## Harry Kennard 0:09

Hello and welcome to episode five of the climate change and health podcast from University College London. I'm your host Harry Kennard, and today's episode is once again dominated by recent events in Scotland's biggest and arguably best city, Glasgow, all the very best to Aberdeen. After two weeks of intense activity, COP 26 concluded one day over schedule with an agreement, the Glasgow Climate Pact, the 11 page document that resulted from the conference has been both welcomed and derided. It calls for efforts towards the phase down of unabated coal power, and phase out of inefficient fossil fuel subsidies. Proponents of this wording note that this is the first time fossil fuels have been explicitly mentioned in a UN climate agreement. Whereas critics argue that phasing down of coal is simply too slow to avoid disastrous climate change. The deal successfully completed the Paris Agreement prior to Glasgow, Article Six, which covers the rules of how carbon markets function was undecided. And there's much more besides that, so I caught up with three of UCL's leading climate change academics from the Institute of sustainable resources, the ISR who attended the conference to get their impressions of what happened. Lilia Couto is a PhD candidate at ISR. She serves as a chapter scientist and research assistant for the Ipcc ar six mitigation report. The main research goal of her PhD is to assess the socio economic impacts of investing in renewable electricity sources in Brazil. I'm also joined by Jim Watson, who is professor of energy policy and director of the ISR and research director of the foreign commonwealth and development offices climate compatible growth programme. And finally, Michael Grubb, who is professor of energy and climate change, and research director at ISR. He's worked as a senior advisor to the UK energy regulator OFGEM and in 2018 was appointed convening lead author for chapter one of the IPCC sixth assessment mitigation report. This week's episode marks the end of the Bartlett schools pre cut Outreach Programme, please do have a look at all the resources ucl.ac.uk/Bartlett/together-climateaction, there really is something for everyone who's interested in sorting out climate change. Next episode we're returning to the more in depth discussions we've had of the relationship between climate change and health explicitly that we were having before cop captured the world's attention. But we decided it was too important not to cover. So here's my discussion with Lilia, Jim and Michael, on COP 26.

So I'm very happy to welcome Lilia Couto, Jim Watson and Michael Grubb to the podcast, they are UCL colleagues who have spent the last week or two at COP 26. And they've agreed to share their impressions of the conference with us. So this will be very interesting. I'll ask each of them to give me a brief background about how they got interested in climate change and energy in the environment. And then we'll crack on with impressions of COP 26, and some reflections on what the conference achieved or didn't achieve. So Lilia I'll start with you. How did you get interested in the environment?

Oh, that's a nice question. Actually. I have always known that I wanted to work, environmental issues. So when I decided to do like my undergrad, first I joined environmental engineering. But then I realised that I was more of an economy. So I changed Siri comics. But I already knew that I wanted to work with like, the economics of climate change. So yeah, it was something I always knew.

### Harry Kennard 4:10

Excellent. Thanks very much. That's, that's great. Okay, moving on to you, Jim. What about your background?

#### Jim Watson 4:15

Yeah, I've turned mine similar to Lily is actually an engineer turned Economics and Policy person. I guess I traced it back to the late 1980s, early 1990s. First spending a few years in a car company, which really didn't show any signs of doing anything for the environment. So I suppose it was partly a reaction to that. And second, having the opportunity to build a small wind turbine, the first and last time I've ever done that in the early 90s. It was very small, I would add, but I guess from there, that the lesson I took is a you know, wanted to work on sustainability in the environment and be I wasn't really cut out for a career in making and designing things. It was more about what government does And what society does about these problems? And I guess that's led to me being where I am.

# Harry Kennard 5:07

Excellent. Thanks very much, Jim. Last but not least, we have Michael.

#### Michael Grubb 5:10

Yes, I Well, like Jim, I fear I date back to the 1980s, which I started the decade with a broad interest across Natural Sciences at university. And when I thought about what I wanted to do, I really wasn't sure. But I found energy and environment issues fascinating. And was lucky enough to get a PhD place in that kind of area that drew me into electricity systems and how they might operate with renewable energy. And then I moved from there into much broader environmental issues. And I've just found it utterly fascinating, as well as hopefully important.

