

Committee: Environment

Topic: The Question of Target Setting to Mitigate the Climate Emergency

Chair: Anna Smyth

School: St. Andrews College

Summary

Climate change is a real, life threatening issue and it is caused by humans. That much is undeniable. There is ample scientific evidence to prove that how we have acted, as a species, has harmed the earth to the point where within a short number of years, life on this planet may no longer be sustainable. Burning coal, building with cement, driving in petrol cars, and dumping plastic in the ocean, are just some of the ways that we cause emissions to be released, every single day. We made this mess, now it is our job to clean it up.

We know how to solve this problem. Planting trees to offset the emissions, using plastic free alternatives, driving electric cars, and switching to renewable energy. The technological know-how is here and has been for a while. The issue is with implementation. There are so many sustainable alternatives yet the uptake on these alternatives is shockingly slow. And there are a myriad of reasons why that is. Something that can help with the uptake in these climate friendly alternatives are targets. Targets are a defined, measurable way of tracking progress. A country (or company) publicating their climate related targets holds them accountable to the public to achieve those targets. As well as that, governments can provide incentives to the regions or cities who meet their targets, providing further incentives for others to do the same.

When larger climate goals seem insurmountable, breaking them down into smaller achievable goals that are still impactful, gives everyone hope. If every country, city, company, town, village, and person, does their bit to achieve climate related targets, we as a species can overcome this challenge. All it takes is a bit of cooperation and teamwork.

Definition of Key Terms

Climate Emergency = serious and urgent problems that are being caused or likely to be caused by changes in the world's weather, in particular the world getting warmer as a result of human activity increasing the level of carbon dioxide in the atmosphere

Target = a level or situation that you intend to achieve

Background Information

Climate emergency has only gotten worse in recent years. Concentrations of the greenhouse gases continue to increase despite a reduction in emissions due to the covid pandemic. 2020 was one of the three warmest years on record. Sea levels continue to rise, alongside ocean acidification which is detrimental to marine life. Extreme weather events including hurricanes, extreme heat waves, severe droughts, and wildfires have caused massive loss of life and caused damages in the tens of billions in us dollars. 9.8 million displacements largely due to climate related disruptions were recorded in the first half of 2020. There has been widespread weather related food insecurity.

Some politicians claim that implementing these changes would hurt the economy. But the increasing number of extreme weather events are becoming extremely costly to most governments. Not to mention the risks of food shortages and droughts. And at the end of the day, if life is not sustainable on earth, it does not matter how well the economy is doing.

Most countries (and companies) base their climate objectives in terms of targets. But how effective are they? Many countries, cities and companies have put climate targets in place. These targets address issues such as CO2 emissions and single use plastic waste. However, ambitious targets can often be put in place, which are not transferable into policies. Some would argue that politicians and companies use these targets to appear as though they are helping the climate whereas they have little to no intention of actually acting on these targets in any serious manner.

However there are undeniable positives associated with target setting. Rewards in funding or tax cuts by the government to companies or cities for achieving targets may provide incentives for sustainable practices to be developed and maintained. Growing pressure from governments to develop and maintain these sustainable practices has seen a rising demand in the market for sustainable alternatives.

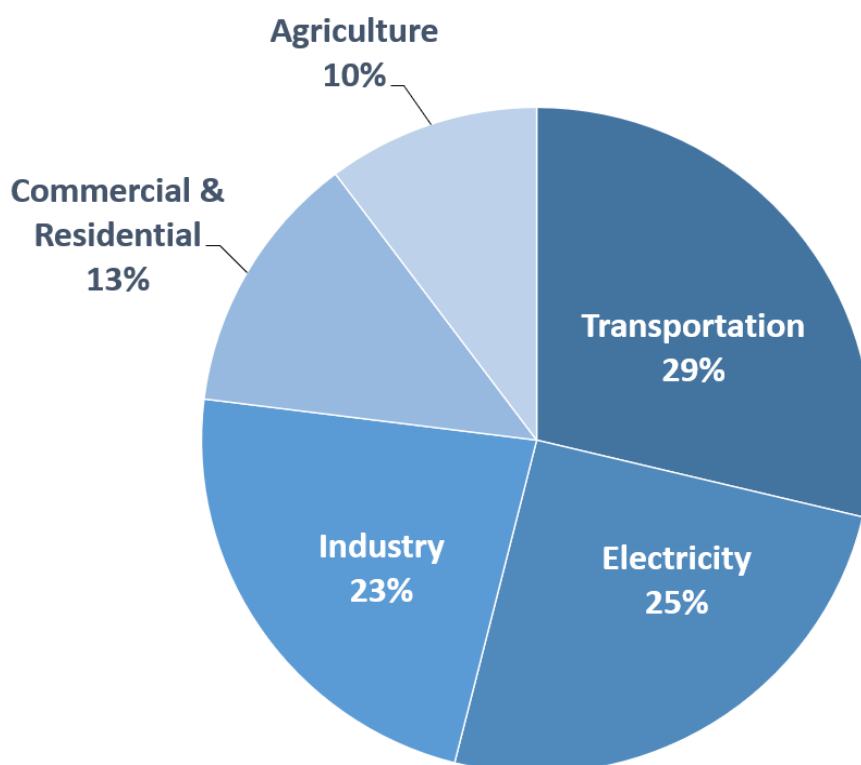
Major Countries and Organizations Involved

