**In twenty-seventeen the then President of the second largest greenhouse gas emitting country in the world decided to withdraw his nation from the Paris Climate Accord that had been agreed and signed up to by almost every nation on earth just two years previously.**

**Despite that unilateral declaration, many individual states in the union made it clear that they would continue their own clean green energy transitions and strive to follow the decarbonisation pathways set out at that historic COP 21 meeting.**

**When President Joe Biden defeated Donald Trump in twenty-twenty, one of the first executive decisions he took was to place the USA firmly back into the Paris framework. The Biden administration then went on to develop the Inflation Reduction Act which, despite being quite ferociously adulterated by policymakers in Congress, many of whom are in the pockets of special interest lobbyists in the fossil fuel industry, still represented one of the most significant and historic pieces of energy transition legislation anywhere in the world.**

**Now I don’t know whether you keep up with American politics at all, but just in case it’s passed you by, that guy from twenty-seventeen has just been re-elected back into the office of President of the United States, and he says he’ll reverse Bidens executive order, take the US back out of Paris again and start systematically dismantling Biden’s flagship environmental policies.**

**And that’s a bit shit really, isn’t it?**

**So, how much damage can Donald Trump do to the US energy transition, and how can individual states safeguard the progress they’ve already made?**

**Hello and welcome to Just Have a Think**

**So, here’s the map of the twenty-twenty-four US Presidential election result by county. It’s really quite red indeed, isn’t it? It’s not my place to comment on how or why such an emphatic decision came to pass in the land of the free and the home of the brave. I’ll leave that soul-searching to the good folks in the Democratic party. Suffice to say, America is a democracy and sometimes that’s what democracies do.**

**My focus for this video is purely on the decarbonisation of the US energy system. So, let’s start with a few stats that actually make quite encouraging reading.**

**According to The US Energy Information Administration, or IEA, America saw significant growth in clean energy in 2023.**

**Solar power was the fastest growing of any energy source. New capacity additions were up eighty percent in the first half of the year and by the beginning of twenty-twenty-four the country had an estimated one-hundred and thirty-nine gigawatts of solar capacity, which was a twenty-three percent increase on the previous year.**

**Wind power capacity was less stellar, but still increased by about eight gigawatts in twenty-twenty-three, and battery storage installations smashed the previous year, with capacity now standing at sixteen gigawatts, and that number is expected to have doubled by the end of twenty-twenty-four.**

**Electric vehicle sales increased by twenty-five percent in twenty-twenty-three, and investment in the sector more than doubled from the previous year.  And greenhouse gas emissions actually went down bythree percent during the year, even as the economy grew.**

**Market analysts Cleanpower found that all in all the clean power industry added a total of thirty-three-point-eight gigawatts of new utility scale clean energy projects, beating the previous record year by twelve-point-five percent. They tell us that the U.S. now has some two-hundred and sixty-two gigawatts of clean capacity on its electricity grids, enough to power the equivalent of sixty-nine million American homes. That equates to sixteen percent of all electricity coming from wind and solar. Developers started construction on another forty-one gigawatts of new projects in the last few months of twenty-twenty-three, which brings the total of project capacity in the pipeline to a whopping one-hundred and seventy gigawatts.**

**All told, according to Bloomberg, a total of two hundred and six billion dollars in clean tech manufacturing has been announced during the Biden administration.**

**And let’s just have a quick look at where all those dollars went to, shall we?**

**Well, a hundred and sixty-one billion of them went into Republican districts, two thirds of which came as a direct result of the Inflation Reduction Act.**

**In fact, since that legislation came into force, nearly a hundred and fifty billion dollars of funding has been announced for new facilities producing things like electric vehicles, 5 battery energy storage systems, solar panels and wind turbines and almost half of that has gone to the seven so-called swing states of Arizona, Georgia, Michigan, Nevada, North Carolina, Pennsylvania and Wisconsin.**

**It’s a total of about sixty-three billion dollars and it’s brought something like fifty thousand new manufacturing jobs to those regions.**

**On a national scale, when you add in incentives for the infrastructure projects to actually deploy all those solar panels in solar farms and build out all the wind turbines, nearly half a trillion dollars in total public AND PRIVATE investment has flowed into the economy as a direct result of the historic legislation, creating no fewer than three hundred thousand new jobs across the country.**

**Clean energy investment AND jobs in the sector are growing at twice the rate of the overall US economy.**

**Maybe Kamala and Tim should have mentioned that a bit more during their campaign, eh?**

**Four of the top ten leading states for green transition technologies voted republican in the twenty-twenty-four election. Most obviously Texas of course, which operates the largest renewable industry in the union, employing roughly four hundred thousand workers.**

**You gonna jeopardize that, Donald? Good luck with that one mate!**

**Between twenty-twenty-one and twenty-twenty-three the Lone Star State brought in thirty-five billion dollars in private clean energy investment, bringing total installed wind capacity to a whopping forty-one gigawatts and solar capacity to sixteen gigawatts.**

**California didn’t swing for Donald this time around unsurprisingly, but forty million people live there, more than half a million of whom work in the renewables industry.**

