**Committee**: United Nations Framework Convention on Climate Change (UNFCCC)

**Topic**: The Effect of Climate Change and Mitigation

**Country**: Republic of Ireland

Climate change is an ongoing issue that brings with it a plethora of global and domestic problems. While the legitimacy of the phenomena has been under cultural and scientific scrutiny over the years, many reputable sources quantify and concur that average global temperatures has increased by about 0.8° Celsius since 1880[[1]](#footnote-1) and annual precipitation levels have generally risen around the world. While they may seem like negligible, inconsequential metrics, these changes in temperature and precipitation represents a significant shift in global climates, which include the shortening/ lengthening of the seasons, rising sea levels, and the increasing prevalence and intensity of extreme weather[[2]](#footnote-2). If status quo is maintained concerning climate change, the risks of crises such as widespread thermal stress, infectious diseases, floods and droughts, and dwindling water resources will become exponentially more pressing as time goes on[[3]](#footnote-3). For our country of the Republic of Ireland, climate change means a permanent recession of coastal lines, loss of grassland, overwhelming rainfall, contamination of freshwater resources, the suffering of Irish agriculture and horticulture[[4]](#footnote-4), and most notably, the degradation of energy systems in the Republic of Ireland.

The Republic of Ireland is a European nation in support of the Kyoto Protocol and the Paris Agreement of 2016. In recent years, climate change has continued to affect many aspects of our country. Our increase in temperature closely resembles Global rates, increasing by approximately 0.14⁰C every decade[[5]](#footnote-5). Overall annual precipitation remains similar, but precipitation rates have increased significantly by over 10% during the Republic of Ireland’s winters and have decreased by a similar percentage during the summers[[6]](#footnote-6). Combined with the fact that the sea levels continues to rise and engulf hundreds of acres of land every year, the Republic of Ireland’s agriculture and horticulture are affected greatly; especially concerning crop yield[[7]](#footnote-7). This is mainly due to the lowering amounts of rainfall during the summers and the decreasing amounts of viable farmland due to sea level rise. Another issue which concerns the Irish people is the degradation of water quality[[8]](#footnote-8). More intense precipitation has been shown to contribute more to direct runoff and may also cause a exponential increase in sediment erosion and pollutant loading. The most concerning issue consequential to climate change, however, is the risk to the Republic of Ireland’s infrastructure and decreasing efficiency in renewable resources. Many of the Republic of Ireland’s refineries, storage facilities, and power stations are located on the coasts, which become vulnerable in the presence of rising sea levels/higher waves and storm surges. Furthermore, many facilities across the island such as power stations and gas stations, and underground facilities such as cable tunnels and basements are at risk of flooding due to higher levels of rainfall during the wintertime[[9]](#footnote-9). Renewable energy infrastructures are also being affected as extreme weathers do not allow for a consistent and safe level of operation. An example of this inconsistency is the growing disparity in the strong winter winds and the more stagnant summer winds in The Republic of Ireland, which keep wind power generators from working efficiently during the summer and sometimes even operating during the winters due to the prevalence of extreme winds[[10]](#footnote-10).

In order to combat climate change, The Republic of Ireland entered a binding agreement with the EU with the goal of reducing greenhouse has emission by 20% in 1990. To achieve this goal, our government has designed the National Climate Change Strategy; a collection of commitments. These commitments include the goal of powering a target 12% of all heating through renewable energy, using biofuels to replace 10% of all fuels used for transportation, generating 33% of all electricity from renewable energy sources, and installing more sources of renewable energy such as tidal or wave power[[11]](#footnote-11). However, these commitments do not address the other aspects of our country effected by climate change. In terms of agriculture, we must focus our resources in order to improve our irrigation systems and create water impounds in order to provide a readily available source of water for crops during the summer when rainfall is low. In general we must have more available resources to put towards our infrastructure, such as coastal protection measures to protect facilities such as oil refineries and other pipelines, and more resources to put towards the development of our renewable energy infrastructure such as wave and tidal energy plants in order to adapt to climate change scenarios such as rising sea levels. Therefore, The Republic of Ireland pushes for increased funding from the UN in conjunction to the 2016 Paris Agreement in order to improve development and maintenance of protective, water impound, irrigation, and renewable energy infrastructures, which will keep from further degradation of our agriculture, coastal and underground facilities, and renewable energy sources.

1. NASA. NASA, n.d. Web. 10 Nov. 2016. [↑](#footnote-ref-1)
2. "Global Warming and Extreme Weather - National Wildlife Federation." Global Warming and Extreme Weather - National Wildlife Federation. N.p., n.d. Web. 10 Nov. 2016. [↑](#footnote-ref-2)
3. "Impacts of Climate Change." David Suzuki Foundation. N.p., n.d. Web. 10 Nov. 2016. [↑](#footnote-ref-3)
4. "Ireland and Climate Change." Climatechangepost.com. N.p., n.d. Web. 10 Nov. 2016. [↑](#footnote-ref-4)
5. "What Impact Will Climate Change Have for Ireland?" :: Environmental Protection Agency, Ireland. N.p., n.d. Web. 10 Nov. 2016. [↑](#footnote-ref-5)
6. "Irish Rainfall." - Climate. N.p., n.d. Web. 10 Nov. 2016. [↑](#footnote-ref-6)
7. "Agriculture and Horticulture in Ireland." Climatechangepost.com. N.p., n.d. Web. 10 Nov. 2016. [↑](#footnote-ref-7)
8. "What Impact Will Climate Change Have for Ireland?" :: Environmental Protection Agency, Ireland. N.p., n.d. Web. 10 Nov. 2016. [↑](#footnote-ref-8)
9. "Ireland at Risk - Critical Infrastructure Adaptation for Climate Change (2009)." Ireland at Risk. N.p., n.d. Web. 10 Nov. 2016. [↑](#footnote-ref-9)
10. "Wind - Climate - Met Éireann - The Irish Meteorological Service Online." Wind - Climate - Met Éireann - The Irish Meteorological Service Online. N.p., n.d. Web. 10 Nov. 2016. [↑](#footnote-ref-10)
11. "Climate Action and Low-Carbon Development National Policy ..." N.p., n.d. Web. 10 Nov. 2016. [↑](#footnote-ref-11)