

**Bay Area Air Quality Management District  
Climate Protection Grant Program**

**Marin Climate & Energy Partnership -- PROGRESS REPORT #2, May 5, 2009**

This Progress Report provides information on Marin Climate and Energy Partnership (MCEP) activities supported by the Bay Area Air Quality Management District (BAAQMD) since the submission of Progress Report #1, covering the period December 1, 2008 – May 5, 2009.

## Summary of Progress Report #2

The following Progress Report provides information on Marin Climate and Energy Partnership (MCEP) activities supported by the Bay Area Air Quality Management District (BAAQMD) since the submission of Progress Report #1, covering the period December 1, 2008 – May 5, 2009. Please note that an addendum to Progress Report #1 has been submitted under separate cover, coinciding with Progress Report #2, to provide additional requested documentation and backup in response to requests from Abby Young. This May 5<sup>th</sup> Addendum to Progress Report #1 contains overlapping information with the current Progress Report #2 in the areas of Green Building and Green Purchasing. The following chart summarizes progress in key areas of work scheduled for reporting in Progress Report #2, under the BAAQMD contract.

Task	Requested Documentation	Documentation To Date & in Process for Final Report	Key Accomplishments as of 5/5/09
<p><b>Task 2.1: Reduce Energy Use in Municipal Buildings</b> (continued)</p>	<p>1. Report on project energy usage before and after implementation of measures; list of measures implemented with energy and cost savings for each; overall energy savings, payback information and summary of any co-benefits including emission reductions (ongoing)</p>	<p><b>Report #2:</b> a) Report on projected energy savings anticipated via building EE measures in participating local governments, including latest status of implementation of EE measures. [Measures are being implemented in upcoming months and before/after energy use data is not yet available.]</p> <p><b>Final Report:</b> Final report will address energy use before and after implementation measures, payback information and summary of co-benefits</p>	<ul style="list-style-type: none"> <li>▪ <b>Marin County</b> has HVAC replacement planning near completion for project completion at Marin Center for Q4 2009</li> <li>▪ <b>Novato DPW</b> has approval to go forward on extensive RE and EE projects including the Senior Center (solar), various community facilities (lighting upgrades), with funding from CREBS, general fund, and stimulus</li> <li>▪ <b>San Rafael</b> has prioritized HVAC (chiller) upgrade for City Hall with part of \$500K stimulus grants</li> </ul>
<p><b>Task 2.2: Establish Green Purchasing Collaborative</b> (continued)</p>	<p>1. Purchasing specifications for target products 2. Copies of purchase orders, invoices for all purchases made through the Collective, unless a mutually-agreed upon reporting system is developed</p>	<p><b>Report #2:</b> a) Purchasing specifications for target products included in attached EPP Report and EPP Fact Sheets for Paper, and Imaging and Computer Products; b) Reporting system components (EPP Trackers in Excel). [Purchase orders made by participating local municipalities for EPP products will be tracked after July 1<sup>st</sup>)</p> <p><b>Final Report:</b> Copies of purchase orders and invoices on a sampled basis for participating municipalities.</p>	<ul style="list-style-type: none"> <li>▪ <b>Comprehensive analysis of purchasing</b> among Marin cities complete</li> <li>▪ <b>Analysis of potential for GHG and cost savings</b> based on specific changes in purchasing patterns</li> <li>▪ <b>Excel-based calculators</b> that enable local jurisdictions to calculate energy, GHG, and cost savings of changed purchasing patterns</li> <li>▪ <b>EPP Fact Sheets</b> describing environmentally preferable purchasing options in the designated priority areas of paper, imaging equipment, and computers</li> <li>▪ <b>City-specific recommendations for paper and printing</b> developed by Conservatree.</li> </ul>

