

FDI Feature Interview

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The Outcome of the Paris Climate Change Talks, 'A Genuine Triumph or Total Fantasy': David Hodgkinson (Part Two)

Key Points

- The Paris Climate Change Agreement of December 2015 unanimously accepted a universal agreement to restrict global warming to 1.5 to 2°C above pre-industrial levels.
- The Agreement recognises that climate change represents an urgent and potentially irreversible threat to human societies and thus requires the widest possible cooperation by all countries.
- This Paris Agreement contains 29 legally binding articles for nations to **commit** to nationally determined emission reduction measures and targets.
- The Agreement does not, however, contain legally binding obligations on any state to **meet** emissions reduction targets.
- Many climate scientists believe the actions agreed in Paris are far too weak to get anywhere close to the target.

Introduction

From 30 November to 11 December 2015, the United Nations Framework Convention on Climate Change (UNFCCC) conducted the twenty-first session of the Conference of the Parties (COP 21) in Paris, France. The aim of the Conference was to establish, for the first time, a universal agreement to keep global warming below 2°C. On the evening of 12 December, there was jubilation when the French Foreign Minister, Laurent Fabius, declared that an Agreement had been unanimously accepted. Australia's Foreign Minister, Julie Bishop, hailed the Agreement as giving Australia comfort 'to take tougher action to reduce its greenhouse gas emissions'.

The Paris Agreement brought together nearly 200 countries under a single framework. It set an ambitious goal of limiting global warming to 1.5 to 2°C above pre-industrial levels, and calls on all parties (whether industrialised or developing) to submit nationally determined contributions

to the reduction in greenhouse gas emissions, which will be increased over time. It also provides a foundation for transparency and accountability and for increased support for poor and vulnerable countries.

In November 2015, in anticipation of COP 21, FDI conducted and published a Feature Interview with Associate Professor David Hodgkinson of the University of Western Australia, discussing the international climate change regime, including the decline of the Kyoto Protocol and the development of a treaty in which both developed and developing countries have emission reduction targets.

Now, in the aftermath of the Paris Conference, FDI has again interviewed Professor Hodgkinson to discuss the outcomes of COP 21 and the development of a new treaty in which both developed and developing countries have emission reduction targets. He will also discuss the considerable challenges COP 21 presents.

The Interview, based upon presentations given by Professor Hodgkinson to Curtin University, Curtin Corner and to the Environmental Defender's Office Western Australia, has been published in two parts. Part One, published last week, contained a background of the events leading to COP 21 and global warming mitigation arrangements contained in the Paris Agreement. Part Two, below, discusses adaptation, carbon markets, legal aspects of the Agreement and its entry into force.

The deputy director of the [Tyndall Centre for Climate Change Research in the UK, Kevin Anderson](#), says this about the Paris climate change talks this past December:

The climate agreement delivered ... in Paris is a genuine triumph of international diplomacy. It is a tribute to how France was able to bring a fractious world together. And it is testament to how assiduous and painstaking science can defeat the unremitting programme of misinformation that is perpetuated by powerful vested interests. It is the twenty-first century's equivalent to the victory of [Copernicus] ... over the inquisition ...

Yet it risks being total fantasy.

Commentary

FDI: We concluded Part One of this Interview with the statement that negative greenhouse gas emissions were viewed by some to be the heart of the Paris Agreement. Could we begin with an explanation of what negative emissions are and why they are so important?

DH: In order to achieve the Paris Agreement's temperature goal, States aim to stop increasing their emissions as soon as possible. This must be followed by a rapid reduction of emissions, achieving a balance between man-made emissions and the removal from the atmosphere of an equal amount of greenhouse gases (GHG). The Agreement has set this to be achieved sometime during the period 2050-2100.

To limit the global temperature increase to 1.5 degrees Celsius, emissions have to be cut urgently and significantly. The Agreement, however, requires better than a balance between

emissions and GHG removal. Article 4(1) is intended to reflect this, though it does not state directly that emissions will need to go below GHG removal (negative emissions) in the second half of the century.

This has prompted a number of prominent climate scientists to collaborate on a letter to the UK newspaper [The Independent](#) warning that the agreement was dangerously inadequate. The scientists argue that ‘deadly flaws’ in the deal struck in Paris gives the impression that global warming is now being properly addressed when in fact the measures fall woefully short of what is needed to avoid runaway climate change. They are concerned that the kind of extreme action needed to avoid devastating global warming, such as massive and swift cuts to worldwide carbon emissions, will not now be taken.

