Cleaner Air Partnership Quarterly Luncheon

Thursday, March 31, 2011
Roseville Utility Exploration Center
1501 Pleasant Grove Blvd, Roseville
Meeting Summary

Participants

See below (40)

Welcome

Tom Stallard, CAP Chair, introduced the meeting and noted the meeting focus is on Biomass, bringing an economic focus to our air quality discussion. Biomass cleans the environment and creates jobs.

Terri Shirhall, City of Roseville

- City of Roseville owns and operates water management, wastewater, utilities;
- Challenges: Providing to a growing population while also meeting goals of legislation to reduce energy use, water use, and resource conservation;
- The City of Roseville has an operational Climate Action Plan, adopted by the City Council in 2009, includes a goal to reduce energy use by 28% by 2015;
- Community Sustainability Plan
    - 38-member community committee representing a diverse range of interest;
    - Plan in draft form, going to Council in May. Available on city's website. Addresses GHG and also Nitrogen oxides.

Bob Garrison, City of Roseville Utility Exploration Center

- Exhibits on water, energy, solid waste reduction;
- Have been in business three years serving 100,000 people;
- Upcoming Programs:
    - Friday 4/1 – First Friday Lecture Series at 7:30pm featuring the author of *Oil on the Brain*
    - Celebrate the Earth Festival - April 16th. 10 booth spaces available. 4,500 attendees last year
- Future plans: Build a one-acre area for interactive display and exhibits to explore things homeowners can do in their home/yard to make lifestyle sustainable.

Tom Stallard mentioned we need to figure out how to export the ideas and accomplishments Roseville's work to other cities/areas in the region.

Presentations:

Susan Brown, California Energy Commission

- Strategic Value of Bioenergy:
    - Job creation in rural areas
    - California has vast resources from farms, forest, landfills – it is a challenge to harness resources in a sustainable manner
- State Government Initiatives:
    - 2011 Bioenergy Action Plan – prepared by nine State Agencies
    - Clean Energy Jobs plan by Governor Brown
- Key Challenges and Issues:
    - Cost to collect and transport biomass materials – need to set priorities for funding
    - Regulatory uncertainty - Meeting stringent air and pollution policy
    - Gas pipeline quality standards
        - Interconnection between the source (i.e. dairy digester) to the backbone system (i.e. the utility). The producer is expected to pay for the pipeline.
    - Permit coordination
    - Financial incentives are needed
        - Feed –in tariffs would subsidize the price of renewable energy
    - Standards must be set to ensure that biomass feedstock can be removed in a sustainable manner
- Air Quality Considerations
    - Biomass development in California's designated nonattainment areas are costly and can be problematic as it is very difficult to get an air quality permit in a nonattainment area as new pollution sources are not allowed (unless it is offset by reducing pollution somewhere else). In some cases you have to buy credits.
    - Strict limits for industrial boilers
    - "Tailoring rule" will limit GHG emissions although biomass can be a "carbon neutral" energy source
- Progress to date:
    - Restarting idle biomass power plants through state incentives
    - Biofuels will require a six-fold increase to achieve the goals
    - Programmatic Environment Impact Report – permit streamlining
- Success Stories:
    - Placer County Forest Biomass Initiative
    - Dixon Ridge Farms: renewable energy from walnut shells
    - Gill's Onion: food waste to produce all onsite power needs
    - Fiscalini Farms (Modesto): Dairy Digester project
    - Waste Management Inc is producing liquefied natural gas for garbage trucks

- Biomass industry is developing, but has challenges
- Plants gone idle – difficulty with power purchase agreements. 20% of the state's energy used to come from biomass, now only 2% because the cost of the input went up. Need a subsidy.