### Harry Kennard 5:52

Did so yeah, we all we all hope that what we're doing this important. Well, let's start with you, Lily. And then we can move to Jim and Michael in turn, then. So what were your

impressions of how, what it's like to attend a cop conference? How did this one differ from previous ones you've been to? Was it made interesting by being in Glasgow?

#### Lilia Couto 6:11

Yeah, it's always overwhelming. There's always this huge fear of missing out, because everything's happening at the same time, lots of Commandments being launched at the same time, and everybody expects you to know everything about what's happening there. Because you're there. Everybody who's not there expects you to be able to explain, everything is happening there while things are happening. So it's really overwhelming. And fear of missing out really defines the sensation of being in the car. So this one was no different. They were all in the first week, while we were there, there were loads of new commitments to reduce the forestation, myth, animations, the finance Alliance, so everything being launched, that the copy has, this is also something that always happens like every new initiative wants to go, they want to launch that the cop, right? Not a little before or just after they want to do an add to cart. So everybody keeps the best they have the the year to launch at the clock. And it wasn't different this time. I think what was different this time was about COVID. really like the fact that there was no cop last year. So we didn't have a car for two years. The car that was supposed to happen last year, and of course just happened is a very important one in terms of like the Paris agreement. And everything and updated NDC. So it's very important cop that was held. So there was a lot of tension and a lot of expectations and excitement. At the same time that events were hybrid for the very first time, like normally the events wouldn't be so focused on the broadcasting, they would more they would be more focused on people who were actually there. And this was very different from my previous experiences, our

Harry Kennard 8:25

which were the previous cops that you went to?

Lilia Couto 8:28

COP 21 in Paris and 22 in Marrakech.

Harry Kennard 8:31

Interesting, fantastic. Thank you very much. That's that's an excellent sort of impression. The sense of overwhelmingness is something that doesn't necessarily come across to people who aren't. Yeah, Jim. Your impressions is similar.

Jim Watson 8:45

It was very different. I mean, my last it's been 10 years since I was at a COP. I went to the COPs either side of Copenhagen, but not Copenhagen itself, because that was such an organisational disaster. I didn't leave home. As I never mind not getting into the Conference Centre, like some people I just didn't leave home. And so fell different. Of course, because 10 years have passed the context is very different. I mean, it's not just COVID Lily mentioned, but you know, just the, the progress we've made with renewable technologies and the costs of those coming down and so on. So a lot of those things added to a very different sense. And of course, Paris had been done in between as the deal that cop 21 So you did feel that the profile of COP this time a cop 26 was way higher than certainly the other ones I've been to. Yesterday, it was a circus, it's always a circus, and I spent a lot of my time in the third ring of the circus, which is the ring outside the cop itself entirely, you know, so there's a set of side events going on inside the main zone, which are not where the negotiations are. So that's the issue of keeping up but then there's another ring of stuff going on even outside the main zone and so I was involved in side events there. And I suppose the the sense when I was there As the overwhelming sense for me was just swinging between optimism and pessimism, depending on which report had just come out or who had just spoken to, you know, so there's a lot of hope riding on this cop, of course, and we'll talk about the outcome in a minute. But yeah, you know, both things were happening simultaneously, both optimism and pessimism quite often. You know, I'm really trying to work out how I failed. Yes,

### Harry Kennard 10:22

yeah. Absolutely. And, Michael, from from you, what's your history of COP attendance and impressions of this last one?

