



Electric
Mobility
Canada

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Canada

As approved by the Board of Directors – 2009 12 08

Business Plan for 2010¹

THIS IS AN ABSTRACT SHOWING THE PRIORITY ACTIONS FOR 2010 AS APPROVED BY THE BOARD ON DECEMBER 8, 2009. IF YOU WISH A FULL COPY, PLEASE CONTACT al.cormier@emc-mec.ca

The Directors of Electric Mobility Canada understand the challenges the globe is facing in terms of environmental and economic conditions as well as our responsibility to future generations. The Board believes that energy efficient technologies, as found in electric mobility, are an important part of the solution to new 'green' economic opportunities that will render Canada more competitive at home and internationally.

Electric Mobility Canada is a national membership-based not-for-profit organization dedicated exclusively to the promotion of electric mobility as a readily available and important solution to Canada's emerging energy and environmental issues. Our membership includes:

- *Private sector companies engaged in the sale or distribution of vehicles or components or the delivery of professional services. These members represent all modes of surface transportation from bicycles to trains.*
- *Providers of electric energy at the provincial and local levels*
- *Managers of fleets from private sector companies, governments agencies and others*
- *Related associations, societies, research centres and labour organizations*
- *Government agencies and individual supporters*

¹ Throughout this document, the term EV is used to represent all forms of electric traction vehicles including hybrid-electric vehicles (HEVs), Plug-In Hybrid Vehicles (PHEV's) and Battery Electric Vehicles (BEVs).

3. Strategies and Activities Proposed for 2010

The identification of strategic projects and activities for 2010 was a multi-staged process including:

- Surveying the Board members on possible priorities for 2010.
- Drafting a Business Plan for review by the Executive Committee
- Surveying the membership on their views of priorities to be followed.
- The Board of Directors reviewing the input received and agreeing on the final content.

Table 2 summarizes the strategic activities proposed for 2010. It should be stressed that Electric Mobility Canada aims to be a ‘results-oriented’ organization focusing its efforts on activities and projects that will provide the highest possible return at the earliest possible date.

The additional resources required for new activities are noted in the table and incorporated in the EMC budget process, the details of which are available to members on request.

Table 2 – Proposed Strategic Activities for 2010

Activity #	Description	Contributes to Goals
1	<p>Technology Road Map for Electric Vehicles in Canada (evTRM) The final report on the evTRM was published in the Fall 2009 and contained 21 strategic initiatives in the following areas:</p> <ul style="list-style-type: none"> • Technology – 4 • Codes, standards, regulations and infrastructure readiness – 5 • Studies and assessments – 10 • Education and outreach - 2 <p>The roadmap concludes that Canada is uniquely positioned to use EVs extensively and identifies the needed initiatives to accelerate EV use in Canada. EMC was asked in late October 2009 to submit a proposal to Natural Resources Canada for leading the implementation process of the evTRM. A proposal was submitted identifying a process and seeking specific financial resources to assist in the process.</p> <p>In the proposal to NRCan, EMC undertakes to develop an implementation plan for the 21 strategic initiatives, communicate the results to appropriate stakeholders, advocate for their acceptance and required actions and report</p>	All goals

Activity #	Description	Contributes to Goals
	<p>progress on a quarterly basis.</p> <p>Meeting the goals of these initiatives will require more involvement of the EMC members during 2010 and extensive collaboration with related groups such as Auto 21, CEATI, Canadian Hydro Power Association, Automotive Parts Manufacturers Association, Electric Drive Transportation Association and others.</p> <p>In addition to the initiatives contained in the evTRM report, there are related but specific proposals that have been proposed for EMC leadership. These are:</p> <p>Related specific initiatives planned for 2010 include:</p> <ol style="list-style-type: none"> 1. Business opportunities for the electric utility sector. According to the report released on 2009 11 16 by the US Electrification Coalition “about 75% of vehicle miles are to become the power industry's responsibility.” EMC’s evTRM also identified a large role for electric utilities and further identified the need for new ‘business models’ to accelerate the sale of EV’s in Canada. Two key possible barriers to the widespread use of EV’s are the up front costs of vehicles and the lack of infrastructure readiness to make the use of EV’s a more reliable and problem free mode of transportation. While financial incentives, where available, will assist the purchasers of EV’s, supportive actions such as battery leases will make it easier for buyers of EV’s. The evTRM identifies a role for utilities in developing the necessary infrastructure for EVs. This needs further exploration and the opportunities may vary from province to province depending on the legislation and regulations covering utilities. This can also include a plan to recuperate batteries after vehicle use for stationary energy storage. Accordingly, a Task Force will be established to commence a systematic dialogue within utilities and others, to determine the interest level of utilities in pursuing these and other opportunities and outline any provincial regulatory hurdles in this area. The common goal being to put in place the right “fuelling” infrastructure, sorting out accountabilities among the various players, setting priorities, and focusing limited resources to achieve the targets. 	

