SM247 | 9.6.2025
Catching Up On Climate | Episode 1
David Shukman, Journalist & Former Science Editor, BBC

This week, we kick off our new series, *Catching Up On Climate*, where we'll be discussing the state of the climate, the energy transition, and carbon markets going into Climate Week New York City 2025.

We begin our new series by welcoming David Shukman back into the SmarterMarkets™ studio. Shukman is a journalist and former Science Editor at the BBC. SmarterMarkets™ host David Greely sits down with Shukman to catch up on how our experience of climate change is becoming more local and immediate, how governments and corporations are responding, and how the stories we tell – and the way we tell them – must adapt to help us confront this changing reality.

David Shukman (00s):
The ground is shifting visibly and rapidly, and I just worry that for the United States, it's a moment of stepping back rather than embracing an obvious future.

Announcer (13s):
Welcome to SmarterMarkets, a weekly podcast featuring the icons and entrepreneurs of technology, commodities, and finance ranting on the inadequacies of our systems and riffing on ideas for how to solve them. Together we examine the questions: are we facing a crisis of information or a crisis of trust, and will building Smarter Markets be the antidote?
This episode is presented by Base Carbon, sensible carbon investing. For more information, visit basecarbon.com.

David Greely (52s):
Welcome to Catching Up On Climate on SmarterMarkets. I am Dave Greely, Chief Economist at Abaxx Technologies. Our guest today is David Shukman, BBC News Science Editor turned Independent Consultant. We will be catching up on how our experience of climate change has becoming more local and more immediate, how governments and corporations are responding, and how the stories we tell and the way we tell them must adapt to help us confront this changing reality. Hello David. Welcome back to SmarterMarkets.

David Shukman (01m 25s):
It's a great pleasure to be back. Thank you.

David Greely (01m 27s):
Well it's great to have you here. I am really glad we are able to find this time to catch up. Always enjoy talking with you and it's really been too long. So I thought maybe we would just start off with catching up. How are you doing and what have you been up to?

David Shukman (01m 43s):
Well, it's been a very crazily busy but fascinating time. I have continued doing what I, I set out to do when I left the BBC nearly four years ago now, which is to move from broadcasting to what a friend calls narrow casting, where I address typically small groups of business leaders and try to engage them with the reality of climate change, what they can do about it, what they should do about it. More and more I am bringing in the physical risks of weather extremes to their supply chains and another new-ish topic that's becoming of greater interest is the role of nature. How so many companies, senior leaders hadn't realized how dependent they are on the natural world and need to be really active about supporting it if they are going to stay in business. So that's been a big part of my work, but probably the largest element of all over the last 12 months certainly has been working on a book that is trying to make the case we are not remotely prepared for the kind of worsening weather extremes that we are seeing for the world. That's 1.3 degrees warmer, let alone any of those, those targets in the Paris Agreement but there are great things that we can do to keep ourselves safe and so it's been fascinating to do a deep dive into exploring all of that.

David Greely (03m 10s):
Well that's some of what I wanted to ask you about because as someone who has reported from the climate front lines for the BBC, you did that for over 20 years. You obviously have a nose for a story and for how a story's changing and so I kind of wanted to ask you, how

do you see the climate story, for lack of a better phrase, evolving and what stories, if you were still broadcasting rather than narrow casting, what stories would you choose to cover today?

David Shukman (03m 41s):
I think we are shifting into a different era actually. We were forced into a different era by the reality of the fact that we are living in a more hostile climate now, never mind what's coming down the track and I think that then makes it kind of an obligatory really for any journalist working in this field to focus on actually what's happening to try and understand with the help of scientists how much of some extreme weather event is, is climate related. They aren't all but many are. Maybe climate exacerbated might be a better way to, to put it, whether fuel is being chopped on the fire so to speak and then to really drill into rapidly and clearly into what can be done to reduce the dangers to particularly to save lives because we are seeing too many preventable deaths and it's partly that these extremes of whether exposing weaknesses and preparedness and governance and systems inadequacies in early warning most acutely with the terrible feds recently in Texas, the poor girls swept away and then from the holiday camp, I mean a lot of that was preventable with current technology, just better application of systems and I think that needs to be a focus much more now.

