**Back in late twenty-twenty-three and early twenty-twenty-four we took a look at two major reports published by an organisation called the Institute and Faculty of Actuaries or IFoA.**

**Actuaries are the number crunchers who sit in the back rooms of banks, insurance companies and large corporations with the specific role of financial risk management. In other words, their job is to work out all the global economic, political, social and environmental impacts that could hit us in the future, calculate which of those impacts might potentially bankrupt their companies, and recommend what those organisations should be doing to avoid that extremely undesirable eventuality.**

**In January twenty-twenty-FIVE, the IFoA published a third paper, consolidating the findings from the previous two publications, and proposing a set of urgent actions for policymakers. Now this is a UK organisation, so I guess if you were a company CEO somewhere else in the world, like North America for example, you might be tempted to take the findings of these British risk managers with a large pinch of salt and get on with your day regardless.**

**JP Morgan Chase isn’t a UK organisation though, is it? It’s very definitely an American organisation. An American Bank in fact.**

**An American bank that, according to Forbes is now the largest bank in the world. An American bank which, according to it’s CEO Jamie Dimon, trades three trillion dollars of US bonds and moves TEN trillion dollars in money every single day. An American bank that since twenty-twenty-one has invested almost two hundred BILLION dollars into the fossil fuel industry. An American bank that could hardly be described as an ardent flag bearer for climate action.**

**Despite all that, in early twenty-twenty-five JP Morgan Chase published its own analysis highlighting many of the same impending climate impacts as its British counterpart.**

**The striking difference though, is in how these two organisations are proposing the world should respond to those challenges.**

**So, who’s on the right track then?**

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

**Now, before we get into the weeds, I’ve got a big favour to ask of you. As many of you already know, I operate entirely as a one-man band here at the Just Have a Think channel. I research, write, film, animate and edit all the videos myself from start to finish, which can be a fifty-to-sixty-hour working week. I love it though, don’t get me wrong, and I wouldn’t want to be doing anything else, but getting noticed by the YouTube algorithm without the big marketing teams that some other channels have access to can be a real struggle. And with seismic global geo-political events going on relentlessly in the past few months, videos about the climate emergency and sustainable technology have dropped WAY down the YouTube recommendations pecking order. That’s where you come in. You see, the YouTube algorithm is massively driven by the number of subscribers, and about seventy percent of you folks watching today have not yet chosen to subscribe to the Just Have a Think channel. Subscribing is completely free. It doesn’t commit you to anything at all and it won’t mean your inbox suddenly gets flooded with daily spam messages from me. That’s not my style, and frankly I wouldn’t have the time anyway. So, clicking on the subscribe button is simply a very kind gesture of support for the work I do here, and it really does help to persuade YouTube’s AI software to offer my videos to a wider audience. It’d be really amazing if you felt you could do that, and if you select ‘all notifications’ from the drop-down box as well, then every Sunday you’ll get my latest video in your YouTube recommendations. And of course, if you do decide to subscribe you would have my eternal gratitude.**

**Right, let’s get back to JP Morgan Chase then.**

**In October twenty-twenty-four, JP Morgan Chase hired the Chief Scientist of the US National Oceanic and Atmospheric Administration, or NOAA. Her name is Dr Sarah Kapnick, and her new title at the bank is Global Head of Climate Advisory.**

**The data in this latest report, published under the banner of ‘Climate Intuition’, is therefore largely a result of Dr Kapnick’s work.**

**So, unlike the majority of the current US administration, there is no argument from JP Morgan Chase about the reality of climate change or the causes of atmospheric warming.**

**“Population growth, fossil fuel production and agricultural productivity have persistently risen over the last century”**

**The report tells us. And it clarifies that**

**“One of the simplest measures of climate change is annual global temperatures. Observed temperatures were long within a steady range over time.” The report says, “ But only in the last 1-2 decades does that range of temperature observed fall well outside that historic range.”**

**All the charts they provide us with are marching relentlessly in the same upward direction, whether it’s population growth, global oil production, gross domestic product, agricultural production, greenhouse gas emissions, or global temperatures, and just to clarify those last two data sets in twenty-twenty-three the world recorded the warmest year on record with a twelve-month average of one-point-four-six degrees Celsius above pre-industrial levels.**

**That record year was immediately surpassed in twenty-twenty-four when we hit one-point-five-four degrees Celsius of warming.**

**And even though the rate of change has slowed a little in twenty-twenty-five, according to the UK Met Office, the world is still on track to exceed the famous Paris Climate accord target of one-point-five degrees in most of the coming five years.**

**And those greenhouse gas emissions that we’re constantly being told we need to start rapidly reducing?**

**Well, they just keep going up and up as well. In April twenty-twenty-five atmospheric CO2 concentrations hit four hundred and thirty parts per million– a level not seen on this planet since the Pliocene era about three million years ago, when we humans weren’t around to witness it.**

