

## CONSERVATION COMMITTEE REPORT

February 16, 2011

9:15–10:40 am

140 West Pine Street

**Members Present:** Marilyn Marler (chair), Pam Walzer, Bob Jaffe, Renee Mitchell, Jon Wilkins, Dave Strohmaier, Stacy Rye, Ed Childers, and Lyn Hellegaard

**Members Absent:** Cynthia Wolken, Dick Haines

**Others Present:** Mayor Engen, Robin Saha

### I. ADMINISTRATIVE BUSINESS

#### A. Approve minutes.

Minutes of February 2, 2011 and February 9, 2011 were approved as submitted.

### II. FINAL CONSIDERATION AGENDA ITEMS

### III. CONSENT AGENDA ITEMS

### IV. REGULAR AGENDA

1. Presentation on “Missoula Greenhouse Gas Emissions Inventory and Analysis, 2003-2008: Toward a Blueprint for Municipal Sustainability”. ([memo](#))—Regular Agenda (Mayor Engen) **(INFORMATIONAL ITEM REMOVE FROM AGENDA) ([presentation](#))([Report](#))**

Mayor Engen and the City of Missoula partnered with Professor Robin Saha and the University of Montana in a comprehensive emissions inventory beginning in January 2009. The effort looked at the City's greenhouse gas emissions from 2003-2008. The study presented today shows the results of those efforts.

Mayor Engen - this project has been several years in the making and it represents the City of Missoula's efforts to understand its carbon footprint and climate change at a local level. It is a function of commitment and was done with the help of the University and Professor Saha, other city employees including Ginny Merriam, Mary Kay Wedgewood and Jack Stucky. It highlights where we are today, what we can do tomorrow and challenges we face as we continue to recognize the environmental impact of emissions and do our best to mitigate.

Professor Saha – the primary objectives of the report are to:

- Give a baseline inventory for the City of Missoula that quantifies total municipal energy use and associated Greenhouse Gas emissions for each municipal sector,
- Identify major sources of municipal emissions, relative contributions within the sectors,
- Examine changes and trends in energy use, cost and emissions from 2003-2008 and
- Identify opportunities and offer recommendation to achieve future municipal GHG emissions reductions.

In 1996 Missoula joined the international council for local environmental initiatives cities for climate protection campaign and in 2004 the Greenhouse Gas Energy Conservation team was formed. Mayor Engen signed the resolution of support for the US Conference of Mayors Climate Protection Agreement in 2007. The Mayor then requested assistance from the University's EVST program with a municipal emissions inventory. Several resolutions were passed in that time frame to document the efforts of Missoula toward reducing greenhouse gas emissions. Additionally the Green Team for the City was formed along with the Green Block program.

The inventory was done to get a baseline and forecast for the future including establishing reduction targets and steps to implement the climate action plan. It is up to the local leadership to develop long term and effective solution and integrate climate change mitigation into municipal planning, infrastructure and decisions making.

The inventory specifically examines the following emissions sectors, Wastewater Treatment, Buildings, Vehicle fleet, Employee commuting, lighting and water. The inventory primarily examines emission directly resulting from purchased energy and fuel for municipal operations and for public services paid for by the City. The objective of inventory is to present baseline emissions inventory, quantifying municipal energy use and associated greenhouse gas emissions for each municipal sector and identify major sources of municipal emissions.

The base year 2003 was selected because it was the earliest year for which hard copy records of purchased energy existed for most sectors. 2008 was chosen as it was also the most recent year for an entire year's data could be obtained.

Professor Saha reviewed with the committee some of the finding of the study. The complete study is available on the city's web page.

The study showed a rise in emissions up 46% from 2003 to 2008. The increase in emissions can be related to growth or change. Increases in electricity for the waste water treatment plant are due to system upgrades and in municipal buildings to new and expanded building. Even taking out the recently built recreation facilities the report indicates the increase is not entirely due to new buildings. This could be attributed to more people, computers, and equipment. It is also true that energy costs have increased.

In looking at the emissions forecast excluding new building (not likely) emission will increase by 40% by the year 2020. A forecast which includes (more likely) all new buildings would increase the percent at to 113% by 2020 if not changes are made.

