

Bound to Nothing: Interview with Graciela Chichilnisky on the Paris Climate Agreement

Interview by C. J. Polychroniou. December 24th 2015

The Paris COP21 negotiation talks on "unchecked climate change" have produced an agreement which has been hailed by Obama "as a turning point for the world" and as the "best chance to save the planet" by much of the media industry. However, this is strange talk given that the agreement is totally voluntary and provides no comprehensive strategy for tackling the climate change challenge. All that it does, according to the architect of the Kyoto Protocol carbon market and Economics Professor at Columbia University Graciela Chichilnisky, is acknowledge that climate change is real and that emissions are the primary cause for global warming. It offers no solution, and merely kicks the can down the road. In this sense, the Paris agreement, as Chichilnisky underlines in this exclusive interview to C. J. Polychroniou for the International Affairs Forum is a step backwards from the Kyoto Protocol, which expires in 2020. Professor Chichilnisky feels that the Paris climate deal is actually a failure in global climate negotiations, but she also believes that a solution to "unchecked climate change" is within our reach.



Graciela Chichilnisky worked extensively on the Kyoto Protocol, creating and designing the carbon market that became international law in 2005, and wrote the wording for the carbon market into the Kyoto Protocol at the COP in Kyoto in December 1997. The Washington Post calls her an "A-List Star" and Time Magazine calls her a "Hero of the Environment".

A world-renowned economist, Professor Chichilnisky is the creator of the formal theory of Sustainable Development and acted as Lead U.S. Author of the Intergovernmental Panel on Climate Change, which received the Nobel Prize in 2007. She is Professor of Economics and of Statistics at Columbia University, Visiting Professor at Stanford University, and the author of fifteen books and some 320 scientific articles in preeminent academic journals. Dr. Chichilnisky holds two Ph.D. degrees, in Mathematics and Economics from MIT and the University of California Berkeley.

C.J. Polychroniou: Graciela, the recently completed Paris COP21 climate change talks have been interpreted by most world leaders as nothing sort of a revolutionary breakthrough in the struggle to address the climate change challenge, which, if unchecked, can lead to a catastrophic outcome for the future of humanity. You participated in the Paris conference negotiations, but beg to differ -- you don't think that the agreement is a step forward in the battle to avert a catastrophic climate change scenario. Explain your objections to the Paris pact on climate change.

Graciela Chichilnisky: My objection is simple. What was achieved in Paris is not a real agreement. It binds the signatories to nothing. No actions were agreed. It is a voluntary agreement that probably guarantees failure unless something is done to find an implementation for its voluntary goals. My former colleague at Columbia University and from NASA, Professor James Hansen, a founding figure in identifying the risks of climate change, says the Paris agreement is "fraud." This may be too extreme, but there is a measure of truth. The lack of any action plan to avert climate change, which is what this enormous global conference was to deliver, is tragic, since the North and the South Poles are melting down and billions of people will be affected, especially the poor and hundreds of millions of people living in island states. Yet we spent billions of dollars and weeks of talks in Paris with no action items to show for it.

Climate change is a tough problem that cannot be resolved by wishful thinking. Voluntary solutions never worked. We have 18 years of experience to prove this fact. The Kyoto Protocol was signed in 1997 by all

nations and what it shows is that the only nations that decreased carbon emissions during this period were those that took part in the Kyoto Protocol carbon market. Specifically, those nations reduced emissions by 27% while those that were not part of the Kyoto Protocol carbon market increased their emission output by almost 50%. So we know that voluntary solutions do not work. So how can anyone be satisfied with – indeed, be proud of - a climate change agreement that is entirely voluntary and that has no action plan is simply beyond me.

