

TO: Mayor Marchione and City Council

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DATE: January 4, 2011

SUBJECT: STAFF REPORT: CITY OPERATIONS 2008 AND 2009 BASELINE CARBON FOOTPRINTS

BACKGROUND

Council gave direction to staff to develop a baseline for the City’s operational carbon footprint. The data is essential in order for the Council to establish emissions reduction targets and provide metrics for measurement. Staff has worked diligently over the past year collecting data on various aspects of City operations in order to establish a baseline. ICLEI’s Clean Air and Climate Protection (CACP) software was used as it contains all EPA and local government protocols for measuring both greenhouse gas emissions and air pollution. This work represents the first step in developing a Climate Action Plan, which is a roadmap to reduce global warming pollution.

FINDINGS

The CACP software produced baseline information for both years 2008 and 2009 for energy consumption, energy cost, greenhouse gas emissions, fuel consumption, and fuel cost for City operations, as well as criteria air pollutants emissions. Additionally, reports produced by the software identify performance of individual facilities, thereby allowing the City to target improvements to specific facilities which could result in not only cost savings to the City but could also decrease the City’s negative climate change impacts.

A summary of the findings is listed in the table below:

Item	2008	2009	Net Change	Net Increase
Energy Consumption (MMBtu)	99,711	106,389	+6,678	6.7%
Energy Cost	\$1,371,283	\$1,674,943	+\$303,660	22.1%
Greenhouse Gas Emissions (eCO ₂) (Tons)	9,596.1	10,083.8	+487.7	5.1%
Fuel Consumption (gallons)	141,089.80	170,652.30	+29,562.5	21%
Fuel Cost	\$383,079.95	\$516,106.78	+133,026.83	34.7%

For total energy consumption, electricity usage has increased three percent from 8,972,238 kWh in 2008 to 9,226,356 kWh in 2009. Likewise, natural gas usage has increased by 11 percent from 141,768 therms in 2008 to 159,628 therms in 2009.

The table above shows that the 2009 figures have increased over the 2008 figures. It is impossible to project a trend from two data sets. However, one could logically infer that as City operations grow our consumption levels and subsequently greenhouse gas emissions will grow if we continue business as usual.

NEXT STEPS

Redmond is a signatory to the Mayor's Climate Protection Agreement which includes targets for greenhouse gas emissions at seven percent below 1990 levels by 2012. Additionally, the Puget Sound Regional Council requires jurisdictions to set emission reduction targets. The State of Washington has adopted greenhouse gas emission reduction goals for the state to reduce emissions to 1990 levels by 2020, 25 percent below 1990 levels by 2035, and 50 percent below 1990 levels by 2050.

Staff requests Council review the attachments and staff will respond to questions that you may have on January 4. In addition, staff requests direction to schedule a study session to consider the issue of setting standards and the potential types of actions necessary to achieve those standards. This target setting step will then enable staff to analyze and provide specific options the City should implement to achieve the targets.

ATTACHMENTS

Attachment A: 2008 ICLEI Clean Air Climate Protection Software Reports

Attachment B: 2009 ICLEI Clean Air Climate Protection Software Reports