

There's a lot of talk today about the need for "cleaner transportation" in the United States.

That's because transportation is the leading source of greenhouse gas emissions, mostly from burning gasoline for our cars and light trucks.

Greenhouse gases like carbon dioxide can trap heat in the earth's atmosphere and warm the planet, and that can cause climate change. This can lead to extreme weather such as hurricanes, droughts, and increased wildfires, which cost consumers billions in damage and increased insurance costs every year.

One of the ways we can reduce greenhouse gas emissions is by using low carbon fuels.

WHAT ARE LOW CARBON FUELS?

Low carbon fuels are transportation fuels that produce fewer greenhouse gas emissions than traditional fuels like gasoline, diesel and jet fuel. They are called "low carbon" because they release less carbon dioxide into the air when they are burned. Experts often call them "LCFs" for short.

One example of a low carbon fuel is electricity. Some automakers are pledging to build only all-electric vehicles in the future, and the federal government has new policies to make it simpler for consumers to buy and charge an electric vehicle.

But the U.S. needs more than just electric vehicles to significantly reduce emissions. There is a wide range of low carbon fuels that could help the nation transition to cleaner transportation:

BIOFUELS

- Bio-CNG (compressed natural gas), bio-LNG (liquified natural gas), or bio-L-CNG (liquified compressed natural gas)
- Gasoline mixed with 10% or higher ethanol, and 100% ethanol ("E100")
- A diesel blend containing biomass-based diesel, 100% biomass-based diesel ("B100"), and renewable diesel
- Sustainable Aviation Fuel (SAF), also known as Alternative Jet Fuel

OTHER LCFs

- Natural gas
- Propane
- Electricity
- Hydrogen
- Any other liquid or non-liquid fuel that produces less carbon dioxide than regular gasoline or diesel

Some low carbon fuels, such as blends of ethanol and gasoline, will work in today's gas-powered vehicles. That's notable because there are hundreds of millions of gas-powered vehicles in the U.S. today, and they will continue to be sold and driven for many years to come. These "drop-in fuels" could power a large number of existing cars, while other fuels like hydrogen require new technology in the vehicle.

Sustainable Aviation Fuel, or SAF, can power the planes we fly. Fuels such as renewable diesel, CNG and LNG can power the heavy-duty trucks that deliver goods across the U.S.

In a recent nationally representative CR [survey](#), only one in four Americans (25%) say they have heard of low carbon fuels. When they learned more about these fuels, two thirds (67%) said they would use low carbon fuels in their personal vehicle if the cost per gallon was the same as the cost for traditional fuels. And one-third (33%) say they would be "very likely" to choose a flight on a plane that uses low carbon fuels if the cost of the ticket was the same as flying on a plane that uses traditional jet fuel.