ABDULLAH BIN HAMAD AL-ATTIYAH INTERNATIONAL FOUNDATION
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Kyoto Versus Paris – A Tale of Two Paradigms

The adoption of the Paris Agreement in December 2015 by 196 countries that are Parties to the United Nations Framework Convention on Climate Change (UNFCCC), was hailed as a major breakthrough in global efforts to combat climate change. After more than 20 years of negotiations, the world agreed on a blueprint on how to keep global climate change well below 2°C. The agreement is seen by many world leaders that gathered in Paris in December 2015, as the last hope for humanity to preserve the foundations for a healthy planet.

This edition of the Al-Attiyah Foundation's Monthly Sustainability Insights will examine some pertinent questions concerning the Paris Agreement by drawing parallel with the experience from the Kyoto Protocol.

- In what ways does the Paris Agreement represent a shift from the Kyoto Protocol?
- How is the Paris Agreement helping to galvanize climate action?
- Has the recent adoption of the rulebook for the Paris Agreement at COP24 in Katowice, restored faith in the multilateral system?
- Is the euphoria and optimism generated by the Paris Agreement still justified?

In what ways does the Paris Agreement represent a shift from the Kyoto Protocol?

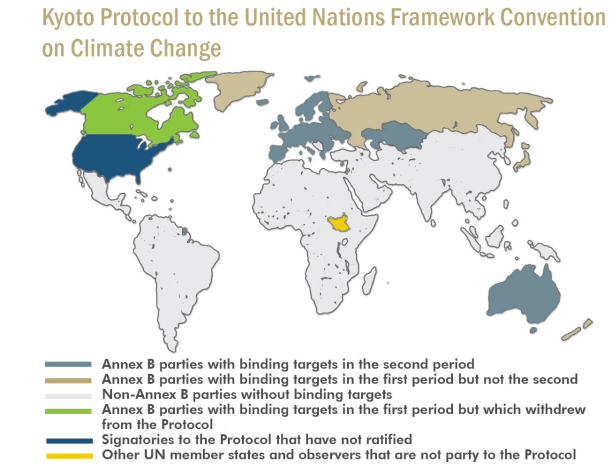
The Kyoto Protocol and the Paris Agreement are both international instruments adopted under the United Nations Framework Convention on Climate Change (UNFCCC).

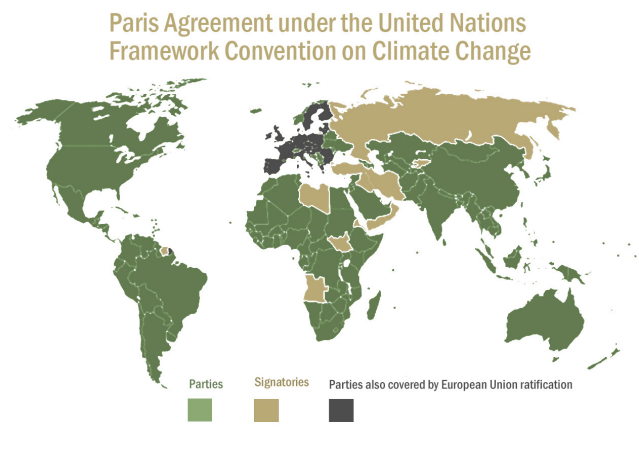
The Kyoto Protocol was adopted on 11 December 1997 and entered into force on 16 February 2005. The rules and requirements for implementation of the Kyoto Protocol were further elaborated in a package of decisions called the Marrakesh Accords. The Marrakesh Accords were formally adopted in Montreal, Canada, in December 2005.