Scientists do not dispute the huge diplomatic achievement of the Paris Agreement. After all, getting 195 world leaders to sign up to a global warming target of between 1.5 to 2 degrees Celsius and pledging action to cut carbon emissions, is a significant outcome. They do say, however, that the agreed actions are far too weak to get anywhere close to that target. Furthermore, the pledges countries have made to cut their carbon emissions are not sufficiently binding to ensure they are met, and the Paris Agreement will not force them to increase measures as often as they need to.

Of even greater concern, they say, is the lack of dramatic immediate action needed to tackle global warming. The Paris Agreement only comes into force in 2020 – by which time huge amounts of additional carbon dioxide will have been pumped into the atmosphere. They claim that this will make it all but impossible to limit global warming to 2 degrees, let alone 1.5 degrees Celsius.

FDI. What, then, does the Agreement statement ‘a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century’ mean?

DH. The [FERN’s Kate Dooley](#) notes, that because forests and other vegetation naturally store carbon, and because this carbon pool has been depleted through deforestation and land clearing, the goal of negative emissions refers to the fact that increased storage or sequestration can remove GHG from the atmosphere. A balance means that man-made emissions from any sector will be compensated by the same level of GHG removal to sinks (forests, the soil or the ocean).

The IPCC’s [Fifth Assessment Report](#), revealed that to achieve even a recognisably normal future climate not only would emissions need to be drastically reduced but widespread use of advanced technology would be necessary to remove carbon dioxide already in the atmosphere. Negative emissions loomed large in Paris, notwithstanding that the technology is currently non-existent. The IPCC acknowledges risks and uncertainties associated with large scale, permanent removal of GHG from the atmosphere.

Writing in [The Conversation, Dooley and Stabinsky](#) note that options for negative emissions are severely limited by the scale of land required. Scenarios in the IPCC database with a 50% or greater chance of limiting warming to below 2°C, around 85% assume large-scale uptake of negative emissions. For 1.5°C all scenarios rely on even larger volumes of negative emissions.

Relying on taking carbon out of the atmosphere later in the century brings a risk that we might delay action in the next few critical decades while waiting for the technology to catch up. This could result in runaway warming if the negative emissions options prove to be unfeasible or too expensive, or socially unacceptable.

The [UK Tyndall Centre's Kevin Anderson](#) describes the unquestioned reliance on negative-emission technologies to deliver on the Paris goals as the greatest threat to the new agreement. Negative-emission technologies received no direct reference throughout the 32-page package. Despite this, the framing of the below 2 degree Celsius goal depends on the massive uptake of these technologies sometime in the latter half of the century. Disturbingly, this is also the case for most of the temperature estimates ascribed to the outcome of the voluntary emissions cuts made by nations before the Paris meeting. The scale of this assumption, Anderson concludes, is breathtaking.

FDI: The Paris Agreement contains significant reference to the cost of halting and reversing climate change, particularly for developing countries. Could you elaborate on some of the key financial issues?

DH: Climate change mitigation involves reducing emissions, reducing the rate and magnitude of global warming through, for example, price-based mechanisms. Many of the impacts of climate change can be reduced or delayed by mitigation but mitigation comes with direct and indirect costs. Some countries being better placed than others to meet these costs.

With regard to **financial assistance**, previously, developed states had agreed (without being legally bound) to provide USD 100 billion each year in public and private investment by and from 2020 to assist poorer and less developed states adapt to the effects of climate change. In the Paris Agreement, developed countries agree that they 'intend to continue' this funding, and that a new and more ambitious goal will be established before 2025.

Another factor relates to **loss and damage**. Loss and damage refers to compensation to those states vulnerable and unable to adapt to climate change. At COP 19 in 2013 a mechanism for loss and damage associated with climate change impacts was established. That mechanism will now continue beyond 2016. The Paris Agreement, however, represents no real or substantive advance on COP19. Article 8 provides that parties should cooperatively enhance understanding, action and support regarding loss and damage and sets out areas of cooperation and facilitation.

A [report last year](#) found that developing countries will collectively face USD 1.7 trillion each year in just economic damage annually by 2050 if global average temperatures rise by three degrees.

In that and other contexts, the decision and the agreement made at COP21 go only a very small way to address loss and damage issues.

Market-based, **carbon trading**, mechanisms are not as central to the Paris agreement as they were to the Kyoto Protocol. Parties, however, will be able to voluntarily use their 'internationally transferred mitigation outcomes towards their nationally determined contributions.

The Agreement establishes a mechanism to contribute to the mitigation of GHG emissions and support sustainable development. Put another way, the mechanism would assist transfers between ‘host’ and ‘purchasing’ states, which is a new, improved mechanism from Kyoto.

This new Paris Agreement mechanism will contribute to the reduction of emission levels in the host country (a developing state), which will benefit from mitigation activities resulting in emission reductions that can also be used by another country (a developed state) to fulfil its nationally determined contribution.

Rules and procedures are to be developed for this mechanism to support trading and avoid double counting.

