The agreement in Paris - what does it mean?
Victory, disappointment … or both?

One can well understand the relief and joy of the tired delegates in Paris on Saturday once the French foreign minister lowered his gavel on the meeting. It truly was the most comprehensive agreement between so many nations ever negotiated, and an affirmation that the global community could, after all, find a way to cooperate on the most difficult and dangerous common problem. Many experienced observers thought the same. There seemed to be an understanding that perhaps something unique and wonderful had just happened - a turning point in the long struggle to get over our habits of partition and enmity - a sign that the most severe challenge had, in the nick of time, brought out the best in us.

We won't know for a while. But it's only fair to say, not everyone shared this optimistic version of the Paris result. It is as if you could stand in two places, and see two different things. George Monbiot, veteran *Guardian* journalist put it like this:

Inside the narrow frame within which the talks have taken place, the draft agreement at the UN climate talks in Paris is a great success. The relief and self-congratulation with which the final text was greeted, acknowledges the failure at Copenhagen six years ago, where the negotiations ran wildly over time before collapsing. The Paris agreement is still awaiting formal adoption, but its aspirational limit of 1.5C of global warming, after the rejection of this demand for so many years, can be seen within this frame as a resounding victory. In this respect and others, the final text is stronger than most people anticipated.

Outside the frame it looks like something else. I doubt any of the negotiators believe that there will be no more than 1.5C of global warming as a result of these talks. As the preamble to the agreement acknowledges, even 2C, in view of the weak promises governments brought to Paris, is wildly ambitious. Though negotiated by some nations in good faith, the real outcomes are likely to commit us to levels of climate breakdown that will be dangerous to all and lethal to some.

In other words, against a backdrop of 20 years of failure, the outcome looks pretty good, but arranged in front of the hard geophysical realities of the climate problem, it looks feeble - even perhaps, fanciful. Could we be kidding ourselves, all we folks who wanted Paris to work? Could the ingenious and untiring fossil lobbyists have won after all? It's possible. But maybe not. Let me explain.

We don't think of this as often as we should, but one of the most remarkable things about the times we live in is the existence of over a hundred democracies. 70 years ago, this number was down to a handful, and had they lost the war, democracy would have disappeared altogether. We forget how new and rare it is in the long experience of humanity, this practice of large populations governing themselves under the rule of law without any superior authority at all. It is, as John Keane says, more a way of life than a political system - a set of practices, values, implied agreements, conventions and laws, always in need of care and revision, and always opposed by those who, through envy or malice or want of faith, would wish to replace it with something less tenuous and more like a King.

In effect, the democracies have set the pattern for governance between nation states. Without them, it's hard to believe there would be much cooperation at all - but even so, international agreements have been notoriously tricky, and climate change has turned out to be very tough indeed. One reason is that the air belongs to everyone, yet no one; another is that when we dump things into it, we only feel responsible for harm close by. Another one is that the economic activities causing the problem are the very ones that have made us so incredibly comfortable and prosperous (at least some of us), and our abuse of the air has been accidental. There are no bad guys here - just us. And we didn't mean it. And we'd rather like to keep the good things cheap energy has given us.

Finally, the climate problem is sneaky. It needs specialists to diagnose, otherwise we wouldn't even know it was there. It needs a bit of imagination to believe that humans could inadvertently mess up something so huge. And the consequences, though severe in the long run, accumulate slowly, so they don't alarm us as they should.

So when the delegates at Paris embraced at the end of a fortnight of fussing over details, haggling, compromising and worrying about the ghost of Copenhagen, we were all entitled to be grateful. The conference organisers had been careful to remove as many traps as possible and to nurture the talks through some rough patches. They also seem to have provided a steady reinforcement of the will to succeed, and the right amount of guidance and leadership. They saw to it that official delegates were accessible to the large contingent of civil society participants and sub-national representatives, and that the discussions were enriched by input from many non-political parties and interests. It was as if the conference structure itself conveyed a message that we are in this together - that politicians are not expected to solve it on their own because it is not a political problem. And some of that appears to show up in the result.

Essentially, the agreement is an open undertaking by the parties to decarbonise as soon as they can. The amount of good will needed to sign up to such a thing is considerable. Of course it is possible for any signatory to cheat, or to declare an inflated intention - and, in truth, we will not know if there is enough good faith to sustain it until some years have passed; but as well, the text provides that the parties make their pledges in the open, and make them flexible so that their ambition will ratchet up, at least as fast as the schedule specified, beginning in 2018.