**Anyway, back to our friends at JP Morgan Chase.**

**They help us understand one of the impacts of a changing climate with this little graphic showing how the probability of heatwaves shifts with rising temperatures.**

**That’s not dissimilar to this graphic from the second IFoA report entitled ‘Climate Scorpion’, showing how the probability of severe FLOODING has shifted over time. So-called Black Swan events that were regarded as vanishingly unlikely back in nineteen-eighty are now slap bang in the middle of the twenty-thirty probability curve, and the ‘NEW’ Black Swans carry a level of catastrophic consequence that would have been simply unthinkable just forty odd years ago.**

**But here’s where we start getting the first hints of divergence between JP Morgan Chase and the IFoA.**

**The ‘takeaway’ from the JP Morgan temperature chart says this**

**“Global emissions are still growing following scenarios to temperatures above 2C, not declining. A 1.5C global temperature milestone has been reached. A linear trendline from 1950 projects global temperatures above1.5C by 2040s.”**

**But according to just about every notable climate scientist that I’ve been listening to for the last eight years or so, projecting a ‘Linear’ or straight-line path of temperature changes into the future is a very unwise thing to do indeed.**

**Take this chart for example, from the IFoA ‘Climate Scorpion’ report.**

**What this is showing is the range and likelihood of atmospheric temperature changes going all the way up to TEN degrees Celsius in the very most pessimistic scenario. And by the way, just to give you a bit of relative perspective on that, it was a temperature increase of just five degrees Celsius that provided enough energy to shift our entire planet out of the last ice age and into the Holocene period that we humans have enjoyed for the last ten thousand years or so.**

**Here’s climate scientist Johan Rockstrom speaking at a recent TED talk**

**“and we’ve had a ten thousand year period where our civilisations have developed where we’ve had an enormous privilege of a planet at 14 degrees Celsius plus / minus 0.5 degrees Celsius. That’s the Holocene since we left the last ice age. And if you look 3 million years back, we never exceeded 2 degrees Celsius. That’s the warmest temperature on earth during the entire Quaternary. The coldest point – minus 5 degrees Celsius – ice age. I call this the corridor of life.**

**Even the JP Morgan Chase report has to concede that the combined stated climate policies of all the world’s nations, IF implemented in full, are projected to take us to two-point-seven degrees Celsius in the next seventy years, but just resting on THAT assumption and advocating for a stronger adaptation policy is not really good enough for properly responsible professional financial risk managers. They need to tell their paymasters what COULD happen if the brown stuff really hit the fan, not what the average or median projections are. Otherwise, they leave themselves wide open to a very nasty surprise indeed.**

**So, while the IFoA chart shows us that two-point seven degrees is indeed the most statistically probable outcome of current policy, it also shows us plenty of lines that surpass that mark, and they tell us this**

**“Focusing on the most likely outcomes under climate change lulls us into a false sense of security, since there is still an uncomfortably high probability of an (Equilibrium Climate Sensitivity) or ECS of 5°C or higher.**

**Under the latest IPCC estimates there is an 18% chance of ECS being greater than 4.5°C. This equates to an almost 20% chance, which is a higher chance of failure than in a game of Russian Roulette. “**

**And of course, this divergence between the two reports really matters because projections of future warming directly influence the decisions made on what to do about it.**

**Here’s the last paragraph of the JP Morgan Chase report**

**“While navigating the complexities of climate change, it’s imperative to develop your climate intuition. In this series, we will first dive into how climate change is becoming a variable, but predictable cost by looking at insurance markets. In response, we’ll explore how ADAPTIVE action can be taken to live with present and future climate change. With the new administration in the U.S., we’ll explore national security issues of energy independence in a changing climate.”**

**That represents a clear focus on accepting what’s coming, finding ways to adapt to it to keep yourself and your clients safe, and looking for ways to exploit the perceived economic opportunities that could bubble up as a result.**

**JP Morgan Chase , alongside all these** [**othe**](https://www.theguardian.com/business/2025/jan/08/us-banks-quit-net-zero-alliance-before-trump-inauguration?utm_source=chatgpt.com)**r large banks has now withdrawn from the Net Zero Banking Alliance that was set up at COP twenty-one in Glasgow in twenty-twenty-one and all those banks are now actively pursuing new oil and gas investment opportunities under the protective wing of a Presidential climate denier.**

[**Here's**](https://www.youtube.com/watch?v=1NHLha3jG2g) **JP Morgan Chase CEO Jamie Dimon at the recent Reagan National Economic Forum giving his view on Joe Biden’s Inflation Reduction Act**