<p><b>Task 2.3: Reduce Energy Use in Residential and Commercial Buildings</b> (continued)</p>	<p>1. Agendas, staff reports and resolutions to adopt model ordinances as presented to city councils and Board of Supervisors 2. Report on progress toward adoption of green building ordinances</p>	<p><b>Report #2:</b> a) Staff reports and adopted ordinances for local governments implementing Green Building ordinances b) Report on progress toward adoption of green building ordinances (including Marin Green BERST Task Force documents) <b>Final Report:</b> Report on outcomes of Marin Green BERST Task Force, including common policy approaches to EE financing and GB.</p>	<ul style="list-style-type: none"> <li>▪ <b>Enhanced Green Building Codes</b> have been enacted by Novato, Mill Valley, and Tiburon</li> <li>▪ <b>Energy Retrofit:</b> All Marin Mayors and City Managers are supporting the establishment of the Marin Green BERST Task Force to address coordinated energy retrofit policies and sustainable building energy financing</li> <li>▪ <b>Funding</b> has been provided by MCF for next steps in EE retrofit planning</li> </ul>
<p><b>Task 2.4: Reduce Emissions from Municipal and Private Vehicles</b></p>	<p>1. Detailed report on project 2. Purchasing specifications for low-carbon municipal vehicle fleets 3. Copies of purchase orders or invoices relating to purchase of vehicles through the City CarShare and green fleets programs, unless a mutually-agreed upon reporting system is developed</p>	<p><b>Report #2:</b> a) Detailed report on Marin EV Transition Project, including workshop agenda, presentations, GHG impact calculations, and Recommendations for Action b) Copies of federal stimulus grant materials from select Marin jurisdictions provided to BAAQMD for Regional “Clean Cities” EV grant, including requests for EV and low-carbon vehicles and EV charging stations [Please note that local jurisdictions are delaying investments in new vehicles at this time, and have no low-carbon vehicle invoices to share during this reporting period. Also, OEM product specifications for EVs are not yet available. However, local jurisdictions have referenced expected EV and SULEV products that will be available in 2010-2011 per BAAQMD/ DOE grant protocols.] <b>Final Report:</b> Updated report on project, including available specifications and purchase orders for low-carbon vehicles</p>	<ul style="list-style-type: none"> <li>▪ Marin EV Workshop (co-sponsored by Transportation Authority of Marin) held to spur local government development of EV charge infrastructure and incentives</li> <li>▪ Assistance provided to Marin County and participating municipalities to develop over \$2M in funding requests to DOE “Clean Cities” grant coordinated by BAAQMD</li> <li>▪ GHG impact analysis developed to assess potential of EVs as a “core climate solution” for Marin’s transport GHGs (currently assessed at 62% of all GHGs)</li> <li>▪ Interested participants in EV Transition Task Force identified to design and implement Marin EV Transition Plan</li> </ul>

**Task 2.1: Reduce Energy Use in Municipal Buildings**

As summarized in Progress Report #1, the MCEP Climate Action Director is working closely with the Marin Energy Management Team to track progress on local government building energy efficiency (EE) and renewable energy (RE) projects outlined below. In addition, MCEP is working with the City of San Rafael and other local partners to create new energy efficiency funding sources via the development of local sustainable energy financing options, now being explored by the newly formed Marin Green BERST Task Force (Building Energy Retrofit and Solar Transformation). The following updated chart indicates progress on key local government EE and RE projects. These will likely be increased over the coming year as cities under 35,000 are able to access federal EE funds through state and federal avenues. Currently, both San Rafael and Novato have received notification of EE awards of approximately \$500,000 each, some of which are being utilized to complete municipal government energy efficiency projects referenced below.

<b>Major Marin Local Government Energy Efficiency &amp; Renewable Energy Projects</b>					
<b>Project Location &amp; Type</b>	<b>Updated Savings Projected</b>			<b>Current Estimated Completion Date</b>	<b>Status Update December 2008 – May 2009</b>
	<b>kWh (Gross)</b>	<b>kW (Gross)</b>	<b>Therms (Gross)</b>		
Marin Center - Auditorium (various)	222,663		3281	10/1/2009	AC unit replacement planning underway. Completion now expected Q4 09
Novato - Arts Center (lighting)	619	0.26		9/30/2009	Novato DPW approved to implement listed energy projects (see attached April Council resolution for \$325K funding for Senior Ctr solar panels.) Projects are timed for completion in August – September.
Novato - Corp Yard (lighting)	89,544	0.00		9/30/2009	
Novato - Hamilton Community (lighting)	55,869	12.09		9/30/2009	
Novato - Hamilton Gym (lighting)	847	0.33		9/30/2009	
Novato - Senior Ctr (lighting)	41,503	10.18		9/30/2009	
Novato - Teen Center (lighting)	2,969	0.99		9/30/2009	
San Rafael - City Hall (various)	189,000			10/1/10	Lighting retrofit funding and chiller replacement now prioritized as part of ~\$500K DOE EE block grant funding allocation.
Corte Madera - Corp Yard (various)	2,880			10/1/2009	These projects will likely be included in stimulus EE funding, but have been cut out of regular city funding.
Corte Madera - Multiple Sites (various)	20,623			10/1/2009	