David Shukman (05m 09s):
When I was doing the job we did a lot on climate models, on projections for the future. We did a lot on polar barrels on the arctic ice and I am proud of what we did and I kind of stand by it, but actually I realize now that it drew the public's attention, audience's attention away from the here and now and I think that would be for me, the big shift of focus. What do we know now and for the next few years, not just forget about 2050 or 2100 because what we are doing now will have a bearing on those dates but probably to really emphasize a contemporary because I think that would do a public service of reducing death and injury.

David Greely (05m 56s):
It's been really somewhat shocking how much it's become a local story. You brought up the tragic floods in Texas, we see the flooding that happens in Europe, the heat waves and it seems like you said just back a few years ago, climate change was very conceptual, right? It was arguing over models and measurements and it was kind of a scientific conversation or it seemed far away and affecting someone else. But now it seems much more a local story many times and increasingly kind of violent sea level rise when people talk about it in millimeters per decade kind of thing, it feels very gradual but when you have a river rise, I believe it was something like 22 feet in 30 minutes, it's shocking and we continue to see this. How do you feel like it changes the story when it becomes so local and immediate?

David Shukman (06m 57s):
I think it should change the story. I mean I think it should, when you go from global warming as it were a local warming, it should resonate with more people. It should make more sense and I think a vital role of science journalists, environment journalists, people involved in explaining this stuff like me is to try to explain the local effects of a global phenomenon. So and when it comes to rain, for example, you know we have known for 150 years that when a body of air is a degree celsius warmer, it can hold 7% more moisture. Well we are seeing, if you look at the records of the most extreme rainfall events around the world in in the UK it's gone up 15%. You see those kind of stats all over the place and so we can say, I think people have got the idea that this global warming thing is, as you say, it's rather abstract, is possibly something for the future.

David Shukman (07m 53s):
We need to worry about it. But I think if one can say, look, hang on that rainstorm that engulfed your campsite and drowned eight of your fellow campers or 20 or a hundred or filled, I mean I just watched the video from the New York subway have, you know, these torrents or water coming do the stairs and up from sun drain and s spilling into the carriages. I mean it's completely terrifying. Well that's partly because when that infrastructure was built, the engineers would have worked out what was the most severe rainfall at the time that was plausible. What do they need to design for? Well we are we have left out behind, we are in a new era, we can get heavier rain and higher temperatures and stronger winds and bigger storms that reach further in land ever coast. So I think that's the kind of description we need to get into and I think although some research bears this but not all, but when people are confronted with the reality, when the, their own lived experience shows them what they are going through, you do, you get a shift in perspective but not always. So I think there is a big education piece that needs to take place now.

David Greely (09m 09s):
And I think a part of that education piece is even just a few years ago the focus was on the, the one and a half degree target that we need to keep the temperature globally below a 1.5 degree Celsius rise from pre-industrial levels. That largely seems unachievable at this point in any practical way. So I wanted to talk to you about how is the climate story shifting to one of experiencing the

consequences and adapting to the changes we are already experiencing and are going to experience rather than trying to prevent it. I find it really interesting when you talked about the New York subways we are designed by engineers for the, their understanding of the weather patterns. At the time much of our infrastructure was designed with certain weather patterns in mind. That's changed, that's going to require large scale adjustments in many places. Are we even prepared for what it means?

David Shukman (10m 07s):
I think we are starting to see this now. Conversations I have had with people for the book have been fascinating. I mean, for example, hydrology experts, people who know about river flow and how to manage flood water, basically saying the textbooks and the previous hundred years of data, of course we will consult them, but we are now recognizing we are in a new era people talk about a new normal, which I didn't like because it suggests a new static situation but actually I think what we are learning is this is non-linear. We are kind of in a zone where things can be off the scale and so for engineers that's a complete nightmare but at the same time, talking to a guy who was a very senior figure in the extinction rebellion movement whose entire focus was trying to shut off the fossil fuel tap as rapidly as possible to reduce the amount of carbon being blasted into the air and making things worse, he has now shifted to saying, hang on, we have still got to do all that the carbon tap thing, but we have to recognize that whatever's been done until now hasn't really worked and we are living with the consequences.

