

# Fort Collins Climate Task Force August 29, 2007 215 North Mason, Community Room MEETING MINUTES



### **Present:**

Board Members and Alternates

John Bleem	Р	Bruce Hendee	Р	Garry Steen	Р
William Farland	Р	Blue Hovatter	Р	Norm Weaver	Р
Bill Franzen	Р	Jeff Lebesch	Р	Steve Wolley	Р
Phil Friedman	Р	Eric Levine	Р		
Stephen Gillette	Р	Liz Pruessner	Р		

Others present: Art Bavoso, Facilitator

Judy Dorsey, The Brendle Group Lucinda Smith, Natural Resources Department Kip Carrico, Alternate for Air Quality Advisory Board Reiner Lomb, Alternate for FCSG Ann Hutchinson, Fort Collins Chamber of Commerce

# **Public Input**

None

# **Task Force Member Input**

Bill Franzen reported on an effort by a non-profit "Advanced Energy" to make available 300 hybrid electric school busses next year through their Plug-In Hybrid Electric School Bus project. These busses are likely to be twice as efficient as a standard school bus and reduce emissions by 90%. The added price may drop from \$140,000 to \$40,000 if an OEM were to be able to manufacture 1000 of these busses. One of these busses will be available in the Denver area next year and PSD will have the opportunity to try one out and possibly purchase one if additional funding can be found.

Phil Friedman stated that Prius-equivalent plug-in hybrid vehicles are now undergoing road testing in Japan and may be available commercially in 1-2 years.

# **Minutes Approval**

Lucinda Smith noted minor corrections to the minutes. Bill Franzen moved to approve the July 11 minutes as amended. Phil Friedman seconded.

The task force unanimously voted to approve the July 11 minutes, as amended.

### **Agenda Review**

Lucinda reviewed the agenda and all concurred with the agenda as written.

### **Overview of Quantification**

Judy provided a summary of the quantification to date. The quantification is now ~ 70% complete (7 measures still need quantification; they will provide a relatively small GHG benefit) Existing measures will lead to ~ 445,000 tons CO2 avoided in 2010 New measures (Conservative estimate) lead to 277,000 tons in 2010

New measures (Conser	vative estimates):
Energy	= 140,000 tons
Mixed (Climate Wise,	etc) = 76,000 tons
Solid Waste	= 61,000  tons
Transport	= 1,200 tons

New measures (aggressive estimate) lead to 515,000 tons in 2010

Currently, the gap to meet the goal of avoiding 1.1 million tons in 2010 is 140,000 tons to 380,000 tons

The costs and savings presented are based on the "conservative" scenario.

### General comments

The group was disappointed in the relatively small contribution of transportation measures. The Mason Street Corridor needs to be added to the quantified "Existing List". For perspective, Norm said that even if all households stopped using all electricity, it would not provide enough GHG reduction to meet the stated goal.

Norm and Judy indicated it was challenging to prepare the cost:benefit analysis. Should it be life cycle cost or first cost? Cost to whom, the citizens, local government, or? Judy noted the state climate action panel does not differentiate between who pays and who saves; their quantification just looks at total costs. John pointed out some of the \$/ton reductions were very high. Judy responded that this is because the quantification looks at GHG reduction just in the year 2010, but the costs are total cost over time. Many again saw that "2010 is essentially tomorrow". Eric indicated the need to look at post-2010 transport measures for any significant GHG reductions in that sector.

In order to address the cost:benefit issue, a subcommittee was formed, consisting of Bill Farland, Norm Weaver, John Bleem, and Judy Dorsey. They will meet to discuss the best approach for the cost-benefit analysis.

#### **Energy Measures**

#### Tiered Electric Rates

Norm Weaver walked the Task Force through the quantification and assumptions. This measure just looked at residential customers. The rate tiers from Southern California Edison's (SCE) experience was included in the spreadsheet as a reference. Reiner asked about the relationship between tiered rates and additional DSM programs. Norm replied this analysis looks only at behavior changes for tiered rates, based on research. Bill pointed out that the SCE rates have changed over time, so we could set an aggressive goal yet start out with small rate changes.

