

Mike Thompson

Reverse Course on Wind and Solar— Report from the U.S. Central States

Mike Thompson is a serving member of the Kansas State Senate, representing the 10th Senate District in Johnson County. He is Chairman of the Senate Committee on Utilities. This is an edited transcript of remarks he delivered to the first panel, “The Economic Effects of Green MAD—Mutually Assured Destruction,” of the Schiller Institute’s July 24 conference, “There Is No ‘Climate Emergency’—Apply the Science and Economics of Development to Stop Blackouts and Death.”



Mike Thompson
Schiller Institute

eration of renewable energies across the country. Because we’re seeing some real distortions in our energy markets here in Kansas, and so I’ll share a little bit of that with you here in a second.

I’m going to share my screen very quickly and go into my presentation.

Basically, what we’ve done over the last 30 years is weaponize science. It really started off with Al Gore and his *Inconvenient Truth*. It was going before that, but that’s when it really went on steroids.

Hey, everybody. Mike Thompson here. I’m a Senator from the 10th District in Kansas, once again very happy to be here as part of this forum, particularly for the distinguished guests from all over the world. We’ve got a great discussion today and hopefully my part will contribute a little bit.

Just as my background. I didn’t get into politics, or didn’t intend to get into politics. I was a meteorologist for over 40 years, mostly on television, but some degree in the private sector, and so the weather and the climate is one of my fields of expertise. One thing I also had studied, over the course of that time period, particularly since about the year 2002, was the energy issue. And so, when I ended up in the Senate in Kansas here, two years ago, that was one of my big things that I was concerned with. And really, we’re making a lot of energy and policy decisions based on false climate information.

Kansas as a Microcosm

And, so as not to really step on some of our other experts, here today, I’ll try to focus just briefly on the climate and some of the things that I’m saying, that are being utilized, propaganda-wise, to steer us in the wrong direction in a lot of ways. And we’re seeing Kansas as a microcosm of the issues that we’re going to be experiencing nationwide, if we continue this prolif-

We’ve literally replaced real science, and real reliable, sustainable energy sources and real clean energy sources, with just basically nonsense. People who are using the climate to their advantage, and the fact that a lot of people don’t understand the climate or the science of climate, to promote some very bad policies. So we’re replacing science with a social narrative.

And here is just one thing we’re doing. We’re killing all sorts of birds and bats, and we’ve heard about this from Michael Shellenberger, to “save the planet” with these renewable energy sources. And it makes no sense to me at all.

Here is the mix of the generation from the Southwest Power Pool, which is where Kansas is part of that regional transmission organization in the Central Plains, during our polar vortex in February, where we had a lot of power outages—Texas really suffered. But look at **Figure 1**. That was what was providing the power for us then. The orangish-yellow is the natural gas, that was 34% of the generation. Coal provided over 50% of the generation. Nuclear—we’ve got one nuclear plant out here, actually two—there’s only about 6%. But that’s all it can, because that’s part of the mix. But you notice wind dropped to about 1%. The variability of the wind is the big problem out here, because what it’s doing is undermining our baseload plants. And I’ll get into that in more detail here in just a few minutes.

The reason we're going that way, is propaganda. Carbon and CO₂ are deliberately used interchangeably. You think of carbon and you think of black, sooty substances. Well, even though carbon and carbon dioxide have "carbon" in the name, they have completely different properties. It's like saying soda pop and pop tarts are the same thing. It just doesn't work. And here is why: CO₂ is colorless, odorless, it's essential to life. It makes plants more drought resistant. It makes them hardier. It makes them more productive. And it's been shown by various agricultural studies, that the CO₂ levels should be about three times higher than they are right now, for plants to continue to thrive.

It is a secondary greenhouse gas. Water vapor does most of the work, and I'm sure some of our other experts will be talking about this in more detail. But

But look at what was providing the power for us [during the Polar Vortex in February].... Natural gas, that was 34% of the generation. Coal provided over 50% of the generation. Nuclear—we've got one nuclear plant out here, actually two—there's only about 6%.... But you notice wind dropped to about 1%.

it's absorbing all of the infrared radiation that it's capable of absorbing. In other words, at this point, we could double, triple, quadruple the amount of CO₂ in the atmosphere, and it would have zero impact on the temperature of this planet. And a lot of people don't understand that, but CO₂ does *not* absorb all of the infrared spectrum, only a very tiny portion of it. Water vapor handles the stabilization of the temperature, so CO₂ just piggybacks on the influences of water vapor and on the Sun. And, of course, volcanoes and the ocean can add far more CO₂ to the atmosphere, than man does.