While both developed and developing states have targets, it would appear that the developed/developing divide still over-shadows the Paris Agreement.

By eliminating the *negotiation* of national emissions targets, the Paris Agreement might make it easier for smaller groups of like-minded countries to link their commitments and targets into more ambitious, trading-based ‘**carbon club**’ arrangements.

US academic, [David Victor](#), has long argued that clubs could help to provide a forum for enthusiastic countries to ‘do the deals’ that would get reluctant countries to make bigger efforts and that there are benefits to working in smaller groups.

Victor notes that many countries, long before Paris, however, were already working on the climate problem in smaller groups outside the United Nations. There were small groups of countries focused on forests, the area where the most progress in cutting emissions has been made in recent years. Other groups worked on the Arctic. Still others, with overlapping membership, are making tangible progress in cutting short-lived climate pollutants.

It might be that the Paris Agreement encourages the formation of such carbon clubs.

FDI: The legal status and the enforceability of climate change agreements has been the subject of considerable discussion. How will the Paris agreement be enforced and signatory nations held accountable?

DH: The Paris Agreement is a treaty under international law and will be binding on a state if it becomes a party to the Agreement. Article 21 of the Paris Agreement provides that it shall enter into force on the thirtieth day after the date on which at least 55 Parties to the Convention accounting in total for at least an estimated 55 percent of the total global greenhouse gas emissions have deposited their instruments of ratification, acceptance, approval or accession. There is therefore, no specific date at this time for entry into force and for the Paris Agreement to then be legally binding on those ratifying states.

In practice, this means that the Agreement will not take effect without the relevant actions by the US, China, India, the EU.

The Paris Agreement was signed in New York on 22 April by some 171 countries, which I understand is a record number for a new international treaty (about 15 nations, mainly small island states, had already ratified the agreement). These 171 states collectively represent more

than 93 per cent of global emissions. The agreement is now open for signature for the next year for those remaining 25-odd countries who have not signed.

The agreement is expected to either enter into force or take effect from 2020 although that date is not mentioned in the Paris Agreement. Reports at the time of the New York signing had the executive director of the UNFCCC, [Christina Figueres](#), saying that, given the volume of signatures, it could enter into force in 2018.

Signatures should not be confused with either ratification by states (which is hard) or the Paris Agreement coming into force. Nonetheless, the New York signing ceremony is a significant milestone. And after expressing such a public show of support for the deal, it will now be much harder for any country to renege on its commitment.

FDI: In light of what you have said, do you have a concluding comment on the Paris Agreement?

DH: Mention was made earlier of [Bill McKibben](#)'s comment about limiting the global temperature increase to 2 degrees or even 1.5 degrees Celsius – the aim of the Paris Agreement – as the most ambitious project the world has ever embarked on. McKibben, however, goes on to say this:

Say you really are going to hold the temperature rise of the planet to 2 °C. We know with some precision what you'd have to do. A study published in *Nature* about a year ago ... looked at all the world's fossil-fuel reserves, and found that most of them would need to stay in the ground. You couldn't, for instance, drill for any oil or gas in the Arctic – those reserves would have to stay untouched. Countries like Australia and the US would need to leave around 90% of their coal reserves underground.

Oh, and say you were going to try and meet a 1.5°C target. In that case you'd have to stop mining coal tomorrow.

This is not ideology. This is not propaganda. This is mathematics, chemistry and physics.

About the interviewee: Associate Professor David Hodgkinson holds a Bachelor of Arts degree (First Class Honours) and Bachelor of Laws and Master of Philosophy degrees. He was also a postgraduate fellow at Columbia University in New York City. Earlier in his career he was Senior Legal Research Officer at the High Court of Australia where he worked mostly for Justice Sir William Deane. He is currently, with Rebecca Johnston, a partner of aviation and aerospace law firm HodgkinsonJohnston and an executive director of EcoCarbon, a not-for-profit association.



David was formerly Director of Legal Services at the International Air Transport Association (IATA), the organisation of the world's airlines, in Montreal and Geneva and Special Counsel (Aviation) at a national Australian law firm. He is currently an associate professor (part-time) in the law school at the University of Western Australia where he teaches aviation law.

David is the co-author of the book *Global Climate Change: Australian Law and Policy* (2008), the standard Australian text on climate change law. He has also written numerous refereed journal articles, book chapters, monographs and opinion pieces on climate change law and policy, and spoken at (and convened) conferences on aviation and on climate change around the world.

He was the principal draftsman of the *Peninsula Principles on Climate Displacement*, and the general editor of the loose-leaf service *Australian Climate Change Law and Policy*.

Any opinions or views expressed in this paper are those of the individual interviewee, unless stated to be those of Future Directions International.

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