Activity #	Description	Contributes to Goals
	<p>2. Integrating EV component suppliers in the automotive supply chain</p> <p>Canada has some leading technology firms that are supplying product for electric vehicles in the key areas of Motive Power, Energy Storage, Smart Charging, Control Systems and Power Conditioning. NRC-IRAP in BC commissioned a study in August 2007 to provide an “inventory” of local expertise and capabilities, as well as recommendations for next steps and implementation of a plan. This study pointed out that <i>‘the average PHEV design will include in excess of 5,000 part numbers. Each “detail” component part number will “roll up” into next level sub assemblies and assemblies leading towards major assemblies or “clusters”’. As PHEV products develop worldwide, cluster level companies will realize opportunities with several new customers in Canada and elsewhere.’</i> EMC, with the support of IRAP and others, can help Canadian manufacturers access new business opportunities while helping to build out the electric vehicle supply chain. EMC has held preliminary discussions on this subject with the Automotive Parts Manufacturers Association (APMA) and there is a willingness to collaborate through participation at each other’s conferences and trade shows in a manner that will allow Tier 1 and Tier 2 suppliers to become acquainted with the EV technologies being developed by EMC members and hopefully incorporate these technologies in their supply chain for major vehicle markets. EMC will partner with the Automotive Parts Manufacturing Association (APMA) in this initiative.</p> <p>3. Charging infrastructure implementation at the municipal level.</p> <p>Toronto and Vancouver have talked periodically about the importance of aligning their EV enabling efforts at the City level across the country. They see an opportunity to reach some consensus on EV charging Infrastructure planning at the Sept. 2010 EV conference. The following path is proposed to achieve some common actions in cities across</p>	

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	<p>Canada.</p> <p>In Advance of Conference:</p> <ul style="list-style-type: none"> • Interested Cities/Provinces and their Power Utilities suggest possible objectives to allow for coordination of our regional/local pilot programs. This effort will make us more efficient and competitive in the world stage and carefully manage our limited resources. • Start with charging infrastructure pilot program template that the BC EV Working Group put together for an NRCAN Clean Energy Fund application... and/or any other templates that are out there. <p>At Sept 2010 conference:</p> <ul style="list-style-type: none"> • Hold a special closed meeting of the above groups to finalize objectives for the coordinated effort setting the stage for a national infrastructure effort (linking local/regional pilot programs) • Hold an open panel session to introduce, and seek input on, the draft coordinated charging infrastructure planning efforts, giving the opportunity for other stakeholders and solution providers to comment and contribute. This would be a broad and efficient engagement of stakeholders and let the automakers know there is a strategy coming together. <p>EMC's role would be to lend its support to this initiative and assist in its coordination. It would send the proper signal to OEM's who repeatedly say that sales of plug-in vehicles will likely be promoted first in areas with welcoming infrastructure.</p> <p>In addition to the workload flowing from the evTRM, EMC will need to identify needed activities in EV modes not covered by the evTRM. The potential for electric drive in on-road 2 and 3 wheel vehicles, grid connected vehicles, off-road vehicles and marine areas is equally important to address and EMC will need to plan actions in these areas during 2010. These could be the subject of future roadmaps (as required through one of the evTRM initiatives) and/or topics at the 2010 Conference.</p>	

Activity #	Description	Contributes to Goals
	<i>Additional resources to manage the evTRM implementation process are identified in the proposal to NRCan.</i>	
2	<p>Government Relations</p> <p>The key activities at the federal and provincial levels will relate to the implementation of the evTRM. EMC needs to keep the governments involved and excited about the potential for EV's in all areas of Canadian society.</p> <p>Some specific evTRM activities will include:</p> <ul style="list-style-type: none"> ▪ Communicating the results of the evTRM Implementation process to government agencies for required actions on their part. ▪ Proposing partnerships between different levels of government to accomplish evTRM objectives. ▪ The preparation of a policy document on the benefits of EVs and the role of government and private sector in the implementation of the necessary initiatives. This document will serve many purposes including use by lobbyists currently retained by some members and working at the federal or provincial government levels. <p><i>Additional resources required are covered through item 1 above as well as core and communications activities identified in item 3.</i></p>	All goals
3	<p>Communications Activities</p> <p>A key EMC goal for 2010 is to increase the effectiveness of its communications internally and externally to increase benefits to its members and to also generate new members. The message of electric mobility is complex and needs to be continuously spread through effective and easily understood communication pieces. More specifically, EMC's communication activities need to focus on:</p> <ul style="list-style-type: none"> ▪ The Canadian EV industry capacity ▪ The benefits of EV's ▪ The need for specific measures to accelerate the use of EVs in Canada. <p>These messages needs to be delivered forcefully using various media and aimed at the general public, policy makers and the EMC membership.</p> <p>EMC will also seek the collaboration of its members in the dissemination of its communication products.</p>	1,5,7, 8