What is not there is any coercion. There are sound reasons for that - the intransigence of the US congress, which would reject a treaty with enforceable legal sanctions; and the reluctance of the two big industrialising nations, India and China, and some others. You could say, as some have, that without legal force, the

agreement is just fine words, but the UN sponsors have been acutely aware of this issue ever since the meeting was planned, and their response has been interesting.

The French hosts, and the UN's indefatigable chief negotiator, Christiana Figueres, decided that the big lesson of Copenhagen wasn't about the conference so much as about the nature of international cooperation itself. Since most of the relations between states aren't governed by law, but by gamesmanship, a voluntary treaty can succeed if it engages agreed common goals, and allows for responsible differentiation. If all goes well, spontaneous coalitions will form, as they did here, prompted by creativity and good will rather than competition.

So far so good, but what about the shortcomings that worried George Monbiot? They certainly worried Jim Hansen. "It's a fraud", he said, "It's just bullshit for them to say we'll have a 2 degree warming target and then try to do a little better every five years." They worried Kevin Anderson too, the emissions specialist from the *Tyndall Centre* in Manchester. In his view scientists have been hiding from some of the implications of their own research - which makes it a bit less surprising that policy makers have been doing the same. The 2 degree limit, according to Anderson, requires much faster decarbonisation than most people admit - about zero by 2050, including the sectors not covered by the agreement - international aviation and shipping. This is a very big ask.

Hansen's argument is that as long as fossils fuels are cheap, they will be burned; they're cheap because they are heavily subsidised, and unlike other polluting industries, they don't pay for the harm they cause. If they did, he says, the transition away from carbon combustion could be rapid - but not otherwise. And it needs to be fast. There's no point setting distant targets, according to Hansen; emissions must start to fall now, and to do so each and every year until they stop in 30-40 years. As well, about 100 billion tonnes of CO_2 has to be withdrawn from the air over the rest of the century. That's what it's going to take if we're serious about 1.5 degrees.

So these scientists aren't just cranky about the dilatory habits of politicians - they have a point. Rhetoric has to match physics. Currently, the very best that can be expected from aggregated national pledges would be about 3 degrees, assuming these undertakings were all fulfilled and continued until 2100. But this doesn't account for any unforeseen climate feedbacks, or for the warming masked by aerosol pollutants, or accelerating land-use emissions in Indonesia and Africa. And it includes some heroic assumptions about industrial agricultural emissions, and possible future alternatives for cement, steel-making, aviation fuel, and economic carbon capture.

Only thing is, a rising global carbon price wasn't even mentioned in the text. Not once. It cannot be that the plain facts available to scientists are unknown to our leaders. It must be that this is a step too far. The sheer difficulties of managing an international, equitable and efficient mechanism for applying a just penalty for the production of combustible carbon is too hard. As George Monbiot put it:

While negotiations on almost all other global hazards seek to address both ends of the problem, the UN climate process has focused entirely on the consumption of fossil fuels, while ignoring their production.

Nowhere in the world is there any sign of an imminent commitment to this sensible measure. It's hard to see how it would succeed without the joint participation of at least two of the three biggest interests, the USA, China and the EU, and in fact, American opposition (which is guaranteed for now) would surely make it unworkable. No smaller nation has any direct interest in adopting it unilaterally. Nor would you expect any. It is disagreeable to say so, but efficient global carbon pricing appears to be out of reach, for now, and we will just have to manage without it. Does Paris give us any encouragement?

Well yes, it does. In Article 4 of the Annex the task is defined thus:

In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty.