### Michael Grubb 10:30

I've got a fairly extensive history of COP attendance, which I think actually yeah, definitely includes right back to cop one. Can you imagine 1995? And the adoption of UNFCCC before it? Yeah. I mean, obviously, the whole thing has grown enormously. In particularly in terms of non governmental involvement, attending, it's clear now that cops are basically two very different events, there's global negotiations. And there's huge civil society interest, you could argue that there's several variants of several meetings going on at once, actually, because you have the sort of the internal discussions where lots of governments have their own pavilions to bring forward their research. And there's the Green Zone, which is more general, wider access. And, and I think Glasgow, to be honest, will partly be remembered for a cop, where you could argue the event were maybe more important than the negotiated outcomes, at least in some senses, because you saw the British presidency, using much more consciously and deliberately the event to convene political pressure and to introduce a lot of coalition statements. So you know, the first week was a kind of pledge fest of, you know, groups of countries saying we will do this and that. And then the second week got noticeably more tricky, more difficult and more serious, because it was actually about the

UN negotiations, and what countries would actually sign up to in terms of at least a formal CoQ statement, which is, of course not itself a legally binding document, that's that happens quite rarely, in terms of high level issues. There were important issues resolved in the negotiations, for example, around what was called Article Six. But you know, most of the headlines really were in the first week on the non negotiating presentations, and statements and coalition announcements, followed by a certain amount of head scratching about how much of real are these and what made the negotiations themselves deliver? In that sense, I think it was a rather different dynamic from from several other cops, but a sort of a natural evolution of the process, you might say.

### Harry Kennard 13:00

Right, and we sort of look on to Egypt next year. Right. That's the way the sort of cycle continues. Okay, well, going back to you, Lily, I think it's probably nice to or good point to sort of reflect on some of the outcomes of the negotiations. I mean, there's a lot of technical stuff we could get into, but that may not be of interest to the listeners. Do you have any specific takeaways from what has resulted that you think are particularly important?

#### Lilia Couto 13:30

Yeah, sure. Sure. I know that there is some disappointment, like some bitter taste, regarding like, the language phase out that became facedown of coal, but I think that the fact that we now have a roll vote for the Paris Agreement is super important. It is like one of the main outcomes that we could expect from this happen, we have it and the fact that fossil fuels were mentioned for the first time in a conversation. So and also the the Article Six of our international carbon markets. Um, we now have rules for that, too. So we have very important outcomes, like what we would expect from this cop. We got we got some of them. So although the ndc is the national exam contributions, they are still not consistent with the temperature goals and some of the things that we would expect we don't have yet. I would say that we have close to positive positive outcomes.

### Harry Kennard 14:45

Do you there's a lot sort of riding on whether the outcome is still compatible with 1.5 degrees of warming? Do you have an impression about some of those opposite And the sense that there was this IAEA analysis that said, we're currently looking at something like 1.8.

#### Lilia Couto 15:09

Yeah, that is debate where we had in terms of temperature according to the commitments we have at the moment, but one very important thing that I didn't mention is the ratchet

mechanism, the fact that all those countries will need to present new targets that are more ambitious next week, next year already. So like the fact that they have to come up with more ambitious targets. Well, at least I hope it will lead us to a better pathway in terms of temperature, etc.

Harry Kennard 15:53

Yeah. Thanks. That's great, Jim.

Jim Watson 15:56

Yeah, so I have mixed a mixed feeling, I guess, about the outcome overall. But I do think in terms of an international negotiation, there are, you know, some pretty positive things in the in the pact that was agreed in the end. Obviously, if you compare it to what the science says we should be doing, that's why lots of people are disappointed. And they're especially disappointed if they're in a less developed country dealing with the impacts of climate change, or a small island state facing sea level rise. So I can really understand the disappointment too. But you know, Lily has already pointed to a few of the things I pick out, some of which I never really expected to survive in the final text, you know, so this idea of revisiting pledges next year, rather than in five years time, I think, is perhaps the most important thing for me, because it means that these extra deals that Michael was talking about, you know, that were announced in the first year, these sorts of have to mean something now, in order for countries to come back and show more ambition in next year, rather than in five years time. The mention of coal, I mean, it got watered down and watered down through the second week, that was intensely frustrating. I don't think India needed that final change in language at all. They had enough weasel words in there already. But somehow they felt they needed to push push their case on that. And I could see why Alex Sharma got so emotional and upset about it, because, but it's still in there. As he said in the press conference afterwards, he never expected that mention of coal and fossil fuel subsidies have to survive in the text. I think the other couple of things that struck me in the text one is that it was fairly blunt in its assessment of where we are. So there was a blunt statement of concern about the rise into emissions we are expecting unless governments do more between now and 2030. And it was pretty blunt on the failure on finance, you know, there was a pretty stark language in there. Or maybe that reflects more of a preparedness to face up to the reality. And then there's a number of other things in there. So it's clearly not enough. It sort of keeps 1.5 alive on life support, or somebody else said, but it's there, it's still alive. But really, you know, the next year or two is really which will, you know, will tell whether we you know, that's still going to remain the case, there's not much time to keep it that way.