David Shukman (11m 25s):
So we have to address how do we live, how do we survive, how do we adapt to the new reality and then on another track entirely, someone sent me a copy of a report pulled together by BlackRock and it was designed for investors and that community, it wasn't really meant for someone like me to see and it was about the financial opportunities of a worsening climate. And they couched it in terms of thinking of the extraordinary business potential of air conditioning, of air filters for when there are more wildfires and the air quality declines huge potential projects in building flood defenses. And the list, there was a long very detailed and fascinating list of, of potential business opportunities getting into buying shows in companies that do this stuff. And I thought that was a, initially I thought well that's, that's a horribly cynical tape. But then I thought actually if we accept that we are in this new reality, we are going to need these products. Hospitals will need air conditioning, we'll need more flood protection. So in a way perhaps it's a good thing that the financial sector is at least in their regard, regards waking up to this. So I think lots of very different strands, very disparate and possibly mutually exclusive but actually all now saying kind of the same thing and I found that fascinating.

David Greely (12m 55s):
I loved your approach to now going as you said, narrow casting so much anymore as people wanting to go to social media and throw the widest net possible. So I find it really interesting that you have had more targeted conversations and why did you choose the narrow cast path?

David Shukman (13m 14s):
I had done broadcasting for 38 years in the BBC in different roles. As you say, 20 of them were to do with environment science climate and I came to a moment when I left the BBC and I didn't want to stop working and I desperately wanted some different form of work and through a few friends and contacts these opportunities arose to speak to the executive teams of some big companies and they liked what I did and I enjoyed it. I particularly loved it when around the table there might be someone who wouldn't denounce me but would really have a go at me, you know, pick up zine, oh the climate's always changed, why do you people sets because of our activities or whatever. And that would give me an, an opportunity to explain where the evidence lies. So I just found it a really interesting activity and what I particularly enjoy and I have done more of recently is when you bring together different stakeholders from very different sectors to discuss a problem.

David Shukman (14m 22s):
So most recently in London, London Climate Action Week, there was a fantastic round table discussion about how to make cities more resilient to extreme weather and how to prepare them for the future, actually prepare them to now and one of the big angles was what can we do to encourage people to prevent their health from getting worse because if you do that, you reduce the burden on hospitals, you reduce the number of journeys maybe by car from a home to a hospital, you reduce all kinds of pressures and we had around the table representatives of some very big corporations, major scientific institutions, not-for-profit groups, other experts, many different countries, people from different cities around the world and I was in the hot seat, it was a lunch discussion. I didn't get to eat actually because I was so busy trying to make sure everybody could contribute and see where we could land.

David Shukman (15m 29s):
And at the end of the 2 hours I, I think we, we got somewhere and, and I found that really interesting. I just think it's a, for me it uses different brain cells too if you are reporting when you are a bit more on transmit while receive talking to people and then transmit as you are broadcasting. This was necessarily much more nuanced and engaged and trying to see where there are differences and see where there are connections and, and all the time thinking constructively about what do we end with and then what comes next. I found that very rewarding.

David Greely (16m 04s):
And are there certain points or issues on which you have been finding people can have constructive engagement where they are able to reach each other and kind of focus on practical paths forward?

David Shukman (16m 20s):
Yes, I think there are just one example from London four years ago now that in the month of July, so 2021, there were two separate devastating flash floods that flooded the underground network. It flooded hospitals, flooded a lot of homes, particularly we have in London a lot of basement apartments and it was the risk of people getting trapped and drowning and it led the local administration in London to say, well like hang on, we have got to find a better way to handle this. The trouble being that London is divided into more than 30 different little boroughs. Plus you have a number of other institutions responsible for different aspects. If a raindrop falls on the roof of a house, that raindrop is the property of that homeowner. But when it reaches the street, it's the property of the local borough. When it gets into the sewers, it's the property of a privatized water, utility water.

David Shukman (17m 15s):
So I mean how do you unify all this and actually there has been a very effective over the last couple of years very effective bringing together of everybody relevant and they've now come up for the first time with a strategy of how do you deal with so-called surface water flood and how do we deal with these cloud bus that we are going to get more of and I find that really fascinating. I've been in touch with the people running it and it's the kind of thing that people suddenly say, well you come over. It's quite optimistic. And I think, well yes actually if, if you can get these very different people together and getting somewhere, of course there are obstacles to come, funding, political support, you name it, streets have to be dug up and there will be local opposition. Of course all that lies ahead. But at least there's a kind of recognition that if well a recognition of a necessary starting point and we've got that. So I will take that as a win.

David Greely (18m 10s):
Have you been surprised at how kind of the leading edge seems to be the flash flooding? I don't know if I am just kind of caught in seeing so much of it on the news recently, but going back to the point of climate change used to seem a little bit more remote or it was about coastal communities flooding or perhaps more powerful hurricanes. I don't recall hearing as much as about the intensity and frequency of like very severe violent flash floods. Was that always there and we weren't paying attention or do you think this has come on more quickly than people thought?

