



MELBOURNE SUSTAINABLE
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CLIMATE & ENERGY
TRANSITIONS

Climate Conversations Series ROAD TO PARIS



FULL TRANSCRIPT

First speaker: Don Henry

Thank you very much. I thought what I might be able to do to help with our discussion is to perhaps focus on two areas, just to reflect on the key elements of the current negotiations running into Paris, and some of the big issues that are sitting in those negotiations, and then also just a few comments on what's going on outside of the negotiations. And I say this in this context. My own observation would be international negotiations on agreements like this attempted agreement on climate. They provide two opportunities, one is an opportunity for agreement making, but they also provide the opportunity because of enhanced public and political focus, for action to occur outside of that agreement making process. And I think that might be something that we want to discuss. So there's an opportunity for change here through an agreement making process, and everything else that can go alongside it.

The key elements in this agreement making process that's being attempted, is to look for full effective and sustained implementation from 2020 of the climate convention. So this is really trying to strike an agreement for action post-2020, something we may want to discuss. National governments are required to put on the table nationally-determined contributions, or national plans for action that will focus on mitigation but can have adaptation in them, on what they're going to do as part of their role to achieve the goals of the convention, which in various interpretations, bottom line involve keeping warming below 2 degrees, the 1.5 degree figure is in the negotiating text as options as well at the moment. So one key element is a bottom up process, different to what we've seen at Copenhagen, with national governments putting forward what they're proposing to do, a process of assessing how those commitments measure against the 2 degree goal, and then alongside that the question of financing what governments are going to do to support this change that's occurring, both public and private finance. In the negotiating text now out of Lima, there are options for a mid-century decarbonisation goal, but there are different options sitting there in the text right now. And then standard elements on technological development and transfer capacity building, and the whole process of transparency and review. And there's options as to whether these are five-year commitments and reviewed every five years, or ten-year commitments and reviewed every ten years.

I just want to sit back, for what it's worth what do I see as some of the big issues, the really big issues up for grabs here. One is the old saying, all politics is local--in this case in these climate negotiations I think one could say that all politics are national, not international. And it's going to be made or broken by what specific key countries put on the table and are prepared to do in this bottom up process. And in particular, US, China, Brazil, India, South Africa, Europe, and then a group of potential laggards including Canada, Australia and Russia, are really pivotal as to what happens with the overall agreement. And I just want to note, we've got a University of Melbourne MSSI program now that's going to have a look at producing briefing papers on a subset of those countries. A paramount issue is going to be the gap between what gets put on the table and the gap to achieving either a 2 degree or a 1.5 degree goal, and how that properly managed. How does one close that gap? What political pressure? What public pressures? What information? And what science can be brought to bear to inform closing that gap over the next eight months and beyond? Another key question is the legal form of this agreement, there's a lot of delicate dancing around the position of the US and India and others, Robyn will no doubt have some things to say. At the moment it's talking as it being a legal instrument or an agreement outcome with legal force.

A key piece that's underdone at the moment is private sector investment. A lot of the debate is around aid money support, public sector support for change, which is really important. Place-marked in the text are some elements on how one drives the level of private sector investment, for instance into low carbon electricity that's going to be needed to make the change. The mid century target, many of us think that's very, very important. That's going to be a very hard fought for issue, and there are many different ways of laying out that target in the negotiations.

And then there is a recognition of two other important things, the role of cities, states, NGOs and business in implementation, and then very importantly the action pre-2020. And the text out of Lima calls on all countries, and this includes Australia, to ratify Kyoto 2, and to really be doing more to lift ambition before 2020. That's not getting a lot of discussion in Australia at the moment. It's expected of us before Paris. And then if I could just sit back, that's an observation or some thoughts on some really big issues at play over the next particularly six, seven, eight months, but of course there's a lot of work going on outside of those formal government negotiations. The NGO community in many forms is lifting its activity to inform people to really create the space for stronger agreements. You may have seen I can report for example Al Gore's climate reality project, is organising a whole series of concerts mid-year, there's a mass mobilisation effort going on by many organisations, plus there's really focussed in-country work occurring in these key countries. The science community is heavily involved in many of these dimensions, and you can probably pick up from what's on the table, there's not only climate science, there's political science, economics, the full range of disciplines, and the knowledge we can bring to bear is at play here.