And specifically on this article six, the wording of that. Could you sort of enlighten listeners as to why that's important and what it means and whether we'll know whether it works?

#### Jim Watson 18:22

Yes. I mean, in a general level, I can I mean, I'm sure Michael can in a more specific level, but I think it does matter, because this is about how countries trade, you know, carbon credits, and can they help each other out to help meet targets. And there was just a lot of scope and especially fears earlier on in the cop that that'd be too many Get Out of Jail Free cards built in that people could claim things were helping to reduce emissions, when actually in reality, they wouldn't. So the idea of avoiding chopping down forests, which probably they weren't going to do anyway, or saying, well, we'll count a new renewable energy project as a credit, but actually, they were going to invest in it anyway. So that's always the difficulty with these sorts of things. But having those rules completed, as Lily said, the article, you know, the full Paris rule, but with Article Six settled, I think is really important. It's not perfect, but it's perhaps again, better than many some people that feared

Harry Kennard 19:15

Lillia, you're gonna jump in with something?

### Lilia Couto 19:17

Yeah, it's just that there is also a rule now to avoid double counting, because one thing that everybody was quite worried about was that there would be double counting in terms of both the country which is predicting the credit and the country who was buying the credit, most of them would be able to use those credits against their indices. And this is something that the new rules have managed to work out.

# Michael Grubb 19:49

I'm just just one word on the Article Six, which is that I, I caught briefly. The tail end of a word earlier today about Article Six by one of the stalwarts, long standing people of the field, Alex Nikolova, his assessment was really quite positive, there was worried it could be a load of loopholes. There were worries that the Brazilian delegation in particular would be very difficult as it was in Madrid in the previous cop. But actually, he was really quite upbeat about the outcome. In most respects. Obviously, it's a really complicated area, but it's at least now, those involved in that field can get on with the job of trying to develop these mechanisms and projects in practice. And there is sufficient protection against the kind of problems Jim mentioned, that they feel that it is pretty robust. And that's actually a not not a trivial achievement, in my view, against the wider, wider backdrop. Yes, the outcome, it was very interesting watching. And I have to say, one lesson is, if you want to

know what's going on a cop, you really don't have to go there. In some ways, it's easier if you're not there. Because if you're not there, you're sitting at your screen, and you're watching the plenary or whatever, and the documents, and if you are there, you're running around the halls, trying to find out what's going on or trying to find somebody that you meant to meet up with. And with 200 countries, 1000s and 1000s of people, it's quite a nightmare. So I was already home and watched the final plenary. And I thought, actually, what happened was sad, but for slightly different reasons. I think, the changes in this famous paragraph about coal, etc. The additions that got introduced 11th hour, upset quite a lot of people in different ways and led to a slightly bad taste in the mouth. But they're not really very material to the outcome of the GOP and its statement, in my view. As Jim noted, it's it is significant that there was an explicit reference to a particular fuel and the need to phase down or phase out. I mean, you know, phasing down is on the way, you've got to do that, you know, what I thought was sad also is on the whole, I think that Alec Sharma and the the British government, certainly the civil service, have done a good job. I mean, in the circumstances, it was pretty well organised. They've been working really hard in the build up to it, etc. I thought it was striking that Alex Sharma didn't appear to have that much support right around him. I don't know where some of the senior cabinet of cabinet ministers have been during this whole process, we saw almost nothing from Dominic Rob, or since there's trust in the way that Lauren's iba was heading up the French effort as the head of the of the Foreign Service. And I think at the end that showed I think Alex Sharma was completely exhausted. But he made a terrible mis judgement in the final plenary. Because watching it, I could see that China and India was saying we cannot accept this text. And I am also reading exactly what they said they had been saying that all along and they were getting really frustrated. And the South Africans said, you know, you have to show that we are not being heard. And then what did you do? He breaks briefly and comes back and says, Well, we're gonna keep the same text. Now, you cannot claim to try and ran through a global text over the stated objections of India, China and South Africa. Yeah, that's not the way the world it may reflect a sort of psychology that if we stitch things up with the Americans, you know, British American access can drive things through. Well, they can't. And I think, to be honest, whilst, you know, it's great to blame India on everything. And you know, I'm disappointed. I just think it was a really unfortunate oversight, misunderstanding, what I've done a what he was thinking of trying to bring the same text back to the plenary, when all three countries, you know, representing almost half of the world's population, and so they were never going to accept it.