David Shukman (18m 49s):
I think it's your last point there with coastal flooding by and large weather forecasting has improved to the point where it's generally more predictable. Not entirely, but generally more predictable where a storm surge will strike, how high it will be, how far it will reach in land and therefore what you have got to do to reduce casualties with rivering. Similarly, if you have got the right topographic mapping and you have got decent modeling and you know how the river is gonna rise, you ought to be able to say for example, holiday cabins shouldn't be so close to the river, they should be on higher ground and therefore you ought to be able to save more lives. Flash flooding tends to come certainly in Europe, but also I think in Texas you have got these big convective storms, you've got a messy, humid, turbulent weather system that's not as neatly defined as a hurricane or a high pressure sort of heat derm but it's a jumble and it's very, very hard to know very within it where the individual cells are going to download.

David Shukman (20m 06s):
And that task of forecasting is extremely difficult because you need to know, let's say within a really small grid square, you are really going to have an accurate forecast and that's terribly difficult. I was with the UK met office scientist a few months ago working on this and you know, they admit it's a really tough challenge. So I think they are getting somewhere they are better than they were. But it's still really quite tricky to know is it that grid square or this one and it makes a huge difference to what you tell people they should do. So I think we are discovering that as the atmosphere warms as rain clouds can hold more moisture and therefore drop more, that

actually cloud bursts causing flash floods are potentially becoming more lethal. I mean there was a horrible example in China a few years back where the underground system flooded and people were on trains that ran out of power and obviously they stopped and the water was rising and officially 12 people died but probably many more and so our infrastructure isn't ready for this. So yeah, I think you are right we are hearing more about flash flooding because it's probably the harvest to tackle and certainly in the context of a city which is paved over so there is no capacity to absorb the rainwater. I think that's where we are going to see if there's one thing I dread waking up to every morning when I check out the news. It's some horrible flash flood in a big city. We know that that can cause absolutely horrific death tolls.

David Greely (21m 46s):
I wanted to compare notes with you a bit because as I have talked to a number of people who are kind of active in the climate space and environmental markets, I have started to pick up a theme recently that people are doing more but saying less a few years ago everybody wanted everyone to know what they were doing about climate and the concern was are people talking a good game and not following through with meaningful action? Now it seems a little bit the reverse that there are still a lot of people working on climate action but they are being much quieter about it than they were a couple years ago and I am curious if you are picking up on the same thing or not.

David Shukman (22m 28s):
Absolutely, and I was talking at London Climate Action Week last month. I was talking to a lot of people about New York Climate Week and whether they were going, I am planning to go, so what were they going to be there and what were they going to do so forth and you are absolutely right that I think a lot of certainly corporates will be still sending teams but much smaller than they might otherwise have done and probably won't be putting on any events themselves. But we will want two or three folk to sit at the back of someone else's event and kind of keep across the subject but not go around trumpeting what they are doing and I think at the same time, picking up on the agenda we have been discussing, I think more and more companies in particular with exposure to the states or being based in the states are framing anything they do around climate less around carbon emissions and more around resilience.

David Shukman (23m 30s):
How to best prepare brace themselves for current weather extremes. Because I think they see that as less political potentially. You don't have to use the words fossil fuels you, you don't have to say anything about greenhouse gases. You don't have to challenge, you know, the dismantling of the inflation reduction act or any of that. You don't have to go there. You can just say, yeah there are these storms and floods and heat waves and fires and, and our supply chains are more at risk and, but we are doing something about for the sake of our business, which I think by the way is really healthy for them anyway. But I think you are seeing a reframing along those lines. So I suspect from September New York Climate week onwards, we, we are going to get people talk about those that dreadful phrase, green hushing, you do the right thing if you don't talk about it.

David Shukman (24m 24s):
So I think definitely a number of the companies that I have engaged with recently are more determined than ever to keep going because they think it makes sense. They know it's the right thing to do, they know it attracts bright young talent and a whole lot of other reasons, but they don't talk about it so much and or if they do, they reframe it as resilient. So I think yeah, there is a shift, but my hope is that enough bright, well-intentioned people will recognize, will read the science and will know what's going on and will know that not only is it the right thing for them to do as individuals, but the right thing for the organizations fingers crossed that that carries through.