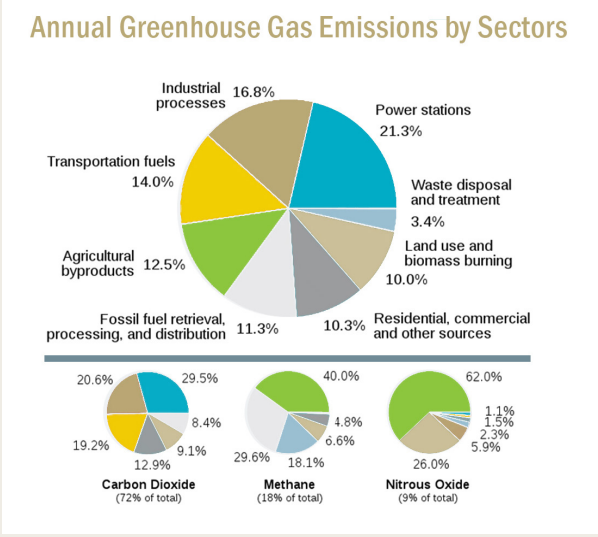
The first commitment period of the Kyoto Protocol started in 2008 and ended in 2012. The Doha Amendment agreed in December 2012 extended the Kyoto Protocol to the second commitment period. However, of the 37 countries with binding commitments, only 7 ratified the Doha Amendment, effectively rendering the Kyoto Protocol dormant.

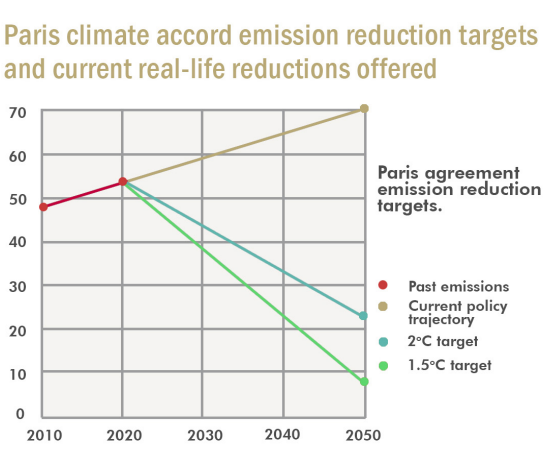
The Paris Agreement was adopted on 12 December 2015, and by September 2018, 195 UNFCCC member States have signed the agreement and 181 have become party to it. At the recently concluded climate change conference on 16 December 2018, in Katowice, Poland, Parties agreed the rulebook for the implementation of the Paris Agreement.

The Kyoto Protocol sets 5-yearly commitment periods for 37 developed countries (referred to as Annex I Parties), while the Paris Agreement allows all countries to submit their obligations and commit to reviewing and revising them every five years.









Schematic showing the Paris agreement emission reduction targets. The schematic was based on figure ES2 of page xvi/16 of the Emissions Gap Report 2016: A UNEP Synthesis Report.

The differences between the two approaches are highlighted by the goals set by the two international instruments and the approach for achieving the goals. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing greenhouse gas (GHG) emissions. These reductions amount to an average of five per cent against 1990 levels over the five-year first commitment period (2008-2012). In pursuance of this goal, each Annex I Party was required to ensure that its total emissions from GHG sources (energy, industrial processes, solvent and other product use, agriculture and waste sectors) over the commitment period do not exceed its allowable level of emissions. The Kyoto Protocol provided for a compliance mechanism, comprising of an enforcement and facilitative branches, to regulate the compliance to the legally binding targets for Annex I Parties.

In contrast, the Paris Agreement sets a long-term goal of keeping global warming below 2°C and if possible even 1.5°C. Paris establishes a long-term signal for action that provides all actors with certainty of the direction of travel. The Paris Agreement is based on an inclusive bottom-up approach that requires all countries to submit national targets to reduce emissions and adapt to climate change. The national pledges are to be submitted by 2020 to the United Nations Framework Convention on Climate Change (UNFCCC) and updated every five years after that so that deeper emissions cuts can be achieved. This pledge-and-review approach of the Paris Agreement, is considered a paradigm shift that allows countries to now focus more on collaboration and cooperation..

