

Proposed Label Designs for a Range of Vehicle Technologies

The Environmental Protection Agency and the National Highway Traffic Safety Administration are redesigning the fuel economy label consumers see on the window of every new vehicle in dealer showrooms. The agencies are proposing two different designs—on the left side of the following pages a label much like the current label in terms of footprint, style, and the featured information, and on the right a completely new approach to the label.¹ The agencies encourage public feedback on which label design is most informative to them as they make purchasing decisions. Regardless of whether EPA and DOT select one of the two labels proposed today or adopt a modified version following the public comment process, the goal of the new label will be the same: to provide consumers with simple, straightforward comparisons across all vehicle types, including electric vehicles (EV), plug-in hybrid electric vehicles (PHEV), and conventional gasoline vehicles.

Please note that the labels shown on the following pages are examples and do not represent real automobiles. The sample labels are intended to illustrate the elements on the label that would be associated with each vehicle technology/fuel type. They are not meant to represent the actual values that any particular vehicle type could achieve. Specifically, the letter grades are proposed to be technology-neutral and fuel-neutral; that is, any vehicle, regardless of technology or fuel type, would be eligible for any letter grade, as long as it met the specified greenhouse gas/fuel economy levels for that grade.

¹ The agencies are also seeking comment on a third label design. To view all the label designs, please visit our website at: www.epa.gov/fueleconomy/label/label-designs.pdf

Gasoline and Diesel Vehicles

- These vehicles exclusively use gasoline or diesel for fuel and can also be called conventional vehicles. This category also includes hybrid vehicles. Hybrid vehicles have both gasoline engines and electric motors. However, the only fuel a hybrid vehicle uses is gasoline, either to propel the vehicle or charge the battery.
- The letter grade “B” is an example only, and would not be reserved for gas/diesel vehicles. Any vehicle, regardless of technology or fuel type, would be eligible for any letter grade, as long as it met the specified greenhouse gas/fuel economy levels for that grade.
- **Examples:** Most cars on the road today are gasoline vehicles. You can view lists of hybrid vehicles and diesel vehicles at: www.fueleconomy.gov/feg/

EPA DOT Fuel Economy and Environmental Comparisons Gasoline Vehicle

26 MPG
combined city/hwy
22 city 32 highway
3.8 gallons used every 100 miles

Annual Fuel Cost
\$1,617

How This Vehicle Compares
Among all vehicles and within SUVs

Worst **10** **26** **103** Best
MPGe SUVs

Environment

Greenhouse Gases (CO₂ g/mile, tailpipe only) **347** (0 Best, 850 Worst)

Other Air Pollutants **6** (1 Worst, 10 Best)

Your actual mileage and costs will vary with fuel cost, driving conditions, and how you drive and maintain your vehicle. Cost estimates are based on 15,000 miles per year at \$2.80 per gallon. MPGequivalent: 33.7 kW-hrs = 1 gallon gasoline energy.

Visit www.fueleconomy.gov to calculate estimates personalized for your driving, and to download the Fuel Economy Guide (also available at dealers).

Label Option 2
Gasoline and Diesel Vehicles

EPA DOT | Fuel Economy and Environmental Comparison

Smartphone

The above grade reflects fuel economy and greenhouse gases. Grading system ranges from A+ to D.

website.here

Over five years, this vehicle **saves \$1,900** in fuel costs compared to the average vehicle.

Gasoline Vehicle				
Gallons/100 Miles	MPG City	MPG Highway	CO ₂ g/mile (tailpipe only)	Annual fuel cost
3.8	22	32	347	\$1,617

10 **26** **103** **850** **347** **0** **1** **6** **10**

Worst Best Worst Best Worst Best

Combined MPGe CO₂ g/mile Other Air Pollutants

• Fuel economy for all SUVs ranges from 12 to 32 MPG.
 • Annual fuel cost based on 15,000 miles per year at \$2.80 per gallon.

Visit website.here to calculate estimates personalized for your driving, and to download the Fuel Economy Guide (also available at dealers).