And this is diplomacy and the tragedy is, if you actually look to this text from beginning in a knowledge of where countries were coming from, he'd say, you know, this is really not bad. This really takes us forward quite significantly. Instead of which the mood music was, oh, it was all a bit of a disaster. And it was procedurally a real mess of the end and Shana lost on her face. But I do think he was he was just exhausted and didn't quite have that diplomatic experience to realise it, what those countries say is absolutely vital. And if you don't take it seriously, you're going to end up in a mess. Just a couple of other things on on the outcome of NDCs, people are still trying to unpick the numbers. I've got mixed feelings about this

come back every year and try and do better. Because, you know, these are we are talking about changing big complicated systems, they don't change overnight, one year's data is not really going to fundamentally change what a country thinks it can deliver. There is a risk of pressuring countries into more ambition than they really meant or know how to deliver or are able to deliver domestically. So whilst obviously the thing that people focus on is ambition, actually, increasingly, the academic community is concerned with the policy and inflamation implementation gap. You may have said you're going to do this, but we see no evidence that you're actually doing it on the ground. You know, that's even true in the UK, what do you think it looks like in some of these other countries?

Harry Kennard 26:24

Heat pumps are an excellent example of that, right?

Michael Grubb 26:27

Yeah, yeah. So I think there's some pretty careful thinking required about the risk is, you have an annual fest. And you cannot conceivably expect countries to increase their commitment every year. So what you're saying is you're setting yourself up for a situation which most countries come back and say, no, no change from last year. And we thought this was five year cycles anyway, which gives us time to really review. So to me, it was a face saving message. It was one that was almost inevitable, given the mantra of Pete 1.5 alive. But I see Jim wants to add something into this conversation. So if you

Harry Kennard 27:07

disagree with you, that'll be exciting. Yeah, I

Jim Watson 27:09

do slightly disagree. That's why I wanted to say something. CIA. I think I first first I've seen firsthand that countries can change things quite in quite short timescales. So the bit of the cop preparation, I was involved in through the research programme that I helped run for the F CDO, we're having a lot of dialogues over this year with a number of countries, middle income, low income countries, particularly focused on phasing out coal, but on other areas, and one or two of those countries basically moved 180 degrees in six months, on things, so Vietnam moved, I think Morocco did significantly to and certainly opened up conversations, not necessarily 180 degrees, but with others where you could see shift. So that's one reason why I think that annual review, in some work cases, countries will just simply refuse to do an update, and it doesn't require them to do so. But in others, I think it opens the window for them to do it. But the second reason I think, the one year review is right, is that something Nigel topping, who's the cop 26 champion for non governmental parties, to put it shortly,

was responsible for and he said basically, the real economy, as he put it is moving much quicker than the five year cycles of a GAAP process, you know, so, so companies are announcing targets and moving technologies are moving quicker, markets are moving quicker. And my fear of sticking to five year cycles was that basically you've got this blundering process, and it's not really able to respond to what has been very rapid developments in the real world. Now, maybe a year is too short. But I do think the five years is way too long, especially given where we are.