David Greely (25m 07s):
And clearly there's been a large shift in the policy landscape, the US elections. How do you see that kind of redrawing the map on which this corporate action is decided? How do you see the policy landscape having changed, not only in the US but how is that affecting how the rest of the world views its climate action?

David Shukman (25m 32s):
It's early days, but I think we are starting to see some really fascinating trends. I mean, without question, it's a blow to the international process not to have the participation of the world's largest economy and there are all kinds of people who will try to say, oh, it's not that bad. We will go in and whatever. It's a blow. There is no question. On the other hand, we are seeing a shift in the tectonic plates of global industry, by which I ally mean China, but not only China. I mean one in every two cars sold in China is electric. I don't know whether you have kept across with developments with electric cars in China, but I mean, you know, they are producing models that

make Teslas look out of date and inefficient. There are a couple of models on the market in China that have a batteries have a thousand kilometer range, can charge in 5 to 10 minutes.

David Shukman (26m 27s):
All of that is feeding through into a revolution in the automobile industry and car makers that can look up from their own desk and see what's going on must be, certainly in Europe we are seeing a shock to the system. So there are tariffs on these Chinese cars to make them more expensive in Europe. But I mean, you know, there's a BYD model for that sells in China for $8,000. You are seeing one of those models being offered for sale to British customers of a power company, octopus energy but there is no upfront capital cost. You pay £300 a month as a customer of the energy company, you get the car and you have bidirectional challenging. So the power company gets to use your car's battery when you are aware then near to iron, our intermission of renewables. I mean my point is there is an industrial revolution happening and my worry for America right now is that this anti EV, anti-solar, anti-wind, anti-battery, I mean it's like, can you imagine rewind a couple of hundred years and the pioneers of the steam engine in the UK coming up with the early designs and the first locomotives for a railway and all of that absolutely transformational.

David Shukman (27m 59s):
And the French and the Germans and the Americans and others saying, ah, no, we are not bothering with that. We are going to stick with the horse and the sail. We know what's best and I just think this century that we're in the Chinese and they can do the zero one party state. But I mean the Chinese have set out an ambition very publicly and had done 15 years ago, I reported on it, they want to be an elector state. But already we're seeing how China is on the brink of importing less oil for the first time. Think about that, the world's biggest polluter, second biggest economy actually growing economically and importing less oil. That's profound and I think taking a really big picture here, I think it's a crying shame. I mean America is such a fantastically invented nation. Probably everything we are using now to communicate. I am on an Apple MacBook, I don't know what you are on, but you know, all this tech is in America is this crucible of amazing invention and I just think harnessed in the right way and allowed to flourish could really get us out of trouble faster.

David Shukman (29m 10s):
So I think if you look at a global landscape, we are going to see the Chinese are not slowing down. They are building enormous electric car factories in Mexico and Brazil. We are seeing them push into Sub-Saharan Africa. If you are in an emerging economy like Nigeria or South Africa, Kenya, and as an $8,000 car offered new Chinese happy to be electric, I could see them storming in that coupled with sailor, coupled with batteries, coupled with wind and all the systems. So I think the ground is shifting visibly and rapidly and I just worry that for the United States it's a moment of stepping back rather than embracing an obvious future.

David Greely (29m 55s):
I was recently in Singapore and I saw my first BYD dealership and it's just impressive, the quality, the look of the cars, everything in terms of their efficiency and I think people in the United States who haven't been paying attention, I think they are trapped a little bit in an old story of China. And I think people vastly underestimate not just the scale at which China's operating, but the level of innovation and the speed of innovation and frankly how commercial many of the companies are in terms of their business dealings. If you agree with that part of the story, which it sounds like you do, how do you think people in the US, even Europe, kind of realize how much the world has been shifting?

David Shukman (30m 46s):
I think certainly in Europe they are starting to see, I mean, you know BYD is just one, it's the most common that there are others that are making inroads here with very attractive offerings despite European Union tariffs. I was in a BYD taxi in London a few months ago. It was a stunning experience. I mean it was no great luxury car it, but it was beautiful and quiet and efficient and the driver was incredibly pleased with it. So I think it's percolating into the national consciousness, it's triggering in response. I have just bought a new electric car, which is French, a Renault 5 electric model. That car maker realized that to meet the Chinese challenge, they had to be very inventive. They have dug into a kind of wonderful sentimental nostalgic thing and reinvented a very popular old brand of car, remodeled it totally, it's charming, it's sexy, it's efficient, very French.

