

The political economy of the Paris Agreement on human induced climate change: a brief guide

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Introduction

In Paris during December 2015 an international conference of the world's governments agreed to adopt the text of a treaty to control the greenhouse gas (GHG) emissions causing human induced climate change, from 2020 onwards.¹ As concerns have been rising over extreme weather events, changing seasonal weather patterns, coastal flooding and submergence of small island nations, the Paris Agreement was greeted with an almost euphoric sense of achievement in the media and policy communities. There appear to be two substantive reasons for hailing this a great success.

First, 195 countries and, most importantly, all the major GHG polluters agreed to the text. Paris was the 21st Conference of the Parties (COP), 197 countries, who are signed-up to the United Nations Framework Convention on Climate Change (UNFCCC) adopted in 1992 and effective 1994. Previously, under the 1997 Kyoto Protocol, only a limited number of some 35 countries were ever prepared to consider limits on their capacity to emit GHGs. Legitimate questions are then: why? what happened to the Kyoto Protocol that promised large emissions reductions from 2008-2020? and does Paris really change anything? That is, the Paris Agreement needs to be understood in the historical policy context of the last quarter century. I will argue that this brings into question its claims to success, but also reveals how major policy shifts have occurred.

Second, in Article 2 the Paris Agreement states that parties to the agreement will hold global average temperature increases “to well below 2°C” and “pursue efforts” to limit this to 1.5°C, in order to reduce the risk and impacts from climate change. This needs to be seen in the context of a switch in policy. Unlike the Kyoto Protocol, there are no hard and fast targets for GHG control, nor commonly agreed baselines or reductions. Under the new unilateralism of international policy, favoured by the USA, independent voluntary reductions were proposed and submitted before the Paris COP. These were not discussed or critically analysed in Paris but are noted “with concern” to be inadequate for limiting temperature to 2°C (Clause 17). A conservative estimate is that these intentions “are more in line with a total warming of 3°C” (*The Economist* 12th December, 2015). Yet governments seem optimistic enough to sign-up for a 1.5°C target.

The central question is, how far does any of this take the world forward in preventing human induced climate change? I will explain the divorce between what the Paris Agreement claims it will do and what governments are actually doing through their commitment to economic growth at all costs. I start by exploring the evolution of policy on limiting GHGs.

¹ The final version of the 36-page document of adoption consists of 139 Clauses in a preamble declaration and an Annex which is the actual Paris Agreement in 29 Articles. Moving text from the Articles to the Clauses was a method of downgrading and removing it from the legally binding treaty.

The Kyoto Protocol and the lead into Paris

The Kyoto Protocol, only came into force in 2005, eight years after its adoption, when Russia finally ratified. It contained national, legally binding, reduction targets for GHG emissions of 5%, on average, in the 1st Commitment Period 2008-2012. Second and subsequent commitment periods were mentioned (Article 3) but not specified. Much larger cuts are needed to achieve stabilisation of GHGs in the upper atmosphere.² Negotiations for a 2nd Commitment Period (2013-2020) led to the 2012 Doha Amendments with 20% reductions on 1990 levels being put forward, but almost exclusively for European countries (not even Japan committed itself). It never became operational because too few signed-up and only seven countries have so far ratified (the Paris declaration pleads for them to do so in Clause 105). So nothing happened, and that is why there was a Paris Agreement instead, and Kyoto is dead. However, this has left an eight year policy gap.

A quick reprise of what happened is informative. Under the Kyoto Protocol neither China nor India had any targets. The USA signed Kyoto under President Carter's Democratic Administration, but never ratified, and then President Bush's Republican Administration withdrew its signature in 2001 (an act of dubious legality). The Obama Administration chose not to reverse this move, despite it being possible (Ash, 2014), and cited jobs as a priority over climate protection. Bush's withdrawal left the whole Protocol in jeopardy of never coming into force due to a lack of major emitters to meet its operational target level. Under the 1st Commitment Period, Russia had no required reductions, but did not want to ratify due to concerns over the economic impact. However, due to the collapse of the Soviet Union, its industrial sector declined and disappeared so that by 1997 its CO₂ emissions had fallen 51% from 1990 levels (calculation using data from Olivier et al., 2015). This meant Russia could benefit from selling emissions permits on the basis of having already exceeded its target, what has been euphemistically called 'Russian hot air'. Similarly, West German reunification with a collapsed East German industrial sector made meeting targets easy for the new unified Germany, because it had already cut emissions relative to the 1990 baseline. This also facilitated the European Economic Community, or European Union (EU) 15, in negotiating a collective target to be met by an internal arrangement (under 'flexible mechanisms') whereby seven EU countries either avoided any emissions reductions or actually increased their emissions up to 27%. Canada ratified with a 1st Commitment Period target of 6% reductions, but in 2011 withdrew (effective 2012), by which time its CO₂ emissions had increased 20% over 1990 levels. Australia did not ratify until 2007 and even then it was actually committed to an 8% increase in emissions!

