

EMMA ALBERICI, PRESENTER: Ian Chubb was appointed Australia's Chief Scientist two and a half years ago after a distinguished career in the higher education sector, most recently as the vice-chancellor of the Australian National University. He previously trained as a neuroscientist.

In more recent times he was appointed a member of the country's Climate Change Authority. It was tasked with reporting on how the Government could best fulfil its carbon emission reduction targets. Next month the Authority's due to hand down a draft report on whether the plan to scale back greenhouse gases by five per cent by 2020 is ambitious enough.

But that research might never be released. Tony Abbott has indicated that the Climate Change Authority, along with the Climate Commission and the Clean Energy Finance Corporation, are to be abolished. Professor Chubb joined me from Canberra a short time ago.

Ian Chubb, thanks so much for joining us.

IAN CHUBB, CHIEF SCIENTIST: Pleasure, Emma.

EMMA ALBERICI: Tony Abbott has not appointed a minister for science, research and innovation. I understand it's the first time in 50 years Australia will be without a science minister. Instead, those responsibilities will be shared across portfolios. Is there a benefit to having a specific minister for science?

IAN CHUBB: Well, Emma, I think the real benefit is when you've got a senior minister with influence and a bit of power who's passionate about science and whether they carry the title or not is a separate issue, I think. So my hope is that we do get somebody who's influential enough, influential enough to have an impact on the decisions that are made about science in Australia.

EMMA ALBERICI: Who might that be?

IAN CHUBB: Well, science itself, if you look at the Federal Budget, science is spread over 14 portfolios already. So putting another one in there doesn't actually make a huge amount of difference. What we need is a strategic approach to the development of science. I've been talking about this now publicly for getting on for a year and I think that's the way for us to go. Now, that would involve several ministers, certainly several portfolio areas and I would hope that we can do so with the support of the Prime Minister, build up that strategy, build up that strategic approach, take a different view from the view that we've traditionally taken in Australia and that is to be coherently strategic about science and its growth and development and have the Prime Minister on side.

EMMA ALBERICI: How can you be coherent in an approach without someone specifically driving it?

IAN CHUBB: Well, I'm hoping that's the Prime Minister's role. I think it's a whole-of-government issue, basically and I think that I hope to be able to persuade the Prime Minister that the Prime Minister's Science, Engineering and Innovation Council, which has existed now since 1984 - some time around there - that it would actually take on the role, a different role from the one that it's traditionally had, but it would take on the role of providing that whole-of-government overall strategic vision and development of science in Australia.

EMMA ALBERICI: Australia's already trailing its Asian neighbours in the area of study in terms of science, technology, engineering and maths - and that's at a tertiary level, I mean. Three times as

many graduates in China, close to four times as many in Japan. Is that something the new Government needs to be paying particular attention to?

IAN CHUBB: Well, I think that they need to be very much aware of it and to work out what to do about it and I think that one of the issues for us is: how do we make those areas of study so compellingly interesting that more people want to do them? We've tended, I think, to take it a bit for granted. We've assumed that somehow there's some market that will dictate what study options students choose, but people who argue that forget to tell you which market they're talking about: the market today when students are making a choice in Year 10 of school; the market that's operating in two or three years' time when they go to university; the markets that are operating four or five years after that, that is prevailing when they're going into the workforce.

So I think we've got to take a much more strategic, arguably interventionist approach, try to make it compellingly interesting, try to teach science, try to teach engineering innovation as it's practiced, rather than as you might learn about it if you just read from a textbook.

EMMA ALBERICI: There's also not going to be a climate change ministry in the Abbott Government. In fact, one of the first areas of the Canberra bureaucracy slated to be cut are the Climate Change Commission, the Clean Energy Finance Corporation and you're in fact a member of the Climate Change Authority which is also to be scrapped. Has there been a value in these bodies that will be lost in your view?

IAN CHUBB: Well, I think there has been a value. I think that the reality is when you bring the different perspectives to bear to look at the evidence, to tease out the evidence, to put it back together and give advice, then I think there's value in that. I mean, these sorts of issues are not going to go away just because we ignore them. They are things that we're going to have to deal with and grapple with and understand better and then make informed choices, rather than go out there sometime and guess at what we might do or worry about what we didn't do when we had the opportunity and we have to make decisions on the basis of less knowledge than we would otherwise have.