The Influence of the Sun

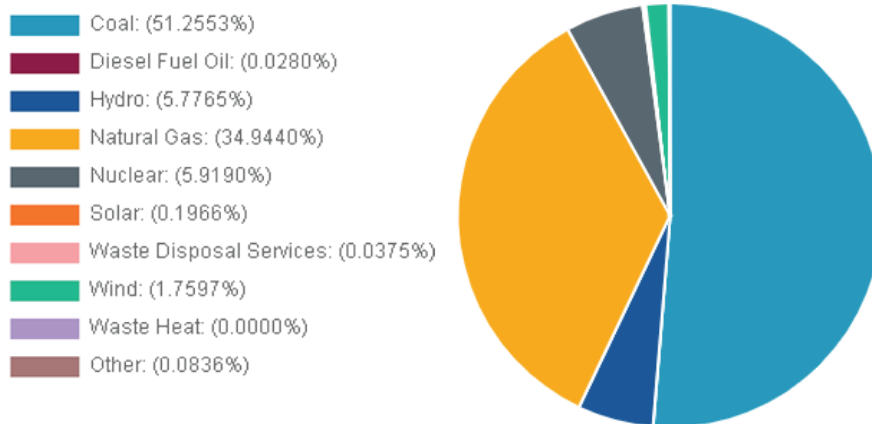
The Sun really controls the climate. The Sun is 1,300,000 times the size of this planet. And although you look up in the sky, you see what looks like something the size of a quarter. It's

hard to imagine how big that thing is, and how much it influences us, but any fluctuations in the solar output at all, have a huge influence in the weather on this planet. And if you look at the total solar irradiance, since the Little Ice Age, we came out of the Little Ice Age in the 1700s into the early 1800s, the Sun woke up after a period, and this is part of a natural cycle process. And you see that since 1800 and particularly 1850, the Sun became more energetic. This is why the global climate alarmists use, or stop looking at data prior to 1850. They use that 1800-1850 time period as their

starting point, because they know that's when the Sun got more energetic and started sending more energy our way.

But now we're going into a part of the solar cycle—there's a 210-year solar cycle, and we're going down to the back end of it. So solar physicists are now looking at a downward path for the energy of the Sun, over the course of the next 20 to 30 years. And in fact, we're seeing a very quiet Sun at this point.

FIGURE 1
Percentage of Power During Polar Vortex

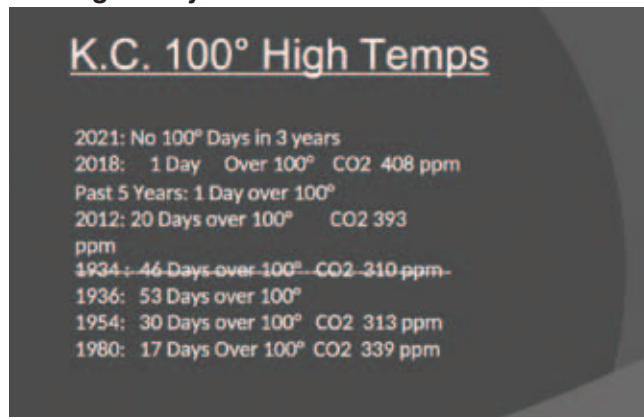


“Kansas’ supposed 43% of electricity from wind, vanished to less than 2% (green color) during the February 2020 Polar Vortex, when it was needed to keep people from freezing to death.”

here's how minuscule CO₂ is in the atmosphere. It is less than one-half of one-tenth of 1% of the atmosphere, and it's one one-thousandth of all of the CO₂ on this planet. Most of it is in the ocean, in the soil, in the rocks. And so, somebody will talk about, “Oh, we're going to be dumping 50 metric tons into the atmosphere.” That's a drop in the water. It's like saying I'm going to spit in the ocean and cause the oceans to rise. And CO₂—we've got enough of it right now that

FIGURE 2

100 degree days



Weather also is not climate. They used those two interchangeably. A weather pattern, like this heat wave that we’re having over the Western United States, is not due to climate change.

The climate is not changing significantly. Yeah, it’s hot out there right now, and it’s due to a weather pattern. But climate is not changing. This Winter, I guarantee you, Minnesota is going to be colder than Florida. And although it’s hotter in parts of the Northern Plains, right now than it is in other areas, that’s due to the fact that it’s drier up there: Dry air in the Pacific, in the Northwest and over the High Plains of the West—dry air heats and cools at two times the speed of humid air. That’s why it doesn’t heat up as much down in the coastal areas of the Gulf, and along the Eastern Seaboard as often, because the humidity is high, it just keeps the temperatures from climbing quite as high, because it doesn’t heat up as fast.

And NASA and NOAA have been “correcting” the temperature arbitrarily for a long, long time. They did a number of re-analyses of the atmosphere. And if you compare that with the raw data, the raw temperature data, you’ll see that the raw data in the orange, actually is on a downward trajectory, whereas the “corrected” temperature data—and I use that “corrected” in quotes—shows us on an upward path. And so we have been fed false information.

