracy of your footprint depends on the activities you have chosen to include, the data you have collected, and the methods you have used in the calculator to estimate your overall footprint. This section provides a confidence factor for your final result.

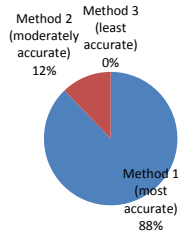
Transportation			
Activity	Method Used	Information Included	Other Notes
Company Fleet	1	Travel from 2 types of company vehicles	
Business Travel	1	Travel from Other Vehicles,	
Employee Commuting	None	Not Included	

Energy Use			
Activity	Primary Method Used	Types of Facilities (all Energy Categories)	Other Notes
Natural Gas	1		
Electricity	1	1 Office	
Steam	None		

Materials and Services			
Activity	Primary Method Used	Information Included	Other Notes
Paper	None	Not included	
Other materials/services	1	Water (CCF)	

Waste Generation			
Activity	Primary Method Used	Information Included	Other Notes
Disposal	2	Material disposed	
Recycling	3	Material recycled	
Composting	2	Material composted	

Overall Accuracy Distribution



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Next Steps

ECOSS and Providence will work through the *Action Tab* and work to reduce our footprint. We have assigned a staff person to take on this task and to align our progress with the SCP 2015 reduction goals.