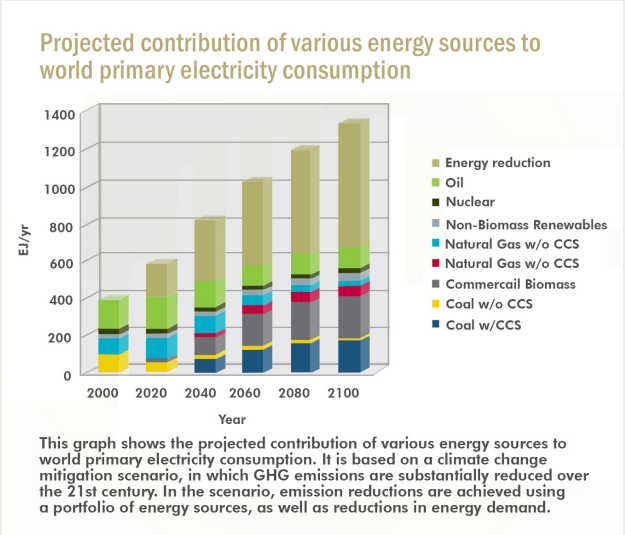
The 'stick approach' of the Kyoto Protocol is replaced in the Paris Agreement with a 'carrot approach' that requires each country to determine own level of contribution based on consideration for its national circumstances. Developing countries also have the option to indicate what level of its contribution would be achieved through own efforts and what additional contribution is possible depending on the availability of support.

How is the Paris Agreement helping to galvanize climate action?

An objective assessment of whether the Paris Agreement is making a significant difference in global efforts to address the challenge of climate change, is rather like the case of either the 'glass is half full or half empty'. Amidst continued rise in nationalist populism like the recent election of a populist President in Brazil; daunting pressures from hotspots of political conflicts; ever growing task of poverty eradication; and mounting scientific evidence of stark danger of global warming, there are glimmers of hope that momentum is shifting positively, since the adoption of the Paris Agreement.

At his campaign launch in July, the eventual winner of the Brazilian Presidential election, Jair Bolsonaro, shocked the world by announcing that Brazil would join Donald Trump's US and withdraw from the Paris pact. Although Bolsonaro later signaled, a few days before the election, that he would respect the Paris deal, subject to assurances it did not affect Brazilian control over the Andes mountains, Amazon rainforest and Atlantic Ocean, his picks for foreign and environment ministers had done little to reassure concerns about the possible shift in Brazilian foreign and environmental policies. Brazil has been one of the most active developing countries in the pursuit of rule-based multilateral environmental agreements. The withdrawal of such an important developing country, home to the world's largest rainforest, would deal a blow to international climate cooperation.

The mounting scientific evidence was brought into sharper focus by the recent IPCC special report on the impacts of global warming of 1.5°C. Prior to the completion of the IPCC work, some experts were skeptical of the value of focusing scientists' energies on a target that was considered barely feasible. However, the special report brought home more clearly than ever the cost of inaction and the scale of transformation needed to avert disaster. The report seized people's attention and offered reassurances that the efforts of those in the forefront of climate action, are not misplaced. It highlights the urgent need for more action.

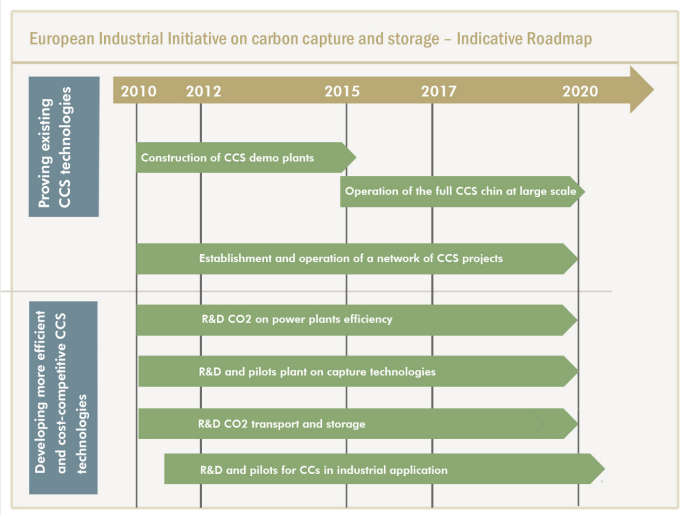


This graph shows the projected contribution of various energy sources to world primary electricity consumption. It is based on a climate change mitigation scenario, in which GHG emissions are substantially reduced over the 21st century. In the scenario, emission reductions are achieved using a portfolio of energy sources, as well as reductions in energy demand.

