

Paris COP21 Climate Agreement is Bound to Nothing: What is the Solution?

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Chichilnisky and Polychroniou explain how and why the COP 21 agreement is empty of action, and argue that we are no closer to averting a catastrophic climate change scenario than we were before the start of the Paris talks.

After months, if not years of preparation, and two weeks of intensive negotiations, the Paris COP21 climate conference has produced an agreement that has been hailed by world leaders as a development signifying “a turning point for the world,” [1] the end of the fossil fuel era. With no time lost, much of the news industry responded in a similar fashion, describing the agreement as a deal representing “the best chance to save the planet.” [2]

This is sad and tragic, for the Paris COP21 climate agreement is simply empty of action, and can be called hot air. We are no closer to averting a catastrophic climate change scenario than we were before the start of the Paris talks. In fact, this could be the biggest failure of the global climate negotiations in their 21 years of existence while hardly a day goes by without further evidence of how severe the problem of climate change is.

To give one example, shortly before the opening of the conference NASA’s Jet Propulsion Lab released a study [3] that is simply shocking. The **study showed** that a huge Greenland glacier, Zachariae Isstrom, “broke loose from a glaciologically stable position in 2012 and entered a phase of accelerated retreat,” an unexpected and ominous development. The **glacier** “holds enough water to raise global sea level by more than 18 inches (almost ½ a meter) if it were to melt completely. And now it’s on a crash diet, losing 5 billion tons of mass every year. All that ice is crumbling into the North Atlantic Ocean.”

To their credit, all the delegates attending the Paris COP21 climate conference acknowledged the problem of unchecked climate change. This is the single achievement in Paris, a universal acknowledgment of the problem. But can a climate catastrophe really be avoided by a voluntary agreement among nations to reduce emissions and keep rising temperatures in check? Because the pact agreed to in Paris last week by nearly 200 nations for tackling global warming is all voluntary, which means it has no teeth. Indeed, the agreement is bound to nothing and no action is to be taken until 2020.

Yet again, this is not the impression one gets by the celebratory remarks made by world leaders. In fact, some of them engaged in systematic misrepresentation about the pact’s actual content. For example, the President of the Paris climate conference, French Foreign Minister Laurant Fabius, described the agreement as “**legally binding.**”

It is legally binding but it binds the signatories to nothing. Legally.

In contrast to the Kyoto Protocol, which runs out in 2020, the Paris deal includes no legally binding carbon dioxide emissions limits. There are no mandatory emission limits and no mandatory payments to help poor nations develop clean energy technologies, nor to mitigate the damages caused by climate change on poor

nations, when the damage was historically caused by the rich nations. Mandatory emissions limits are necessary for the carbon market to operate. What is traded in the carbon market is the right to exceed one's mandatory limits. With no mandatory limits, there can be no carbon market. The entire world is clamoring for a "price on carbon": this is the carbon market. The six largest oil and gas companies in the world publicly supported a price on carbon (Including Shell, BP, Statoil, Total and Engie). Yet the Paris Agreement undermines the very foundation for a price on carbon by requiring no mandatory emission limits.

Why did the Paris climate change negotiations move away from mandatory targets on carbon emissions output and adopted instead a voluntary approach to the climate change challenge? Because a legally binding treaty that needed ratification by governments back home would have reduced substantially the chances of reaching any kind of an agreement.

This is certainly the case for one of the world's biggest polluters, i.e., the United States. Any treaty on climate change that made its way to Capitol Hill would be shredded into pieces by the Republican-controlled Congress. Perhaps this is why Obama **can claim** that the Paris COP21 agreement as a "turning point for the world" — that is, because the deal does not have to go to the US Congress. This is going against the US' own interest since President Obama himself introduced mandatory decrease in emissions from US power plants. President Obama's prudent actions in defense of the US environment defy the logic of the Paris Agreement itself.

As time goes by, it is certain that more and more people will realize that the political compromise made in Paris over mandatory emissions comes at a great cost. Our ability to control rising temperatures caused by carbon dioxide accumulated in the air is greatly hindered since voluntary agreements guarantee failure.

But there is more. As the latest Intergovernmental Panel on Climate Change report points out,[4] carbon emission cuts are not enough to slow down global warming. According to IPCC, we are headed with certainty towards an increase in temperatures by three degrees Celsius by 2100, although there are scientists who believe that two degrees of warming is "**a recipe for disaster.**" It suffices to recall the superstorm Sandy that closed down New York City for weeks, with flooded subways, leaving entire neighbourhoods without electricity, no schools, no law enforcement, and automobiles floating in the streets of this proud city. Climate change means an increase in the frequency and severity of such climate events. This means three or four Superstorm Sandies every year in New York, and the city cannot survive such climate change.

In addition to reducing drastically emissions through mandatory limits and adopting clean energy systems, it is now imperative that we utilize negative carbon technologies to remove existing carbon dioxide from the air. This was required by the IPCC, the scientific foundation of the climate negotiations, in their November 2014 5th Assessment Report.[5] We procrastinated too much and now we have to massively reduce the CO2 that is already in the atmosphere in addition to reducing emissions. There are carbon negative technologies in Silicon Valley, like those employed by **Global Thermostat**, that are operating at SRI, which can offer a solution to the greatest threat facing the future of human civilization as we know it. This requires that we accept mandatory emission limits and reactivate the carbon market that is based on mandatory emissions, and **was trading** \$175Bn/year by 2011. The funding from the carbon market suffices to implement and scale up carbon removal around the world, as the IPCC requires, for example through carbon negative carbon plants that clean the atmosphere while they produce electricity- and do all of this in a low cost and profitable fashion. A proposal made in Copenhagen was to use the Kyoto carbon market to offer finance to scale up globally such carbon negative carbon plants in poor nations, thus providing electricity that is needed by 1,3 Bn people around the world that currently have no access to electricity, all this while cleaning the planet's atmosphere[6] This was called the Green Power Fund and required \$200Bn/year for building carbon negative power plants; instead the Green Climate Fund was made into law, severing its connection from the source of funding, the carbon market of the Kyoto Protocol.[7]

Why did the Climate Fund sever the connection with its very source of funding, the carbon market of the Kyoto Protocol, which can offer enough funding for the solution to climate change? For the same reason that the Paris negotiations ended in an agreement with no teeth. The reason is the insistence of the US Congress — through its unanimously voted **Byrd- Hagel Act**— of no mandatory emissions limits.