Fairfax – Tennis Courts	35,186			9/1/2008	Tennis court lighting will be replaced with EE lights.
Novato - IT	35,000	3.50		6/30/2009	Project is on track
San Rafael - IT Verdiem	40,000	4.00		9/1/2009	PC Network power mg't software has been 50% installed and will be completed by September
Corte Madera - IT	20,000	2.00		9/1/2009	
Fairfax - IT	8,000	0.80		9/1/2009	
San Anselmo - IT	10,000	1.00		9/1/2009	
Marin Municipal Water District - IT	40,000	4.00		7/1/2009	PC power network software will be done by July, 2009
<b>Total</b>	<b>814,703</b>	<b>53</b>	<b>3281</b>		

**Task 2.2. Establish Green Purchasing Collaborative**

<b>Green Purchasing Collaborative Summary</b>		
<b>Status as of Dec. 2008</b> (per 04/01/09 EM from A. Young)	<b>Status as of 05/01/09</b>	<b>Backup Documents</b>
<p>Research and drafting of the policy done, but adoption and implementation not yet completed.</p> <p>[Assessed by BAAQMD as 50% complete]</p>	<ul style="list-style-type: none"> <li>▪ A green purchasing policy has been incorporated into the draft climate action plans for the 7-municipality “small cities” climate collaborative, which will be presented for Council adoption in April – Nov. 2009.</li> <li>▪ EPP tools and policies are complete for use by MCEP cities beginning 7/1/09, including fact sheets, and GHG, cost, and energy tracking tools</li> </ul>	<ol style="list-style-type: none"> <li><b>1. MCEP 7-city Climate Action Plan Draft</b></li> <li><b>2. MCEP EPP Report</b></li> <li><b>3. EPP Fact Sheet - Computers</b></li> <li><b>4. EPP Fact Sheet – Imaging</b></li> <li><b>5. EPP Tracker – Imaging</b></li> <li><b>6. EPP Tracker -- Computers</b></li> </ol>

As described in Progress Report #1, MCEP convened Marin cities and towns and Marin County in November – December to identify potential green purchasing priorities. Following consultation with green purchasing experts, an initial draft list of seven areas was winnowed down to three high-impact areas that could be addressed for FY 2009-2010 implementation, given local budget and staff limitations. These are: 1) Paper; 2) Imaging equipment and multi-function devices; and 3) Computers. A comprehensive EPP Report and Recommendations for Action were developed with the the assistance of MCEP consultant Miya Kitahara, Green Purchasing Institute Executive Director Alicia Culver, and

Susan Kinsella, Director of Conservatree, an authority on recycled and other environmentally preferable papers. Development of this report and associated implementation measures are being supported in part by a new grant to MCEP of \$80,000, awarded by the Marin Community Foundation (more information on the grant is provided in Progress Report #2.) The Report and associated toolkit includes the following elements:

- **Comprehensive analysis of current purchasing** patterns among Marin cities
- **Analysis of potential for GHG and cost savings** based on specific changes in purchasing patterns
- **Excel-based calculators** that enable local jurisdictions to calculate energy, GHG, and cost savings of changed purchasing patterns
- **EPP Fact Sheets** describing environmentally preferable purchasing options in the designated priority areas of paper, imaging equipment, and computers
- **City-specific recommendations for paper and printing practices** developed by Conservatree.

In addition to these deliverables, MCEP gathered feedback from local government staff regarding draft climate policies and completed development of a shared policy for inclusion in the collaboratively developed *Marin Small Cities Climate Action Plan*. Of the model policies circulated (including Marin County, Alameda County, Novato, and Palo Alto), local stakeholders agreed that the policy that most closely matches Marin’s needs is the Palo Alto policy. This template was customized to reflect Marin-specific needs, and incorporated into the draft *Small Cities Climate Action Plan* developed collaboratively by city staff from Belvedere, Sausalito, Mill Valley, Tiburon, San Anselmo, Fairfax, and Ross. (See attached draft 7-City Climate Action Plan.) The model policy is being presented to Marin City Councils in tandem with other quantified reduction measures identified in each city’s Climate Action Plans.