Gary Simon, Chairman of SARTA

"Biofuels as a Regional Clean Air Strategy"

- Will need liquid fuels for transportation sector for a LONG time before electric vehicles take over. Must figure out where we will get these fuels.
    - Biofuels are a good source for liquid fuels.
    - Electricity is more talked about, but the value of biomass applied to transportation sector (fuel) is approximately 3X the value of making natural gas or electricity.
- Must look beyond what we are doing now. We don't have a good biofuels procurement policy between local governments and major employers.
- Most energy we purchase is for cars and trucks. Energy-wise spending→ 1/3 Electricity, 1/2 Gasoline.
- Greenwise project: Million Gallon Challenge
    - Regional effort: One million gallons is one-tenth of a percent of the gasoline we buy in the Region!
    - If we could aggregate a million gallon per year purchase for multiple years, we could get our own little industry going, and keep those funds in the local economy. Start by using waste (not garbage): Forestry, rice hauls, algae. If you can get the volume, get a buyer, starts working.
    - 10-year program: get companies to build plants here – needs to be near the resource/feedstock.
- There are all sorts of ways to make biofuels – see "Biofuels Conversion Option" chart. We only focus on two options, not looking at the other ways/sources.
- "Drop-in Biofuels" as a Strategy
    - You can drop-in biofuel into any part of the current chain. 100% compatible with the current infrastructure, vehicles, etc.
    - Drop-in works naturally and supports President's goal 1/3 of all fuels coming from something we can make
    - Must be cost competitive at ~$3/gallon rack prices
- Community needs to come together to do this. Focus on the $3billion we spend on what goes in cars and trucks. Big opportunity on biomass.

Brett Storey, Placer County Biomass Program – Environmental and Air Quality Opportunities

- Why embark on this program? Over half of Placer County is forested. (Most is not private land)

    - Protect the forest/communities from catastrophic fires; and
    - Provide cleaner air.
- How?
    - Strategic plan;
    - Work with public agencies and private business; and
    - Must have supporters, customers, and others. Partnerships are very important.
- Agency decisions:
    - Before – open pile burn of brush (Large amounts of air emissions)
    - Versus: Grind and haul waste, controlled energy creation
    - Challenge: making it economical
- Ongoing programs and projects:
    - Community biomass collection – changes people's perception of what a backyard fire (to eliminate biomass) does to the air
    - Chipping
    - Regional biomass collection points (often in Tahoe region). Don't have to pay tipping fee like at the dump.
    - **Change public perception of doing this differently.**
    - Contracts in place; Material being reclaimed; Air Pollution saved; Forest Health increased.
- United States Forest Service National Forest biomass removal. Expensive because of increased regulations (where you can use the equipment)
    - Placer County is the first public agency in the nation to have a master stewardship agreement to remove biomass from the Tahoe basin by permission of the US Forest Service to remove underbrush and tree debris.
- Results of this biomass removal program:
    - Air emissions reductions
    - Water deposition reductions
    - Enhanced forest health operations
    - Watershed improvements
    - Lower wildfire risks to community and soil
    - Potential lower healthcare costs (respiratory problems)
- Other opportunities to pursue:
    - Business opportunities
    - Job growth
    - Green renewable non-fossil fuel power
    - Lower government costs for fire (federal forest service)
    - Insurance costs reductions
- Results on Air Quality:
    - Achieving major reductions in harmful particulates in the air. (96% reduction);
- EPA Recognition
    - 2010 Clean Air Excellence Award

    - 15K biomass waste removed, not burned; Reductions of 90tons of PM, 23 tons of nitrogen oxides (NOx), 70 tons volatile organic compounds (VOCs), 900 tons carbon monoxide, and 6K tons of greenhouse gases (GHG)
    - 15K biomass = 1 year of gathering
    - Chosen for "impact, innovation, and replicability"
- Future:
    - Biomass Facility in Lake Tahoe Region
    - Biomass Facility in Foresthill Region
    - Biomass Protocols – Value GHG benefits
        - Biomass for energy – supported by many organizations.
- Goals:
    - Lowering Air Emissions, utilize biomass waste
    - Protect against catastrophic Wildfire

Open Discussion:

Q: One million gallon challenge – first three steps to reach it. What are the impediments?