UNEP (United Nations Environment Programme) - the leading global body for the environment. They provide leadership and guidance so that nations can better care for the environment. They seek to implement sustainable development and increase quality of life, without harming the planet and future generations.

Although it is difficult to assess which countries are the biggest polluters, certain countries are repeatedly mentioned in the lists of the highest polluters. Different lists can take different factors into account. For example, some lists include only CO2 emissions where others take all greenhouse gases into account, some take deforestation into account, and some look at emissions per person. These countries include the USA, China, India, and the UK.

In the **USA**, the largest causes of pollutants are transportation and electricity production. These alone account for over 50% of the greenhouse gases being emitted. The vast majority of these emissions come from burning fossil fuels such as petroleum based fuels in cars and coal in power plants. Oil pipelines are still being built in the USA today, with the proposed Line 3 pipeline that will carry crude oil through the country. This project faces much backlash from environmental groups due to the proposed route carrying oil over rivers, lakes, and wetlands. There is an increase in the amount of renewable energy being produced each year but it's clear that fossil fuels are still seen as a lucrative investment.

Total U.S. Greenhouse Gas Emissions by Economic Sector in 2019



China has developed significantly into an industrial country over the last few decades and has seen a correlating rise in emissions, with greenhouse gas emissions tripling in the last 30 years. China produces more greenhouse gases than all EU member states combined. However, China's population is so great that per person, they produce less greenhouse gases than other countries, the USA for example. China is expanding its renewable energy system at a rapid pace, with large investments from the government. However, their electrical needs are so great, that there is still a reliance on fossil fuels as their main energy source. The country has an ambitious target of net zero emissions by 2060, with a peak in emissions by 2030.

India is the world's third largest greenhouse gas emitter. A reliance on coal power plants, rice paddies, and cattle causes a large part of emissions. However, similarly to China, emissions per person are below the global average. India is also particularly susceptible to climate change, due to the risk of the melting of the Himalayan glaciers and extreme weather events such as monsoons. India has pledged that 40% of energy being produced will be either renewable or nuclear by 2030.

Similar to the USA, the **UK's** main emitters are transport and electricity production, which amount to almost half of all emissions. The main gas emitted is CO₂, accounting for 80% of all greenhouse gases emitted. However, the UK have set ambitious climate targets. They aim to reach net zero emissions by 2050 and have recently announced that they will set a new target into law. They are aiming to reduce emissions by 78% by 3035, which will bring them over three quarters way to their 2050 target.

IPCC (The Intergovernmental Panel on Climate Change) - this is a United Nations body that researches the science related to climate change. It evaluates the emerging scientific climate related reports and determines where there is consensus on findings and where more research is needed. It does not conduct its own investigations or research. It formulated reports which are used in policymaking.

Timeline of Events

Date	Description
1890s	Independently two scientists calculated that the burning of fossil fuels could cause CO ₂ to build up in the atmosphere and could lead to global warming, but neither realised that the process had already begun
1890s to 1940s	A 0.25 degree celsius rise in surface air temperature is recorded
1957	Scientists warn about the effects of releasing greenhouse gases into the atmosphere. David Keeling sets up the first continual monitoring of CO ₂ in the atmosphere and soon records a rise in the figures received year on year
1979	First World Climate Conference is held with climate change as part of its key agenda. Asks for governments to try and prevent causing any more damage.
1987	Warmest year since records began
1990	Reports show that the earth has warmed 05 degrees celsius in the last decade

June 1992 - Earth Summit in Rio de Janeiro, Brazil- over 178 countries adopted agenda 21 to build global cooperation for sustainable development, and where the UNFCCC was opted for signature