Some inspiring examples, a few of them predating the adoption of the Paris Agreement, including sector-wide initiatives, to keep industries in line with the goals of the Paris Agreement, are noteworthy.

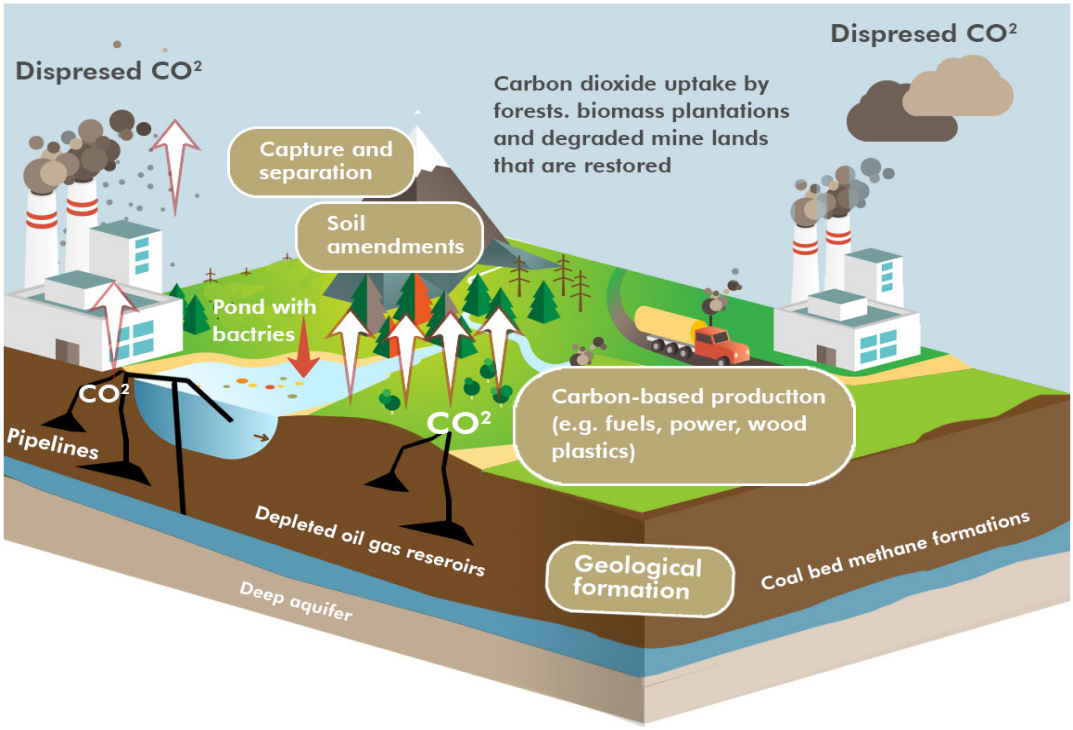
The Oil and Gas Climate Initiative (OGCI) - The OGCI was launched in 2014 with the aim to increase the ambition, speed and scale of the initiatives undertaken by its individual companies to help reduce manmade greenhouse gas emissions, in particular from the production and use of oil and gas in power, heating, industry and transport. Its over USD $1 billion investment arm, OGCI Climate Investments, supports the development, deployment and scale-up of low emissions technology and business models. This CEO-led initiative, currently made up of 13 major oil and gas companies, announced in September, a target to reduce by 2025 the collective average methane intensity of its aggregated upstream gas and oil operations by one fifth to below 0.25%, with the ambition to achieve 0.20%, corresponding to a reduction by one third.