David Shukman (31m 50s):
And that's what drew us to buy it and so I think there are fantastic opportunities. Wherever you have got solar panel makers in Europe, they are playing on the patriot card. Some will survive, some might not. I, I think that clever operators will up with the Chinese and find an ingenious way to work together because it's still the case. I think that the greatest inventiveness lies in the west. I am thinking of the next generation of soda panels. I mean the ones that NASA sent to the moon in the early seventies had a 6% rate of efficiency. Now we

are at about 20% for your standard panel. But I mean there's the potential for 30 or more. If you double the layers, you have a layer of silicon and then a layer of Perovskite for example, you catch on more of the sun's ray. I mean all of that stuff, particularly the Perovskite being developed in Europe will probably be turned into a product in China, which should be sad for the European inventors.

David Shukman (32m 56s):
But that's where I think actually collaboration is potentially very productive way forward. You have the great ideas and then you use Chinese manufacturing muscle or you get the Chinese to build the things here. I don't know, but I mean there are ways of thinking about this more imaginatively. I think if you shut the door, you try to shut the door, the rest of the world won't be doing the same. As I mentioned, Brazil, Mexico, Indonesia, and all of these, these fast growing emerging economies. They just want cheap good vehicles and if they happen to be Chinese and they happen to be electric when a gust of all if they are Chinese but made in those countries, I think, you know, suddenly we are going to see, you know, potentially older industries are just not going to be, not going to be standing. I mean this exact, the same thing happened, you know, in shipping, which I have done a lot of work on as late as the 1870s, 80s, 90s, there were companies still offering new sailing ships to carry cargo even if steam had been around for a century already.

David Shukman (34m 00s):
But I mean by then it was clear invest in steam, you have a more reliable vessel, you can deliver goods for your customers with greater certainty but some of these vested industries, vested interests, understandably, don't want to let go. They can't see there's another way. Well the famous one is that Kodak didn't see a future for digital photography right? Didn't recognize that they were in the imaging business. Well I think the same with car makers. You know, they are not necessarily in the internal combustion engine business, they're just in personal transport and whether it's cars or planes or electric something and whatever, that's what they're good at. I think we are gonna see the kind of rest of the world's syndrome, which wasn't plausible 20 years ago. Let's face it, you know, there were dominant industries typically in the west. The world is different now.

David Greely (34m 58s):
And that ability to realize when and what's different and even be able to reframe things like you said, like with Kodak, like we are in the, the imaging business or a car makers in the personal transport business. A lot of how we human beings frame and reframe things comes through the stories we tell ourselves and tell each other. And you are someone who is a long-term practitioner of the craft of storytelling. I think sometimes the knock on people interested in climate has been that they are not particularly good communicators. I think that's probably a knock on science broadly has not always been great at communicating to a, a general audience. Where do you think we need to do a better job of communicating on climate and how do we need to be able to tell these stories better so that the response to them will be more effective?

David Shukman (35m 57s):
We need new language immediately and I think it's almost like throwing out the textbook. So just kind of an example or two, rather than saying to someone, our climate models suggest an increased likelihood of more severe precipitation in the coming decade or two, which probably would leave most people completely kind of stunned or cold but if you say that we reckon your house is going to be uninsurable in a model of years, or if you say, rather than greenhouse gases, particulate pollution from exhaust pipes is exacerbating health conditions you just say your daughter's asthma is made worse by all the crap being belched out of exhaust pipes on the highway next to you and then if you twin that with a little suggestion of blame and say, fat cat polluters are getting rich by making your daughter's asthma worse again, you have got another pathway.

David Shukman (37m 12s):
Now I am going to give credit for those examples to a wonderful guy called John Marshall who used to be a big shop marketing guru on Madison Avenue and then saw the light and wanted to do a completely different thing and contribute to this very question that you have raised with his work through the Potential energy coalition and he has found that if you get the words right, if you avoid some and use others, so you, you don't mention climate, you don't mention greenhouse gases, you don't mention planetary. There is a whole long list you just don't go near and then there's a list that you do use, you get even amongst the most conspiracy minded folk who you would think would be the last to engage with this subject, get it suddenly and wake up and so it seems to me that just as MAGA is a clever turn of phrase, America first, I mean these are brilliant and British regime, we had take back control as the slogan to get out of the European Union.

