The International Energy Agency's <u>2025 review</u> isn't likely to make the bestseller list. But there's some eye-opening information. We can lose sight of global trends because of our understandable preoccupation with our own situation. Not that U.S. trends are unimportant, mind you, but they're not the whole ball game. The big takeaway globally is that oil and coal are basically static, and natural gas is growing slowly. Meanwhile alternate forms of energy are booming.

I'm sure some of you are more deeply briefed than I am about the energy sector, but I found a lot of surprising new information. If you're wondering why the oil industry is in the doldrums despite Trump's fervid support, it turns out that global demand for gasoline and diesel have hit a ceiling. Here are some of the highlights:

Carbon-Free Energy. Eighty percent of new power generation in 2024 came from renewable sources and nuclear power. Forty percent of all power generated in 2024 came from zero-carbon sources, a new record. For the twenty-second year in a row, the rate of renewable growth accelerated globally, with solar accounting for three-fourths of the new renewables.

Fossil Fuel Generation. Global use of natural gas for electricity grew 2.8% year, a healthy rate but below the growth rate for GDP. The coal sector, in contrast, was anemic, growing only half as fast as natural gas. Coal's share of the global electricity mix has fallen to one-third, the lowest in the last fifty years.

The Transportation Sector. Global oil consumption in 2024 was only slightly above the pre-COVID level. Strikingly, even that growth wasn't for use in cars and trucks. Instead, growth was almost entirely due to the use of oil as a feedstock for products such as plastics. And that growth was almost entirely in China, where feedstock use rose by more than the total net increase in world oil demand.

On the other hand, oil use for transportation has sunk 5.4% below pre-COVID levels with most of the drop due to lower use by cars and trucks. IEA attributes the drop to "tighter vehicle efficiency standards, the higher share of EVs and more prevalent remote working, outweighing modest underlying economic growth."

EVs. Electric car sales continued to rise globally in 2024, increasing by a quarter over 2023. Much of this is a China story. China had almost two-thirds of the global EV market and a 40% increase in sales, with a huge surge in plug-in hybrids.

There's every indication that use of coal and use of oil for transportation are peaking.

That's good news. Use of natural gas hasn't hit that point yet. People disagree about whether, if it's replacing coal, this means a big decrease in total (CO2 plus methane) emissions. With the continuing global boom in EVs and renewables, we can hope that we're at or near turning the corner where use of fossil fuels will starting to rapidly incline. Sadly, we haven't gotten there yet.

The U.S. remains an important player - we're still the second largest emitter on the planet. But it's striking how much of the real action in the energy sector has shifted to China.