Economic Analysis

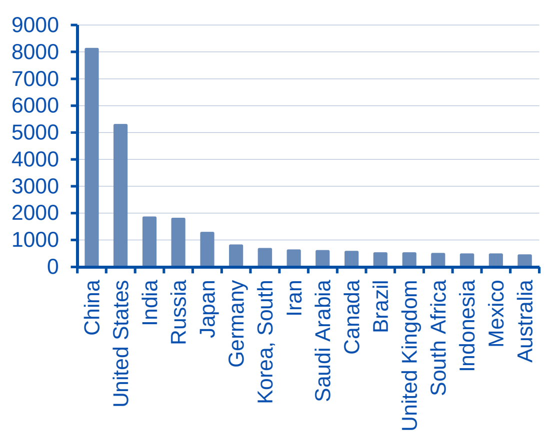
Paris COP21: The Clean Economy Is Possible

Anthony Quinones, Marcial Nava

- **A major diplomatic success, still plagued by uncertainty**
- **The agreement signals that a clean economy is possible and financially attractive**
- **The banking industry should prepare for the challenges and opportunities in the fight against climate change**

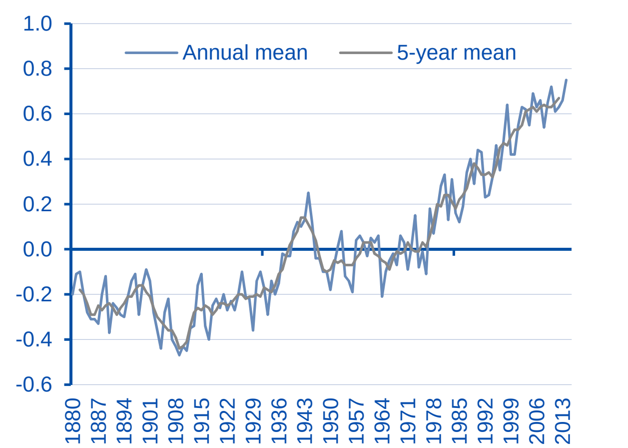
On December 12th in Paris, 195 countries of the COP 21 UN Climate Change Conference agreed to a new deal, laying out a plan for long term action to mitigate and adapt to the effects of climate change. The Paris agreement sets forth a path to limit global temperature rise to below 2°C above pre-industrial levels. Beyond that, scientists predict, the effects of global warming will be catastrophic and irreversible. Participants also agreed to pursue efforts to limit global temperature to increase 1.5°C. Through the development of intended nationally determined contributions (INDCs), all countries, both developed and developing, are to define emissions targets and produce plans to reach them. The agreement is set to take effect in 2020, and the INDCs are to be updated and published every five years after that. The goal of the updates is to both monitor progress and to steadily increase the nations' ambitions in the long run. So far, 188 countries have submitted these climate action plans, including both China and the U.S, the number one and number two emitter of greenhouse gases globally.

Chart 1
Total CO2 emissions from the consumption of energy in 2012 (million metric tons)



Source: U.S. Energy Information Administration

Chart 2
Global land-ocean temperature index (temperature anomaly in °C)



Source: NASA's Goddard Institute for Space Studies

The Paris agreement was perceived as a remarkable diplomatic success compared to the disappointing 2009 Climate Conference in Copenhagen, where a 2°C shared target was approved, but participants were unable to sign an agreement. Contrary to the top down approach of the Kyoto protocol that set forth binding emissions targets only for developed countries, the Paris Conference succeeded in bringing every country into the agreement, including China and India. These two countries combined are responsible for a third of global carbon emissions, and a solution to the complicated problem of global climate change would be impossible without their cooperation. The Paris agreement is also unique because it incorporates clauses aimed at helping developing countries adapt to and mitigate the effects of climate change, as well as mechanisms to compensate for loss and damage in countries that will be severely affected.

Private firms, cities and individuals made important contributions and commitments during the Conference. For example, San Diego, California announced its commitment to use 100% renewable energy in 20 years. In the private sector, 114 major global companies, accountable for nearly 476 million tons of CO2 emissions, made carbon reduction pledges approved by the Science Based Targets Initiative. Other multinationals, including some of the best known names in high-tech, committed to secure 100% of their electricity from renewable energy. Setting a strong example, Bill Gates and 28 other private investors launched an Energy-Innovation Fund to help commercialize government-sponsored developments in basic research.

