



How To Evaluate Alternative Fuel Fleets

Top factors to consider when deciding on sustainable vehicles

This paper is brought to you by **[DPV Transportation Worldwide](#)**, a leading provider of premium fleet services throughout the U.S. It provides you with some of the most important criteria to examine when transitioning your fleet service transportation method from traditional diesel fuel vehicles to AFVs (Alternative Fuel Vehicles).



With a focus on global change taking shape on a corporate level, an increasing number of organizations are making purchasing decisions that prioritize more environmentally friendly solutions.

Many of these organizations have sustainability mandates they need to reach, and are actively taking concrete steps toward attaining them.

The reasons are clear. Being sustainable reduces costs over time, improves efficiency, mitigates risks, and, simply enough, is the right thing for the long-term health of our environment. Even from a branding perspective, there has been an influx of contributions, investments, and student/employee recruitment based on taking socially responsible initiatives.

However, although **90 percent of executives** think sustainability solutions are important on an organizational level, only 60 percent of companies have a strategy in place.

Often, companies that speak of being sustainable are lacking when it comes to implementation. This gap speaks to some resistance as it relates to perceived risks, such as:

- Larger up-front costs
- Logistical complications
- Overall lack of understanding or awareness

One thing is certain: The days where you had to rely solely on traditional diesel fuel to power your fleet vehicles are long gone. Today, there are multiple fuel alternatives that can address the sustainability standards of an organization.

It is not suggested here that alternative fuels present greater risks than conventional fuels, simply different ones which could be mitigated through gaining a better understanding of the facts.

The following are eight important factors to keep in mind when considering alternative fuel vehicles for your next fleet service contract:

Eight Factors When Considering AFV Fleet Services



1) Which type of alternative fuel?

Alternative Fuel Vehicles use **combinations of vehicle fuels and technologies** to reduce the use of petroleum in on-road vehicles. There are a handful of different AFV types to choose from which may or may not match the sustainability standards of your organization. These include:



• Ultra-Low Sulfur Diesel Vehicles (ULSD)

ULSD is a cleaner-burning diesel fuel that contains 97 percent less sulfur than low-sulfur diesel (LSD). It was developed to reduce diesel emissions more effectively. Lowering the sulfur in our fuel significantly limits the amount of emissions emitted by the vehicles, thus improving the air quality.



• Biodiesel & Propane

Biodiesel is made from vegetable oil, cooking oil, animal fats, and other natural sources. It offers good cold-weather performance, and an energy output per gallon that's often indistinguishable from gasoline. Per-gallon cost for biodiesel ranges from 3 cents up to a dollar more compared to wholesale fuel prices.



• Compressed Natural Gas (CNG)

The cleanest burning fuel in the transportation industry to date, compressed natural gas is created when natural gas is compressed to less than 1 percent of its original volume. It's stored in pressurized tanks and offers similar fuel efficiency, power, and acceleration as regular gasoline. Using low carbon fuel can significantly lower greenhouse gas emissions as well as tailpipe emissions.



• All-Electric Vehicles (EV)

All electric vehicles release zero emissions, making them the optimal choice to prioritize the long-term future of the environment. For example, at Stanford University, you'll find 100 percent electric transit buses in use every day. These buses can run all day, with a range of over 125 miles.



• Hybrid - Electric Vehicles

Internal combustion engines and electric motors power these vehicles to lower tailpipe emissions, while maintaining comparable capabilities to conventional fully gas-powered vehicles. However, hybrid cars are heavier than their regular counterparts which might be an issue depending on how it's used. Eventually the battery in an electric or hybrid vehicle will need to be replaced, and cold weather negatively affects battery life.

2) Do you have fueling centers on or near your location?

If the choice of alternative turns out to be electric, you must think about where they get fueled. The number of publicly accessible charging stations reached more than 26,000 in 2020, offering more than 80,000 places to charge, according to the [Alternative Fueling Station Locator](#). That number continues to grow with the latest data (Feb 2022) showing ChargePoint Network recording 27,500 charging stations.

Search for nearby fueling stations and [electric charging stations](#) before you commit to a large purchase to ensure that it is truly cost-effective for your team. For other alternate fuels, like biodiesel and compressed natural gas, you will need to train your personnel to fill up at stations capable of providing these uncommon fuels.

3) When do you need them?

There is typically a low turnover of AFVs because of supply and demand issues. For example, purchasing new EVs could be delayed intermittently due to a chip shortage, according to [Scientific American](#).

Purchasing or converting to AFVs could take six weeks or more to implement and that is after confirming your exact needs.

This means you have to consider possible fleet challenges such as meeting the needs of an increase in size in your team, or an increase in mileage based on your expanding market. Honoring your ever-changing needs is exactly what DPV Transportation was built on. We are able to provide custom solutions to your unique situation.

4) How much time do you have between charging?

Charging EVs takes as much as eight hours, exponentially longer than it takes to fuel a diesel bus, for example. So, while the vehicle is being recharged, it's out of operation; therefore, in many cases, you may need two or more vehicles to fulfill your business needs.