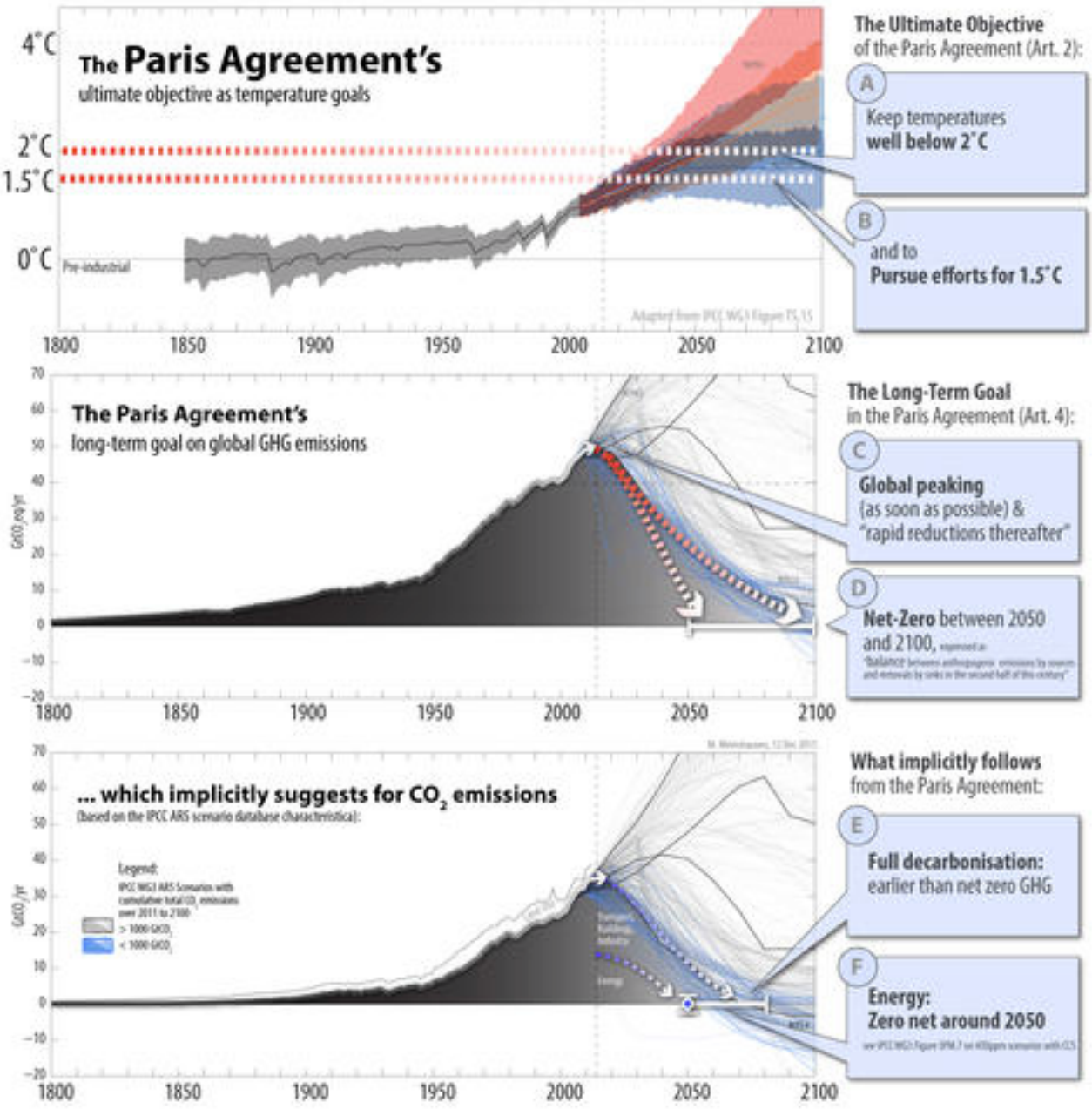
After acknowledging the urgency and scope of the problem, the preamble includes this:

Emphasizing with serious concern the urgent need to address the significant gap between the aggregate effect of Parties' mitigation pledges in terms of global annual emissions of greenhouse gases by 2020 and aggregate emission pathways consistent with holding the increase in the global average temperature to well below 2 °C above pre- industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre- industrial levels

Then, in Section II there is this clause:

17. Notes with concern that the estimated aggregate greenhouse gas emission levels in 2025 and 2030 resulting from the intended nationally determined contributions do not fall within least-cost 2 ˚C scenarios but rather lead to a projected level of 55 gigatonnes in 2030, and also notes that much greater emission reduction efforts will be required than those associated with the intended nationally determined contributions in order to hold the increase in the global average temperature to below 2˚C above pre-industrial levels by reducing emissions to 40 gigatonnes or to 1.5˚C above pre-industrial levels by reducing to a level to be identified in the special report referred to in paragraph 21 below.

Look carefully, and you can see that the signatories not only admit the INDCs need to be strengthened in magnitude and timing, but they supply some significant numbers to make the task unmistakable. In fact, the language is so clear that Malte Meinshausen at the *Australian-German Climate and Energy College, University of Melbourne* quickly produced a memorandum on what this would mean for the power generation sector and what emission pathways required under the agreement would look like. The diagram below is from their paper.



This figure is pretty well self-explanatory, showing that the parties have agreed to a challenging decarbonisation schedule, to be achieved through frequent revisions of their INDCs.

http://www.climate-energy-college.net/facts4cop21-paris-agreement-includes-ambitious-long-term-goal

This is the main reason why many close observers have said the Paris agreement is the long-awaited signal for the end of the fossil fuel era. The implication of these promises is perfectly clear - if absolute global emissions are to decline 20% in the next decade or so, there must be a sharp turnaround in carbon combustion starting now. The colossal momentum for renewables underwritten in Paris is also a permanent brake on coal, oil and gas. There can certainly be no expansion of those industries by any signatory which is serious about its obligations.

