MUNESCO

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Issue: The issue of imposing carbon emission permits

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Introduction

Carbon, in its most basic form, is an element, which is the most common element for life on earth. When we talk about carbon emissions, we're focusing specifically on carbon dioxide, or CO2.

Definition of Key Terms

Anthropogenic: caused or produced by humans

Carbon Credits: a permit that allows a country or organization to produce a certain amount of carbon emissions and that can be traded if the full allowance is not used

Carbon Footprint: the amount of carbon dioxide and other carbon compounds emitted due to the consumption of fossil fuels by a particular person, group, etc

Carbon Market Trading: An exchange of credits between nations designed to reduce emissions of carbon dioxide. The carbon trade allows countries that have higher carbon emissions to purchase the right to release more carbon dioxide into the atmosphere from countries that have lower carbon emissions

Carbon Offsets: is a reduction in emissions of carbon dioxide or greenhouse gases made in order to make up for an emission made elsewhere

Efficiency: the ability to do something or produce something without wasting materials, time, or energy

Emissions: the production and discharge of something, especially gas or radiation

Green Energy: Green energy comes from natural sources such as sunlight, wind, rain, tides, plants, algae and geothermal heat, Green energy is renewable, meaning it is naturally replenished

Kyoto Protocol: An international agreement that aims to reduce carbon dioxide emissions and the presence of greenhouse gases,

Sustainable Development: economic development that is conducted without depletion (reduction) of natural resources

Background Information

Climate Change

Climate change is a change in the statistical distribution of weather patterns when that change lasts for an extended period of time. Climate change may refer to a change in average weather conditions, or in the time variation of weather within the context of longer-term average conditions. Climate change is caused by factors such as biotic processes, variations in solar radiation received by Earth, plate tectonics, and volcanic eruptions. Certain human activities have been identified as primary causes of ongoing climate change, often referred to as global warming.

Scientists actively work to understand past and future climate by using observations and theoretical models. A climate record—extending deep into the Earth's past—has been assembled, and continues to be built up, based on geological evidence from temperature profiles, cores removed from deep layers of ice, floral records, glacial processes, stable-isotope and other analyses of sediment layers, and records of past sea levels. More recent data are provided by the instrumental record. General circulation models, based on the physical sciences, are often used in theoretical approaches to match past climate data, make future projections, and link causes and effects in climate change.

Carbon Footprint

When talking about climate change, we use the term footprint as a metaphor for the total impact that something has. And carbon is an easier way to define all the different greenhouse gases that contribute to global warming.

The term carbon footprint, therefore, is a shorthand to describe the best estimate that we can get of the full climate change impact of something. That something could be anything – an activity, an item, a lifestyle, a company, a country or even the whole world.

Typically, a carbon footprint is calculated by estimating not just the CO2 emissions that the activity in question causes, but also any emissions of other greenhouse gases (such as methane and nitrous oxide) and in some cases other types of climate impacts as well, such as vapour trails from aeroplanes. For simplicity, all these impacts are added together and expressed as a single number in terms of carbon dioxide equivalent (CO2e): the amount of CO2 that would create the same amount of warming.

CO2e

Man-made climate change, or global warming, is caused by the release of certain types of gas into the atmosphere. The dominant man-made greenhouse gas is carbon dioxide (CO2), which is emitted whenever we burn fossil fuels in homes, factories or power stations. But other greenhouse gases are also important. Methane (CH4), for example, which is emitted mainly by agriculture and landfill sites, is 25 times more potent per kilogram than CO2. Even more potent but emitted in smaller quantities are nitrous oxide (N2O), which is about 300 times more potent than carbon dioxide and released mainly from industrial processes and farming, and refrigerant gases, which are typically several thousand times more potent than CO2.