Until more cities learn from Detroit and [build roads that charge electric vehicles](#) while they drive, you will need to consider some creative solutions. Employing a fleet of EVs can take the pressure off and keep your team running efficiently.

5) What is your discretionary budget?

Although energy costs for hybrid and plug-in electric vehicles are generally lower than for similar conventional vehicles, purchase prices can be significantly higher. EVs cost more, just like cars in the open market, and that cost can be a premium of 65 percent.

However, when you factor in the many benefits of alternative fuel vehicles, such as lowering your company's dependency on fuel, and increasing your tax savings through subsidies; your actual operating costs are significantly lower for an alternative fuel vehicle than for a gas- or diesel-powered one.

At DPV Worldwide, we buy the vehicles, we maintain them, we provide the drivers, and even the fuel, and bundle all of it into a one set price. You can think of us as a transportation outsourcer for shuttle services.

What about unexpected costs like maintenance? EVs in general tend to need less maintenance. When considering bringing transportation in-house, consider whether the fleet service is knowledgeable in the maintenance and repair of each alt fuel vehicle to ensure a quick and seamless turnaround.

6) How long do you need the fleet of vehicles?

Contracts can often be tedious and cumbersome. Between RFPs, negotiations, agreement terminology, etc. At the end of the day, the less you have to be responsible for, and the more you can entrust your vendor with, the easier your job becomes.

Some questions to ask regarding contracts:

- Does the vendor own all the equipment?
- How much risk falls on our organization?
- Who maintains the vehicles and equipment?
- What type of insurance is offered?
- What contractual incentives do you offer?
- Do you offer contract extensions?

A contract for a fleet service can meet a short-term need on a monthly basis or provide the stability of a long-term service through a twelve- or eighteen-month contract. The benefit of increasing the length of time gives you peace of mind while you focus on your business operations.

7) How important is sustainability to your image?

A survey by Nielsen shows that millennials are **twice as likely** as baby boomers to say they are changing habits to reduce environmental impact. Generation Z is soon to become the next dominant generation and is equally concerned, and in many cases **more concerned**, than millennials.

Further evidence shows that an emphasis on branding electric vehicles, through vehicle wraps and strategic campaigns, can provide a high ROI. This shows that corporate brands can increase their values tremendously by promoting their focus on sustainability.

This is especially important for universities and other academic institutions, where a vehicle driving around campus can provide invaluable PR as it fits with their sustainability mission. Bentley University Office of Sustainability distributes data about their internal sustainability programs and practices. As of 2021, 29 percent of their commutes use alternative transportation. They are so committed to the culture of sustainability that there are four dedicated majors and minors to drive research and professionals in areas ranging from Sustainability Science to Sustainable Investing.

Another prime way to leverage branding is with shuttle bus services for traveling employees, or commuting guests to and from events. Often, they see the ROI because of the positive PR from attendees who are concerned with clean transportation and energy.

8) How and when do you need to meet your sustainability initiatives?

The reality is that it may not be logistically or financially realistic to take the plunge into AFVs all at once. As a result, organizations may want to first dip their toe in the water and do a test run to mitigate any possible risks.

The logistics, uncertainties, up-front costs, and other anticipated challenges in making the transition to AFVs are giving pause to many who are considering the switch. However, for those who do not have a mandate to make the move entirely, for five, ten, or more years, there lies the opportunity to start small and build from there. Any cost saving you make by handling transportation internally is quickly absorbed by the cost of employing both drivers and administrators to handle the logistics.

What The Hartford Insurance Company Discovered:

For one client, The Hartford Insurance, we helped them determine the costs when they were thinking of switching to a completely EV fleet. We presented relevant options based on our projections and calculations of their company's needs and the state of their operations. The Hartford realized switching to an EV fleet would not be as easy and fast as they hoped, and would have a greater cost than they had anticipated. Given their desire to still improve their fleet's sustainability, they decided to start with one vehicle, test, and expand from there. They are making definite strides in their sustainability efforts and doing it in a way that is comfortable for their bottom line.

A fleet situation doesn't have to be an all or nothing decision.

Quick comparison chart

	Traditional	EV
Quicker fueling	✓	✗
More fueling stations/Easier approach	✓	✗
Lower fueling costs	✗	✓
Lower initial cost of vehicle	✓	✗
Lower maintenance cost	✗	✓
Quicker delivery of new vehicles	✓	✗
Tax subsidies	✗	✓
Better brand image	✗	✓
Faster innovation pace	✗	✓
Lower emissions impact	✗	✓

Biggest electric bus manufacturers in the USA



We invite you to learn more.

At DPV, we pride ourselves in staying up to date with the latest technological and sustainability trends.

With live location tracking, arrival estimates, and customizable settings to specify your experience, you're always in the know of what's going on with your logistics. Reach out to our team to explore more details about our electric & sustainable vehicles and how we can revolutionize your ride in comfort and safety.

To schedule a consultation with a DPV Worldwide ground transportation consultant, please click [here](#). Or you may contact us via the methods below:

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