**“You know, the Biden Administration giving all this money to EVs and cars and wasting a lot of money on green stuff which isn’t gonna work”**

**Morgan STANLEY bank quietly mentions a three-degree Celsius world in a recent report to its clients on the Air Conditioning market, concluding that this warming bonanza could more than double the growth rate of the cooling market from three percent to seven percent a year. And of course, we’ve all heard about the scramble to exploit the vast mineral riches up in the Arctic now that all the sea ice is disappearing and the permafrost is thawing out to allow access to this previously inaccessible bounty.**

**But according to the Institute and Faculty of Actuaries, all those strategies are extremely short-term, hopelessly blinkered and dangerously irresponsible.**

**Their latest report, called ‘Planetary Solvency – finding our balance with nature’, places a much greater emphasis on MITIGATING the risks of our climate emergency rather than simply accepting them and trying to adapt. The report’s authors argue that many high-profile, public climate change risk assessments are significantly underestimating risk because they exclude many of the real-world impacts of climate change, like the impact of tipping points, extreme events, migration, sea level rise, human health impacts or geopolitical risk. And too many financial institutions are predicting a continually growing global economy even in a so-called hothouse world scenario, because they’ve calculated climate damages as discrete individual events rather than cascading catastrophes that have a compound effect, so they come up with a cost of climate damage that is lower than their economic growth projections and conclude that everything will be OK. That, according to the IFoA, is in direct conflict with scientific predictions of significantly reduced human habitability from climate change.**

**“The risk of Planetary Insolvency looms unless we act decisively.”**

**The report tells us**

**“Without immediate policy action to change course, catastrophic or extreme impacts are eminently plausible, which could threaten future prosperity.”**

**To give an idea of the size of the disparity between market driven capitalists who are apparently only reading the data that suits their investments strategies, and impartial, hard-nosed financial risk assessors, many of whom have to underwrite multi-billion dollar insurance risks, here’s a statistic from the IfoA report that really should put a chill down the spine of those money driven entrepreneurs.**

**It shows a range of GDP impact scenarios calculated by The Network for Greening the Financial System or NGFS, which is a voluntary, global coalition of central banks and financial supervisory authorities formed in twenty-seventeen with the specific aim of strengthening financial systems against climate-related and environmental risks and promoting green finance.**

**The orange line shows a projection based on research available when the organisation was founded. That research has already been superseded by updated numbers based on real-world extreme weather events in the intervening years. That’s the difference between five percent of global GDP lost by twenty fifty and fifteen percent lost. The authors of the later dataset state that:**

**‘These damages already outweigh the mitigation costs required to limit global warming to 2 °C’, i.e. it will be overwhelmingly positive economically to limit global warming.’**

**And if you overlay the range of uncertainty, which is this grey section, you get a worst-case scenario of twenty-five percent by mid-century and no less than half the global economy up in smoke by twenty-one hundred.**

**Despite that data, the IFoA explains that some policymakers are still using an even older analysis showing a negligible impact of only two percent GDP loss by the end of this century even at three degrees Celsius of warming. Scratch the surface of that report and you apparently find that it not only excludes many of the risks now expected to occur, but it also excludes eighty-seven percent of the economy from analysis, on the assumption that a number of sectors will be negligibly affected by climate change.**

**According to the IFoA that means policymakers using these older model outputs may be accepting far higher levels of risk than they think.**

**The approach that the IFoA is advocating for still has the economy at its centre but also factors in societal and biosphere impacts. It should be risk-led, accept the primacy of our earth systems, be systematic and based on the latest science. It should very definitely be NON -linear, factoring in ALL the known tipping point risks and it should be collaborative across disciplines to achieve effective governance and reporting, all of which just happens to give you the snappy acronym of Resilience.**

**Will that happen in our current, entirely self-inflicted global kerfuffle?**

**Seem unlikely, doesn’t it. But that’s the choice. Act now and act decisively or wait for nature to make the decisions for us.**

**Personally, I definitely prefer option one, but no doubt you’ve got your own view. And if you’re keen to express that view right now then, as always, the place to do that is in the comments section below.**

**That’s it for this week though. Like I said earlier, if you found this video useful and enjoyable then you really would be helping to support my work by hitting the subscribe button and clicking on all notifications.**

**And you can also join the absolutely incredible group of people over at Patreon who support this channel with feedback and corrections on early access videos, votes in regular content polls and financial support starting from a dollar a month. That’s all available at Patreon dot com forward slash just have a think, and THAT support means I’ve never monetised any of my videos on YouTube, which means you never get interrupted by ads or sponsorship messages when you’re watching any of my content.**

**So, if you’re on a smart phone, tablet, PC or Mac, you can subscribe over here and visit the Patreon page over here.**

**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.**