**Renewable generation capacity there reached thirty-three gigawatts in twenty-twenty-three, representing nearly forty percent of total electricity generation, and with the exponentially accelerating growth of battery energy storage, it’s quite normal now for renewables to completely displace fossil fuels for many hours during the middle part of each day.**

**I could go on and on, but essentially what I’m trying to say here, is that America’s got a nice little economic boom going on with green energy, and stamping all over it right now would most likely be as unpopular in states that turned red as it would be in those that went blue.**

**One of the safeguards put into the Inflation Reduction Act was a ten-year, fully protected investment horizon for clean energy projects, many of which, as we’ve just seen, are in solidly Republican states providing hundreds of thousands of very well-paid jobs to American workers. Are the representatives and Senators of those states going to fight for a repeal that would remove that employment and economic growth from their region? Seems unlikely, doesn’t it?**

**And then there’s good old Elon, isn’t there? I won’t elucidate my view of him here because this is a family channel, but I don’t envisage the boss of the world’s biggest electric vehicle manufacturer doing anything to disadvantage his own businesses as he stomps all over the federal regulatory system causing damage wherever he goes. So, we can at least expect the progress of American made EVs to be pretty healthy over the course of the next four years.**

**According to an assessment by Reuters, published just after the US election result, despite Mr Trump’s pledge to “drill baby drill” and maximize US oil and gas production, in reality his policies are unlikely to dramatically slow the U.S. renewable energy boom.**

**In fact, most analysts project that U.S. fossil-fuel production will probably look very similar during a Trump administration to the levels seen under Biden, who oversaw a boom in the Permian Basin and New Mexico that has already made America the world’s largest oil and gas producer. Growth in that sector won’t be determined by policy. It’ll be determined by market prices, and as global demand for oil and gas continues to dwindle in the coming years, prices will tumble and the profitability of things like fracking will look even more precarious than it does today.**

**Of course, a Trump administration will probably make a real nuisance of itself by hamstringing federal agencies that deliver IRA grants and loans, and Trump himself has already made it clear that he will immediately halt all new licences for offshore wind turbines because he thinks they kill birds and send whales doolally. But American offshore wind has barely got going anyway really, and it currently represents a negligible contribution to US clean power, despite the blindingly obvious opportunity it offers, so putting the kibosh on that, although a very stupid and short-sighted thing to do, won’t really slow the overall progress of clean energy technologies.**

**So, am I suggesting that the accelerating juggernaut of the energy transition is now so unstoppable that it can’t be hampered by an ideologically fossil fuelled Trump administration?**

**No of course I’m not. Don’t be daft. I imagine he will do everything he can to completely bollocks up all the good progress that’s been made so far, because he’s that kinda guy, isn’t he? What I am suggesting though, is that the free market economy so beloved of the Republican right will ultimately decide the progress of the transition, and try as he might, Mr Trump can’t wave a magic wand and reverse the precipitous drop in the cost of solar, wind and battery storage technologies, so whether he likes it or not, his capitalist entrepreneurial buddies will continue to see renewables as a nice little earner for their investors. Just don’t mention the climate.**

**And speaking of the climate, here comes the entirely predictable but very important caveat. Despite the record-setting pace of annual installations, the USA is still falling short of what’s required for the country to achieve a net-zero emissions economy by twenty-fifty, and of course isolationist policies like tariffs could also represent a drag on global progress too. So, while the next four years might not take us back quite as far as some may fear, it will most definitely not be catapulting us forward either.**

**And as this recent chart from Bloomberg demonstrates, it’s also worth reminding ourselves that twenty-twenty-four is on track to be the warmest year on record, taking us above the 1.5 degrees Celsius commitment set out in Paris nine years ago and putting us well on track to hit 3 degrees or more of warming by the end of the century.**

**If you’re still not sure why that’s a very very bad idea indeed then make yourself a stiff drink, set aside an hour or so when you can focus all your attention on a large TV screen and watch this chilling documentary from the Potsdam Institute of Climate Research. It may just change the way you look at the world.**

**Anyway, no doubt there are some very strong views on this topic, one way or another, so as always, the place to leave your thoughts is in the comments section below. That’s it for this week though. Thanks, as always to the amazing folks who support my work via Patreon, and who enable me to keep ads and sponsorship messages out of your way. And I must just give a quick shot out to some folks who joined recently with pledges of ten dollars or more a month. They are Joe Hopfield, David, Dennis Morgane, Andrew H, Peter Parker and Paul Gauthier.**

**And of course, a huge thank you to everyone else who joined recently too. Don’t forget to jump over to Patreon dot com forward slash just have a think to find out how you can join them and have a look at all the exclusive perks you can get there, including free membership. And if you enjoyed this video then you really can hugely support me by hitting the subscribe button on YouTube and clicking on all notifications. It won’t cost you a penny to do that and it’s just a simple click away, either down there or on that icon there.**

**Most important of all though, thanks very much for watching! Have a great week, and remember to just have a think.**

**See you next week.**