Activity #	Description	Contributes to Goals
	<p>A part-time Communications Coordinator will be retained to coordinate the following activities.</p> <p><i>Additional resources required - \$50,000 as included in the budget.</i></p>	
<p>3.1</p>	<p>Newsletter</p> <p>The monthly newsletter from the Executive Director will be improved in the following areas:</p> <ul style="list-style-type: none"> • Members will be further encouraged to provide news on their key initiatives. • Other news, particularly on government policies and programs of interest to our members will be given broader coverage. <p><i>Additional resources required covered in item 3 above.</i></p>	
<p>3.2</p>	<p>Backgrounders</p> <p>In order to more actively engage our members, EMC will seek various EMC member authors to draft at least 4 additional backgrounders in 2010. Outlines of these backgrounders will be circulated in draft form to the membership for comments and input. Once finalized and approved, these backgrounders will be given wide circulation to our members and appropriate policy makers in need of awareness on EV issues. They will also be placed on our web site in a prominent location.</p> <p>Possible new topics include:</p> <ul style="list-style-type: none"> • How new and improved batteries (energy storage technologies) will contribute to the growth of EVs. • How EVs can meet the transportation needs of Canadians. • The role of EV's in achieving sustainable transportation in Canada. • Information to potential buyers of EV's. • Information about EV's to emergency response personnel so they can deal with evacuation procedures in a safe manner to themselves and the occupants. <p><i>Additional resources required: covered in item 3 above.</i></p>	
<p>3.3</p>	<p>Media Relations</p> <p>Resources will be devoted to opening an account with a Canadian based media relations service operating at the</p>	

Activity #	Description	Contributes to Goals
	<p>national level and in both official languages for the distribution of press releases as required throughout the year. This will be supplemented by two key activities:</p> <ul style="list-style-type: none"> • The identification of media personnel in major cities with an interest in electric mobility and in transportation issues in general. • Seeking the involvement of our members in distributing press releases and other information to their local media sources. This will include coaching tips on how to deal with the media. <p>EMC will seek to be involved in the hosting of media events by its members announcing demonstration or other projects.</p> <p><i>Additional resources required: covered in item 3 above</i></p>	
<p>3.4</p>	<p>Web site</p> <p>Additional resources will be devoted to ensure that our web site is maintained and continues to improve both in content and style. The web site has to be a tool regularly used by members, media, general public and be an important tool to meet the overall EMC communication objectives.</p> <p>A key development will be to incorporate a password accessible 'Members Only' section in which information only available to members will be available. Such a section will show particular value to being members of EMC and will include:</p> <ul style="list-style-type: none"> ▪ Conference proceedings ▪ Minutes of Annual General Meetings, Board of Directors meetings and Committee meetings. ▪ Presentations made by EMC to other organizations ▪ Job offers ▪ Other items to be determined. <p><i>Additional resources required: covered in item 3 above</i></p>	
<p>3.5</p>	<p>Update of Directory of Electric Mobility Resources in Canada</p> <p>This directory was first published in early 2009 with a grant from Natural Resources Canada, the National Research Council and the Canadian Space Agency. Some of the existing information contained therein needs updating and many new entries need to be made. The directory needs to be regularly updated and made available to potential clients and decision</p>	