#### Michael Grubb 28:48

Yeah, no, I do agree five years is is rather long, almost feels like a bilateral process where maybe in the interim years, you actually try and assess what have countries done that would move them towards their NDCs or beyond it. Right, some kind of iterative cycle, if you like, between ambition and implementation, but I not sure the UN f triple C is able to deliver that.

### Harry Kennard 29:13

That yeah, that may be challenging. Lilia, do you have anything? Any thoughts on that particular on the ratcheting mechanism in particular?

### Lilia Couto 29:21

Yeah, I think, Michael, I think I think it's very important that we have some kind of I don't know if stocktake, but like, trying to assess whether you're really delivering not only the targets, how the child is having meant and how much

### Harry Kennard 29:44

right? Yeah. So I think one perhaps final question, because we're all doing pretty well in terms of content is just a reflection on the civil society response and in particular thinking of grit, as response to the whole conference as being just another case of blah, blah, blah. As sort of technical experts, I think we can probably refute that on some level. Though I do have some sympathy in the sense that if you just look at the co2 levels in the atmosphere over the last 30 years, that cuts have been happening. They've just gone up and up and up. So do you have any reflections on on how at least we can convince wider society that that something positive has happened here?

## Michael Grubb 30:31

Yes, I think, I mean, we've never forgotten, the Carbon Trust headed by a sort of experienced businessman. And his reaction on this was, while it may look pathetic from the outside, but I can tell you reaching a deal between two companies hard enough how anybody gets 198 countries to agree anything is an absolute miracle, as far as he was concerned. Now, just a word, though, on this sort of mantra about oh, the whole thing's useless. We're not getting anywhere, which kind of easy to say. And as you said, you look at the numbers, and you think it does feel like that. And just a few remarks. One is that there's, I think, a growing debate about half glass half full or half empty, in other words, yet clearly half empty from the global trends. But actually, you look at the huge progress in renewables, actually, over 20 countries have sustained emission reductions for well over a decade. There's quite a few bright spots of things that could grow and you might grow expect to grow almost exponentially. The other thing is that just a few weeks ago, we published on the ISR website, a link to a review that we've done on the impact of policies. In other words, attribution of observed changes to government policies. And the evidence there was not only have they been important in say technology and the growth of renewables, but even on global emissions, you can reasonably conclude that several billion tonnes of co2 a year were several billion tonnes a year lower than we would have been without government policies. And a lot of those government policies are actually traceable back to the input impacts of the international process, the Kyoto Protocol, some of the politics then around Paris. And I just think that it's so easy to criticise. But remember, we are trying to change century whole civilizations that have been built on two centuries of fossil fuel development. Anybody who thinks that's going to be easy will happen overnight does not understand the problem.

### Jim Watson 32:50

Yeah, so I do agree with Michael and Lillia on this. But I do think that Greta and the you know, the the people who are frustrated in civil society also have a point. And I would connect the two things together, because, you know, we've already talked about the fact that, of course, countries have made pledges, but the real challenge is implementing them and showing you can meet those pledges and reduce your emissions, and do all the changes in your economy, which are hard, as Michael said, to make it happen. Now, without that civil society pressure on the outside, whether it is of a cop centre, or civil society, within individual countries, politicians aren't going to go as far and as fast as required. So, you know, there is a connection between the civil society kind of view of this, and what governments will actually do. But but I've I fundamentally agree that, you know, to dismiss this deal is kind of useless is really not a very good characterization of the truth. It's not enough, but it's we are making some progress, but that pressure has to continue if the implementation is going to follow as quickly as it needs to.

You've been listening to the climate change and health Podcast. I'm Harry Kennard, if you'd like to get in touch, you can find me on Twitter, please do contact me, especially if you work on the relationship between climate change and health. I would love to have you on the podcast. I have the dubious honour of being in charge of this thing so I can decide who joins me. It's quite exciting. Thanks to Lilia Couto, Jim Watson and Michael Grubb for joining me today. And also Kevin MacLeod who wrote the music which appears in this podcast. I found it on free pd.com Thanks very much for listening.