So I think those bodies - I mean I can't speak for them all, I was only on one of them - but the one I was on I thought diligently, constructively, coherently did good work and will produce good advice.

EMMA ALBERICI: So will it be a loss to have that removed from the Government?

IAN CHUBB: Well, yes, it will, in my view, but it will doubtless be compensated for by other bodies and groups and, doubtless, individuals who will be offering advice. The one advantage the Climate Change Authority had or has is that the advice that it gives will be made public and I think that a public disclosure of the sorts of advice you're giving and the reasons you're giving that advice, the evidence on which the advice is based - regardless of which side of the argument it goes - but the evidence that you're presenting is out there for people to have a look at and doubtless argue about.

EMMA ALBERICI: Well, specifically, Tony Abbott has previously signalled that he intends to sack Climate Commissioner Tim Flannery. What's your view on Professor Flannery's contribution to the country's understanding and responses to climate change?

IAN CHUBB: Well, Emma, he's been one of those people who's been out there and been vocal about it for quite some time and I think all of those contributions are valuable. I think that people will bring their different perspectives to bear, they will bring their perspectives to bear on the basis of their own background, their own information, the work they do, the research they do and they will make commentary about that and I think all of that commentary, whichever side of the argument you happen to fall on, but all of that commentary is valuable.

EMMA ALBERICI: As Chief Scientist, what did you make of the 'Australian' newspaper's front page yesterday attacking the Intergovernmental Panel on Climate Change and claiming they drastically overestimated rising temperatures?

IAN CHUBB: Well, I'm a scientist, or I used to be a scientist. I'd like to think that I base my arguments on evidence. I haven't seen the leaked report, the leaked draft report. I don't know as a consequence what it says and I don't know how the final report, when it's eventually released, will compare with the draft report. Draft reports are put out there for people to comment on, to make comments on, to add evidence to or to argue about evidence as presented. And they change. So I wouldn't comment on a newspaper report that's on a leaked draft report when I haven't seen the leaked draft report and I know that draft reports change.

EMMA ALBERICI: But I understand that the new IPCC report due out Friday week will confirm that, while there has been an unprecedented surge in the level of human generated heat-trapping gases like CO₂, temperatures have been roughly steady for the past 15 years. Does that give you cause to doubt the science of longer-term warming?

IAN CHUBB: No, it just means that the system is very complex and there are many factors involved and many reasons why certain things might happen at certain times and I'll need to have a look at the report to find out what they believe the explanation is. But atmospheric temperature is one measure. Ocean temperature is another measure. There are all sorts of things going on in this extraordinarily complex system and we need to take them all into account before we draw really hard conclusions, firm conclusions, dogmatic conclusions.

EMMA ALBERICI: The Coalition has previously promised to cut carbon emissions by five per cent on 2000 levels by 2020. But the PM-elect Tony Abbott now says that if his \$3.2 billion Direct Action policy doesn't manage to reduce emissions by the five per cent, there'll be no more money poured into that particular scheme. What do you think about that?

IAN CHUBB: Well, a very personal view and I can't speak for the climate scientists and so on around the country or around the world for that matter, but a very personal view is that we do have to do something about mitigating carbon dioxide emissions without destroying the place. So the real question is: how do we do that sensibly? How do we make the case to do that sensibly? How do we bring forward the evidence that's persuasive, that says we do have to do something and we do have to do it sensibly? And by sensible, I mean at an appropriate level and by reducing it by an appropriate amount. And I think all of those factors have to be put on the table and politicians will make their decisions and that's where politics intrudes into the science and they will make a political decision.

But the scientist's role is to put all the evidence that they can compile, the pros and the cons, the pluses and the minuses, the whatevers - put it on the table so debate can be informed. And it will also involve what the rest of the world is doing. I mean we're not acting alone. Not everybody is acting. So in five years' time I wouldn't speculate what the rest of the world will be doing because I think there are quite substantial changes afoot.

