



# Climate Change and Natural Disasters

## Introduction

The past few months have seen huge amounts of damage caused by three separate hurricanes in the United States and the Caribbean region. Harvey, Irma, Jose, and Maria. Four hurricanes, all category 4 or 5 – the highest classification for such weather phenomena. Hurricane Harvey on its own has created damage of between \$86 billion to \$108 billion<sup>1</sup> while Maria has left 94.6% of Puerto Rico without electricity and just 12.1% have cell phone service<sup>2</sup>.

These disasters are not just tragic, but also highly alarming given the frequency with which these category 5 hurricanes are occurring. It is accepted that climate change will lead to more 'extreme' weather events occurring globally<sup>3</sup>, and it is all too likely that this will not be just one hurricane season with such a concentration of powerful storms, rather this season is a forerunner to what is yet to come.

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<sup>1</sup> <https://www.nytimes.com/interactive/2017/09/01/upshot/cost-of-hurricane-harvey-only-one-storm-comes-close.html>

<sup>2</sup> <http://abcnews.go.com/US/hurricane-maria-95-percent-puerto-rico-power/story?id=50276834>

<sup>3</sup> For a scientifically literate overview of the link between climate change and disasters: [https://earthobservatory.nasa.gov/Features/RisingCost/rising\\_cost5.php](https://earthobservatory.nasa.gov/Features/RisingCost/rising_cost5.php)

This committee will have to assess the existing commitments made by the international community on climate change and the modern science at their disposal to decide whether enough is being done to implement and enforce existing agreements.

## United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol

After ratification at the 1992 Rio Summit, the UNFCCC entered into force on the 21<sup>st</sup> of March 1994. The goal of the UNFCCC was to stabilise the emissions of so called greenhouse gasses at a level that would prevent harmful human interference with the climate system. Though it been almost universally signed, the meeting UNFCCC's goal was supposed to be led by the industrialised nations which have contributed the most to the level of emissions.

As a part of the convention, nations were supposed to reduce their emissions in 2000 to 1990 levels. To this effect they had to release annual reports detailing the emission of greenhouse gasses from the base year of 1990 and assist Less Economically Developed Countries (LEDCs) through the sharing of technology<sup>4</sup>.

Unfortunately, the agreement quickly proved to be inadequate to achieve its goals of halting 'manmade' climate change, for this reason the international community adopted the Kyoto Protocol in December 1997.

### The Kyoto Protocol

As with the UNFCCC, the Kyoto Protocol places a large focus on industrialised nations and places binding legal limits on their levels of pollution. The three mechanisms of the Kyoto Protocols are based on the basic principles of economic markets, where emissions have been turned into a commodity that can be traded globally. Nations that produce emissions below their target values can sell permits to nations that emit above their target levels. Nations can also add to their number of permits through engaging in 'climate-friendly' activities such as reforestation and 'green' investment in LEDCs<sup>5</sup>. The Kyoto Protocol includes an enforcement mechanism, if a nation is deemed to have failed to meet their obligations in an enforcement period, they will have to make up their commitment plus 30% within the next period of enforcement.

## The Paris Agreement

The latest international agreement on climate change is the Paris Agreement which sets out a goal to reduce global temperature growth to less than 2°C above pre-industrial levels. The Paris Agreement does not have any enforcement mechanisms with which to force non-compliant nations to meet their obligations. In the wake of President Trump's announcement of his decision to withdraw the United States from the agreement<sup>6</sup>, the rest of the world has stepped up and announced that they will not follow in the United States' footsteps and they will continue to meet and exceed the targets that they agreed to. These actions have helped give life to the young agreement that could have otherwise easily been abandoned so soon after its ratification by 166 of its 197 signatories.

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<sup>4</sup> [http://unfccc.int/essential\\_background/convention/items/6036.php](http://unfccc.int/essential_background/convention/items/6036.php)

<sup>5</sup> [http://unfccc.int/kyoto\\_protocol/mechanisms/items/1673.php](http://unfccc.int/kyoto_protocol/mechanisms/items/1673.php)

<sup>6</sup> This can only happen in 2020 at the earliest.

## What can be done?

The most obvious criticism of these agreements is that they lack an effective enforcement mechanism. The international community cannot place sanctions on offending nations, therefore, the success of the agreements and the future of the planet depends solely upon governments choosing to keep their and the predecessors' commitments. The committee may wish to explore possible amendments to the existing framework that would allow for possible referral to bodies such as the United Nations Security Council (UNSC) for possible economic sanctions to force compliance. But before the committee rushes to adopt a resolution calling upon nations party to the framework to draft such an amendment, a major pitfall must be considered. By referring nations to the UNSC, the imposition of sanctions would be placed at the discretion of permanent members. This would raise the possibility of a permanent member vetoing sanctions that would be placed on it<sup>7</sup>. As many of the biggest polluters are also permanent members of the UNSC, this would make the entire enforcement mechanism toothless.

The agreements thus far place their focus on nations and what governments can do to reduce emissions, but the age of regulation-only approaches has passed. Current economic theory states that the most efficient ways to reduce is by using market based methods such as tradeable permits. The committee could choose to pursue an amendment that tries to increase the economic benefits to firms that engage in environmentally beneficial research and development. Such an amendment would be the recognition of the fact that much of the cutting-edge work done of environmentally friendly technologies is undertaken by the private sector as opposed to the public sector, and as such it should be the firms and researchers who complete breakthroughs who should be encouraged, supported and rewarded for their invaluable work.

## Conclusion

The job being asked of the committee is not an easy one. There is an overwhelming scientific consensus on the matter, there is a strong understanding among nations regarding the direction that must be taken, yet there is no clear answer. Any final decision taken by the committee should make meaningful progress within the agreed framework of the UNFCCC, while allowing nations to maintain sovereignty over the matter. However obvious the urgency is, a solution must not be chosen because it is the quickest, as the most direct solutions can easily become draconian and violate the very values that the United Nations stands for as an organisation.

## Bibliography

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4. [http://unfccc.int/essential\\_background/convention/items/6036.php](http://unfccc.int/essential_background/convention/items/6036.php)
5. [http://unfccc.int/kyoto\\_protocol/mechanisms/items/1673.php](http://unfccc.int/kyoto_protocol/mechanisms/items/1673.php)

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<sup>7</sup> Such a situation has already occurred when the United States vetoed an International Court of Justice judgment in the Nicaragua v. United States case on the violation of Nicaragua's right to non-interference in internal affairs.