Missoula's increase is greater than other cities which have conducted inventories and Missoula is behind using the milestone factor. Missoula needed this data as a baseline. The rapidly increase in recent years exceeds population growth and the costs are unsustainable and may undermine city ability to efficiently provide service Missoula expects

The good news is the City can be smart and invest in energy cost savings, Professor Saha recommended a four part strategy which is to

- Set a greenhouse gas emissions reduction target of zero net emissions by 2020
- Carry out a climate action planning process
- Develop an efficient energy use monitoring and reporting system
- Delegate responsibility for implementing, managing and reporting on energy savings measure being accountable
- Set target and develop a climate action plan
- Form a climate action plan task force
- Develop energy and emissions monitoring and reporting system

Some ideas to consider include:

- Revolving energy loan fund
- Explore renewable energy partnerships
- Consider energy bond or renewal energy loan fund
- Establish renewable energy certificate and or carbon offset program
- Hire a full time permanent sustainability coordinator
- Integrate GHG emissions into planning and decision making
- Four day work week for employees and or work from home

Inactions will continue to see an increase in energy costs with a higher budgets, higher costs of good and services, less to spend or invest on services. Steps toward sustainability rely on planning, policy and practice proven successful, as opposed to piecemeal actions that occur outside the broad context. The City must continue to build on current efforts, use the Mayor framework, develop a climate action plan, and adopt emissions reduction strategies for Missoula that use less energy and use what we have more wisely.

#### Discussion

The committee discussed factors affecting Missoula and whether the comparison to other cities is comparing apples to apples. Missoula has seen significant growth in the last five years with the addition of new facilities and a nutrient removal system to the Waste Water Treatment plant which uses more energy.

The report indicates Missoula is moving in the right direction but some of the committee members questioned the forecast. It was agreed that more specifics need to be flushed out and find trends or answers as to why energy use at the City level continues to be high. The move forward should also include the entire city at some point and have a plan for a community footprint. The analysis

is impressive and the data can be used as a baseline as Missoula moves forward regardless of how it compares to other cities. The first step of developing a climate action plan which sets reduction targets, writing a plan, implementing the plan and monitoring progress and reporting results.

Jack Stucky gave a brief update on the City's success at reducing fuel consumption by 10%. The use of unleaded fuel has dropped 11.82% but there was a gain in diesel fuel consumption by 3%. Diesel fuel is the work horse of the City and several older trucks have been replaced with newer diesel models. The combined overall reduction is at 6.06%. Several of the several buildings have reduced electrical and natural gas use. Several of the systems are antiquated and will be addressed in the JCI study including Council Chambers which has a 9.5% increase in electrical. The HVAC system will be replaced this year.

The Street Department building was seeing a slight decrease but with the addition of the 24/7 police occupancy the savings in minimal. Centralized maintenance building has achieved a 4% reduction in electricity, 16% in natural gas, as the building has a new infrared heating system and changed out the light bulbs.

#### Public comment

Ben Brauer – I worked with Helena climate plan, and would be happy to share how that process worked and the results. There are good things happening on initiative of city staff and policy makers, and going forward this should be an annual report and gives us something to measure progress.

Jill Alba - Clark Fork Collation – ([letter](#)) I want to thank you for taking on this large daunting task – and want to express the CFC willingness to participate and partner with city. The CFC is also working to produce a climate action plan and would be willing to share our process.

#### **V. NON-AGENDA ITEMS HELD IN COMMITTEE**

1. Information on Trail Projects ([memo](#)).—Regular Agenda (Marilyn Marler) (Referred to committee: 08/23/2010)
2. Consider a new ordinance that will create a process and criteria for the naming of public parks, trails, open space, and recreation facilities. ([memo](#))—Regular Agenda (Jackie Corday) (Referred to committee: 10/25/10)
3. Approve an agreement between the City and Garden City Harvest (GCH) to allow for community gardens on City owned properties that will be identified in the future. ([memo](#))—Regular Agenda (Jackie Corday) (Referred to committee: 10/25/10) (Item tabled in committee 12/08/2010)
4. Annual tree planting program update. ([memo](#))—Regular Agenda (Renee Mitchell) (Referred to committee: 01/24/11)

**ADJOURNMENT** - The meeting adjourned at 10:40 am.