Exactly what this means for our own country is an intriguing question, since the public utterances of senior ministers are so opaque and contradictory as to be meaningless. On her return from Paris, the foreign minister said this:

… all nations are committed to taking action … that's what we wanted … we know what our major trading partners and competitors are doing … all countries are committed to reducing greenhouse gas emissions while balancing economic growth.

This is a curious thing to say. It suggests that Australia had no idea what we were supposed to do before; that we can only rationally act once we get some guidance about our commercial relations; and that somehow, managing the climate problem is subordinate to the imperative of "economic growth". Of course, to those familiar with the intimate bondage of governments with mining in our country, none of this is a mystery. The minister is really saying she's been given a new survival handbook for Australian coal and gas export businesses. The hard work she promised is the work of designing ways to observe the letter of our commitment while promoting and preserving our carbon extractive industries for as long as possible.

The Queensland Premier was asked the day after the signing what the agreement would mean for her State. She said:

… coal is the backbone of our economy … we'll always be reliant on coal but we are diversifying … as the world moves to a good mix between coal and renewables, we've got to get that mix right …

There's a fair bit of space between the lines here too. Surely the Premier means that she can't imagine a prosperous State without its coal and gas income. But a careful study by the Australia Institute's Rod Campbell found otherwise. The coal industry in Queensland employs 1.2% of the workforce (about the same as the arts & leisure sector); because mining jobs are well paid, this comes to about 5% of wages paid in Queensland (this data excludes the last 2 years of retrenchments). Royalties paid to the State by coal miners amounted to about $2 billion, around 4% of the State's revenue - a bit more than the income from vehicle registrations.

As the Premier pointed out, about two-thirds of the coal exported from Queensland isn't burned in power stations, but used for steel-making in Japan and elsewhere. But we just agreed that these emissions too must be either eliminated or captured by some means yet to be discovered within the next couple of decades. Evidently, our leaders are still having trouble imagining the future, and as Bill McKibben wrote a day or two after the conference:

They don't seem to quite get it: from this point on, if you're even slightly serious about meeting these targets, you have to do everything possible. There's no more compromises or trade-offs that can be made. You're no longer negotiating with a bunch of other countries around a conference table. You're negotiating with physics, and physics holds all the good cards.

That is where citizens come in. Christiana Figueres, a canny negotiator with a passion for her cause and the patience and wisdom to see it through, has made it clear many times that the massive task ahead cannot be left to politicians. Politics, after all, is the business of balancing competing interests in order to get the most of

what everyone wants. But in this case it's humans against the laws of nature. They don't negotiate, and anyway, it's not what we want that counts, but what we can have. The necessary political will is not going to arise in any capital, or in the heart or mind of any representative, elected or otherwise - it will be forged by an active union of concerned citizens with their governments. It will entail coercion, persuasion and demonstration; it will be nothing less than a reclamation of democracy - an exhibition of what it can do in the face of a profound challenge. In Bill McKibben's words:

for the next few years our job is to yell and scream at governments everywhere to get up off the couch, to put down the chips, to run faster faster faster.

On the second-last day of the conference, the Australian writer Clive Hamilton, who spent the fortnight there, wrote something very interesting. I can't remember ever noticing a rosy tint in anything Clive wrote before, but this day he recorded his rather astonished conclusion that the momentum for change had swung away from policy makers to business and finance - and that it was, as far as anyone could tell, unstoppable. For a self-confessed pessimist, he said, it was refreshing to discover that the end game in humanity's tortuous wrestle with this problem seems likely to be quite different, and possibly better than many of us had supposed - politicians dragged along by energy innovators and the rational decisions of corporate managers. As he put it:

These corporations have not decided that principles should outweigh profits; they have decided that, looking over the next several years, sustaining profitability requires that they shift to low-emission energy. One factor weighing on corporate minds is exposure to risk in energy markets, which are likely to be more volatile and uncertain partly because of the growing challenge posed to fossil energy.

The agreement in Paris is not succour for the hopeful, because the fulfilment of its promise will entail lots of hard work over the next few years, and a lot more capacity building in the nascent global partnership it inaugurated; but neither is it fodder for despair. We've known for a while that delay has cost us the best outcome - what we want is the best we can have - and that seems to be what Paris affirms. Fallible creatures such as we are, the designs we aspire to will always acquire our imperfections before appearing in the achievements we celebrate.

Whether Paris turns out to be the miracle at the end of a long road of ambition, foresight and folly, like the end of slavery, remains to be seen, but there are plenty of signs to sustain hope, and plenty of will, growing appreciation of the way ahead, and a sense of momentum such as veterans of the COP series have never seen before.

John Price
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