David Shukman (38m 22s):
Actually what John Marshall's work tells me is that there is a potential to find language that influences people and changes minds in a constructive way and we just got to make sure that we keep using that language. I said this in a few, a few events and whenever I get the chance and sometimes people say, yeah, yeah, you are absolutely right. And then the next thing you hear them say is mitigation adaptation and greenhouse gas emissions Paris agreement and you said, well hang on, didn't you just hear what I said? So I think there is a long way to go, but it seems to me that the good news is that there is language that cuts through. We just got to make sure that people use it.

David Greely (39m 03s):
Yeah and I often think especially with science communication, when people are trained in the sciences, they are taught to be very impersonal, right? You are supposed to be objective, you are supposed to stand back and so you end up with this writing like you, like your wonderful first example that doesn't resonate with anyone citing your T-stat or your P statistic is not gonna convince anyone of anything, but often feel like nothing is inherently meaningful. It's meaningful to a person, it's meaningful to me or to you. And it's, as you said, when it's my daughter, my home is becoming uninsurable, my daughter having asthma. That becomes meaningful and I wonder like, are we just afraid to have that conversation on a personal level? Is there something about the scientific frame of mind or that people are just, they try to stay a little bit too objective?

David Shukman (39m 56s):
I think part of it is that this whole topic originated from scientists and we have to thank them for alerting us all to what's going on and how it works and where we are heading. But because it originated from science, the predominant language to date has been scientific, as you say and so words like uncertainty get used, which in the scientific world means something quite precise. It doesn't mean you don't know, it just means there's a range of possible outcomes and, but of course critics would say, well these scientists even they sow their answer and so immediately you get a kind of false avenue created that suggests we don't know what's going on or what we are talking about. So I think that's one thing. I think there is another thing for a long time there was a tendency in climate science world and probably the climate journalism world where nobody wanted to be accused of being overly alarmist.

David Shukman (41m 05s):
So if there was a range of outcomes, like how hot might the planet be by 2100, for example, and there was some high number up here kind of, I would steer away from that kind of just didn't feel right and I think there was a lot of mutual kind of nudging towards the middle. So people tended to land on were sort of heading, I am talking now 15 years heading for a three and for a long time people thought two degrees were safe, we now know it isn't, won't be so three didn't sound that bad and I think another thing is that climate scientists, they are trying to establish what is the likeliest outcome to something. If you are in the business of resilience and planning for emergencies and trying to work on how to keep a city safe, reducing deaths and injuries and damage to property in some location, actually you don't need the middle ground.

David Shukman (42m 09s):
I mean of course you need to know it, but you want to know what the worst case scenario, what's the reasonable worst case scenario. You want the outlier, not many. You come along every at many years, but you need to know it if you are building a bridge or a railway on a coast or power station, whatever you are doing, you need to know actually what's the worst we could face here and so I think there has been a mismatch over a number of years between what the scientists have been producing, which is these models with these projections with kind of suggested landing zones somewhere in the middle and then actually what the risk analysts actually need and that's this more extreme stuff, what actually could happen and I think that's another reason why a lot of people are being perhaps a bit surprised by what we are seeing now by way of extreme word because we haven't been prepared for the worst case scenario because no one's really wanted to talk about it. I didn't want to talk about it when I was reporting for the BBC and I think actually I explore this in my book a bit more. Like what are the worst case scenarios? Not something that's going to happen, but they could and isn't it safer to be ready for them? It's a different mindset.

David Greely (43m 23s):
It really is and it's a mindset that matches kind of our lived experience. Do you remember that the summer was a couple degrees warmer on average than a previous summer? No. Do you remember if the storms were more violent? Do you remember if there was that day where it was over a hundred degrees Fahrenheit or a week where it was in the upper nineties Fahrenheit? Like the extremes are what live in our memory and affect our life.

David Shukman (43m 49s):
I think that's right. No one knows what these averages mean or what, but they definitely know that we never got flooded on this street. But now we do get flooded or our upstairs room used to be perfectly habitable in the summer, but now it isn't. We started to see in Britain train tracks are designed for a certain temperature range, which we are now exceeding more often than, so the trains don't run. I mean, so very definitely the realities of a different climate hitting people in ways and which I think makes it all the more important to try to lace that together, that experience with explanation. So that it shouldn't be a huge surprise and a huge shock, but actually is. Oh, okay. That's part of a pattern right okay. Well maybe I can do something about it.