The so-called Paris agreement also makes no commitment to funding. Yet, funds are needed to transform the \$55 trillion power plant infrastructure that emits 45% of the global emissions. There can be no solution to the climate change challenge without transforming the very infrastructure that is responsible for nearly half of the global emissions. The power plants upon which this infrastructure is based on operate through the use of fossil fuels and we need to move in the direction of clean power. This will also not happen through wishful thinking. Transforming the \$55 trillion power plant infrastructure requires solid financial targets and actions. It is an extremely difficult to do, but it can be done - indeed we now have the financial political and technological solution to resolve climate change - but it cannot happen merely by wishful thinking. Magical thinking will debilitate us and undermine our ability to succeed. And what is at stake here is nothing short of the survival of human civilization as we know it.

CJP: There are visibly no climate change deniers among today's global leaders, so why did the negotiation talks end up producing simply a voluntary agreement, which probably guarantees failure?

GC: I don't know why. It seems very strange indeed. Perhaps they are afraid to commit themselves to a course of action that will change the very nature of the global economy itself, since much of economic life depends today on the use of fossil fuels. Perhaps they don't believe they can take on huge vested interests such as the fossil fuel industry. Perhaps they are seeking to find a universal agreement with all nations, which includes nations such as the US that have been traditionally opposed to mandatory emission limits. It is relevant that the US Senate and Secretary of State John Kerry said a week before the Paris Conference started that there would be nothing binding in the Paris Agreement. President Hollande differed publicly in the international media. There are two ways to achieve what the US said. One way is to make a non-binding agreement as John Kerry said. The second is to make a binding agreement, as president Hollande said, but one that binds the parties to nothing. It is a game with words. This could explain why they opted for an agreement that is bound to nothing.

CJP: Certain leaders of the developing world opted to speak at the conference of "climate justice" rather than climate change. Interestingly enough, however, their notion of "climate justice" did not march in tune with the version of "climate justice" advocated by activists, which calls for direct action on fossil fuels and energy market reform, but sought to ascertain the right of the developing world to their own pollution! Given the economic realities facing many of the poor nations around the world, is their version of "climate justice" as morally abhorrent as one might be tempted to conclude in the light of the already critical state of the environment?

GC: It is a matter of not knowing what is possible. Many people in developing nations believe that development can only take place through a conventional industrial revolution in which we use all the materials available for industrialization. It is an evangelical version of the Republican view in US Congress, the idea that God placed natural resources on earth for human use. Almost a religious position that defies wisdom, and one that can be terribly dangerous for the future of the planet.

CJP: The Kyoto Protocol, which actually placed mandatory emission limits on the parties that adopted and ratified the treaty, expires in 2020. Is it too late now to be rescued and reinforced?

GC: The Kyoto Agreement is international law since 2005, and only its limits end. No, it is not too late to extend the Kyoto Protocols mandatory limits beyond 2020, and it will probably be rescued and reinforced as soon as people understand that the any agreement that has no emission limits for the planet, such as the Paris agreement, can be dangerous to the survival of the human species. It will take a bit of time to get there, but the message will become clear when the increase in emissions catches up with a climate agreement that binds us to nothing.

Once reality sets in, to facilitate matters the first step nations will take will be to adopt "conditional"

mandatory emission limits. The use of carbon negative technologies is unavoidable and what I propose has proven acceptable to all nations: (1) The developing nations will accept mandatory limits *provided* that there are funds available for them to assist with achieving those limits through carbon negative technologies. For example, through the removal of carbon from the atmosphere accomplished through carbon negative power plants. The industrial nations will accept mandatory emissions limits *provided* these can be achieved with carbon negative technologies that are profitable, so they do not harm the economy. These issues have been of special concern to U.S. policymakers, in particular, and are at the heart of the so-called Byrd-Hagel Act, which was passed unanimously by the U.S. Senate with a vote of 95-0 in July of 1997. The Byrd-Hagel Act calls for no mandatory US limits unless the developing nations accept themselves mandatory limits and unless the limits do not cause harm to the US economy. The conditional mandatory agreement I just proposed meets the Byrd-Hagel conditions. By achieving these conditions, we can ensure the extension of the Kyoto Protocol and proceed with the key implementation of the removal of carbon that is already in the atmosphere. That is what is needed now: the 5th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) establishes that carbon removals are now needed in order to hold the increase in temperature to 2 degrees Celsius or less. Furthermore, the EU Climate Chief, Miguel Arias Canete, admitted that it has not yet looked into the policies needed to hold global warming to 1.5c as stated in the Paris Agreement, and will ask a UN climate science panel IPCC for advice involving “negative emissions” technology to achieve this. The conditional mandatory limits I propose are based on carbon negative technologies, on carbon removals. According to the aforementioned IPCC report, carbon removals are now needed to avert catastrophic climate change. I was able to write “carbon removals” policies into several articles of the Paris Agreements and the wording makes funding available for this necessary task. But, as already explained, it is all voluntary right now. There is nothing binding in the Paris Agreement.