In summary, the Kyoto 1st Commitment Period ended-up requiring GHG emissions reductions averaging 7.6% from 21 European countries plus Japan, while requiring nothing of, or allowing increases by, other countries. The European Commission (2016) states that the 1st Commitment Period covered 18% of global GHG emissions with a goal of an average 5% net reduction. So, basically, 20 years was spent by the UNFCCC trying to cut global emissions by 0.9%. During this period the main contributions to actual emissions reductions have been: (i) the collapse of the Soviet Union with the demise of industrial emissions from Russia and Eastern Europe; (ii) the recession since the 2007-2008 financial crisis. That is, actualised GHG reductions have required significant declines in economic growth and shrinking of industrial production and consumption. International policy has been a failure.

² For example, Parry et al. (2008) specify 80% emissions reductions on 1990 levels by 2050 in order to stand a chance of avoiding temperature rises above 2°C.

The politics of the Paris deal

The European Commission (2015: 4) had officially proposed “that the 2015 Agreement should be in the form of a Protocol under the UNFCCC”. A Protocol would have provided a treaty with a much stronger legal status with binding targets (like Kyoto) rather than independently set intentions. In addition, the same communication stated this new Protocol “should enter into force as soon as countries with a collective total of 80% of current global emissions have ratified it” (European Commission, 2015: 4). The idea here was to enforce mitigation action beyond the almost exclusively European countries who ended-up taking responsibility under the Kyoto Protocol.

The rule for treaty activation under the Kyoto Protocol (Article 25) was ratification by:

“...not less than 55 Parties to the Convention, incorporating Parties included in Annex I which accounted in total for at least 55 per cent of the total carbon dioxide emissions for 1990 of the Parties included in Annex I”

“Parties included in Annex I” means a Party included in Annex I to the UNFCCC and covered 35 countries plus the EU15. The Paris Agreement (Article 21) requires:

“...at least 55 Parties to the Convention accounting in total for at least an estimated 55 per cent of the total global greenhouse gas emissions [...] on or before the date of adoption of this Agreement by the Parties to the Convention.”

The first requirement in number of parties is the same as Kyoto, while dropping reference to Annex I countries is meant to achieve the wider participation goal.

The treaty requires both signature and ratification³ to become effective and the Kyoto experience is not very encouraging. However, during the Opening for Signature of the Paris Agreement, held at UN Headquarters in New York on 22 April 2016, 175 Parties (174 countries and the European Union) signed the Agreement, and the ability to sign will remain open for one year. Yet, only 15 countries ratified the Agreement and by late June only another two had ratified. All countries have different procedures to follow to allow them to ratify an international treaty. The process is expected to take some time for the EU because it requires agreement of 28 national governments, who vote separately in their various parliaments; only Hungary had done so after six months.

The early ratifiers of the Paris Agreement account for just 0.04% of global GHG emissions. The first to ratify were the small island states (e.g., Maldives, Marshall Islands, Tuvalu) whose land area is highly susceptible to being totally submerged by sea level rise, storm surges and increasingly extreme weather events. For example, the natural land height of the 1,192 islands that constitute the Maldives is on average 1.5 meters above sea level and 80% is less than a meter high. They have everything to lose and little responsibility for having created the problem in the first place. They also hope to benefit from international finance for adaptation and technology transfer for a low carbon energy transition.

Like the small island States, most countries have little or no responsibility for creating the problem. Just 1% of current global CO₂ emissions, from fossil fuel and cement, comes from

³ I use ratification to also cover acceptance, approval and accession.