Label Option 1
Gasoline and Diesel Vehicles

Electric Vehicles

- Electric Vehicles (EVs) are powered exclusively by electricity stored in batteries. You charge the battery by plugging your vehicle into an electrical outlet. The vehicle travels until the charge is depleted or you recharge it. EVs cannot be run on gasoline.
- The letter grade “A+” is an example only, and would not be reserved for EVs. Any vehicle, regardless of technology or fuel type, would be eligible for any letter grade, as long as it met the specified greenhouse gas/fuel economy levels for that grade.
- **Examples:** The only EVs on the road today are the BMW Mini E and Tesla Roadster.

EPA DOT Fuel Economy and Environmental Comparisons
Electric Vehicle

98

MPG_{equivalent}

combined city/hwy

city 102

highway 94

34

kW-hrs per 100 miles

Annual Electric Cost

\$618

Charge & Range

Full Battery Charge time on a fully charged battery, vehicle can travel about... **99** miles

12 hours

How This Vehicle Compares

Among all vehicles and within midsize cars

Worst

10

MPG_{eq}

98

103

MPG_{eq}

Best

midsize cars

Environment

Greenhouse Gases (CO₂ g/mile, tailpipe only)

850

Worst

0

Best

Other Air Pollutants

1

Worst

10

Best

Your actual mileage and costs will vary with electricity cost, temperature, driving conditions, and how you drive and maintain your vehicle. Cost estimates are based on 15,000 miles per year at 12 cents per kW-hr. MPGequivalent: 33.7 kW-hrs = 1 gallon gasoline energy.

Visit www.fueleconomy.gov to calculate estimates personalized for your driving, and to download the Fuel Economy Guide (also available at dealers).

Smartphone Interactive

Scan code for more information about this vehicle or to compare it with others.

**Label Option 2
Electric Vehicles**

EPA DOT
Fuel Economy and Environmental Comparison

Smartphone

The above grade reflects fuel economy and greenhouse gases. Grading system ranges from A+ to D.

[website.here](#)

Over five years, this vehicle **saves \$6,900** in fuel costs compared to the average vehicle.

Electric Vehicle

Range (miles)	kW-hrs/100 Miles	MPGe City	MPGe Highway	CO ₂ g/mile (tailpipe only)	Annual fuel cost
99	34	102	94	0	\$618

10 Worst **98** 103 Best 850 Worst **0** 0 Best 1 Worst **10** 10 Best

Combined MPGe CO₂ g/mile Other Air Pollutants

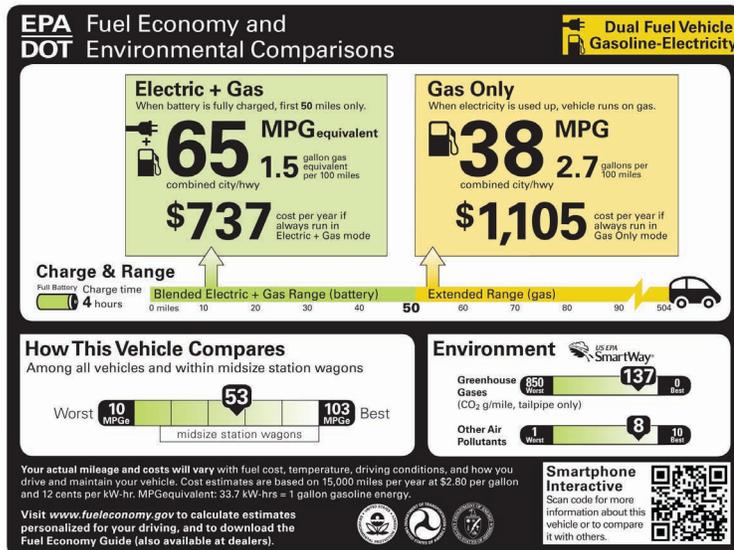
- Fuel economy for all midsize cars ranges from 12 to 103 MPGequivalent. MPGequivalent: 33.7 kW-hrs = 1 gallon gasoline energy.
- Annual fuel cost based on 15,000 miles per year at 12 cents per kW-hr.

