

## “Clean” Energy?

Energy consumers everywhere, we need to clean up our act! Anti-fossil fuel activists are nodding their heads at that one. Except, I’m thinking about something a little different than what they’re thinking.

I’m referring to the commonly used phrase, “clean energy.” All of us, even those who understand that oil, natural gas, and coal run the world, often refer to wind and solar as “clean” without even questioning it. It’s time to do some questioning.

What is it that makes wind and solar clean and fossil fuels dirty? Well, with wind and solar you don’t see anything getting burned like you do with oil, natural gas, and coal. And it’s the burning that creates pollution. Fair enough. But let’s take a closer look at that.

Air pollution from the burning of fossil fuels in the United States has been in steep decline since 1970. And that dramatic drop across all six pollutants the EPA classifies as dangerous took place as Americans increased their fossil fuel use by 40 percent. From 1988 to 2015 our vehicle miles traveled have more than doubled! So as America has grown we’ve used more fossil energy, traveled a lot more and yet the air we breathe has continued to get cleaner. That’s amazing.

And, for those who are worried about energy-related CO2 emissions, they’ve been in decline for more than a decade.

Oh, and here’s one more amazing fact. Since 1970, the pollution coming out of the tailpipes of our cars and trucks has been reduced by 99 percent. Seriously, 99 percent. I’m not kidding, you can ask the EPA.

Now, what about wind and solar? We feel like they’re clean because we don’t burn them. Well... not directly. But, let’s be real. They aren’t born of unicorns and pixie dust. Producing solar panels and windmills requires a lot of mining for resources, especially for rare earth minerals. China owns 95% of the rare earth market and the Chinese government isn’t all that protective of the environment. Their mining projects are creating giant, toxic and radioactive lakes. It’s a serious problem they will be dealing with for decades.

And what about land use? The US Energy Information Administration estimates that natural gas, and coal use about 12 acres of land per megawatt of electricity produced. Solar and wind gobble up four and six times the amount of land that coal and natural gas do. So, what’s so clean about that?

There are other environmental impacts to consider. Industrial wind and solar projects kill a lot of wildlife. Wind turbines alone are estimated to kill 600 thousand birds a year along with a million bats. The bats are very important to our ecosystem

because they are essential to pollination. Wind turbines cause visual blight and have negative health impacts for the people who live around them, like noise, shadow flicker, and vibrations.

Let's keep in mind that fossil fuels have been running the world since they began fueling the industrial revolution and still carry more than 80 percent of the load. Wind and solar contribute less than three percent to our energy use and for that small amount of power, we're dealing with a significant amount of environmental nastiness.

The point of all this is not to disparage wind and solar, but to talk about them in a way that makes sense. It's ridiculous to say fossil fuels are dirty while wind and solar are clean. They're not. All energy sources and technologies have their impacts, but in the case of oil, natural gas and coal, there have been astonishing improvements over the past half-century. They are much, much cleaner and getting more so all the time.

So all you energy consumers clean up your act. Stop using the word "clean" when talking about wind and solar.

For the Clear Energy Alliance, I'm Mark Mathis. Power On.

CLEAR ENERGY  
ALLIANCE