Margaret Chase Smith Library 2023 Essay Contest

Each year the Margaret Chase Smith Library sponsors an essay contest for high school seniors. The essay prompt for 2023 asked students to consider what the proper role of government should be in responding to the issues surrounding climate change. Essays have been edited for length.

THIRD-PLACE ESSAY

A Climate Action Blueprint

by Logan Blanchette

Climate change is a global crisis that demands immediate and coordinated action from governments worldwide. As a high school senior from Generation Z, I recognize that our generation will bear the brunt of the consequences if governments fail to address climate change effectively. My generation needs to get serious about pressuring governments align on this issue, as we are the ones who will face the most significant disruptions if decisive action is not taken now. To do that, it's imperative that we also get serious and seek to understand the historical context and facts surrounding this issue.

In this essay, I discuss five responses that governments must implement to mitigate the impacts of climate change and safeguard the future of Generation Z: protecting and restoring key ecosystems, promoting green energy, limiting deforestation, implementing a carbon tax, and reducing greenhouse gas emissions.

PROTECTING AND RESTORING KEY ECOSYSTEMS

Ecosystems play a vital role in maintaining Earth's climate balance. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services reported in 2019 that approximately 1 million animal and plant species are threatened with extinction, largely due to human activities and climate change (IPBES 2019). I believe that governments should prioritize protecting and restoring critical ecosystems to ensure their long-term sustainability. For instance, the US National Park System, established in 1916, has protected millions of acres of land and provided a model for other countries.[1] Governments can adopt similar approaches, creating protected areas and investing in habitat restoration projects. By preserving ecosystems, governments can help maintain the balance of the environment and mitigate the impacts of climate change.

PROMOTING GREEN ENERGY

The burning of fossil fuels is the primary driver of climate change, responsible for about 76 percent of human-induced CO2 emissions (IPCC 2021). I think that world governments should take the lead in promoting green energy to reduce our dependency on fossil fuels and lower our carbon footprint.

Germany's Energiewende, or energy transition, is an excellent example of how governments can promote green energy. Launched in 2000, the initiative has led to a significant increase in renewable energy production, with renewables providing 46 percent of the country's electricity in 2020.[2] World governments can follow Germany's example by investing in research and development for renewable energy sources, providing incentives for businesses and individuals to adopt clean energy, and setting ambitious renewable energy targets.

LIMITING DEFORESTATION

Deforestation contributes to climate change by releasing large quantities of carbon dioxide into the atmosphere. Forests act as carbon sinks, absorbing approximately 30 percent of anthropogenic CO2 emissions (FAO 2020). Being from Maine, I strongly believe that governments need to take decisive action to limit deforestation and promote reforestation efforts.

One successful example is Costa Rica, which managed to increase its forest cover from 26 percent in 1983 to over 52 percent in 2019 through reforestation initiatives and strong environmental regulations.[3] Government officials in other countries should be able to implement similar policies, such as land-use planning, financial incentives for reforestation, and stronger enforcement of environmental laws, to protect and restore forests.

IMPLEMENTING A CARBON TAX

A carbon tax is a market-based approach that puts a price on carbon emissions, encouraging businesses and consumers to reduce their carbon

footprint. In 1991, Sweden became the first country to introduce a carbon tax, which has been effective in reducing CO2 emissions and fostering the growth of renewable energy (World Bank 2021). Other countries, such as Canada, have since followed suit.

By implementing a carbon tax, I believe that governments can create an economic incentive for businesses and individuals to adopt cleaner technologies and practices, ultimately reducing greenhouse gas emissions. The revenue generated from the carbon tax can be invested in clean energy projects, public transportation, and other climate change mitigation measures.

REDUCING GREENHOUSE GAS EMISSIONS

Governments play a critical role in reducing greenhouse gas emissions, both nationally and globally. The Paris Agreement, signed in 2015 by 196 countries, is a landmark international accord that aims to limit global warming to well below 2 degrees C above pre-industrial levels.[4] Governments absolutely need to work together to achieve the targets set by the Paris Agreement and implement effective policies to reduce emissions.

One example of such policies is the European Union's Emissions Trading System, launched in 2005. It is the world's largest carbon market, covering around 45 percent of the EU's greenhouse gas. By setting a cap on emissions and allowing companies to trade allowances, the EU's Emissions Trading System encourages businesses to reduce their emissions in a cost-effective manner. Governments can adopt similar cap-and-trade systems or other policies that effectively reduce greenhouse gas emissions.[5]

In conclusion, I believe that the proper role of government in addressing climate change includes protecting and restoring key ecosystems, promoting green energy, limiting deforestation, implementing a carbon tax, and reducing greenhouse gas emissions. Each of these actions has proven effective in mitigating the impacts of climate change. I think governments need to work together and take a proactive and collaborative approach to tackle this global crisis, as the well-being of future generations depends on our ability to create a more sustainable world.

NOTES

1 https://www.nps.gov/aboutus/history.htm

2 https://www.energy-charts.de/energy_pie.htm

3 https://explorersagainstextinction.co.uk/how-costa-rica-is-leading-the-way-in-sustainable-practices/

4 https://unfccc.int/process-and-meetings/the-paris-agreement

5 https://www.epa.ie/our-services/licensing/climate-change/eu-emissions-trading-system-/

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Logan Blanchette graduated from Mount Desert Island High School in Bar Harbor, Maine. In high school, he participated in football, wrestling, baseball, and cross country. Logan has been accepted to Quinnipiac University in Connecticut and plans to study mechanical engineering.