Visit [website.here](#) to calculate estimates personalized for your driving, and to download the Fuel Economy Guide (also available at dealers).

**Label Option 1
Electric Vehicles**

Plug-in Hybrid Electric Vehicles ²

- Plug-in Hybrid Electric Vehicles (PHEVs) are considered dual fuel vehicles because they can be powered by both electricity and gasoline. Like EVs, PHEVs have a battery that you charge by plugging your vehicle into an electric outlet. But unlike EVs, PHEVs also have a gasoline-powered internal combustion engine. Some PHEVs use only electricity to power the vehicle while the battery is charged, and use gasoline once the battery is depleted. This type of PHEV is sometimes called an extended range electric vehicle. Other types of PHEVs use a combination of both electricity and gasoline while the battery is charged, and then use only gasoline.
- The letter grade “A” is an example only, and would not be reserved for PHEVs. Any vehicle, regardless of technology or fuel type, would be eligible for any letter grade, as long as it met the specified greenhouse gas/fuel economy levels for that grade.
- **Examples:** There are currently no new commercial PHEVs for sale in the United States.



Label Option 2
Plug-in Hybrid Electric Vehicles



Label Option 1
Plug-in Hybrid Electric Vehicles

² The agencies have developed an alternative representation of the label shown on the right for PHEVs. To view all the label designs, please visit our website at: www.epa.gov/fueleconomy/label/label-designs.pdf

Flexible Fuel Vehicles

- Flexible fuel vehicles (FFVs) (also called flex-fuel, dual-fueled or bi-fueled vehicles) are vehicles that can operate either on gasoline or diesel fuel, or on an alternative fuel such as ethanol or methanol, or on a mixture of conventional and alternative fuels. Essentially all FFVs today are E85 vehicles, which can run on a mixture of up to 85 percent ethanol and gasoline.
- The letter grade “B” is an example only, and would not be reserved for FFVs. Any vehicle, regardless of technology or fuel type, would be eligible for any letter grade, as long as it met the specified greenhouse gas/fuel economy levels for that grade.
- **Examples:** Produced since the 1980s, FFVs are the most numerous of the currently available alternative fuel vehicles, with dozens of 2010 car and truck models available from a variety of manufacturers. You can find more information about FFVs at:
www.fueleconomy.gov/feg/flextech.shtml

EPA
DOT

Fuel Economy and Environmental Comparisons

Dual Fuel Vehicle:
Gasoline-Ethanol (E85)

25

GASOLINE
MPG

combined city/hwy city highway

4.0 gallons of gasoline used every 100 miles

Annual Fuel Cost

\$1,680

How This Vehicle Compares
Among all vehicles and within midsize cars

Worst 10 25 103 Best

midsize cars

Environment

Greenhouse Gases (CO₂ g/mile, tailpipe only)

Best 850 355 0 Worst

Other Air Pollutants

Worst 1 7 10 Best

Your actual mileage and costs will vary with fuel cost, driving conditions, and how you drive and maintain your vehicle. Cost estimates based on 15,000 miles per year at \$2.80 per gallon. Ratings are based on gasoline and do not reflect performance and ratings using E-85. See the Fuel Economy Guide for more information.

Visit www.fueleconomy.gov to calculate estimates personalized for your driving, and to download the Fuel Economy Guide (also available at dealers).

Smartphone Interactive
Scan code for more information about this vehicle or to compare it with others.

Label Option 2
Flexible Fuel Vehicles

EPA
DOT

Fuel Economy and Environmental Comparison

B

Smartphone

The above grade reflects fuel economy and greenhouse gases. Grading system ranges from A+ to D.

website.here

Over five years, this vehicle **saves \$1,600** in fuel costs compared to the average vehicle.