I don’t know how they come up with this correction. It’s a sub-

jective and arbitrary path. But, in other words, we’re being fed that we’re putting too much CO₂ into the atmosphere; the atmosphere is getting hotter; and therefore we’ve got to make all these energy choices. We’ve got to get away from fossil fuels, we’ve got to get away from nuclear, and everything else, and go toward these renewables because they’ll save the planet. And that is the false narrative. In fact, in Kansas City, we’ve not had a 100° day yet, in over three years. And you look at 1936 down there, we had 53 days over 100°—the carbon dioxide level was 100 parts per million lower than it is right now **Figure 2**.

The oceans also determine the weather patterns on this planet, and they can be profound. Remember it’s 71% of the Earth’s surface. When there is a very strong El Niño, not only does it release massive amounts of CO₂ in the atmosphere, it changes the weather pattern. There’s a cold Pacific Decadal Oscillation. Look how much colder the Pacific is here in 2008, than in 2019. These are huge pattern shifts that we see constantly. They’re very slow, and they affect the weather pattern around the atmosphere. And so it’s affecting the weather pattern and giving us the heat wave that we have out West right now.

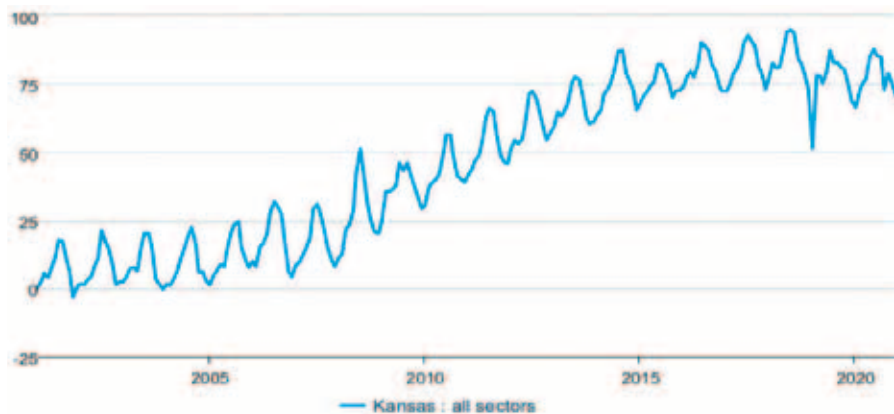
No Gale, No Power from Wind

So we’re heading in the direction, energy-wise, that California’s already led us. Do we follow? Well, California is now a net importer of electricity: 32% of their electricity has to come from other states. So they are reliant on everybody else, because they put all these renewable energy sources into play.

FIGURE 3

Average retail price of electricity, monthly

Indexed to Jan 2001 as percent



Source: U.S. Energy Information Administration

Kansas, we're paying dearly for it. In Kansas, we had only a very small percentage of wind prior to 2005. But after that, this is the main implementation of wind energy in Kansas, and look at where our average retail prices **Figure 3** of electricity had gone. And this is a scale of zero to 100%. Our retail electricity prices across the board in Kansas are 70 to 80% higher, as a result of the implementation of wind. We've added no extra generation sources, other than wind in significant sources since that 2005-2007 time period.

So it all goes to the infrastructure required for wind transmission lines, the extra generation capacity. We're replacing our dispatchable power sources, the ones we rely on—the nuclear, the coal and the gas—with the wind and the solar, and the wind is intermittent and variable. It doesn't blow all the time. We can't control when it blows. In fact, it usually blows when we don't need it, and that creates a distortion in the energy market.

And the big, important thing to understand about wind, is, just because you may see a turbine turning in the wind, it does *not* generate that much electricity. Less than 10 miles an hour, it's actually using more electricity than it's generating.

And the rated speed, which is where it produces what it's supposed to, almost never happens. Here's a power curve of a couple of wind turbines: These are 2.5 and 2.3 megawatt turbines. And you'll notice they list across the bottom, the wind speeds and meters per second. So I've annotated what those mean. You notice they don't reach their peak power until about 11.9 meters per second or 12 meters per second. That means the wind has to be sustained at more than 25 miles per hour during an entire day, for those wind turbines to produce what they are designed to produce. You'll notice that lower wind speeds, under 9 miles an hour, even under 15 miles an hour, which is 7 meters per second, that it's not even half of what those wind turbines are supposed to produce.