<b>Marin Green Purchasing Collaborative</b>	
1. Survey city efforts and identify city staff leads	Completed
2. Identify and distribute model policies	Completed
3. Host kickoff meeting to establish priority actions	Completed
4. Identify consultant & develop draft EPP workplan	Completed
5. Refine & adopt EPP/ Green Purchasing Workplan	Completed
6. Develop refined model policies as part of consideration by Councils	Completed
7. Develop target product lists, specifications, supply sources, and ordering protocols	Completed
8. Adopt model EPP policies	Policies being adopted in tandem with Climate Action Plans on schedules set by City Councils.
9. Begin collecting data on costs, GHGs, & energy savings	Ongoing beginning July 1, 2009

**Task 2.3: Reduce Energy Use in Residential and Commercial Buildings**

<b>Green Building Initiative Summary</b>		
<b>Status as of Dec. 2008</b> <small>(per 04/01/09 EM from A. Young)</small>	<b>Status as of 05/01/09</b>	<b>Backup Documents</b>
<p>Model green building code has been drafted. A good deal of research has been conducted, but the <i>ordinances</i> had not yet been drafted.</p> <p>[Assessed by BAAQMD as 1/3 complete]</p>	<ul style="list-style-type: none"> <li>▪ Green bldg. ordinances enacted by Mill Valley (12/08) Tiburon (11/08), Novato (2/09)</li> <li>▪ Marin Green BERST Task Force launched (Building Energy Retrofit &amp; Solar Transformation) to develop model policies for all cities</li> <li>▪ Contract developed with Brian Gitt of Bki (using new MCF grant resources) to assist in developing green building market transformation strategies and to identify sustainable financing options</li> </ul>	<p><b>7. Mill Valley green building ordinance</b></p> <p><b>8. Tiburon gr. bldg. ordinance</b></p> <p><b>9. Novato gr. bldg. ordinance</b></p> <p><b>10. Marin Green BERST program design workplan</b></p> <p><b>11. Marin Green BERST Task Force invite &amp; overview</b></p>

**A. Overview of Green Building Ordinance Adoption in Marin Cities from December – April, 2009:** As reported in Progress Report #1, MCEP presented a model green building code to city planning and building representatives as a means to inform further enhancements in green building codes. This has been followed by adoption of planned enhancements in Green Building codes by several Marin cities, including Mill Valley, Novato, and Tiburon, as described in the chart below. Other enhancements (in Fairfax, San Rafael, and the County of Marin) are currently in various stages of development, with a likely adoption in Q3 or Q4 of 2009.

## MCEP – Progress on Green Building Ordinances

### Green Building Ordinance Adoption

Cities	Action Taken	Date	Documentation/ Discussion
Mill Valley	GB Ordinance adopted	Dec. 2008	<a href="http://www.cityofmillvalley.org/Index.aspx?page=948">http://www.cityofmillvalley.org/Index.aspx?page=948</a>
Novato	GB Ordinance adopted	Feb. 2009	<a href="http://cityofnovato.org/agendas/pdfstaffreports/ord558.pdf">http://cityofnovato.org/agendas/pdfstaffreports/ord558.pdf</a>
Tiburon	GB Ordinance adopted	Nov. 2008	<a href="http://www.ci.tiburon.ca.us/government/guidelines%20&amp;%20ordinances/ordinances/Green-Building-Ordinance-final.pdf">http://www.ci.tiburon.ca.us/government/guidelines%20&amp;%20ordinances/ordinances/Green-Building-Ordinance-final.pdf</a>