Financing the fight against climate change

To help fund developing and at-risk countries' efforts to adapt to and mitigate climate change, developed countries have reiterated their pledge to provide $100 billion a year in funding by 2020 through bilateral financing, multilateral development banks and publicly motivated private co-financing. To that end, the OECD estimates that $62 billion a year was spent in 2014, up $10 billion from 2013, well on the way to meeting the $100 billion goal. The U.S. has already announced that they will be doubling the $430 million of public grants given to at risk countries to deal with climate change. The parties to the Paris agreement have also decided to determine a higher goal on the provisioning of climate finance before 2025.

The U.S. INDC outlines a plan to cut emissions by between 26-28% from 2005 levels by 2025, mostly through targeting the transportation and electricity generation sectors, the two largest emission producers. Coal, which produces the most emissions when burned, will be phased out in favor of cleaner burning natural gas and renewables through the implementation of stricter carbon emission limits. This would lead to increased investment in natural gas and renewable energy, though the regulation is currently being challenged by several states in the courts. Fuel economy standards will continue to be raised for passenger and heavy-duty vehicles, increasing incentives for research into hybrid and electric automobile technology.

A signal to the market

The Paris agreement has some limitations. The reach and scope of INDCs can vary greatly across countries to the point that there is a risk that some may not commit enough. The $100 billion dollars pledged every year to developing countries are not guaranteed and may be subject to economic and political cycles. Leadership is also crucial to the future of the agreement and ensuing actions. In the U.S., for example, Republicans and Democrats have conflicting views on climate change, making the upcoming presidential election critical for the progress of the country's climate initiatives in the fight against global warming. Moreover, the agreement falls short in establishing emission targets for each country or creating a global mechanism for pricing carbon. The latter could have accelerated the adoption of renewables and created an efficient market in which countries and firms trade carbon credits.

However, despite its limitations and uncertainties, the agreement has sent a signal to the market that a green economy is possible and financially attractive. It has set up a more transparent and reliable framework for the development of clean enterprises. While $100 billion a year represents a commitment to funding climate change action, it is only a small fraction of the funding necessary if the world is to meet the 2°C target. In order to meet this goal, the International Energy Agency projects that it will take about $40 trillion in additional investment and financing of low carbon energy systems and infrastructure by 2050.[1] Governments cannot provide this financing alone, the participation of private capital will be essential if the Paris agreement is to be successful.

Depending on the implementation of the agreement, billions of private dollars could be funneled to renewables, carbon capture and storage, and energy-efficiency in the following years. Already, a movement towards divesting from fossil fuels seems to be gaining momentum. In mid-2015, the Norwegian Sovereign Wealth Fund, the biggest in the world, announced the sell-off of stakes in companies that originate 30% or more of their business from mining or burning coal. This action has been replicated by smaller private and public investment funds and is expected to set the path for further carbon divestments around the world.

Investment will be needed in many areas, but it is the energy sector that holds the most opportunity and scale. Developing countries offer an opportunity for renewable energy investment, as much work is needed to build out the infrastructure to meet their fast growing energy needs. Since 2005, private foreign direct investment into building wind, solar, and biomass energy projects in developing countries totaled almost $250 billion.[2] The opportunity for renewables investments is not confined solely to the developing world. In the U.S., renewable energy consumption, including nuclear, is forecasted to grow 21.9% from 2013 to 2040, far outpacing overall energy supply growth of 9.47%.[3] Within the renewable energy category, wind is projected to see the highest growth, adding near 50 gigawatts of generating capacity to surpass hydropower as the largest producer.

Implications for banks

The Paris agreement is only one step in the right direction. However, more efforts will be needed for humanity to effectively avoid the negative impact of rising global temperature. Given the massive amounts of money needed to achieve this goal, the banking industry plays an important role in financing the clean economy. The positives for the industry are many. For instance, from a corporate banking perspective, financing renewable energy industries could help the diversification and capital allocation efforts of banks, providing a counterbalance to the cyclicality of other industries. From a retail perspective, the following years could be marked by a higher demand for climate insurance, electric vehicles, solar panels, energy storage, and energy-efficient goods—items that will be funded with credit. From a wealth management perspective, providing alternatives in the clean energy space could serve and attract investors interested in moving away from fossil fuels. Finally, the Conference's emphasis on adaptation and mitigation has shown the need for banks to implement programs to reduce their own carbon emissions while evaluating and responding to the impact that climate change could have on their stakeholders, assets, and operations.

[1] http://www.iea.org/Textbase/npsum/ETP2015SUM.pdf
[2] fDI Markets https://next.ft.com/content/3c96c24a-9daa-11e5-8ce1-f6219b685d74
[3] https://www.eia.gov/forecasts/aeo/pdf/tbla1.pdf