David Greely (44m 53s):
Well, I always enjoy getting to talk with you, David, and I think there is probably no one better at lacing together experience with explanation and so I appreciate you joining us again. And you know, even though our summer playlist is over, I always enjoy understanding what you are reading and what you are up to. So I wanted to ask you, even though we have moved on to a new podcast series, what's on your reading list right now but before I do that, I want to note that your mother Ann published a book last year titled *44 Days in Prague*. So I was hoping you could just tell us a little bit about her book.

David Shukman (45m 30):
Well, it's lovely of you to ask. So my mother, Ann is 94 years old, so she was 93 when this book was published. It's about a peace mission that her grandfather, Walter Runciman, led to Czechoslovakia in 1938, the eve of the Second World War tensions in Czechoslovakia and the right in the middle of Europe between the German speaking minority and the Czech speaking majority, Hitler was whipping up the German speaking minority and wanted to use it as a pretext for invasion and so my great-great-grandfather was sent by the then British government to see if he could broker a peace deal and my mother brilliantly got hold of papers and family documents. Her grandmother's diary, her grandmother went on the mission as well and has pieced together what went wrong. It's a tragic story really, of British hubris that they could turn up and sort things out and didn't.

David Shukman (46m 34):
My great-great-grandfather was ailing and kind of losing it a bit. His wife was, turns out to be pro German. I didn't help and probably the most important thing and relevant to now is that this delegation was completely out of its depth negotiating ultimately with the tyrant Hitler. They didn't know, they thought he might be reasonable and they could have a negotiation, but parents don't negotiate and I think there is a lesson for us now. In fact, president Trump is finding that right now with Putin. It's not straightforward. So yeah, I am very proud of her and she has done a couple of events where she thinks she is too old to give a talk at a retreat festival. So I get roped in as her interviewer and we have done a couple and we are doing one in a couple of months' time, so very exciting.

David Greely (47m 26s):
Ah, that sounds fascinating, David, and it sounds like a wonderful book. So that's going on my reading list for certain, but I assume that you have already read the book since you are hosting these events with your mother. So I wanted to ask you anything else that you have been reading this past summer.

David Shukman (47m 39s):
Every year and it's a kind of homage. I pick up my well-worn copy of Scoop by Evelyn Waugh published in the 1930s, and it's just a terrific expose of everything that's wrong about information, news, journalism. It's about power, it's about big business, it's about corruption and although it was published getting onto a hundred years ago, it's totally relevant now and it also has the absolutely magnificent quality of being hilarious to read. So I get back into it pretty well every year. It's on my summer reading list, and if every your listeners haven't read it, Scoop by Evelyn Waugh, it's the most fantastic read.

David Greely (48m 29s):
I will have to check that out. I haven't read it, but it reminds me a little bit of the way I feel about Liar's Poker, where I read it many, many years after it was written, after I had worked over 10 years on Wall Street, and it seemed just as appropriate at that time as it did when it was written.

David Shukman (48m 46s):
There's that wonderful blend of cynicism, humor, warmth, humanity kind of reality. I find it very absorbing and enjoyable.

David Greely (49m 01s):
Thanks again to David Shukman, BBC News Science Editor turned Independent Consultant. We hope you enjoyed the episode. We will be back next week with another episode of Catching Up On Climate. We hope you will join us.

Announcer (49m 18s):
This episode is presented by Base Carbon, a financier of projects involved primarily in the global voluntary carbon markets. Base Carbon endeavors to be the preferred carbon project partner in providing capital and management resources to carbon removal and abatement projects globally, and where appropriate will utilize technologies within the evolving environmental industries to enhance efficiencies, commercial credibility, and trading transparency. For more information, visit basecarbon.com. Base Carbon, sensible carbon investing.
That concludes this week's episode of SmarterMarkets by Abaxx. For episode transcripts and additional episode information, including research, editorial and video content, please visit smartermarkets.media. Please help more people discover the podcast by leaving a review on Apple Podcast, Spotify, YouTube, or your favorite podcast platform. SmarterMarkets is presented for informational and entertainment purposes only. The information presented on SmarterMarkets should not be construed as investment advice. Always consult a licensed investment professional before making investment decisions. The views and opinions expressed on SmarterMarkets are those of the participants and do not necessarily reflect those of the show's hosts or producer. SmarterMarkets, its hosts, guests, employees, and producer, Abaxx Technologies, shall not be held liable for losses resulting from investment decisions based on informational viewpoints presented on SmarterMarkets. Thank you for listening and please join us again next week.