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OPINIONCOMMENTARY

You Can't Build Roads Without Oil

Where does the Biden administration think asphalt comes from?

R. Borden

12:38 pm ET

The Infrastructure Investment and Jobs Act of 2021 allocates \$110 billion to build and repair roads and bridges. The Inflation Reduction Act of 2022 spends hundreds of billions on renewable energy, with the ultimate goal of eliminating fossil fuels. But how are we going to build roads without oil?

According to Federal Highway Administration data, 94% of U.S. road miles are paved with asphalt, which constitutes the bottom of the bottom of the oil barrel. We don't refine oil merely to make asphalt. It's a byproduct left behind in the process of making fuel. And it isn't the only one.

While 70% by volume of each barrel of oil is used for combustion, the other 30% materially contributes to almost every consumer product on the shelf. Petroleum coke is a main source for the anodes used in aluminum smelting, which requires about 40 pounds of coke for every 100 pounds of aluminum. The same goes for BTX, which stands for benzene, toluene and xylene. BTX is the refinery stream used to make the polymers, plastics, resins and solvents that contribute to everything from the sheath on electrical wires and cellphones, to catheters, IV bags and pill casings. Except for jeans and wool suits, almost all clothing is at least partly synthetic.

If we stop using oil to make gasoline, diesel and jet fuel, we also won't be using oil to make the other stuff that comes from the barrel, like asphalt. Using 70% of the barrel for fuel subsidizes all the products made from the other 30%.

Thus those who demand a transition away from fossil fuels need to account not only for the resources to make and power electric cars but also for replacing the portion of the barrel that makes society modern. When we speak of material wealth, we largely mean materials composed from the unburned portion of each barrel.

Humanity can't be separated from its hubris, and that's not all bad. Hubris, and hydrocarbons, took us to the moon and back. But it's beyond hubris to believe that modern marvels that pass as everyday objects, developed with the guide of an invisible hand, can seamlessly be replaced through collective will alone.

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