Dual Fuel (Gas & E85) Vehicle

Gallons/100 Miles	Gasoline MPG City	Gasoline MPG Highway	CO ₂ g/mile (tailpipe only)	Annual fuel cost
4.0	22	30	355	\$1,680

Worst 10 25 103 Best

Combined MPGe

Worst 850 355 0 Worst

CO₂ g/mile

Worst 1 7 10 Best

Other Air Pollutants

- Fuel economy for all midsize cars ranges from 12 to 103 MPGe equivalent.
- Ratings are based on gasoline and do not reflect performance and ratings using E-85.
- Annual fuel cost based on 15,000 miles per year at \$2.80 per gallon.
- See the Fuel Economy Guide for more information.

Visit website.here to calculate estimates personalized for your driving, and to download the Fuel Economy Guide (also available at dealers).

Smartphone Interactive
Scan code for more information about this vehicle or to compare it with others.

Label Option 1
Flexible Fuel Vehicles

Compressed Natural Gas Vehicles

- Compressed Natural Gas Vehicles (CNG) are vehicles that operate on compressed natural gas. You can re-fuel your CNG vehicle at special CNG fueling stations where, like gasoline, compressed natural gas is dispensed, priced and sold by the gallon.
- The letter grade “A-” is an example only, and would not be reserved for CNG vehicles. Any vehicle, regardless of technology or fuel type, would be eligible for any letter grade, as long as it met the specified greenhouse gas/fuel economy levels for that grade.
- Examples:** Currently Honda is the only major manufacturer selling a natural gas vehicle. Its Civic CNG is available only in selected markets.

EPA DOT Fuel Economy and Environmental Comparisons
Compressed Natural Gas Vehicle

28

MPG_{equivalent}

combined city/hwy
city highway

24 36

3.6 equivalent gallons per 100 miles

Annual Fuel Cost

\$777

How This Vehicle Compares
Among all vehicles and within SUVs

Worst 10 **28** 103 Best
MPG_e SUVs

Environment

Greenhouse Gases (CO₂ g/mile, tailpipe only) 850 Worst **220** 0 Best

Other Air Pollutants 1 Worst **9** 10 Best

Your actual mileage and costs will vary with fuel cost, driving conditions, and how you drive and maintain your vehicle. Cost estimates based on 15,000 miles per year at \$1.45 per gasoline gallon equivalent. MPGequivalent: 121.5 cubic feet CNG = 1 gallon of gasoline energy.

Visit www.fueleconomy.gov to calculate estimates personalized for your driving, and to download the Fuel Economy Guide (also available at dealers).

Smartphone Interactive
Scan code for more information about this vehicle or to compare it with others.

Label Option 2
Compressed Natural Gas Vehicles

EPA DOT
Fuel Economy and Environmental Comparison

Smartphone

The above grade reflects fuel economy and greenhouse gases. Grading system ranges from A+ to D.

website.here

Over five years, this vehicle **saves \$6,100** in fuel costs compared to the average vehicle.

Compressed Natural Gas Vehicle

Range (miles)	eGallons/100 Miles	MPGe City	MPGe Highway	CO ₂ g/mile (tailpipe only)	Annual fuel cost
170	3.6	24	36	220	\$777

• Fuel economy for all midsize cars ranges from 12 to 103 MPGequivalent. MPGequivalent: 121.5 cubic feet CNG = 1 gallon of gasoline energy.

• Annual fuel cost based on 15,000 miles per year at \$1.45 per gasoline gallon equivalent.

Visit website.here to calculate estimates personalized for your driving, and to download the Fuel Economy Guide (also available at dealers).

Label Option 1
Compressed Natural Gas Vehicles

For More Information

You can access the rule and related documents on EPA's Office of Transportation and Air Quality (OTAQ) website at:

www.epa.gov/fueleconomy/regulations.htm

To view all the proposed label designs, please visit our website at:

www.epa.gov/fueleconomy/label/label-designs.pdf

For more information on this rule, please contact Kristin Kenausis at:

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