120 countries while five countries are responsible for 60% of global emissions (based on 2014 data, source Olivier et al., 2015). The big CO₂ polluters are China (30%), USA (15%), India (7%), Russia (5%), and Japan (4%). Then comes Germany (2%). As a group the EU28 would rank 3rd (10%) led by Germany followed by the UK, Italy, France and Poland (approximately 1% each). Fossil fuel intensive economies and producers try to deflect responsibility by criticising others for their land use practices, such as deforestation and agriculture, that both release GHGs and destroy sinks that absorb GHGs. These are serious concerns and switching to total GHGs, from just CO₂, and including emissions from land use change and forestry does push Indonesia and Brazil up the league table into 5th and 6th positions. However, this does not change the list of countries accounting for about 70% of GHG emission nor those at the top.

What the requirement for 55% of total global GHG emissions means is that, for the Paris Agreement to become effective, some of the major emitters will need to ratify, and the exact calculation basis (left unspecified) will affect how many. Even if the entire world ratified, without at least one of China, USA or India the treaty will not come into effect. Conversely if all the top seven GHG polluting countries ratify the target would likely be met, even with the vagaries of the unspecified date and calculation basis.

In the lead up to Paris, Europe was particularly sensitive to the needs of the USA. The President wants to avoid a vote in the Republican dominated Senate that would block ratification. Its climate denialists, led by Senator Inhofe – who ironically Chairs its Environment Committee – have published a report attacking both the Paris Agreement and the Obama Administration’s attempts to reduce GHGs, while claiming planned emissions reductions will prove illegal (United States Senate Committee on Environment and Public Works, 2016). The President can ratify a treaty without the Senate’s approval, unless this conflicts with domestic law (Ash, 2014). This seems the only route open for Obama (even if an executive order can be revoked by a subsequent President). Despite this the USA successfully used concerns over the inability of the President to sign an agreement to force both a Protocol and binding targets off the agenda (Ash, 2014; Davenport, 2014).

The European Commission (2015 p.7) failed to get the robust mitigation commitments which it defined as “economy-wide targets with emissions budgets”; these have “advantages including certainty, transparency, flexibility and, if used widely, reducing the risk of carbon leakage”. Rather than a set of planned and coordinated reductions with a common base year, as under Kyoto, that would have targeted fossil fuel combustion and those responsible for creating GHGs, the Paris Agreement has “intended nationally determined contributions”. The fear of not getting the big players on board led to the idea of these voluntary unilateral targets that are currently totally inadequate.

Intended nationally determined contradictions

The USA has played a double game, talking big on climate change while expanding fossil fuel production and consumption. Indeed, in total contradiction of Obama’s public expressions of concern over climate change his period in office has seen an unprecedented expansion in oil and gas production making it the number 1 world producer ahead of Saudi Arabia (Reuters, 2013). In a speech at an oil town, Cushing, on 22nd March 2012, Obama stated that:

“Over the last three years, I’ve directed my administration to open up millions of acres for gas and oil exploration across 23 different states. We’re opening

up more than 75 percent of our potential oil resources offshore. We've quadrupled the number of operating rigs to a record high. We've added enough new oil and gas pipeline to encircle the Earth and then some. So we are drilling all over the place – right now [...] And as long as I'm President, we're going to keep on encouraging oil development and infrastructure” (Obama speech, source Shallow Nation, 2012).

Obama has chosen, as a political strategy, to favour oil and gas while targeting coal. This will not prevent climate change, but does reveal the power of fossil fuels in the economy and the lie of decoupling (i.e., having more output with less fossil fuel energy and its pollution). Yet even this strategy is not certain to win. The EPA regulation “Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units,” has been challenged by 29 States led mostly by Republicans and many with economies that rely on coal mining or coal-fired power stations. A Supreme Court ruling in February 2016 put plans on hold (Stohr and Dlouhy, 2016), and some are concerned that this will jeopardise the Paris timeline and allow a possible incoming Republican administration to stop any action before it starts (Davenport, 2016). If the USA fails to ratify, or drops behind, then China and India may follow suit and the Paris Agreement would be still born, regardless of how many others ratify.

