

# Policies Affecting Electric Vehicles in the U.S.

MIT Electric Vehicle Team, April 2008

## Incentive laws

There are a number of federal laws that make the use of Alternative Fuel and Advanced Vehicles preferable to the consumer. The Energy Policy Act of 1992 laid down many of the guidelines for such vehicles, including the definitions of Alternative Fuel Vehicles (AFVs). It expounds on the benefits of these vehicles and explains how use of them will minimize the US's dependency on foreign oil as well as minimize environmental harm.

### Federal/State

The US government has passed a number of bills to promote the use, purchase, and sale of Hybrid Electric Vehicles, Plug-In Hybrid Electric Vehicles and full function battery electric vehicles. All but two states have such laws. California is, by far, the leader in AFV incentive laws.

- 1) *Private Incentives* – Many states offer consumer discounts for buying or leasing Zero Emission Vehicles (ZEVs) and AFVs. Insurance discounts and parking discounts are also given.
- 2) *Research and Development Incentives* – The US government funds alternative fuel research, development and programs that work to further EV and AFV technologies.
- 3) *Program Grants* – Federal and State governments offer grants for projects and organizations such as the “Lower-Emission School Bus Grant.” This gives monetary and organizational support to AFV proliferation and improvement projects.

### Massachusetts

Massachusetts offers no incentives for the consumer or the research/development of AFVs.

Go to the following website for information about other states:

[http://www.eere.energy.gov/afdc/fuels/electricity\\_laws.html](http://www.eere.energy.gov/afdc/fuels/electricity_laws.html)

## State laws and regulations

Most states have laws that set goals for the inclusion and proliferation of AFVs in government funded programs and institutions. The objective of these laws is to increase the use of AFVs over the course of the next couple of years.

### Federal/State

- 1) States must reduce emissions by a certain amount. Use of AFVs is encouraged.
- 2) States must have a certain percent of ZEVs, often increasing by year for a gradual introduction of AFVs. This is often aimed towards certain organizations and fleets of vehicles.

### Massachusetts

Massachusetts AFV regulation: 75% of vehicles purchased by the Massachusetts Department of Procurement and General Services must be the cleanest AFVs available. 10% must be zero emission vehicles. This law was derived from the Energy Policy Act of 1992 (EPAAct)

## **Categorization**

### *Low Speed Electric Vehicles (Neighborhood Electric Vehicles, NEVs)*

Four-wheeled motor vehicles weighing less than 1800 pounds and capable of a maximum speed of 25mph. These vehicles are limited to roads with a speed limit of 35mph or less.

### *Medium Speed Electric Vehicles (MSEVs)*

Similar to NEVs, but are permitted to travel at a maximum of 35mph and can drive on roads with a speed limit of 45mph or less. Montana was the first state to authorize the registration of these vehicles. Now a number of states allow them.

### *Highway Capable Electric Vehicles*

Must be able to reach a speed of 60mph and must fit all regulations for highway driving.

## Links:

<http://data.opi.mt.gov/bills/mca/61/8/61-8-377.htm>

<http://data.opi.mt.gov/LEGBILLS/mca/61/9/61-9-432.htm>