Norm prepared a "small hammer" approach that would generally affect the upper 20% of households (those using > 1000kWh/month). Many liked having the cost impact point above the majority of households as in the small hammer model. Jeff asked why SCE customers on averages used only half of the electricity of FC citizens. This is due mainly to a milder climate and a more aggressive tiered rate program. Only ~ 10% of all FC residences are all-electric homes. The statewide average residential electricity use is 600kWh/month at \$0.084/kWh (higher than FCU rates). Bill said that PSD has been on a tiered rate system for a long time but initially only their facilities staff saw the rate/use impacts. But now PSD's energy programs focus on peak demand reduction through a hotshot type of program. They do "coast" (shut off HVAC system) at times to avoid peak demand, leading to slightly increased temperatures inside but students and now even parents are aware of this approach. Bill thinks a precedent has been set and that the public would accept peak demand reduction strategies because of the benefits.

### Smart-Metering

Norm also reviewed the Smart-metering measure, again focusing on residential customers. He prepared 3 scenarios. The conservative analysis was for a voluntary program, and is based on past public response to the voluntary wind program. Research data suggest that DSM programs can bring 10% reductions, with a range of 2% to 20% energy reductions. Scenario one assumes 8% reduction for participants. Scenario two is for an aggressive program that would double the market penetration and double the projected usage reduction (1.2%/yr and 16%). Scenario 3 involves a system-wide smart meter program using more expensive smart meters (~\$300 ea) that can communicate with FCU and the homeowner. All scenarios assume that FCU pays for the smart meter. Kip points out that if FCU pays for the meter, there might be a higher adoption rate than for the wind program where the subscriber pays extra. Norm indicated that communities have found mixed results from smart metering. FCU does not feel scenario 3 is feasible by 2010.

What is the rate of new meter installation? Bill asked about the possibility of requiring or supporting meter installations on all home sales (like Waterloo??). Phil also wondered about adding meters at point of home sale.(i.e. new Utility accounts). What about the commercial sector? Many businesses are already participating in the FCU hotshot program. The task force is interested in an expanded hotshot program for commercial customers.

# Free Residential Energy Assessments

As a reminder, residential emissions constitute 22% of FC community-wide GHG. The Brendle Group only prepared a conservative estimate for this measure, based on Boulder's pilot program that offered free retrofits for 300 homes and yielded lower than anticipated energy savings. This measure assumes the program cost is to the city government and the savings are to the homeowner.

#### Expanded Electric Energy Supply Policy

Norm reported that historically, utilities see only 1-2% of sales impact from on-going DSM programs. The existing EESP needs to achieve 0.5-0.6% of sales to achieve the existing goal. This measure looks at an expanded program and assumes 1% of sales impact.

Reiner pointed out that some small GHG-reducing measures can be important revenue-generators and therefore important to the overall mix of measures.

Jeff pointed out that carbon emissions are higher per MMBTU for electricity than gas.

Someone pointed out that electricity is the largest sector of the total GHG inventory.

### Energy Conservation at Point of Sale

The analysis is based on performance data from Berkeley, CA. It assumes 14,000 homes are sold/year through 2010. It shows a large GHG benefit and a large cost. This approach has worked well in some communities, but not in Seattle, WA. Why not? This measure has the potential of creating many local business development opportunities. Some asked about the impacts to the housing market. Norm asked what the impact would be if every home in FC got an energy makeover?

### **Transportation Measures**

Judy reviewed elements of some of the other transportation measures. The analysis of the roundabout measure was provided by Garry. Overall, the reductions from the transport sector a small. Jeff felt a carbon tax (not quantified yet) could offer a good benefit.

Phil said we need to reduce carbon emission/mile but have no local control over this, except to provide incentives (i.e. for PHEV). Eric pointed out that per capita VM T is still rising. Blue suggested that it is possible for the local government fleet to change and that we should start with local government. What about a policy for new City vehicles? Bill said that if FC could create a better mass transit system, it could make a significant difference. Reiner said the City could make parking more expensive, and Poudre School District could prevent students from driving to school.

Because the task force did not have enough time to discuss all the quantified measures today, they set an extra meeting for Tuesday, Sept. 11. Art closed the meeting by asking everyone what he or she learned today that they didn't know before.

# **Next Meeting**

Tuesday, September 11 281 N. College Ave., Conf Rooms A&B 5:30 – 8:30 p.m. (Dinner served starting a 5:15 p.m.)