In many respects, the USA's double standards and intentional contradictory positions and statements are no different from most other countries. For example, Norway is one of the richest nations in the world on the basis of oil extraction, but that largely does not count because others buy and combust it relieving Norway of its responsibility for the emissions. Domestically they can claim to be clean and Green with hydroelectricity and electric cars. They can also pursue growth in fossil fuel extraction. As Fridtjof Unander, Executive Director at the Research Council of Norway, has emphasised, the role gas plays in all future energy mix scenarios, especially in its role for crowding out coal, means Norway should expand extraction into the “predominantly gas-prone” Arctic (Keil, 2015).

Other nations also pursue contradictory policies. Germany has expanded brown coal extraction and exports cars to others promoting their increased emissions, while (like many others) buying products from China that have embodied emissions (i.e., off-shoring production leading to carbon leakage). Canada left Kyoto in order to frack on a massive scale. The UK is planning more offshore oil and gas exploration and has been pushing fracking, while freezing taxes on petrol for five years. China and India have invested heavily in coal fired power plants, locking themselves into decades of future combustion. Australia is the largest coal exporter in the world, supplying China. The list of government commitment to fossil fuel extraction and investment goes on.

Of the top 20 countries with the highest emissions of CO₂ per capita 15 are oil and gas based economies. They are also some of the wealthiest countries in the world. No wonder the Paris Agreement makes no mention at all of such inconvenient words as oil, gas, coal, petroleum, shale and fracking (Spash, 2016). There is a fundamental contradiction between the fossil fuel economy and addressing climate change. Yet the parties to the Paris Agreement do not seem overly concerned.

Risk management NOT stopping climate change

UNFCCC's Halldór Thorgeirsson, Director for Strategy at the UN Climate Change Secretariat, speaking in Tromsø, Norway, at the Arctic Frontiers Conference on Climate & Energy, stated:

“This treaty [the UNFCCC], signed in Rio in 1992, is a planetary risk management treaty. Its objective is not to prevent climate change, which is clearly not feasible. It is designed to limit climate change to a level which avoids ‘dangerous interference with the climate system’” (Thorgeirsson, 2015).

This is actually a change in interpretation from the precautionary approach prevalent in 1992 to the risk cost-benefit approach of today, a shift from mitigation to adaptation. The benefits of growth, jobs and fossil fuels are to be weighed against the potential of climate catastrophe. What is rarely mentioned is that GHGs have already exceeded the level expected to produce climate forcing of 2°C, and the UNFCCC plans are only meant to offer a 50:50 chance of avoiding some of the worst effects of climate change (for details see Spash, 2016).

Article 2 of the Paris Agreement states the aim of enhancing implementation of the UNFCCC by:

“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, recognizing that this would significantly reduce the risks and impacts of climate change.”

The sudden appearance of a 1.5°C target being mentioned should be an embarrassment for the Intergovernmental Panel on Climate Change (IPCC). That is, this authoritative scientific body ran no low emissions scenarios, had ignored anything lower than the politically set and arbitrary 2°C target and dismissed the need to pay attention to any literature relating to lower targets. As a result, the Paris declaration (Clause 21):

“*Invites* the Intergovernmental Panel on Climate Change to provide a special report in 2018 on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways.”

That such scenarios were absent from a supposedly scientific body's massive report has gone unmentioned upon. Yet, the implications go far because the scenario analysis of the IPCC informs the Paris Agreement and is questionable for other presumptions it has incorporated. As Kevin Anderson (2015: 899) of the UK's Tyndall Centre has explained, the scenarios of the IPCC report are highly skewed despite their vast number:

“344 assume the successful and large-scale uptake of negative-emission technologies [...] in all 56 scenarios without negative emissions, global emissions peak around 2010, which is contrary to available emissions data. In plain language, the complete set of 400 IPCC scenarios for a 50% or better chance of meeting the 2°C target work on the basis of either an ability to change the past, or the successful and large-scale uptake of negative-emission technologies. A significant proportion of the scenarios are dependent on both.”

Technological optimism is at the core of the IPCC projections and the assumptions that inform the Paris Agreement. On publication of the IPCC 5th Assessment report the official press release quoted the Chair, R.K. Pachauri, as stating that:

“To keep a good chance of staying below 2°C, and at manageable costs, our emissions should drop by 40 to 70 percent globally between 2010 and 2050, falling to zero or below by 2100.”