- Find out: who are the big buyers purchasing the million gallons
    - Local government fleets, large employer fleets
- Assured that buying the fuels would be smart, meet specs, etc.
- Meet with producers, willing to respond to RFP
- The process could take a path we don't expect
- Overall point: Do something. Chicken and egg dilemma.

Q: What are some of the air emissions issues (health risks) with biobutanol?

- Gary Simon provided a scientific explanation of biobutanol
- Don't really know the health risks at this point

Q: I've heard that ethanol takes more energy to create than it provides?

- It depends on the source of the ethanol. This is true when it is being made from corn because of harvesting, etc.
- Pick the sources carefully.
- Thermo-mechanical, or biochemical

Further discussion:

- Much of the country runs on biodiesel. This is a problem in California because of NOx problems.

- Inside the forest – still do burns, because getting the equipment in place to collect the waste materials is too expensive (due to the terrain- no roads)

- Each fuel type has advantages and disadvantages. Need to analyze life cycle. Research done by California Air Resources Board. Not all fuels are the same.

- Burning versus biomass
    - Control burn maintains control of forest after it is already clean. (Different than pile-burning)
    - Doing less than 3% of controlled burning that actually needs to be done.

Partner Event Updates:

Breathe California of Sacramento-Emigrant Trails (BCSET), Kori Titus

- May 20th: Clean Air Award Luncheon. CAP is the regional award winner this year.
- June 10th: River Cats game – portion of ticket will go to BCSET. Buy at Teichert website.

Sacramento Metropolitan Chamber of Commerce, Kelly Brenk

- May 7-11th: Cap-to-Cap. Last day to register is April 20th. A lot of crossover issues. Questions – call Kelly.

Valley Vision, Julia Burrows

- Energy Upgrade California program – energy efficiency retrofits. www.EnergyUpgradeCA.org

Participants:

First Name:	Last Name:	Company:
Jim	Alves	SMUD
Ruth	Alves	Placer County Board of Supervisors
Maquoo	Anderson	SETA
Philip	Arndt	Comcast
Jeane	Berry	SMAQMD
Rick	Bettis	Breathe California Board of Directors
Kelly	Brenk	Metro Chamber
Linda	Brown	Placer County
Susan	Brown	California Energy Commission
Leila	Bruderer	Downey Brand LLP
Julia	Burrows	Valley Vision
Jacobe	Caditz	Sacramento Tree Foundation
Emily	Dransfield	Valley Vision
Gene	Endicott	Endicott Communications, Inc.

Gary	Fabian	Plan-it Green
Bob	Garrison	Roseville Utility Exploration Center
Larry	Greene	SMAQMD
Tricia	Hedahl	Sacramento Area Bicycle Advocates (SABA)
Jim	Holmes	Placer County Board of Supervisors
Erik	Johnson	SACOG
Dr. Jayna	Karpinski-Costa	Councilmember, City of Citrus Heights and
John	Lane	Teichert
Argelia	Leon	Breathe California of Sacramento-Emigrant Trails
Jennifer	Montgomery	County of Placer
Bill	Mueller	Valley Vision
Joe	Muller	Teichert Materials
Bralynn	Newby	CRE Alliance Group
Duane	O'Donnell	BERC - Sacramento Area Sustainable Business Pgm
Christina	Ragsdale	Sacramento Metropolitan Air Quality Mgmt. District
Alberto	Ramirez	Teichert Materials
Terri	Shirhall	City of Roseville
Gary	Simon	SARTA CleanStart Program
Tom	Stallard	Rose Colored Glass Company
Brett	Storey	Placer County Planning Department
Tim	Taylor	Sacramento Air District
Kori	Titus	BCSET
Jason	Vitaich	South Natomas TMA
Bill	Westerfield	SMUD
Earl	Withycombe	California Air Resources Board
Becky	Wood	Teichert