

Explainer: U.S. energy security depends on domestic production and imports



Tariffs and taxes that limit crude oil or refined product imports will raise costs for consumers and manufacturers, and also threaten U.S. energy security. And while it sounds counterintuitive, simply drilling for more U.S. shale oil is not a viable substitute for much of what we import.

Why do we need imported oil?

About 60% of the crude oil that runs through U.S. refineries is extracted right here at home. However, our refineries run on many different types of crude oil, some of which we don't produce here or can't economically transport. In those cases, we use imports. Nearly 70% of our crude oil imports come from Canada (60%) and Mexico (7%). Using the right types of crude oil keeps costs down and maintains energy security.

- The amount of crude oil U.S. refineries process greatly exceeds U.S. crude oil production. The United States is producing a record amount of crude oil (~13.4 million barrels per day), while U.S. refineries need about 16.5 million barrels per day to maintain current production levels
- Many refineries need heavier crude oil to maximize flexibility of gasoline, diesel and jet fuel
 production. Today, most crude oil produced in the United States is light, including much of
 what's produced in the Permian and Bakken. Light crudes are not good replacements for the
 heavy crude oil we get from Canada and Mexico.
- Re-tooling refineries to process solely U.S. crude oil (light crude) would cost billions a risky investment that would take decades to permit, construct and eventually pay off.
- We lack the infrastructure (like pipelines) needed to cost effectively supply U.S crude
 oil and refined products to every region. Even if the economics of re-tooling our facilities
 worked, it can take close to a decade to permit and build pipelines in the United States.

Why are tariffs and taxes on oil imports bad for the United States?

Import tariffs and taxes would increase the cost of producing gasoline, diesel and jet fuel and compromise our energy security.

- Raising the cost of heavier crude oil would increase the cost of manufacturing fuel.
- Forcing refineries to process oil they weren't designed for would cause them to reduce production and potentially shut down.
- Tariffs on North American imports could spur retaliatory actions and make our exports less

Most American-made gasoline, diesel and jet fuel stays right here in the United States where it's used by American consumers and fuels the U.S. economy. Of the total gasoline, diesel and jet fuel we export, Mexico and Canada purchase 43%. And nearly all of what we export stays in the Western Hemisphere.



Why do U.S. refineries run on heavier crude oils that we need to import?

Long before the U.S. shale boom, when global production of light sweet crude oil was declining, we made significant investments in our refineries to process heavier, high-sulfur crude oils that were more widely available in the global market. These investments were made to ensure U.S. refineries would have access to the feedstocks needed to produce gasoline, diesel and jet fuel. Heavier crude is now an essential feedstock for many U.S. refineries. Substituting it for U.S. light sweet crude oil would make these facilities less efficient and competitive, leading to a decline in fuel production and higher costs for consumers.

What is the difference between heavy and light crude oils?

There are hundreds of varieties of crude oil around the world. Different types of oil require different refining processes to make the products we need in the quantities we need. American refiners need heavier crudes than what is largely produced in the United States.

- Crude oils have different viscosities or "gravities." "Heavy" crude oil is more viscous, while "light" crude oil is thinner.
- Crude oils also have different sulfur content. Low-sulfur crude is called "sweet" and high-sulfur crude is called "sour."
- Refineries run on a mix of crude oils in order to run efficiently and maximize outputs. Nearly 70% of U.S. refining capacity runs most efficiently with heavier crude.
- That is why 90% of crude oil imports into the United States are heavier than U.S.-produced shale crude.
- Because heavier crude is more difficult to process, it tends to trade at a discount to light crude.

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