EMMA ALBERICI: Many scientists and climate change mitigation experts now believe that direct action can't work to bring down emissions by five per cent by 2020. How damaging for Australia will it be if we don't meet that target?

IAN CHUBB: Well, I think one of the things for us is that we have to play a part in the global attempts to reduce CO2 emissions or to reduce the amount of CO2 in the atmosphere. And it's important for a country like Australia, in my view, it's important for a country like Australia to play a role in that and indeed to play a leading role in that. Now, I don't think we should expose ourselves to dramatically negative consequences simply to say we're leading, but I do think that it's important that we don't put our head under our wing and pretend that there's not an issue simply because we're not looking at it anymore.

EMMA ALBERICI: As Australia's Chief Scientist and someone who believes the science in this area of climate change is settled, what do you make of the PM-elect's chief business adviser Maurice Newman today describing climate change as a myth?

IAN CHUBB: I think it's a silly comment.

EMMA ALBERICI: He goes onto say that the money spent on agencies and subsidies pursuing these myths has been wasted.

IAN CHUBB: Well, he still uses the word "myth" so it's still a silly comment.

EMMA ALBERICI: Well, presumably one of the agencies considered to be wasting taxpayers' money was the Climate Change Authority of which you were or are a member. I understand the Authority was due to release a draft report next month on whether five per cent was, in fact, ambitious enough a target. Are you clear on whether the Government intends that report to be completed?

IAN CHUBB: No, I'm not. You'd have to ask the people who run the Climate Change Authority and that's not me.

EMMA ALBERICI: You are a member of it though?

IAN CHUBB: I am, but I don't know where it's up to today.

EMMA ALBERICI: How important is it that that work is continued, in your view?

IAN CHUBB: Well, I think it's important work. I think that it's carefully analytical, very rigorously done, very carefully done and it will present a view and I think it's then up to people to judge it. It's up to politicians to respond to it one way or the other, but I think it's important work to put out there so again, the debate is informed rather than toss words around like "myth".

EMMA ALBERICI: Finally, former Prime Minister John Howard's been booked to deliver this year's Global Warming Policy Foundation lecture in November. The title of his address is One Religion Is Enough.

IAN CHUBB: (chuckles) Oh, yeah.

EMMA ALBERICI: Is it helpful to the debate to paint climate change science as a quasi-religion with believers and nonbelievers?

IAN CHUBB: Well, Emma, there are believers and nonbelievers, I suppose. Personally I'm not a believer, I just look at evidence and I see where the balance of the evidence is going. I think one of the unfortunate things in this area is that it's turned out to be a sort of belief, you know, do you believe in or do you not believe in. I don't, as I said, I don't subscribe to that view of belief. I think that it's important that we put all of the evidence that we can gather on the table. Some of it will be strongly on one side of the argument, there may well be stuff strongly on the other side of an argument. It's always like that in science. And scientists will work out what the balance of probabilities are.

And I think that when we understand that we are talking about the balance of probabilities, we put that evidence out there, we argue that point, people can then turn that into a belief system if they want to. But I don't think scientists do. I think scientists base their argument on evidence rigorously analysed, hotly debated, allowing for as many sides of the argument as you can that are legitimate and legitimately put forward, based on evidence, and they draw some conclusions from it on the balance of probabilities.

I don't think there's anything wrong with that. We do that for most of the things in our lives. We work out the balance of probability when we get on an aeroplane or when we cross the road. It's our life and science is based on evidence designed to increase the level of probability that allows us to draw certain conclusions from which we can make, take certain actions. And I think that's the important part of it. And I don't think about this as, you know, "I believe". I mean, what would that tell you? I mean, it doesn't tell you very much. It just is a waste of your time and mine for me to do that, quite frankly. I think that it's much better for me to say: I think the evidence is heading in this particular direction and if you want to know about it I'll get as much of it to you as I possibly can.

EMMA ALBERICI: Professor Chubb, I appreciate the time you've taken to speak to us this evening. Thank you.

IAN CHUBB: Okay, Emma, thank you.

EDITOR'S NOTE (25 September): Lateline would like to clarify a comment referring to an article written by businessman Maurice Newman. It should have more clearly specified that he regards anthropogenic climate change as a myth.