We now have technology that can remove carbon from the atmosphere as required by the IPCC. It is already operating in Silicon Valley. We have a financial structure — the Green Power Fund — that can use the funding

from the carbon market of the Kyoto Protocol, which offers enough funding (\$200Bn/year) to resolve the climate change problem. All we need is to implement politically the financial and technological solution that is in our power to implement. The whole thing hinges on mandatory emissions limits. We even have a political solution to implement mandatory limits in a way that comply with the requirements of the Byrd Hagel Act, namely conditional mandatory limits for developing nations so they agree to mandatory limits that can be implemented by carbon removal projects that they are paid to implement and end up being profitable. We can seek conditional mandatory limits on industrial nations, conditional on their being achieved through profitable carbon removal technologies. Everybody benefits, and we save human civilization from disappearing under the raising oceans. Why then has the Paris failed to deliver mandatory emissions limits, the foundation for the whole solution?

Unfortunately, the climate change pact reached in Paris does none of the above, which means, as a 2015 statement by the Bulletin of Atomic Scientists **warns** against the threats of global warming and nuclear weapons, that global leaders “have failed to act with the speed or on the scale required to protect citizens from potential catastrophe,” endangering “every person on Earth [by] failing to perform their most important duty—ensuring and preserving the health and vitality of human civilization.”

Can this be fixed? First we must acknowledge that mandatory emission limits, conditionally mandatory as explained above, are possible and needed. The 2015 Paris Agreement is a statement of hope by the nations of the world, but it has no action until 2020 and no financial commitments nor mandatory limits for carbon emissions as the Kyoto Protocol that is international law since 2005. With no mandatory emission limits the carbon market of the Kyoto Protocol – the EUETS – which provides a price on carbon – cannot function – and there is no funding for mitigation efforts in poor nations nor for the deployment of carbon negative technologies as needed now, according to the IPCC, to avert catastrophic climate change.

It is possible to solve this problem using four articles within the Paris Agreement that support “carbon negative technologies” such as those of the Silicon Valley company Global Thermostat created by one of the authors. This and similar technologies can build “carbon negative power plants” that are profitable, and provide energy for development and poverty alleviation in poor nations while cleaning the atmosphere as required by the IPCC to avert catastrophic climate change. A \$200Bn/year Green Power Fund created by one of the authors in Copenhagen can fund the deployment of carbon negative power plants globally. The carbon market suffices to fund this effort, and will do so once we extend the mandatory emission limits: it can fund the removal of carbon from the atmosphere that is needed to avert climate change.

In the Kyoto Protocol, mandatory emissions have indeed reduced 27% of the emissions in the Kyoto Nations – while all other nations increased their emissions over the period. On that basis we can support the carbon market and its price on carbon, something that that the world’s business communities are clamoring for. On that basis we can implement carbon removal technologies and carbon negative power plants that provide clean electricity and alleviate poverty while cleaning the atmosphere. The problem can be resolved or nearly resolved in the next 20 years.

Will humans do it?

Notes

[1] This is how US President Barack Obama himself opted to describe the significance of the Paris climate agreement in a **statement** he made from the White House on Saturday 12 December 2015.

[2] This statement was also made by President Obama and headlined, approvingly, by much of the **news industry**. And the self-proclaimed “progressive” British newspaper The Guardian called the Paris climate agreement “the world’s greatest diplomatic success.” See Fiona Harvey, “**Paris climate change agreement: the world’s greatest diplomatic success.**” The Guardian, December 14, 2015.

[3] Jeremie Mouginot et al., “Fast retreat of Zachariæ Isstrøm, northeast Greenland.” Science Vol. 350 no. 6266 pp. 1357-1361 . Published Online November 12, 2015; Science 11 December 2015, Vol. 350. No. 6266, pp. 1357-1361.

[4] 5th Assessment Report of the Intergovernmental Panel on Climate Change. UNFCCC Bonn Germany, November 15, 2014.

[5] 5th Assessment Report of the Intergovernmental Panel on Climate Change. UNFCCC Bonn Germany, November 15, 2014, page 191.

[6] See Graciela Chichilnisky, 'Green capitalism: negative carbon and the green power fund.' International Journal of Green Economics, 2009. Vol. 5, Issue 4, pp. 321-333. "Avoiding Extinction: Negative Carbon and the Green Power Fund," International Journal of Green Economics, October 11, 2011; "The Green Power Fund — proposed December 15 2009 at Copenhagen COP15." National Journal Copenhagen Insider. December 15, 2009; and "The Copenhagen Agreement – A disappointment or a relief?" Financial Times, Climate experts' Forum, December 19, 2009.

[7] See Graciela Chichilnisky and Kristen A. Sheeran, Saving Kyoto. New Holland Publishers UK Ltd, 2009; and Graciela Chichilnisky, The Kyoto Question," Financial Times, Climate experts' Forum. December 15, 2009.

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