### Other Steps Toward Green Building Policy Implementation

San Rafael	GB recommendations in Climate Action Plan	Apr. 2009	<a href="http://www.cityofsanrafael.org/Assets/CDD/Climate+Change+Action+Plan.pdf">http://www.cityofsanrafael.org/Assets/CDD/Climate+Change+Action+Plan.pdf</a> <ul style="list-style-type: none"> <li>▪ Council will consider Green Building action recommendations made in light of San Rafael’s GHG reduction goals.</li> <li>▪ San Rafael will lend staff support to Marin Green BERST Task Force</li> </ul>
Fairfax	Ordinance drafted	May 2009	<ul style="list-style-type: none"> <li>▪ Council is considering enhancements to new amendments to green building code, for potential action in Q3 of 2009</li> </ul>
San Anselmo	Ordinance drafted	May 2009	<a href="http://www.townofsananselmo.org/meetings/green.pdf">http://www.townofsananselmo.org/meetings/green.pdf</a> <ul style="list-style-type: none"> <li>▪ Planning Commission &amp; Town Council held joint meeting on Feb. 18<sup>th</sup>, 2009, to discuss potential of adopting GB ordinance. Council outlined parameters, and Planning Commission is working on a draft for completion this summer.</li> </ul>

**B. Establishment of Green Building Task Force:** In addition to individual city and County efforts to enhance existing green building ordinances, MCEP’s San Rafael liaison, Community Development Director Bob Brown, is convening a special Task Force focused on achieving potentially dramatic reductions in building energy efficiency in alignment with California Public Utility Commission (PUC) goals to cut building energy use by 40% by 2020. This effort will require substantial energy efficiency retrofits of existing building stock, and new investments of both public and private resources. To initiate this policy development process, the Marin Mayors and City Managers’ Associations approved the formation of a special “Marin Green BERST Task Force” (Building Energy Retrofit and Solar Transformation

Program), which will develop model energy efficiency retrofit strategies and coordinated policies to inform the next phase of potential Green Building code enhancements at the municipal and county level. As described in the attached draft Green BERST Program Design Workplan and Green BERST Task Force invitation and overview, each city and the county will appoint one member of the City Council, Planning Commission or Design Review Board and an alternate to be educated on green building and energy efficiency issues, consider regulatory or policy options, adopt a set of common principles or objectives, and prepare sample ordinances for each agency to consider and modify as desired, with the goal of making dramatic reductions in countywide energy use in alignment with local climate action plan goals. Bob Brown and Richard Schorske, the Climate Action Director of the Marin Climate and Energy Partnership, will provide staff support. A Technical Advisory Committee is also being formed with representation by the Marin Builders Association, the Marin Association of Realtors, local architects, building officials and chambers of commerce to provide input to the Task Force.

In the invitation letter sent to Marin Mayors, the scope of the Task Force is defined as follows:

1. Green Building Ordinance: Consider existing green building requirements from Marin jurisdictions and elsewhere in the Bay Area, adopt a statement of principles for green building regulations that would be applicable to Marin jurisdictions, both for new construction and for remodeling of existing homes and non-residential structures, and endorse a sample ordinance that would be provided to each agency for consideration. The goal would be to achieve as much consistency and commonality among these green building regulations in Marin as possible.
2. Energy Retrofit Program: The more challenging issue will be consideration of a program to incentivize property owners to retrofit existing buildings to increase energy and water efficiency and possibly add renewable energy options, such as solar panels. The Task Force would examine other existing retrofit programs, which are few and far between at present, options for the type of financing package allowed under AB 811 (to eliminate up-front costs and make the annual financing costs equal the annual energy savings), means of marketing such a program and means of developing workforce capacity to audit building systems and perform efficiency upgrades. There will be many policy issues to address, including whether to make such a program voluntary or mandatory to achieve our greenhouse gas reduction targets.

A summary of the Task Force and Technical Advisory Committee composition and the initial scope of work are included in the attached Green BERST invitation letter and overview document. The intention of this collaborative approach is to minimize the staff time that each jurisdiction would otherwise require to perform such analysis and policy development independently. The Task Force will also collaborate closely with the AB 811 financing district study currently being undertaken by the Marin Energy Authority. To support the initial work of the Task Force, MCEP applied for and received a grant from the Marin Community Foundation, of which \$15,000 will support the initial (Phase I) workplan collaboratively developed by MCEP and Brian Gitt of Bevilacqua Knight, Inc. Brian will provide technical support on policy development issues pertaining to building energy efficiency across all Marin jurisdictions. Brian is the Founder and former Executive Director of Build it Green, and is currently assisting a number of localities, including Alameda County and Sonoma County, to develop “green building market transformation programs” that integrate regulatory approaches,

such as green building ordinances, with newly developing financing strategies, including federal stimulus funds, utility energy partnership programs, AB 811 programs, and other strategies.

