October 17th, 2022

This public comment was written in response to proposed rule revisions by the Washington State Department of Ecology (Ecology) to Chapter 172-423 WAC, the Clean Vehicles Program.

I think that the Washington legislature was wise to direct the Department of Ecology to adopt California’s Advanced Clean Cars II rules, as they will help boost the adoption of electric vehicles (EVs) in the state of Washington. The adoption of EVs is crucial as it will contribute to reducing air pollution and carbon emissions from the transportation sector. However, the mass adoption of EVs will still be an immense [burden](https://www.wired.co.uk/article/lithium-batteries-environment-impact) on the global environment and on Washington’s electrical demand. Unfortunately, the transition to EVs is not a climate change or environmental panacea.

In addition to EV adoption, Washington residents need to drive less. 20% less, at least, according [to one study](https://rmi.org/our-driving-habits-must-be-part-of-the-climate-conversation/). That will require agencies like the Department of Ecology to adopt other rules that actually encourage the use and expansion of mass transit, walking, biking, and perhaps most promisingly, e-biking. After all, in 2017, 35% of car trips in the United States were [less than two miles](https://nhts.ornl.gov/vehicle-trips), and 53% of trips were less than four miles. A two-mile e-bike ride can be leisurely completed in about ten minutes, while a four-mile ride can be done in about twenty. I recognize e-biking may not be an adequate option for everyone, but it could be for a lot of people with the right infrastructure in place. In combination with improved transit, e-bikes could drastically reduce overall vehicle miles travelled.

Additionally, despite the critical importance of adopting EV’s for greenhouse gas reductions, their adoption will do nothing to address the [air pollution from tire emissions](https://www.autoweek.com/news/industry-news/a40205475/tires-pollute-more-than-tailpipes-report-claims/). Particulate matter from tire wear is [ubiquitous and hazardous to human health](https://ww2.arb.ca.gov/resources/documents/brake-tire-wear-emissions). It consists of PM 2.5 and PM 10 that contain hazardous microplastics and chemical compounds. And because EVs are heavier and provide more torque than gas-burning cars, they cause more tire-wear. I crossed an I-5 bridge everyday walking to school last year. Who knows how inhaling those microplastics has affected my long-term health? EVs will do nothing to change that element of air pollution for those who live near or walk and bike near highways.

With this in mind, I believe that the adoption of California’s vehicle code does not go far enough. Ecology is not limited by the legislature in adopting only California’s vehicle emission standards. Instead, Ecology can and must go further. As the legislature acknowledges, “[m]otor vehicles are the largest source of air pollution in Washington. Transportation contributes about 22 percent of total air pollution and **45 percent of greenhouse gas emissions throughout Washington.**” The threat of climate change is imminent and existential, and Washington needs to do its part to reduce emissions now—regardless of what other states and countries are doing.

 Ecology should issue stricter rules and regulations that encourage alternative modes of transportation including mass transit, walking, and biking. What might these look like? I’m not exactly sure. But here’s an example of a program that Ecology might be able to incentivize through rulemaking: at the University of Washington, the campus’s mail fleet [is now composed of electric assisted cargo bikes](https://green.uw.edu/blog/2018-11/delivering-difference-mailing-services-uses-e-bikes-move-mail-uw). These have proven to be safer, faster, and significantly cheaper than the trucks the mail service had used previously. If electric cargo bikes can be effectively used to do routine parcel delivery service, why are they not being included or discussed in a rulemaking process about clean vehicle standards?

The emphasis on “clean vehicles” will always be incomplete without a full analysis of Washington’s transportation system. While I support this rulemaking, I would like to see Ecology push to get rules in place that help improve mass transit, encourage e-bike adoption, install protected bike lanes, or make streets safer for pedestrians. Such actions might actually provide Washington residents with safe alternatives to driving, and help the state reach its greenhouse gas emissions targets.

Sincerely,

Michael Burley