

CITY COUNCIL STUDY SESSION ITEM

SUBJECT

Briefing on Bellevue's Electric Vehicle Infrastructure efforts

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POLICY ISSUES

Commercial rollout of highway approved, family sized all electric vehicles (EVs) is expected in our region in December, 2010. There has been an increasing amount of associated activity around EVs. Two large federal grants are supporting the installation and study of EV infrastructure in our region. Second Substitute House Bill 1481 mandates certain local government actions "to encourage the transition to electric vehicle use and to expedite the establishment of a convenient, cost-effective, electric vehicle infrastructure." A federal bill was recently introduced to support EV infrastructure. With this increasing activity, policy questions are arising that will need to be addressed over the course of the next year. This briefing is intended to provide an overview to Council on Bellevue's EV efforts.

DIRECTION NEEDED FROM COUNCIL

Action
 Discussion
 Information

BACKGROUND/ANALYSIS

Wide spread adoption of electric vehicles would present multiple public benefits. With zero tailpipe emissions, EVs produce significantly less air pollution and greenhouse gas emissions than petroleum burning vehicles. Additionally, rapid growth in EV related industries, a significant portion of which involve the high tech sector, presents key economic development opportunities for our region. A significant migration to EVs could also reduce dependence on petroleum, with the associated economic stability and national security benefits. Lastly, when smart grid technologies are integrated with EV usage, efficiencies will be realized in the electricity market. EVs are expected to be priced competitively with comparable gasoline powered vehicles (and to be even more competitive for consumers who can take advantage of the \$7,500 federal tax incentive). Further, they require little change in consumer behavior.

Despite this broad range of potential benefits, successful deployment and market penetration will depend upon cooperation across sectors. Key roles of the public sector include (1) establishment of fast and easy permitting and inspection processes for the installation of charging infrastructure, (2) support for the development of a readily and easily accessible network of charge spots throughout the community, and (3) market support through fleet purchases. An additional function for the public sector is to ensure that sufficient communication and coordination occurs among stakeholders to ensure that investments are fully leveraged, and that other decisions (e.g. those relating to technologies, point-of-sale systems, communication protocols, etc.) are aligned.

Staff will provide Council with details of current Bellevue and regional efforts, which include:

- Review of electrical permitting processes and capabilities to ensure safe and efficient service delivery when needed;
- Development of code revisions to comply with Second Substitute House Bill 1481;
- Development of internal organizational policy regarding charging stations;
- Membership, along with King County, Puget Sound Clean Air Agency/ Clean Cities, City of Seattle, and WSDOT, in the ad-hoc EV Steering Committee, the goal of which is to ensure that regional efforts are coordinated and investments are leveraged;
- Collaboration with two federal grant recipients (ECOtality (formerly eTec) and Coulomb Technologies) for inclusion of Bellevue in the boundaries of their pilot projects;
- Involvement in technical working groups (the Model Code and Guidance workgroup being lead by the Puget Sound Regional Council and the ECOtality technical advisory committee);
- Coordination with the State Department of Commerce on the tri-state I-5 Alternative Fuels Corridor project; and
- Allocation of a portion of our federal Energy Efficiency and Conservation Block Grant to the installation of electric vehicle charge spots.

Staff will continue to stay abreast of developments in this arena and update Council as appropriate.

ALTERNATIVES

N/A

RECOMMENDATION

N/A

ATTACHMENT(S)

None

AVAILABLE IN COUNCIL OFFICE FOR REVIEW

None