The latter is the new rhetoric of negative emissions that relies on imagined future technologies (e.g. biotechnology, geoengineering, carbon capture and storage). The press release also reports the findings of Working group III as showing that:

“...mitigation cost estimates vary, but that global economic growth would not be strongly affected. In business-as-usual scenarios, consumption – a proxy for economic growth – grows by 1.6 to 3 percent per year over the 21st century. Ambitious mitigation would reduce this by about 0.06 percentage points.”

This major transformation of the energy basis of the economy in fossil fuels is floated in the press as having no real impact on economic growth without anyone raising a qualm. In fact Lord Stern and colleagues have been arguing that economic growth will be boosted by the energy transformation to a “new climate economy” (GCEC, 2014). Elsewhere, I have discussed some of the many fallacies of this Green Growth argument and noted the connection to a power elite (Spash, 2014). Yet this is now the dominant international position and hope of the Paris Agreement.

The whole of Article 2 is qualified by the phrase: “...in the context of sustainable development and efforts to eradicate poverty”. As I have noted elsewhere (Spash, 2016), the Paris Agreement cannot be read outside the context of the, October 2015, UN Resolution A/RES/70/1 “Transforming our world: The 2030 Agenda for Sustainable Development”, which promotes economic growth, technology, industrialisation and energy use. Goal 8 is to sustain per capita economic growth at a rate of “at least 7 per cent gross domestic product per annum in the least developed countries”. The environmental devastation this would entail is meant to be addressed by the “endeavour to decouple economic growth from environmental degradation”, which is meaningless unless undertaken in absolute terms and that is simply impossible for the industrial economy being promoted in Goal 9. The Paris Agreement follows suit and claims that: “Accelerating, encouraging and enabling innovation is critical for an effective, long-term global response to climate change and promoting economic growth and sustainable development” (Article 10).

The ultimate concern is the threat to economic growth and this is a perspective that has been heavily lobbied for by advocates, such as Stern, of the new climate economy under the banner “better growth, better climate”. As they state: “In the long term, if climate change is not tackled, growth itself will be at risk” (GCEC, 2014a, p.9). The climate can and will be changed, but growth must not be threatened.

Concluding remarks

The negotiations around human induced climate change reveal the tensions and contradictions of the resulting policy. There are those who argue for more and better growth spurred on by new technologies to be developed via innovative corporations (GCEC, 2014). This is to be funded, as usual, by massive public investment that will 'leverage' private finance, or in plain terms subsidise corporate profit-making while pretending to remove market imperfections. Advocates are heavily invested in preserving the existing social and economic order as evident by the elite networks of the 1% within which they operate (Spash, 2014). The hope is for new miracle technologies to allow moving pollutants from the air to the soil and water, and reliance on treating the Earth as a mechanical toy for boys to (geo)engineer. The economics profession with its macroeconomic obsessions over jobs and growth is living in a fantasy world without any biophysical reality and merely plays along with this techno-optimist tune, and unfortunately the heterodoxy has so far done little to alter this.

The targets of Paris are not some simple internalisation of an externality that is messing-up the perfectly functioning market system. If taken seriously they are a call for a major transformation of the global economy away from its foundation on fossil fuels and energy intensive systems. As the UNFCCC's Director for Strategy has stated:

"The objective is to put in motion a fundamental transformation in the way we use and produce energy, how we plan our cities, how we manage land and how we prepare for a changing climate and cooperate to minimise its disruptive effect. Transformation takes strategy. You need to know your destination if you are serious about reaching it" (Thorgeirsson, 2015).

Yet, while the need for transformation is now widely recognised, this is generally interpreted as being totally consistent with maintaining the same social ecological and economic structure as today. That is a structure of social inequity, ecological exploitation and an economy promoting hedonistic materialism supplied through a system of corporate and State capital accumulation. The politics of human induced climate change go to the heart of the modern industrialised capital accumulating economy and the rhetoric of growth as supplying development and progress. In the end the Paris Agreement changes nothing. The destination is the same old growth economy and that is in total contradiction with addressing human induced climate change.

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