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	<p>makers. EMC proposes to place this directory on line as a live document allowing listed entries to update their information on line with appropriate safeguards. If it works well, it can also be designed to replace the existing EMC membership directory.</p> <p><i>Additional resources required: covered in item 3 above</i></p>	
<p>3.6</p>	<p>Speaking and/or exhibiting at other events</p> <p>EMC will actively secure speaking engagements for its staff and volunteer leaders at national and regional events where the delivery of the EV message will benefit the EMC membership. The targeted events will include:</p> <ul style="list-style-type: none"> • National and provincial meetings of municipal politicians. • National and regional events of fleet managers. • National and provincial electrical energy providers • Globe 2010 • EVS 25 in China • (others) <p><i>Additional resources required: covered in item 3 above</i></p>	
<p>4</p>	<p>Events</p>	<p>1,3,5,6,8</p>
<p>4.1</p>	<p>Globe 2010 Event in Vancouver</p> <p>At this prestigious global event, EMC will consider organizing a booth at which its members could distribute their literature and services.</p> <p><i>Additional resources required: This will be designed as a self-supporting event and will only be done if there is sufficient interest by members.</i></p>	
<p>4.2</p>	<p>EV 2010 VÉ – Electric Vehicles/Véhicules Électriques and Trade Show.</p> <p>The key event for EMC in 2010 will be the national Conference being planned for September 13 to 16, 2010 in Vancouver. This event will benefit from the successful PHEV 09 conference and trade show held in Montreal and is planned to draw 450 delegates plus exhibitors.</p> <p><i>Additional resources required: This event is expected to attract enough financial sponsors to support the personnel and resources required to plan and execute such a large event.</i></p>	
<p>4.3</p>	<p>Electrical Vehicle Symposium in China (EVS 25)</p> <p>Given that the key EV players from around the globe will be at the EVS 25 event in Shenzhen China, November 5 to 9, 2010,</p>	

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	<p>EMC is working on the organization of a ‘Canadian presence’ at this event that would allow its industry members to connect with their potential clients and partners worldwide.</p> <p>EMC has opened dialogue with the Automotive Parts Manufacturers Association (APMA) to seek their collaboration in organizing such an event. APMA has experience in this area and the needed resources to plan and execute the complex process involved. APMA has expressed an interest in taking the lead to organize this ‘Canadian presence’ with EMC in a supportive role. Discussions between EMC and APMA are on-going.</p> <p><i>Additional resources required: (to be designed as a self financing event)</i></p>	
5	<p>Students</p> <p>As noted in the Technology Roadmap project, it is critical that students at all levels, particularly at the university level, be informed of technological and other developments in electric mobility. Allowing them in the ranks of EMC through a special membership category would contribute significantly to this objective. Accordingly, EMC has approved a special membership fee for students and will promote their involvement in some of its key activities.</p> <p><i>Additional resources required: covered in the items above</i></p>	1,2,5,6,8
6	<p>Membership Development</p> <p>EMC is encouraged with the recent growth in membership and will continue to market its products and services to the nearly 200 additional potential members that have been identified. The Communications and Membership Development Committee, EMC will develop strategies involving existing members in the recruitment of new members.</p> <p><i>Additional Resources Required: (none)</i></p>	1,6,7

4. Membership Structure and Fees

The membership categories and fees detailed in Table 3 were approved by the Board of Directors for the year 2010. The fees are an important part of the budget necessary to

support the proposed strategic activities. A full budget was approved by the Board and is available to members on request.

EMC recognizes the many In-Kind services received from its members and is looking to increase these in 2010

Table 3 – Membership Categories and Fees approved by the Board of Directors on November 17, 2009

#	Membership Categories	Annual Fees 2009	Proposed Fees for 2010 – 20%	Notes
VOTING MEMBERS				
1	INDUSTRY (Private sector companies engaged in the sale or distribution of vehicles or components or the delivery of professional services)			
1.1	New small companies incorporated in the past 2 years	300.00	300.00	
1.2	Up to 50 employees	750.00	900.00	
1.3	51 to 100 employees	1,500.00	1,800.00	
1.4	101 to 500 employees	2,200.00	2,640.00	
1.5	More than 500 employees	3,000.00	3,600.00	
2.	ENERGY PROVIDERS			
2.1	Municipal level – up to 100,000 subscribers	750.00	900.00	
2.2	Municipal level – over 100,000 subscribers	1,500.00	1,800.00	
2.3	At the provincial level	3,000.00	3,600.00	
3.	END USERS (i.e. fleets from private sector companies, government agencies and others)			
3.1	Less than 50 vehicles	750.00	900.00	
3.2	51 to 100 vehicles	1,500.00	1,800.00	
3.3	101 to 500 vehicles	2,200.00	2,640.00	
3.4	Over 500 vehicles	3,000.00	3,600.00	
4	NOT FOR PROFIT ORGANIZATIONS (Associations, Societies, Research Centres, Labour organizations)			
4.1	Annual budget under \$500,000	400.00	480.00	
4.2	Annual budget over \$500,000	700.00	840.00	
NON VOTING MEMBERS				
5	SUPPORTERS (students, academics, or individuals not part of above categories)	150.00	180.00	To include students
6	ASSOCIATE MEMBERS (Government departments or agencies at the federal, provincial and municipal levels)	3,000	3,600.00	