#### 2.4. Reduce Emissions from Municipal and Private Vehicles

Marin Green Vehicle/ EV Transition Status Update		
Status as of Dec. 2008	Status as of 05/01/09	Backup Documents
Initial research completed on upcoming state AB 118 EV funding opportunities and EV vehicle and charge station infrastructure providers	<ul style="list-style-type: none"> <li>▪ Marin EV Workshop (co-sponsored by Transportation Authority of Marin) held to spur local government development of EV charge infrastructure and incentives</li> <li>▪ Assistance provided to Marin County and participating municipalities to develop over \$2M in funding requests to DOE “Clean Cities” grant coordinated by BAAQMD</li> <li>▪ GHG impact analysis developed to assess potential of EVs as a “core climate solution” for Marin’s transport GHGs (currently assessed at 62% of all GHGs)</li> <li>▪ Interested participants in EV Transition Task Force identified to design and implement Marin EV Transition Plan</li> </ul>	<p><b>12. Marin EV Workshop Report</b> (includes workshop summary, agenda, and attendance)</p> <p><b>13. Marin EV Workshop Presentation</b> (addresses EVs as core climate solution for Marin)</p> <p><b>14. Marin EV Impact Analysis</b> (excel spreadsheet shows comprehensive analysis of projected EV deployments between 2010 – 2050 and impact on GHGs, fuel use, and fuel costs)</p> <p><b>15. Marin County summary of EV charge infrastructure</b> developed for BAAQMD / DOE Clean Cities Grant</p>

**Overview:** On April 21, 2009, a countywide workshop, “Planning the Electric Vehicle Transition in Marin County” was jointly sponsored by the Transportation Authority of Marin (TAM) and the Marin Climate and Energy Partnership (MCEP). (See attached report, including agenda, presentations summary, and RSVPs.) The goals of the workshop were to:

- Assess the key role of electric vehicles (EVs) in Marin’s climate, energy, and transportation future
- Identify Marin’s EV charging network issues and next steps
- Develop strategies for maximizing federal stimulus and state (AB 118) EV funding for Marin

**Participation:** Leading experts, senior agency staff, and vendors were invited to address key issues pertaining to the EV transition and upcoming EV funding opportunities. Approximately 40 attendees participated, representing public works and planning departments of Marin jurisdictions, fleet managers, TAM itself, BAAQMD, auto manufacturers (Nissan) and EV charge equipment manufacturers (Coulumb

Technologies), and environmental and sustainability organizations (Friends of the Earth, Sustainable Marin, etc.)

**Presentation Summary:** Supervisor Kinsey and Executive Director Steinhauser welcomed the group. Sup. Kinsey emphasized that all our public policy making must take into account the primacy and urgency of the climate crisis, and that EV transition planning is an important component of Marin's overall climate, energy, and transportation policy context. Dianne Steinhauser indicated that TAM is ready to assist MCEP in integrating EV planning into the overall transportation policy context, and potentially to link Transportation Fund for Clean Air (TFCA) resources to larger EV grants now under development. Dave Head, Sonoma County Fleet Manager, described Sonoma County's robust program of EV and alternative fuel vehicle deployment and indicated that Sonoma County and the Sonoma County Water Agency (SCWA) has committed to take delivery of approximately 1,000 Nissan EV's in Fall, 2010, for both fleet needs and sale or lease to employees of public agencies as well as major private employers. This is being accompanied by a plan to deploy upwards of 3,000 charge stations.

**Key Role for EVs in Marin Climate Solution Set:** Richard Schorske, MCEP Climate Action Director identified the central role that EVs can play in reducing the 62% of Marin's GHG's that are transportation related. Schorske presented data indicating that robust penetration of EV's into the Marin marketplace can reduce GHGs from transportation by approximately 80% by 2050 (in alignment with AB 32 goals). To make this penetration rate feasible, early deployment of EV infrastructure (charge stations) and other incentives, such as parking preferences and (potentially) preferential HOV/HOT lane access are among the policies that should be considered. Schorske noted that federal stimulus funds for EVs total over \$2.5 billion, and that all Marin jurisdictions should begin planning for initial charge station and EV deployment now in order to be ready for AB 118 (Alt Fuel Vehicle Act) guidelines expected to be published in the next few weeks. (\$46M will be available from the state for EVs this year.) In addition, the federal government has approved tax credits of \$7500 per vehicle, and CARB has approved credits of up to \$5,000 per vehicle, providing the means to "buy down" the incremental cost of EVs vs. conventional vehicles.