There is increasingly constructive involvement from some in the business community as well, and you may have seen collective statements out there by business leaders including the CEO of Unilever and others, really urging a strong agreement out of Paris. And then apart from that actual, the agreement on what's going on, the political and public focus at this time, is providing unique opportunities to advance constructive action to tackle climate change, internationally and in many countries around the world, and it's providing the space for questioning and action of destructive activities, including fossil fuel investment for example. And that dialogue is going on at the highest level in our reserve banks around the world.

I make this concluding comment; I think there is very substantial momentum for action, driven by an increasing recognition of the role human induced climate change is playing in extreme weather events in particular, driven by the opportunity that's now presented with lower cost, low carbon technologies such as renewables, moving very rapidly into the marketplace, and driven by leadership from US and China. I think the agreement by the presidents of the US and China late last year that there needs to be an ambitious outcome from Paris, committing their countries to what is modest action, but it's action, is very, very helpful. So we're at a time of profound challenge and profound opportunity for change, will Paris develop what's needed according to the science? No. Will it set us off down a path where action can be ratcheted up rapidly to achieve action on climate change commensurate with science? Potentially it could. And that's up for grabs.

Second speaker: Malte Meinshausen

Four priorities and many challenges. Four priorities, first the new agreement needs to stick. We need to have somehow, something in the text which strengthens the polluters pays, or the beneficiary pays principle, so adaptation funding or loss and damage. There needs to be a stick somewhere, even if it's just between the lines. We need carrots. The agreement needs to build leaders, it needs to create a race to the top, it needs to create claps for the willing, so focuses well on the co-benefits. Air pollution, renewable, reducing air pollution, renewable innovation, trade balances, electrification of rural areas. Second priority, the targets. The targets for 2025 and 2030 are important, they need to match up. If Paris doesn't achieve anything in terms of action happening on the ground in the next ten years, then there is not much we have gained. The long term target however, can as well trigger a lot of action on the ground, and that's why I put the zero carbon long term target, the full decarbonisation as the top priority, because I think as John mentioned and as well Don, there can be a lot of action on the ground outside the agreement and the zero carbon agreement could trigger a lot of action. Everybody knows personally how to implement a zero carbon target, coal carbon neutral use with the old energy use etcetera.

Four priorities, many challenges, one is how to fulfil a global agreement expectation by not going for the lowest common denominator. So we have this push, now it should be global, everybody should be on board, but then of course gives countries that don't want to participate a great chance of metering. So we need to keep in mind that these are current emissions, so we have G7 around for a quarter of the world bio emissions currently responsible for the current emissions. G20 is three-quarter, US, China and EU together would roughly be half of global emissions. So if you get these blocks doing sensible actions, we already have won a lot.

How to create a fair support regime without taking mitigation hostage. As was previously mentioned, finance is a big issue, finance ministers in the developed countries do see themselves unable for constitutional law parliamentary reasons, to commit to finance of the \$100billion order from public finance, for the next 10-20 years. That's not going to happen. Still the expectation for a lot of finance support is there, so how can we channel or create market conditions as well for private finance, to fill that gap. There's a negative negotiation dynamic that could be coming up is that mitigation is taking all hostage, if you don't pay us we don't mitigate. That was of course the fatal blow to Paris negotiations. Then there are lots more, how to build trust with insufficient or murky 2025 targets. If we don't know what these targets actually mean, how can we ask somebody else to put in a sensible target.