Carbon Emissions Trading

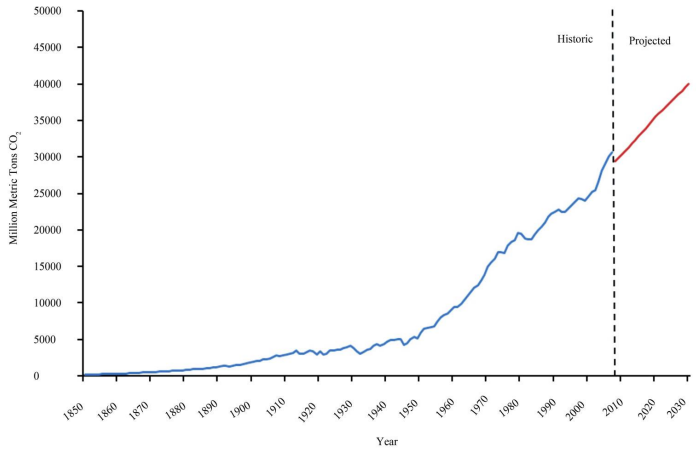
Carbon emissions trading is a type of policy that allows companies to buy or sell government-granted allotments of carbon dioxide output.

Governments distribute a finite number of CO2 “credits” to companies. That’s the “cap” part. The companies can only emit as much CO2 as they have credits for. Those below their CO2 limit can sell credits to companies that exceed the limit. That’s the “trade” part. The goal is to slow down global warming. Industries, like utilities, are the biggest traders. They burn coal and other fossil fuels that emit too much carbon dioxide into the air.

The market for carbon trading was $176 billion in 2011. It could exceed $1 trillion by 2020. At least 84 percent of this is the EU's Emission Trading Scheme. It caps emissions for any company doing business in the EU. As of 2018, there is no cap and trade program in the United States, despite some attempts at legislation.

Greenhouse Gas Emissions

Greenhouse gases trap heat and make the planet warmer. Human activities are responsible for almost all of the increase in greenhouse gases in the atmosphere over the last 150 years.1 The largest source of greenhouse gas emissions from human activities in the United States is from burning fossil fuels for electricity, heat, and transportation.



Timeline of Major Events

1850-1960

At the beginning of this time period—1850—the United Kingdom was the top emitter of CO_2 , with emissions nearly six times those of the country with the second-highest emissions, the United States. France, Germany, and Belgium completed the list of top five emitters. In 2011, China ranked as world’s largest emitter, followed by the United States, India, Russia, and Japan. Tellingly, while the United States was the world’s second-largest emitter in both years, its emissions in 2011 were 266 times greater than those in 1850.

Between 1850 and 1960, the world generally experienced a constant growth of emissions, due largely to industrialization and population growth, particularly in the United States. This development only saw some interruptions by historic events, like the Great Depression in the 1930s and the end of World War II in 1945. By the 1950s, however, China and Russia started seeing their emissions climb as their economies grew.

1960-2011

We saw some new developments after 1960. While the United States kept its place as the top CO2 emitter until 2005, Asian countries also started to emerge, led by China. The graph above shows the development of the current top five CO_2 -emitting countries since 1960, with the United Kingdom presented for comparison. The UK, once the world's highest emitter, stabilized its total CO_2 emissions. Russia experienced a significant reduction in emissions with the dissolution of the Soviet Union. But the most obvious development was the rise of China's emissions in the first part of the 21st century and its overtaking of the United States as the world's largest emitter after 2005.

Major Countries and Organizations Involved

350.org

350.org was founded with the goal of uniting climate activists into a movement, with a strategy of bottom-up organizing around the world. Activists in 189 countries have organized 350.org's local climate-focused campaigns, projects and actions. In India, for example, organizers have mobilized people to speak out against the country's dependence on coal for growth. In the US, the group has campaigned to divest public institutions — such as municipalities and universities — from the fossil fuel industry, and to stop the Keystone XL pipeline.

In the Keystone fight, 350.org has partnered with a number of local organizations in the path of the pipeline across North America, including Bold Nebraska, Tar Sands Blockade, the Indigenous Environmental Network, Idle No More and the Hip Hop Caucus. 350.org takes its name from what climate scientists say is the safe concentration of carbon dioxide in the atmosphere — 350 parts per million.

Sierra Club

In its early days, The Sierra Club, founded in 1892 by conservationist, naturalist and explorer John Muir, was mostly made up of scientists interested in exploring the Sierra mountains. For years, the organization promoted the appreciation and stewardship of the outdoors but steered clear of civil disobedience. A change came last year when, in the face of increasingly dire warnings from climate scientists, the group's executive director, Michael Brune, and then-president, Allison Chin, were arrested — with about 50 others, including McKibben — outside the White House protesting the Keystone XL pipeline.

