

The COP-21 Climate Summit held in Paris in early December of 2015 was hailed as a landmark success for getting the world to move forward addressing climate change. Given the repeated inability to get all nations to agree to anything in the last 20 COP's (Conference of the Parties), declaring this one a landmark success was based on the fact that all 195 countries signed the agreement.

One of the biggest hurdles to overcome was getting China to sign the agreement. Both President Obama and Secretary of State John Kerry visited China several times prior to the summit working hard to get them on board. Had China not signed the agreement, it would surely have fallen apart again. President Obama and President Xi Jinping of China announced that they would move forward jointly on plans to reduce their greenhouse gas pollution. That announcement broke the 20-year stalemate.

Negotiations were tense none the less. For two weeks developed countries and developing countries hammered out agreements and compromises. One of the hottest contentions was America's insistence that there be an aggressive system to verify that countries were living up to their Intended Nationally Determined Contribution (INDC) pledges, or carbon reduction commitments. China and India objected strongly to outside verification as being too intrusive so the US backed down.

The most insidious display at the entire conference was a kiosk sitting in front of the main entrance/exit to the international press area. This kiosk was presented by the United States Senate. They were handing out pamphlets entitled, "Senate Outlook on United States International Strategy on Climate Change in Paris 2015". The pamphlet was signed by Senator John Barrasso, Chairman. The obvious intent of the Senate was to scuttle the Paris Agreement. Given how fragile the agreement was, this could very well have done the job. In essence the pamphlet said that President Obama could promise anything he wants but if the Senate doesn't want it, the President won't get it. It was a relief to see that the Senate was totally ignored by the negotiators.

Speaking of the press, there were over 3,000 media people at the conference and out of them only eight from America. Blatantly missing were CBS, NBC, ABC, and FOX television news. My flight to Paris took me to Toronto, Canada for a two-hour layover. While in the airport CBC News ran two climate change reports, both around 28 minutes long and they were not repeats. The reports were very extensive, accurate, and scientifically correct. When I checked into my room in Paris I turned CNN-Europe on and saw another very long report about climate change that was very factual and in-depth. Here in America, you're lucky if climate change gets 30 seconds, if any coverage at all. It really hit me how little "news" we actually get here in America after seeing news in other countries.

The last few days of the conference became more tense as the deadline approached. Many negotiating teams worked all night and literally caught an hour or so of sleep in a lounge chair in the lounge area outside the negotiating rooms. On Thursday, December 15<sup>th</sup>, two days before the signing of the final agreement, several climate scientists went through the press area and handed out a media advisory about a media announcement that would take place at 10:00 AM that morning. Its headline read, "URGENT"! Dr. Kevin Anderson, a leading climatologist from the Tyndall Center for Climate Research in the UK and several other climatologists confiscated a negotiating room that was booked to another group and held their impromptu media event. The outrage from the negotiators whose room they confiscated helped to draw the press to the event.

The scientists were protesting the fact that the political and industry negotiators were ignoring the science and settling on a bad temperature target of 2° C. The scientists pointed out how dangerous

extreme weather events have become with a 1° C temperature rise in the last 150 years. They also pointed to the massive polar ice cap loss and glacier losses caused by this 1° C temperature increase. They demanded that the agreement target be lowered to 1.5° C and emphasized that that is even too high but they knew that's all they could push for without killing the agreement.

The critical issue that politicians and industry, especially the fossil industry, has a blind spot for is that since the beginning of the industrial revolution we burnt 2,000 gigatons of carbon and that increased the global average temperature by 1.2 degree Celsius. If we want to keep the temperature from rising any higher than 1.5 degrees Celsius we can only burn around 473 gigatons of carbon. The critical issue is there is 2,795 gigatons of carbon in inventory licensed to burn right now. If we burn that, it will send the temperature up to a very dangerous 6 degrees Celsius. We have to leave carbon in the ground and get off fossil fuels as soon as possible.

All 195 countries signed the COP-21 Climate Agreement, also referred to as the Paris Agreement, and the atmosphere at the Le Bourget conference center was giddy with elation. The biggest problem about the agreement was that none of it is legally binding. Every INDC promise was voluntary with no enforcement to hold any country to their pledges.

The 184 countries responsible for about 96% of the world's greenhouse gas emissions submitted their INDCs and according to the *Journal Science* the INDCs fall short of the needed pledges to keep the temperature below the 2° C level. In fact, as the pledges stand now they will allow the temperature to rise above the preindustrial temperature by 2.7° C or 4.3° F. If you are interested in seeing the INDC pledges from each country this is a great site to get that information: <http://klimalog.die-gdi.de/#INDCContentExplorer>.

In the end, Dr. Michael Mann and Dr. Jim Hansen panned the agreement as useless. Bill McKibben said of the agreement, "the gun has been fired, why isn't anybody running?" In anticipation of this outcome, Bill Gates founded an organization called Mission Innovation that includes 28 billionaires with the likes of Mark Zuckerberg and Richard Branson to mention a few. The organization is to provide billions of dollars to seed clean energy innovation projects. Also, in America, a coalition of Mayors, States, corporations and universities are launching their own initiatives to reduce their carbon emissions to help America meet its INDC pledge of reducing carbon by 26 to 28 percent by 2030.

The bottom line is world political systems will not deal with climate change in any meaningful way. Therefore, it's up to the people to take the bull by the horns. We have to change our own ways and convince as much of the rest of humanity as possible to change their ways as best we can. If the government and the deniers sit back and watch us move forward creating a new economy in the process, perhaps they will get on board. Right now we must move with great speed and leave carbon in the ground or humans won't be around.