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Department of
General Services



Annual Report on Energy-Efficient Purchasing

Fiscal Year 2019-2020

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PROCUREMENT REQUIREMENTS

Procurement of energy-efficient motor vehicles is mandated by Tennessee Code Annotated § 4-3-1109, which requires the following:

- Each year, every effort should be made to achieve a target goal that one hundred percent (100%) of newly purchased passenger motor vehicles be energy-efficient or alternative fuel motor vehicles.
- The department shall ensure that at least twenty-five percent (25%) of newly purchased passenger motor vehicles procured for use in areas designated by the United States Environmental Protection Agency (EPA) as nonattainment areas shall be hybrid electric vehicles or vehicles powered by natural gas; provided that such vehicles and fueling infrastructure are available at the time of procurement and such vehicles are purchased at competitive prices. In the event that such vehicles or fueling infrastructure is not available at the time of procurement, the department may instead meet this mandate by procuring compact fuel-efficient vehicles.
- In areas not designated by the EPA as nonattainment areas, the department shall ensure that at least twenty-five percent (25%) of newly purchased passenger motor vehicles are hybrid electric vehicles, vehicles powered by natural gas, or compact fuel-efficient vehicles; provided, that such vehicles are purchased at competitive prices.

As of December 2020, the only area designated by the EPA as nonattainment in Tennessee is Sullivan County. Source: <https://www3.epa.gov/airquality/greenbook/ancl.html#tn>

T.C.A. § 4-3-1109 defines a passenger motor vehicle as a motor vehicle designed for carrying six (6) or fewer adult passengers and used for the transportation of persons; provided, that vans, including cargo vans, trucks, sport utility vehicles, and police pursuit vehicles shall not be considered passenger motor vehicles.

T.C.A. § 4-3-1109 further defines an energy-efficient motor vehicle as a passenger motor vehicle that is:

- An alternative fuel vehicle as defined by the Energy Policy Act of 1992 (Public Law 102-486);
- A flexible fuel vehicle (FFV) utilizing ethanol, biodiesel, or any other commercially available alternative fuel approved by the United States Department of Energy;
- A hybrid electric vehicle (HEV);
- A compact fuel-efficient vehicle, defined as a vehicle powered by unleaded gasoline that has a United States EPA estimated highway gasoline mileage rating of at least twenty-five miles per gallon (25 mpg) or greater for the model year purchased;
- An electric vehicle (EV);
- A vehicle powered by natural gas; or

- A vehicle powered by ultra-low sulfur diesel fuel that meets Bin 5, Tier II emission standards mandated by the EPA and that has an EPA estimated highway mileage rating of at least thirty miles per gallon (30 mpg) or greater for the model year purchased.

REPORTING REQUIREMENTS

In accordance with T.C.A. § 4-3-1109, this report provides information on the procurement of energy-efficient motor vehicles for fiscal year 2020. The code requires information to be compiled and maintained on the nature of passenger motor vehicles that are owned by the state, including the number of passenger vehicles purchased during the fiscal year categorized by energy efficiency and the number of passenger motor vehicles owned as of June 30 of each year categorized by energy efficiency.

Additionally, in accordance with T.C.A. § 4-3-1109, the report shall include:

- Problems or concerns the state may have experienced in meeting the target goal set relative to obtaining such energy-efficient motor vehicles;
- Any savings or increased expenditures to the state in the purchase of, as well as the operation and maintenance cost of, such motor vehicles;
- Plans for integrating energy-efficient motor vehicles into the state passenger motor vehicle fleet;
- The volume of gasoline or diesel displaced by the usage of energy-efficient or alternative fuel vehicles; and
- The emissions reduction achieved by the usage of energy-efficient or alternative fuel vehicles.

VEHICLE AND ASSET MANAGEMENT ANALYSIS

State of Tennessee Fleet

As of June 30, 2020, the state owned 377 energy-efficient passenger motor vehicles. All vehicles in the category are either electric or fuel-based, with all fuel-based vehicles owned achieving at least 25 MPG highway. Below are some subcategories within the total:

Energy Efficient Category	Number of Vehicles
Flex Fuel (FFV)	152
Hybrid	2
Electric	5
>25 MPG Highway	218
	377

FY 2020 Acquisitions

During fiscal year 2020, the state purchased 12 passenger vehicles, all of which were energy efficient. The following table lists the make and models purchased.

Vehicle Description	Number Purchased
Toyota Camry	5
Ford Fusion	7
TOTAL	12

Additional Information

- In recent years the United States Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA) have established fuel economy standards for light-duty passenger vehicles that require manufacturers to meet stringent fuel economy standards. As a result, Vehicle and Asset Management (VAM) will continue to meet the goal of 100% procurement of energy-efficient passenger motor vehicles. As a result of these requirements, there are not comparable models to use to estimate emissions reductions achieved by using energy-efficient vehicles over non energy-efficient vehicles.
- Since most vehicle manufacturers are reducing their number of flex fuel vehicle (FFV) offerings and rapidly developing full electric vehicles (EVs), the current focus is on an effective EV implementation as all manufacturers are increasing their offerings. Budget restrictions due to the pandemic will determine the pace of widescale EV implementation due to the required infrastructure.