**Charge Infrastructure:** Mike Dinucci, Strategic Account Manager, Coulumb Technologies, Mike and a colleague from Coulumb presented their chargepoint charge station, and discussed costs, safety features, and installation requirements for this unit. He indicated that it was essential for successful EV deployment that sufficient stations be available to provide a positive customer experience. The units demonstrated are currently available in 110 volt configuration (\$1-2K installed), 240 volt configuration (\$4-5K installed). The stations are networked with a wireless system to let customers know via cell phone and wireless technology where there are available chargepoints, and to interact with the grid to ensure that power management issues and time of day rate issues are appropriately addressed. Battery swap technology was discussed, but there are not yet any OEMs in the US committed to a swappable battery technology (Nissan will not support fast-swapping with their initial vehicle, although the Renault – Nissan vehicle in Israel and Denmark will deploy fast-swapping.)

**Comprehensive Regional EV Strategy in Development:** Bob Hayden, Clean Vehicle consultant to San Francisco, presented on the regional effort to make the Bay Area the "EV capital of the US." This involves several task forces of government and private industry stakeholders working on issues such as codes and standards, funding and advocacy, and charge network issues. The initial collaborative effort is to present a unified funding plan (via BAAQMD) that will request \$15M in funding for EV vehicles and charge stations,

and associated infrastructure. Bob presented a San Francisco workplan for addressing EV infrastructure issues throughout the city and county of SF.

**Solar Fueling Stations:** Danielle Frugere of Friends of the Earth presented on the regional effort to develop “solar fuel stations” for EVs, via large-scale photovoltaic deployments over public and private parking lots. There is stimulus and EV-specific funding for these projects, and Marin County has identified at least six lots for priority development, including sites in San Rafael, the civic center, and elsewhere. Danielle presented very compelling economic models and financing strategies. Following the workshop, Marin County and other municipalities

**EVs Ready for Deployment in 2010:** Joetta Gobel of Nissan USA presented on Nissan’s battery-electric EV (not a plug-in hybrid.) This vehicle will be priced in the \$24 – 33K range (BEFORE tax credit rebates), and have a 100 mile range lithium ion battery. Nissan is interested in a Bay Area early deployment in large numbers, and is assisting with battery charge infrastructure strategies as well. They are partnered with Sonoma County on a thousand vehicle order, and are interested in working with Marin stakeholders as well. The first model will be a five-door compact similar in size to the Sentra but with a unique body style. MCEP has met with Nissan representatives to prepare an MOU for potential acquisition of fleet EVs as part of an early deployment scenario for Marin.

**Marin Participation in BAAQMD Grant:** Karen Schkolnick, BAAQMD Grants Program Director presented on BAAQMD’s effort to coordinate the \$15M regional grant, and answered questions on local match. CARB and the state California Energy Commission has agreed to help buy down the 50% local match, potentially to zero, with an early allocation from AB 118 funds. Dianne indicated that TCFA funds may also be available.

**Next Steps in Marin EV Deployment:** A meeting was held after the workshop to discuss how to work together on funding and infrastructure issues. The following next steps were identified:

**Funding:** Richard will coordinate with Dianne and Karen from BAAQMD on funding to enable Marin jurisdictions to obtain needed financing for vehicles and charge stations. (Initial deadline is May 1 for proposals, and May 18<sup>th</sup> for backup documentation.)

**Solar parking Lots:** Richard will coordinate with Dawn Weisz (CDA) and Michael Frost (DPW) and the County on solar lots, as well as the Friends of the Earth initiative.

**EV market development:** Richard will coordinate with Dale Miller of the North Bay EV Association, Nissan and other stakeholders on a potential EV purchase and deployment with Nissan and/or other OEMs.

**HOT lane and parking incentives:** Dianne and Richard will coordinate with other TAM staff and TAM Board on investigating incentive strategies, including potential HOT lane and parking issues. These ideas will be presented in the upcoming draft EV Transition Plan currently being produced by Richard for MCEP, as part of MCEP deliverables to BAAQMD.