Greenpeace

Founded in 1971, Greenpeace's initial advocacy work focused on its opposition to nuclear testing. In 1985, the French Secret Service famously bombed a Greenpeace ship moored in Auckland, New Zealand, on its way to protest French nuclear testing in Mururoa Atoll. Since then, the

organization's priority has shifted from nuclear proliferation to confronting climate change. But their strategy of direct action with an international focus has essentially remained the same.

In September of last year, 30 people who were aboard the Greenpeace ship the Arctic Sunrise drew international attention when they were detained by authorities after a demonstration at a Russian drilling rig in the Arctic. The activists sought to highlight the exploitation of the fragile Arctic environment for fossil fuel extraction. Some of the activists were at first charged with piracy, though the Russian government later reduced the charges to "hooliganism" and released all involved, then dropped the charges entirely ahead of the Sochi Olympics.

Two years earlier, two activists — including Greenpeace International Executive Director Kumi Naidoo — boarded a drilling rig off the coast of Greenland and were blasted for hours by fire hoses as the crew attempted to repel them, pushing them into the choppy sea.

Idle No More

Idle No More, a group of mostly Canadian Native North Americans, sprang into existence in October 2012, when Canada's conservative prime minister Stephen Harper pushed a law, known as C-45, through parliament that rolled back both environmental protections and indigenous peoples' sovereignty in order to make the country's tar sands, and the crude oil that could be extracted from them, more easily exploitable. Resource extraction projects, like the tar sands, often hurt North America's indigenous populations disproportionately.

In protest of C-45, the group organized rallies in major cities across Canada. A leader of Idle No More, Attawapiskat Chief Theresa Spence, started what would become a six-week-long hunger strike and groups of protesters blockaded rail lines and highways.

Previous Attempts to Solve the Issue

The Kyoto Treaty and International Summits

Climate change is a global issue, and so too has been the international move to support a long lasting solution to tackle the problems. A number of international summits - including the Earth summit in Rio and more recently Kyoto - have taken place in recent years to debate the principal environmental concerns and set out an agenda to help prevent further eco depreciation.

Kyoto has been one of the most influential summits to date, as it sets out a binding protocol for reducing carbon emissions. For countries in the EU, this involves a commitment to reducing carbon emissions by 12.5% by 2012. While the protocol is binding, it isn't compulsory for countries to actually sign up, and, notably, several large counties including the US haven't committed to signing up to the scheme as yet, despite growing international pressure.

Paris Agreement

The Paris Agreement's aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. To

reach these ambitious goals, appropriate financial flows, a new technology framework and an enhanced capacity building framework will be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for enhanced transparency of action and support through a more robust transparency framework. There will be a global stocktake every 5 years to assess the collective progress towards achieving the purpose of the Agreement and to inform further individual actions by Parties.

Bibliography

- United Nations Framework Convention on Climate Change. "The Paris Agreement." The Paris Agreement - Main Page, 12 Oct. 2017, unfccc.int/paris_agreement/items/9485.php.
- "Climate Change." United Nations, United Nations, www.un.org/en/sections/issues-depth/climate-change/.
- Nicklen, Photograph by Paul. "Global Warming Solutions." Stopping Global Warming, 18 Jan. 2017, www.nationalgeographic.com/environment/global-warming/global-warming-solutions/.
- "What Is Being to Stop Climate Change." What Is Being Done to Stop Climate Change?, www.preventclimatechange.co.uk/what-is-being-done-to-stop-climate-change.html.
- "Five Groups Fighting Climate Change." BillMoyers.com, 22 Feb. 2014, billmoyers.com/2014/02/07/five-groups-leading-the-charge-to-halt-climate-change/.
- "Climate Change." Climate Change - Wikipedia, www.wiki-zero.com/index.php?q=aHR0cHM6Ly9lbi53aWtpcGVkaWEub3JnL3dpa2kvQ2xpbWF0ZV9jaGFuZ2U.
- "Sources of Greenhouse Gas Emissions." EPA, Environmental Protection Agency, 14 Apr. 2017, www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions.