General Motors LLC

Priorities

General Motors LLC (GM) appreciates the opportunity to provide input on the use of funding in the state's Environmental/Beneficiary Mitigation Plan and would like to encourage Washington to use the maximum allowed 15% of the fund (equating to nearly \$17 million) to increase the availability of critically-needed electric vehicle (EV) charging stations. There are currently over 26,000 EVs registered in Washington, and in order to grow the EV market and attract even more advanced transportation technologies to the state, such as self-driving EVs, Washington needs to invest in a charging infrastructure network that addresses consumer and industry concerns.

Automakers have made enormous investments in the electrification of transportation – GM alone has invested billions of dollars to develop electrification technologies, including the state-of-the-art Chevrolet Volt and Chevrolet Bolt EV, which has swept the industry's most prestigious car awards, including North America Car of the Year, Motor Trend's® 2017 Car of the Year, MotorWeek's 2017 Drivers' Choice "Best of the Year" Award, and Green Car Journal's Green Car of the Year. The Bolt EV is the industry's first affordable, long-range EV with an EPA estimated range of 238 miles-per-charge. This advanced technology will require more widespread charging infrastructure to convince consumers that EVs can be driven anywhere they need to go. Thus the urgency to rapidly expand EV charging infrastructure in Washington.

While the majority of all EV charging today is done at the home, there are still critical infrastructure needs not met by single-family home charging. And to maximize the impact of limited state funds, it is important to invest strategically. GM would prioritize today's key infrastructure needs as follows:

- 1. Highway corridor DC fast-charging most visibly inspires consumer confidence in the driving range, and practicality, of EVs. A 2016 survey of 2,500 consumers by Altman Vilandrie & Company found the top reason customers gave for not wanting to purchase a plug-in electric vehicle was a perceived lack of charging stations (85%). Highly visible corridor EV charging (SAE industry standard) on key, high-volume routes can help address this consumer perception issue.
- 2. Workplace EV charging creates an EV "showroom" that very effectively grows EV awareness among corporations, and employees of these corporations. According to US DOE data, workplace charging results in employees 6X more likely to purchase an EV than employees at companies not offering workplace charging.
- 3. Multi-unit dwelling EV charging provides an important opportunity to expand EV adoption to consumers residing in townhomes, condominiums, and apartments, who may not have access to a "home" charger every evening. This is currently an untapped segment of potential EV buyers. This need can be met by Level 1 or Level 2 charging directly at the multi-unit dwellings, or by neighborhood DC fast-charge hubs that can serve these residents.
- 4. Public EV charging at key destinations is also important to increase the practicality of EVs and the number of places an EV can go, with a special focus on destinations typically outside a consumer's normal daily driving patterns (e.g. airports, hotels, resorts, etc.).

We appreciate the work that has gone into the development of the proposed plan. We were pleased to see that accelerated adoption of electric vehicles is listed as a priority and EV charging stations are identified as a key opportunity. To that end, we support the proposed allocation of 15% of funds to light duty zero emission vehicle supply equipment. By enabling growth in the EV market, EV

charging infrastructure investments can help achieve long-lasting emissions reductions and related benefits that increase over time as the market expands. Additionally, Washington's low electricity prices mean that electric vehicles can be an important economic driver for the state.

Washington can further increase the impact of these investments by engaging industry. We recommend coordinating efforts with Electrify America, which is planning a national highway corridor network. And we encourage the state to directly engage electric utilities in the strategic planning of EV infrastructure to ensure the most cost-effective and grid-responsible EV charging solutions. Utilities can also play an important role in outreach and education to support the "transformational change" that is called for in the proposed plan.

The Environmental Mitigation Trust is an opportunity to invest in forward-looking infrastructure that lays a much-needed foundation for EV market growth and will help attract even more advanced transportation technologies to Washington. GM greatly appreciates Washington's commitment to support the strategic transition to transportation electrification and all efforts to help drive this emerging market.

Sincerely,

Britta K. Gross, Director Advanced Vehicle Commercialization Policy

Mitigation fund allocations

General Motors LLC (GM) appreciates the opportunity to provide input on the use of funding in the state's Environmental/Beneficiary Mitigation Plan and would like to encourage Washington to use the maximum allowed 15% of the fund (equating to nearly \$17 million) to increase the availability of critically-needed electric vehicle (EV) charging stations. There are currently over 26,000 EVs registered in Washington, and in order to grow the EV market and attract even more advanced transportation technologies to the state, such as self-driving EVs, Washington needs to invest in a charging infrastructure network that addresses consumer and industry concerns.

General comments

December 18, 2017

Brett Rude Department of Ecology Air Quality Program P.O. Box 47600 Olympia, WA 98504-7600

Subject: GM Comments on Washington's Proposed VW Beneficiary Mitigation Plan

General Motors LLC (GM) appreciates the opportunity to provide input on the use of funding in the state's Environmental/Beneficiary Mitigation Plan and would like to encourage Washington to use the maximum allowed 15% of the fund (equating to nearly \$17 million) to increase the availability of critically-needed electric vehicle (EV) charging stations. There are currently over 26,000 EVs registered in Washington, and in order to grow the EV market and attract even more advanced transportation technologies to the state, such as self-driving EVs, Washington needs to invest in a charging infrastructure network that addresses consumer and industry concerns.

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GENERAL MOTORS

Britta K. Gross Director Advanced Vehicle Commercialization Policy Environment, Energy & Safety Policy

> General Motors Global Headquarters MC: 482-C30-C76 300 Renaissance Center Detroit, MI 48265-3000

December 18, 2017

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