



CITY OF VANCOUVER

ADMINISTRATIVE REPORT

Report Date: January 12, 2007
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TO: Vancouver City Council
FROM: General Manager of Engineering Services
SUBJECT: Plug-In-Partners, Hybrid Electric Vehicles

RECOMMENDATION

THAT Council approve that the City of Vancouver join the group 'Plug-in-Partners' in support of the development of electric vehicles.

COUNCIL POLICY

March 25, 2003: Council approved emissions reduction target of 20% below 1990 levels for the Corporation of the City of Vancouver. Vehicle emission reductions are a part of that plan.

March 29, 2005: Council approved the Community Climate Change Action Plan. The plan targets that 40% of emissions reductions will come from adoption of new engine technologies, fuel solutions, and vehicle operator practices.

PURPOSE

The purpose of this report is to seek Council approval to join Plug-in-Partners; a U.S. based grass-roots initiative to demonstrate to automakers that a market for flexible-fuel Plug-in Hybrid Electric Vehicles (PHEV) exists today.

DISCUSSION

There is no single driving technique, vehicle technology, or fuel solution available that can solve all of our local carbon and emission challenges in the near future. Therefore, the City is pursuing a range of preferred solutions to ensure the largest improvement within the City fleet, private commercial fleets and personal use vehicles that operate within the city.

Electric based vehicles (e-mobility) are one possible low carbon solution that the City is investigating. The Sustainability Group (SG) is supporting future e-mobility demand by exploring pre-planned charging infrastructure (including ensuring codes and standards are in place) and by pursuing pilot programs as new e-mobility solutions are introduced.

The SG has also developed external relationships to expedite the planning process and to ensure best practices. Some examples of organizations the SG is engaging with include: The Vancouver Electric Vehicle Association, BC Hydro, BC Transit (Clean Vehicle group) along with broader stakeholders groups like the Canadian Electric Association, Electric Mobility Canada, as well as vehicle makers.

One of the largest barriers to e-mobility is the lack of production electric vehicles. Recent successes with hybrid vehicle launches and new developments with advanced storage batteries (i.e. Lithium Ion) have created new opportunities for electric vehicles. A number of automakers have indicated that they are now developing commercial versions of Plug-in-Hybrid Electric Vehicles (PHEV) that could be available in a few years, assuming there is growing demand for this vehicle technology solution. Theoretically, PHEV's can run for longer periods of time with zero emissions because of a larger battery pack that can be re-charged by plugging into any standard 110V/15amp circuit.

Recently the SG engaged in a dialogue with the American based group Plug-in-Partners (<http://www.pluginpartners.org/>). The City of Austin, through its municipal electric utility Austin Energy, is the founding member. More than half of the 50 largest U.S. cities have joined over the last year. Those cities include Los Angeles, Portland, Seattle, Boston, Dallas, Chicago, Denver and Phoenix. The goal of this grass-roots initiative is to demonstrate to automakers that a market for PHEV's exists today.

The Partnership has not actively looked for partners outside of the US but they have expressed interest in having Vancouver join the partnership.

The benefits of becoming a member soon include:

- Access to valuable technical and infrastructure support information about PHEVs to assist us in planning for when the vehicles are available.
- Becoming a Canadian leader in pursuit of low carbon vehicle solutions for our community.
- Driving demand for low carbon vehicles in support of the City's Community Climate Change Action Plan.
- Publicizing that the City of Vancouver is their first international partner (subject to review by Corporate Communications)

FINANCIAL IMPLICATIONS

There is no cost to join the Partnership. There is also no requirement to place 'soft' orders with vehicle makers. For the purposes of this report 'soft order' is defined as: *an indication that if plug-in-electric vehicles were available, the City would give their purchase serious consideration.*

Equipment Services may decide to place soft orders at some later date, to further drive demand, if it can be shown that there is a specific need for these vehicles in the City fleet and that costs are within budget.

CONCLUSION

There are a number of barriers in the way of full commercialization of PHEV, but the City's participation can help remove some of these barriers. Vancouver is well positioned to be a leader in e-mobility with our renewable sources of electricity and dense urban centre. Joining the Plug-in-Partnership is a small but strategic step to help drive demand for e-mobility as part of a broader vehicle electrification planning process.

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