Now a couple of bonus slides on the top priority, the zero goal. Here you see the global emissions in the past, they rose up so that's total CO₂ emissions. These are pathways for the future, possible pathways, you see the slightly thicker lines are the four main IPCC scenarios. The IPCC's main conclusion was as well a carbon budget, so the cumulative amount of CO₂ emissions that we have to stay beneath if we want to have a likely chance of staying below 2 degrees, that would be indicated here. If we go from today to 2060 levels down then we have exhausted our carbon budget in order

to have a likely chance of staying below 2 degrees. If we wait to 2020 and go further up the path we are on, except that last year's carbon emissions seems to have stalled, but then we have to phase out to zero emissions by 2050 already.

On the 2030 targets, we need to do, the INDCs have to add up to, you see here 1990, and by 2030 under this IPCC pathway that has a likely chance of staying below 2 degrees, you look at about returning back to 1990 emissions by 2030. By 2050 for the greenhouse gas emissions so that CO₂ plus the methane nitrous oxide and the other gases, it's around a halving below 1990. So the 2050 halving greenhouse gas emissions is consistent with a zero, the phase out target of net CO₂ emissions by say 2055 to 2070.

Further info as John mentioned there is a great link collection now on the MSSI website, we have a little video from our troops that went to the last conference, the big conference in Lima, and there is as well another seminar within these series, so we have a key negotiator from the small developing countries from the small island states, Ian Fry likely to join us here on the 21st of April. Thank you.

Third speaker: Robyn Eckersley

Thank you very much. Yes I want to talk about what happened at Lima, the fallout, then the inter-sessional negotiations in Geneva in February, and then a quick timeline of things that are going to happen between now and Paris, in November/December this year.

Firstly, Lima produced a Lima Call for Climate Action, and elements of a negotiating text. The negotiations over the elements of the text stopped before the end of the two weeks, and that was handed over to be worked on in February. But there was a lot of painstaking negotiation to produce the final COP decision, which is the conference of the parties' final decision.

Now a lot of observers said that, after Lima, differentiation is dead. Irwin Jackson from the Climate Institute said never before has there been an agreement requiring all significant emitters to submit national targets, which are to be judged against the same benchmark. There is no differentiation here between developed and developing countries. And Michael Jacobs, a seasoned participant and observer, said the binary, the firewall between developed and developing countries, is over. A lot of climate realists also say that we should stop thinking about a legally-binding commitment, it's a distraction, everything will turn on what happens at the national level, and we should just think of the negotiations as one thread in a very rich tapestry.

Well I want to take a contrary view to both of those interpretations. If you watch the negotiations particularly in the last 48 hours, you could see that developing countries were very angry. The draft COP decision, drafted by the Conference secretariat, favoured developed countries, and they wanted the parties to take control over it again. Differentiation had been taken out, and they got it put back in again. So the principles of common but

differentiated responsibilities and respective capabilities were reinserted in that draft decision text. So differentiation didn't look to me like it was dead, and I think the long running 23-year old debate will continue grinding along right through to Paris and beyond.

The developing countries also got equal weight to be given to not just mitigation but also other issues. They felt the text was too mitigation centric (quite understandably), but they said hey don't forget about adaptation, finance, technology transfer, and particularly loss and damage. They should all be in the Paris agreement.

Yet the Lima call for climate action was quite disappointing. There was no movement to raise pre-2020 ambitions. So pretty much the Copenhagen targets that parties agreed to back in 2009, had not shifted, and it's now 2015. That's something to be depressed about. There was no agreement about any ex-ante review, which means a pre-2020 review of the post 2020 commitments to be made in 2015. They've given up on any principled agreement on how to apply common but differentiated responsibilities, so each country decides what they think is sufficiently ambitious and what is fair according to their own national circumstances. So it's Do-It-Yourself climate policy. There's no principle negotiations over this anymore. There will be a synthesis report prepared by the UNFCCC secretary in November, which will synthesise all the INDCs and see whether they add up to a hill of beans or not. But there won't be any other review prior to that.

