

Advanced Biofuels USA, a nonprofit educational organization, advocates for the adoption of advanced biofuels as an energy security, economic development, military flexibility and climate change solution.



Just A Minute (or So) about Renewable Fuels Episode 5

Why Biofuels? The Reasons Why Renewable Fuels Are Important and the Benefits They Provide

Advanced Biofuels USA Presents Why Biofuels? The reasons behind why renewable fuels are important and the benefits they provide.

Our goal is to replace imported oil and petroleum-based fossil fuels, to do so [transportation fuel](#) is the way to go. While [Windmills](#) and [solar](#) can produce electricity they cannot [power jet](#) airplanes. And Virtually no oil is used to produce electricity in the US. Only about 1% of electricity is produced from [petroleum](#). Although there is work on [electrifying short flights](#) in small planes, even renewable electricity won't power large jet planes for a very long time.

Oil is also difficult and often dangerous to extract to both people and the environment. In these photos you can see the "before and after" of a boreal forest that has been turned into [tar sands](#) petroleum production.

Dangers to the environment occur when carcinogenic [MTBE](#) in gasoline enters the water supply from leaking underground storage tank systems including those at gas stations. MTBE is highly water soluble, not easily absorbed into soil, and sticks around for a long time. When MTBE was banned in many states, ethanol replaced it.

[Ethanol fuel](#) has a lot of benefits. It burns clean, has high octane, replaces harmful chemicals in gasoline and can be used in fuel cells.

[Renewable fuels recycle the carbon](#) that is already on land and in the air. We won't have to take fossil carbon out of deep storage and add it to the atmosphere. This means that using renewable fuels helps with: reducing carbon footprints, [erosion control](#), [wastewater](#) treatment, the remediation of contaminated [soil](#), [carbon sequestration](#), and improves [air quality](#).

Besides the environmental benefits. There are also geo-political reasons to replace fossil fuel.

The [oil embargo](#) in the 1970s showed us the vulnerability of relying on imports for energy. Every country should be able to minimize its reliance on imported energy, increase their [energy security](#) and energy independence.

There's a lot of talk about a transition from liquid fueled vehicles to electric ones. Certainly, it will take a long time for liquid-fueled vehicles to be off the roads, even if we get to half of on-

road vehicles being electric vehicles, that means half still need liquid fuels. We need to make sure those liquid fuels are as clean and green as possible.

Until EVs are affordable, available, powered by renewable sources and use [fair trade batteries](#), vehicles fueled with advanced biofuels look like our best option to reduce the greatest amount of our transportation carbon footprint as quickly as possible for the least expense.

For more information about advanced biofuels visit advancedbiofuelsUSA.org an online educational nonprofit library with nearly 40 thousand items.



Three questions you should be able to answer after watching Episode 5:

1. What are the negatives to using MTBE?
2. Name 3 benefits to using renewable fuels.
3. Why is diversity in the energy sector important?

[WATCH VIDEO](#)

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