Here's another power curve of some others, and they're very, very similar. So how many days a year do we have 25 mph sustained winds? And so I went back in 2016, 2017, 2018—and you'll notice this is at Kansas City International Airport—over 200 days per year, we have less than 10 mph wind, which means any

turbines sited around here, are using more electricity, they're a bigger electrical *client*, than they are a generator. And we only had 30-40 days where the wind was at least 15 miles per hour, which means that it was producing less than half. We had zero days in those three years, and I could probably update this chart for any year that you want, and it's going to be very similar. We rarely have, out here in the windy plains, days that we have sustained winds at 25 miles an hour for an entire day. Here's Gardner, it's on the southwest side of the metro, with similar numbers. Topeka is even worse in those three years. No days, with 25 mile per hour winds.

And as a result of adding all this turbine capacity across Kansas, just under 20% of all the transmission line costs of the entire Southwest power pool are borne by the ratepayers here in Kansas.

We also have to put more peaking natural gas plants into play, to compensate for when the wind doesn't blow. And there are environmental issues. Each of those turbines contains about a 1,000 pounds of these rare earth minerals, neodymium and dysprosium. They are primarily mined in

China, and they leave behind an equivalent amount of toxic radioactive waste. So all of the environmental reasons for going to wind, get thrown to the wind by these.

We have turbine failure safety concerns. Turbine lifespans are overstated. In Germany and other places in Europe, where they've had the wind for a lot longer than we have, the turbines wear out much faster than the stated 25-year lifespan. It's more like 12-13 years, and the blades typically only last about 3 years, and we're putting them in landfills at a huge cost to us.

The efficiency rating of the turbine drops by 24% in the first 12 months, and the operational efficiency of these turbines is down to about 11% after 15 years. And that's just because of the wear and tear on the nacelle [generator housing—ed.] and the engine inside the nacelle. And of course, we subsidize solar and wind, more than anything else. So the reason they're able to operate is because of these subsidies.

We have other wind power concerns. Oftentimes, we have to pay these things to shut down, because there's too much wind when we don't need

The wind has to be sustained at more than 25 miles per hour during an entire day, for those wind turbines to produce what they are designed to produce.

it. There are decommissioning costs, that are underestimated. In fact, we think it's about \$1 million per turbine to take one of these things down and restore the land.

So with over 3,000 turbines in Kansas right now, we're talking at over \$3 billion in decommissioning costs, and we don't know who's going to pay that. A lot of landowners like this, because they get paid, but there's a lot of legal issues that they have to consider, that they probably haven't thought about.

'Ensure Baseload Plants Can Compete'

And just some final thoughts. Just from my experience in looking at this, we should require bigger setbacks. In Bavaria, they require 10 times the height of the turbine, which would be over a mile; or require specific time of day bids for electric delivery—that would help to undermine the wind coming on and clearing the market before any of the other sources. Require bonding and escrow for decommissioning; re-

quire full restoration cost for the land. These turbines don't pay property tax. They pay a payment in lieu of tax. So we need to have them pay their fair share in the property tax.

We need to look into reliability requirements, ensure baseload plants can compete. This is the big problem for us. We are retiring coal plants out here, because the wind is so heavily subsidized that when it does come online, it competes directly against the coal and the nuclear and the gas plants, and clears the market before they can even get online. So we are paying—those plants are paying to operate; they're paying people to be employed or to keep their people employed and run our lights 24/7 so that we can accommodate wind. It's just completely backward. The wind should only be a supplemental source of electricity.

This is a subject that we've got to be aware of nationwide, otherwise we're going to continue to make some very, very bad choices and energy policy and other policies, all based on false science.

Angel Cushing

Stop the Green Land Grab: Protect Food Production and People

Angel Cushing is a goat farmer and Lyon County action leader in the Flint Hills region of Kansas. This is an edited transcript of her presentation to the first panel, "The Economic Effects of Green MAD—Mutually Assured Destruction," of the Schiller Institute's July 24, 2021 conference, "There Is No 'Climate Emergency'—Apply the Science and Economics of Development To Stop Blackouts and Death." Sub-heads have been added.



Courtesy of Angel Cushing
Angel Cushing

My name is Angel Cushing. I live in the Flint Hills of Kansas. Flint Hills is cowboy country. We grow grass here and that produces wonderful livestock that taste absolutely wonderful. We are retired military. We retired to this part of Kansas back in 2015 and shortly after, there was a planning and zoning regulation that was going into effect that would pretty

much eliminate all livestock in this area. They literally zoned everything outside of the city of Emporia as a park. They called it a green space.

National Heritage Areas

I got involved at that point. That's been a couple of years now, and I've learned an awful lot along the way. We are currently fighting a National Heritage Areas [designation] as well as the "30 by '30" [Biden's Federal Order to "protect" 30% of all U.S. land and water by 2030]. I could describe all of this really easily from the housing study that I came across to the Flint Hills Regional Council. The housing study actually talked about changing this whole entire area from agriculture and agriculture industry, to tourism and energy production. They're planning public use trails along all the major