The COP decision did require the sorts of information that parties have to put in, but it's a wilderness of metrics. There's no common metric anymore, each country will decide what sort of commitments to make, how much weight to give to mitigation, whether they'll put adaptation in, what baselines to use. It's all a wilderness of single instances, which is going to make judging relative effort, relative fairness, relative ambition quite difficult. So these are all problems. The parties did manage to achieve the \$10 billion threshold for climate finance, but there was no agreement on how they are going to make the \$100 billion target by 2020, and they carefully dodged the question of the legal form of the treaty.

So two more observations: I have never seen Australia more isolated at any single COP prior, and I've never seen the US more engaged (except perhaps the when Al Gore was leading the US at Kyoto). So these are good signs. Obama wants to go down in flames as a second term mitigation man, and he's certainly important. The China/US announcement was very important. Obama had a three-day visit to India earlier this year, but it wasn't as galvanising as the joint announcement with the US. Indian PM Modi announced some big things on renewable energy, such as a solar target of 100 gigawatts by 2022, but nothing about mitigation, no caps, not timetable for peaking, nothing about preventing India from hurtling down a coal path into the future. And remember India's population is going to overtake China's very soon. So India I think is the biggest sticking point.

Now for the next steps. There will be another meeting in Bonn in June and October, there'll be a G7 meeting hosted by Germany (a proactive party, which is good), and the G20 hosted by Turkey in November. The hype leading toward to Paris is will not be anything like the hype leading into Copenhagen. We've seen a lot of playing down of expectations. The legal form of the agreement is very much up for grabs, as Don said. The negotiating roadmap calls for a new protocol, legal instrument, or agreement with legal force that is applicable to all. We know that the US, China and

India will not sign an agreement that has legally binding mitigation commitments. But we know that there are other ways of crafting an agreement that will get those countries on board. It will probably be a package agreement, with a core agreement of some kind, and the INDCs will not appear as legally binding commitments in the body of that agreement, I can tell you that much. They will probably remain posted on the UNFCCC website, or they might find their way into a schedule, but not if that gives them legally binding force. The legal force of this agreement will be national law based on a soft law treaty. The parties will probably confer some rule-making power on the COP. COP decisions aren't international law unless a treaty says they have legally binding force. That's another possibility. There is no agreement over the review process and the cycle of review, whether it's five or ten years. And the developed country divisions are definitely set to continue big time.

But I think I'd like to finish off by reinforcing Don's point that the climate regime is not the only show in town. It is the main show in town, since it will give us kind of the moral compass, if not the legal compass, because it will be probably take the form of soft law buried inside a treaty. But the most exciting development since Copenhagen has been the rise of the divestment movement, the leave it in the ground movement, and the lock the gate movement. But if you read the treaty, the UNFCCC, fossil fuels are mentioned once only. And they're mentioned in a provision on response measures, that is, for countries that are worried about the adverse effect of other countries' climate policies on their economy. This provision inserted by Saudi Arabia to protect their fossil fuel economy. So basically this convention upholds the principle of permanent sovereignty over natural resources. While not explicitly mentioned, it's implicit in the whole agreement. So you have to get at fossil fuels outside this agreement by other means. And that's movement is going gangbusters at the moment.

I'll finish with this little metaphor: we have an engagement to get married, but we'll wait to see what happens when the parties get to the altar.

Final speaker: Tim Flannery

Thanks so much Robyn. Malte could I just ask you to turn back to your last projection slide there? Yeah, that one. I just want to talk about this Paris meeting in the context of it being part of a process. And part of a political process as Robyn's outlined, but also part of a physical process of the impact of Greenhouse gases on our planet. Now if you look at the red line there for the trajectory of greenhouse gas emissions, you can see that we're tracking the worst case scenario for the IPCC projections. So we're doing very badly in terms of these emissions just continuing to rise at a very fast rate. And we are hoping that the agreement in Paris, at least after 2020 and perhaps having influence before, will turn that trajectory very, very steeply downwards. Currently we're emitting as a species, about 44 gigatonnes, 44 billion tonnes of CO₂ equivalent into the atmosphere every year. And we've got to get that down to zero at about 2050. Now those trajectories—~~to~~ for staying below 2 degrees, I should explain, are based on the idea that we've got a 50/50 chance of staying below 2 degrees. If you want to give us a better than a toss of a coin chance, say a 75% chance of staying below 2 degrees, the carbon budget for the future becomes very small. At a 75% chance we've got about 600 gigatonnes of carbon left to emit, and we're emitting 44 gigatonnes per annum as we go now.

