

# Montana Taxing of High Efficiency Light Vehicles: The Realities of HB 60

Testimony to Transportation Interim Committee meeting March 13, 2024 by Nick Shrauger, Bozeman

## Introduction

In 1975 the Federal Government required U.S. vehicle manufacturing to meet higher efficiency standards to reduce gasoline consumption. These standards, known as Corporate Average Fuel Economy (CAFE), are administered by the National Highway Traffic Safety Administration (NHTSA). They regulate how far vehicles must travel on a gallon of fuel. CAFE standards have currently increased the average efficiency of light vehicles to 25 MPG and continue to be revised to require more efficiency in the future.

Beginning in 1919 states began charging vehicle owners a milage tax to help pay for transportation infrastructure. A simple method to collect taxes was (and is) to use each gallon of gas sold as a proxy for miles driven. More miles driven means more gas purchased, and more tax collected!

At the present time, the collection of taxes on fuel is failing even as the number of vehicles using our transportation infrastructure is increasing. More vehicles require more need for construction and maintenance dollars. The Montana per-gallon road tax supplies approximately 18% of Montana transportation funding. This small but necessary part of transportation funding is failing because of the increasing number of high efficiency gas and electric vehicles that are using Montana roads. It is important to know that now, and for several years in the future, the number of high efficiency light gas vehicles greatly out number high efficiency electric vehicles. In other words, in Montana more gallons of avoided gas purchases are due to gas vehicle efficiency than is caused by electric vehicles which do not use gas.

Vehicle efficiency (miles per gallon or MPG) has long been a major attribute considered by consumers. Consumers are increasingly choosing high efficiency vehicles, both gas and electric. The April 2024 issue of Consumer Report (p30) list ten high-efficiency, light gas vehicles as "The Best Buys Right Now". Their average transactional price is \$23,942. Their average efficiency is 35 MPG. Even though yearly sales of electric vehicles are increasing it will be many years before the number of electric vehicles matches the number of gas vehicles in Montana.

## The Reality of HB 60

Improvements in vehicle propulsion batteries has allowed development and increased sales of Electric Vehicles (EV). The Montana Legislature passed HB 60 to require electric vehicle owners to "pay their fair share" since fully battery electric vehicle (BEV) owners were not purchasing gallons of gas and thus not paying for road usage.

I agree that owners should pay for electric vehicle road use based on vehicle efficiency and miles driven. I submit that HB 60 is discriminatory and not equitable. Here is my assessment.

### Discrimination

HB 60 enacts a flat fee tax on BEV owners which is not based on individual vehicle efficiency and miles driven. This fee is collected even if EVs are not driven. In contrast, high-efficiency gas vehicle owners pay no tax unless vehicles are driven.

Gas vehicle owners also choose vehicles based on efficiency. Choosing a vehicle of high-efficiency means fewer gallons purchased thus less tax paid. High-efficiency gas vehicles put miles on the roads that are not taxed.

HB 60 discriminates between owners of BEVs and owners of gas vehicles. Montana consumers should not have to experience a discriminatory tax.

### Equitability

HB 60 is not equitable. It is not based on individual vehicle efficiency and miles driven and thus overtaxes BEV owners.

Below is a spread sheet which calculates EV tax liability based on actual, average efficiency and miles driven for 4 BEV registrations in Montana. Energy is used as a common parameter for these calculations. (The Environmental Protection Agency -EPA- has determined that the energy in one gallon of gas is equivalent to 33.7 kWh of electric energy.)

The equitable BEV tax liability of these 4 vehicles is calculated and subtracted from the \$130 HB 60 fee to show individual vehicle HB60 overtax payments. These payments range from \$92.80 to \$118.96.

## Recommendation

I ask this committee to submit to the 2025 legislature a revision of HB 60 that will remove discrimination and reduce overtaxing for both gas and electric high-efficiency vehicle owners. I ask this in the spirit of non-discrimination and equitability for Montana consumers who purchase high-efficiency gas and electric vehicles.

Comparing HB 60 fee to Actual BEV tax liability based on vehicle efficiency and miles driven								
Based on actual BEV efficiency and mileage								
					State Tax			
Montana pump tax for 1 gallon of regular gas is					\$ 0.3275	per gallon	Nick Shrauger	
							12-Mar-24	
EPA Electric Energy equivalent in one eGallon =					33.7	kWh		
<b>Electric Fee not supported by individual EV efficiency and annual electric vehicle road miles driven</b>								
MFG	Model	HB 60 FEE	AVR Eff Miles/kWh	Annual Electric miles on Montana roads	Annual EV Fuel kWh	Equivalent Gas Energy (eGallons)	EV Equitable Tax based on electric miles driven	HB 60 Overtax amount: HB60 Fee - Equitable Tax Equals Over tax paid
Any		\$130	Any	0	0	0	0	\$ 130.00
Toyota	BZ4X	\$130	3.2	12,250	3828	113.59	\$ 37.20	\$ 92.80
Tesla	3	\$130	4.4	5,000	1136	33.72	\$ 11.04	\$ 118.96
Chev	Bolt	\$130	3.9	8,000	2051	60.87	\$ 19.93	\$ 110.07
KIA	EV6	\$130	3.5	13,000	3714	110.22	\$ 36.10	\$ 93.90
<b>Calculation of avoided gas tax liability of a high efficiency gas vehicle 35 PMG vehicle to the 25 MPG EPA Average</b>								
If driven 8,000 miles a 35MPG high efficiency gas car would use 229 gallons of gas (8,000 mi/35 mpg).								
The average 25 MPG gas car would require 8,000/25 = 320 gallons to cause the same amount of wear and tear.								
The high efficiency vehicle saved 320-229 = 91 gallons and avoided 91 X \$.325 = \$29.80 of gas tax.								
The avoided tax liability on the gas car is \$29.80. The tax equitable tax liability on the Bolt is \$19.93.								
<b>HB 60 requires the Bolt owner to pay \$130 for an avoided tax liability of \$19.93.</b>								
<b>HB 60 does not require high efficiency gas vehicle owner to pay their fair share of \$28.80 for untaxed miles of road use</b>								