CJP: One of the least mentioned -- and dismally understood -- topics in the race against climate change is indeed the potential role that new, disruptive technologies can play in cleaning up the air from accumulated carbon dioxide. Since you are an advocate of a solution that not only places limits on carbon emissions output but looks to technology in order to help us avert a climate change catastrophe, please explain briefly what exactly these carbon negative technologies are all about and how they differ from the previous generation of carbon capturing and sequestration technology, which has proven to be rather inefficient as well as expensive.

GC: *Carbon negative technologies*TM take out CO₂ that is already in the atmosphere. These technologies already exist and they operate in the Silicon Valley. What they can do is make power plants carbon negative so the more energy they produce the more they clean the atmosphere. These technologies remove carbon dioxide directly from the air. If they removed carbon dioxide from chimney, which is what traditional carbon capturing technology does, they would not be carbon negative. At best, they would be carbon neutral as they would only clean the air from new emissions. But we need to remove the carbon that is already accumulated in the air from past emissions. This is what the IPCC 5th Assessment report says is needed now, because we delayed taking action to limit emissions across the board so now we have to remove the carbon that is already in the atmosphere. This is surely a difficult undertaking, but it is now quite possible and moreover it can be done in a way that is profitable. The cost involved behind this new, disruptive technology is now very low. This is why I believe that the wording I proposed for conditional mandatory limits on emissions works.

CJP: What would it take, from a political and financial standpoint of view, to introduce carbon negative technology on a global scale, and why should we not simply strive for a carbon free economy and clean energy systems?

GC: It is not sufficient to strive for carbon neutral sources of energy because it will take too long to replace the \$55 trillion power plant infrastructure, which is mostly run by fossil fuels, by clean power. Planting trees is the right strategy, because they absorb CO₂, but it will take far too long. And we are running out of time: once the Antarctic melts, it will take centuries to reconstitute. We are at the point of no return.

CJP: What about countries like Greece, which are financially stranded, and simply impossible to introduce such technologies for the protection of the planet? Do you have any suggestions as to what nations like Greece can do to help with the process of cleaning up the air from already accumulated carbon dioxide?

GC: First, let me say that what Greece has been experiencing since the eruption of the debt crisis is unprecedented for a western economy. The nation's GDP has shrunk by 1/4 and unemployment shot as high as

27% early last year. Now it stands at 24%, which is simply unacceptable. The economy is still in free fall and the country remains bankrupt. So it is obvious that a country like Greece cannot be expected to invest in negative carbon technology without outside financial assistance. In this case, the EU has a responsibility to assist financially stranded members to implement technologies with power plants that can remove carbon from the air. In doing so, it helps provide energy for economic development and to clean the atmosphere, both very desirable targets. In fact, as I have already mentioned, the signals coming out of Brussels are very encouraging as European policymakers appear willing to support the development of negative carbon technology employed by power plants like Global Thermostat.

CJP: Are you optimistic that humanity will win the battle against climate change?

GC: I believe it can be done. I don't know if it will be done, but it can be done. The question is whether humans will receive clear signals to change on time. Humans are not good at dealing with change.

C. J. Polychroniou is a political scientist/ international political economist scholar who has taught and worked in universities and research centers in Europe and the United States. He holds a PhD in Political Science and is the author/editor of five books and many scholarly articles, policy papers, essays, and interviews.