

## Data Factors AdHoc, June 28, 2012

Those present: Allyson Siwik, Mary Stoecker, Denise Smith, Shelby Hallmark, Debaura James

Denise called this meeting to order at 1 p.m. The purpose of the meeting was to establish what multiplier is the most appropriate to use in our data recording so that it is consistent now and in the future. This data is collected so that we can note trends in energy-use reduction or increase, and to measure our success in reaching our Green House Gas Emissions (GHGE) goals set in the original Climate Action Plan. The OoS has been using 1.314 as a multiplier to determine GHGEs using the formula of 1 kWh = 1.314 lbs CO<sub>2</sub> emissions, and 2204.6 lbs = 1 metric tonne (required by the Dept of Energy when reporting on ARRA funded projects, based on the 88061 zip code). The baseline data used to determine GHGE reduction goals was based on a multiplier of 1.99 lb. per kWh, and 2000 lb. per ton. The multiplier changes depending on the source of energy production (coal, gas, wind, solar, etc.). The source of energy for this area is a blend of different sources of power that change from time to time. Therefore, the multiplier changes over time. The algorithm used by the OoS for electricity is believed to be the most accurate and up-to-date approach. To address the problem of differing formulas between the baseline and the current approach, the committee will normalize the baseline to the current approach; in the case of kWh usage, this will require reducing the baseline usage data by 34%. Since it is not known whether a better formula could be adduced for the 2003 baseline period, using this simplified normalization formula is the best (and least labor intensive) way for the committee to make general comparisons of trends over time.

Past members of the Climate Protection Task Force were invited to the meeting to help the current membership understand how the baseline was determined. The group shared information about how and what data was collected and recorded in the early years of the organization compared with more recent data. The outcome measures become the problem. There was some discussion about footnoting our records. It was the opinion of the group that we are in early enough stages of implementing changes that should impact our energy-use, we may not see trends yet.

Does this cause a major problem? According to the goals set in 2009, we may not be on track to meet goal of 15% decrease in emissions by 2015. Obtaining accurate estimates of overall community energy use is extremely difficult, and because of changes in the algorithms used to compute tons of carbon emitted (at least for electric power), it will be necessary to make rough adjustments (e.g. the estimates in the baseline must be adjusted downward by 34%). In addition, power usage data trends are significantly impacted by short-term or unrelated variables – e.g., the economic downturn, significant shifts in local weather, possible changes in buying habits (the ratio of gasoline purchased in town/county vs. out of town/county), etc. These influences make it very difficult to assess how well Silver City as a community is faring in terms of the goals of reduced energy consumption and hence GHGE reductions. Calculations in the overall reduction in carbon emissions will not be exact. We can measure progress on GHGE reductions in terms of the 13 specific recommendations, but only general statements/data can be provided on overall usage/emissions.

When we present our update to the Town Council, we should focus on areas of success or shortfalls based on the 13 specific recommendations.

The group adjourned at 1:52.

Respectfully submitted, Debaura James