The European Industrial Initiative on CCS - The European Industrial Initiative on Carbon Capture and Storage (CCS) sets a strategic objective to demonstrate the commercial viability of carbon capture and storage (CCS) technologies in an economic environment driven by the emissions trading scheme. In particular, to enable the cost competitive deployment of CCS technologies in coal-fired power plants by 2020-2025 and to further develop the technologies to allow for their subsequent wide-spread use in all carbon intensive industrial sectors.



A report by the Global CCS Institute on 'a strategic analysis of the global status of CCS' enumerated some highlights for CCS in 2018, including: new initiatives in CO2 recycling and direct air capture projects in the United States, Canada and Iceland; and 43 large-scale facilities (18 in commercial operation, 5 under construction and 20 in various stages of development) around the world. There are now evidences of decisive action by a number of governments to include carbon capture and storage (CCS) in their armory for combating climate change.

Schematic showing both terrestrial and geological sequestration of carbon dioxide emissions from a coal-fired plant



The Sports for Climate Action Initiative - At COP24 in Katowice, the UN Climate Change launched an initiative that encouraged sports organizations and their stakeholders to join a new climate action for sport movement. It is aimed at using sports as a unifying tool to federate and create solidarity among global citizens for climate action. Participants in the Sports for Climate Action Initiative commit to adhere to a set of five principles and incorporate them into strategies, policies and procedures, and mainstream them within the sports community, thus setting the stage for a wider dissemination of the message and long-term success.

Climate Neutral Initiative - This initiative launched by the UN Climate Change Secretariat before the adoption of the Paris Agreement has already attracted 15 international organizations. The organizations agree to make their operations climate neutral, with a commitment to measure their greenhouse gas emissions, reduce them as much as possible and compensate the currently unavoidable ones with credible carbon credits. Some of the climate actions that these organizations are implementing to reduce their greenhouse gas emissions include: the installation of solar photovoltaic systems; policies for reduction of air travel; upgrading of insulation and lighting systems in buildings, reduction of paper used at conferences; installation of efficient cooling systems, promotion of car-pooling schemes among employees; establishment of sustainable procurement policies; and enhanced collection and recycling of waste. Representing over 2 million tons of CO2 per year in emissions, and more than 50,000 staff, the aggregate action by these organizations sets an important example that can inspire all levels of society.

Has the recent adoption of the rulebook for the Paris Agreement at COP24 in Katowice, restored faith in the multilateral system?

The recent adoption of a robust set of guidelines for swinging the Paris Agreement into action, has reinvigorated global commitment to climate action. The agreed 'Katowice Climate Package' is designed to operationalize the climate change regime contained in the Paris Agreement, in a manner that promotes international cooperation and encourages greater ambition. The guidelines will promote trust among nations that all countries are playing their part in addressing the challenge of climate change.

The Katowice package sets out how countries will provide information about their Nationally Determined Contributions (NDCs) that describe their domestic climate actions. This information includes mitigation and adaptation measures as well as details of financial support for climate action in developing countries.

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The package includes guidelines that: operationalize the transparency framework; set out process for establishing new targets on finance from 2025 onwards; relate to how to conduct the Global Stocktake of the effectiveness of climate action in 2023; and help assess progress on the development and transfer of technology.

Is the euphoria and optimism generated by the Paris Agreement still justified?

As expected, the negotiations in Katowice were hard and messy, including disagreements on how to reflect the findings of the IPCC special report on the risks of overshooting 1.5°C of global warming. A dispute over the rules governing the use of carbon market mechanisms, as contained in Article 6 of the Paris Agreement, was unresolved but moved to COP25 next year in Chile. In the end, the process of multilateral rules-based systems survived, with a reaffirmation that every country is needed at the table in order to solve a global problem that knows no borders.

While current levels of ambition are not sufficient to meet the Paris goal, global efforts are moving in the right direction, and the momentum generated by the Paris Agreement, particularly among non-State actors, appears to be unstoppable.

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