So one of the things I think that's missing from the Paris negotiations is the taking out of some insurance. Is it likely we are going to perform the perfect three-point turn in terms of emissions, to get down below that 2 degree mark, given a 50/50 chance? My suspicion looking at that graphic is no, we're not. Now in the last few days some data has come out that's made me re-think a bit, the International Energy Agency has said that emissions growth has stalled, stalled for the first time ever in 2014 while economies continue to grow. From energy sources they've stalled at 32.3 gigatonnes in 2014. That's a good sign but you never know that you've passed peak anything, peak emissions or anything else until you've seen a trend on the other side. So we can't count on this actually being a peak, at the moment.

How would you go about taking out insurance? There's a few things that can be done. And probably the least popular of those things is to engage in some further discussion and thinking about geo-engineering. I am not a great fan of hard geo-engineering, particularly solar radiation management. But we have made some progress recently in terms of establishing some of the facts around these geo-engineering proposals. The joint US academy's two-volume analysis of geo-engineering, which came out a month or so ago, is incredibly useful, and could form the basis for further international discussions about desirability of particular kinds of geo-engineering, and if so what are the rules around them. If we don't do that, the fear is that we will see geo-engineering done by individuals or nations capable of doing it. The Haida Nation in Canada recently undertook a massive geo-engineering project, 10,000 square kilometre algal bloom in the North Pacific, totally unregulated, no scientific overview. And that was a thousand people borrowing \$2.5million to be able to do that. So increasingly the capacity to do it is there, we need a regulatory framework I would argue around it, if we're to avoid at least those sort of things happening in future.

The second option is that of what I call third way technologies. Sometimes they've been discussed as geo-engineering in the past, but these are technologies which enhance earth's natural CO₂ drawdown capacities. They range from manipulation of mineral silicates like olivine, which are part of the natural CO₂ balance process of the planet, through to forest restoration, through to biochar initiatives, through to a whole series of other things that may happen. The difficulty with all of these approaches is that they are at the moment at a very rudimentary scale compared to the scale of the problem. So if you wanted to draw down 4 gigatonnes of CO₂ from the atmosphere out of, you know, we're putting in 44, we're thinking we'll take out four, what will we need to do to do that? Just one way you could do it is to take all of the world's forestry waste, all of the world's agricultural waste, plus the production of 10 million hectares of energy crop like sugar cane, take all of the CO₂ you'd capture in that and store it safely, that would give you 4 gigatonnes. So this is a planetary scale problem. So when we get to looking at third way technologies that enhance earth's capacity to draw down CO₂, most of them are inherently limited just by the scale of the issue.

If we want to scale them up by 2050 so we have the chance of drawing down some gigatonnes of carbon, if we overshoot, then we need to start focussing on those technologies now and working out how they can be enhanced and scaled up into the future. This is going to take decades, it's not something you do in 2020, 2030, or maybe even 2040, but beyond that you could do it. If you wanted to make a real difference, just say you want to

just draw down one part per million of CO₂ out of the atmosphere using these technologies, you need to be thinking about taking 18 gigatonnes of CO₂ out of the atmosphere. So we're currently approaching 400, to make it 399 we've got to do 18 gigatonnes, 398 another 18. So the scale is huge.

Taking out insurance in this area I think is really, really important. I remain somewhat pessimistic despite the latest IEA figures that we can stay within the 2 degree range, just because it does demand a perfect three-point turn. I think we need probably outside the process, outside the Paris process to be thinking about these other options, so that when the time comes, if we need them as insurance we're prepared and able to use them.