1995 - The hottest year on record

September 2000 - Millennium summit where the 8 millennium development goals were conceived

2003 - Europe experiences its hottest summer in at least 500 years with an expected 30,000 fatalities

February 2005 - the Kyoto Protocol entered into force

December 2009 - the UN Climate Change Conference was held in Copenhagen where the Copenhagen Accord was developed

June 2012 - UN conference on sustainable development in Rio de Janeiro, Brazil - member states launched the process of building the sustainable development goals based off of the millennium development goals

December 2012 - the Kyoto Protocol was amended in Doha, Qatar, known as the Doha Amendment

September 2015 - UN sustainable development summit in New York - adopted the 2030 Agenda for sustainable development with the 17 SDGs at its core

December 2015 - Paris Agreement on climate change

Relevant UN Treaties and Events

The United Nations Framework Convention on Climate Change (UNFCCC) came into force in March 1994. Almost all countries are members. The goal of the UNFCCC is to prevent dangerous human interaction with the environment and the climate. The UNFCCC was very important at the time, simply because it recognised climate change as a problem. This was revolutionary at a time where there wasn't much scientific evidence that proved climate change. The UNFCCC set an ambitious goal of keeping greenhouse gas emissions at a level that will prevent impact on the climate. The convention stressed that was the responsibility of the more economically developed countries to lead the way. These nations agreed to divert funding towards action on climate change. It also sought to help economically developing countries to develop without dramatically increasing their greenhouse gas emissions.

The Kyoto protocol was adopted in 1997 but due to an intricate ratification process, it did not come into force until February 2005. In essence, the Kyoto Protocol puts the UNFCCC into operation by creating emission targets that industrialised nations are expected to meet.

It follows the UNFCCC's principles and provisions and thus is only binding to more economically developed nations as they are responsible for more of the greenhouse gases that are currently in the atmosphere. The more economically developed countries also have harder targets to meet. During the UN climate change conference in Doha, an amendment was made to the Kyoto Protocol known as the Doha amendment. The Doha Amendment essentially extended the Kyoto protocol for a second period ranging from 2013-2020. It also included updated climate targets and commitments.

The Copenhagen Accord was created during the UN Climate Change Conference in 2009. It was the meeting of the parties of the UNFCCC and the Kyoto Protocol. The conference aimed to bring climate change awareness to the highest political powers. The conference was attended by 115 world leaders. During the conference, negotiations were advanced on the infrastructure needed for effective global climate change cooperation, as well as improvements to the Clean Development Mechanism of the Kyoto Protocol. The Copenhagen Accord was also produced which outlined clear political intent to reduce emissions and prevent climate change, both in the short and the long term. It includes several key elements that the different governments could agree on including limiting global warming to below 2 degrees celsius. However, there was no consensus on how this should be done.

The Paris agreement on climate change in 2015 is the most recent and most important treaty on climate change. It is a legally binding international treaty. The aim of the treaty is to limit global warming to well below 2 degrees and ideally to below 1.5. To do this, the treaty aims to have the peak in global emissions as soon as possible and thus experience a decline in the amount of fossil fuels that we are burning, globally. This will hopefully result in reaching emission neutrality by mid-century. The Paris Agreement is a landmark of climate change legislation because for the first time, there's a binding agreement for all the nations in a common cause. The agreement works on a five year cycle. Each country must set climate related goals to reach in five years time. These 5 year cycles allow for increasingly ambitious climate actions. As well as short term goals the countries also have the option to create long term goals. This allows the short term goals to be put into the context of the countries long term developmental goals. The mandatory short term goals have put pressure on the markets to adapt to form low carbon solutions and have seen new markets emerge. Every day more countries, regions, cities and companies are creating carbon targets, especially in the power and transport sectors.

Previous Attempts to solve the Issue

There is no denying that climate is an issue that is constantly talked about in the news and is an issue that many people care very much about. So why aren't politicians doing more about it? Despite countries declaring climate emergencies, there is very little actual climate related policymaking to try and deal with it. There are a multitude of reasons for this.

Firstly, a politician's main concern while in office is how to get reelected. Most climate targets will have no immediately visible results within the few years that they are elected. This may cause the electorate to believe that the politician is not being effective in managing climate change as they had promised during the election. The politician may believe that it would be safer to tackle a more obvious issue that has short term results. For example, a climate policy to prevent deforestation and restore a section of a jungle that has been destroyed will take many years. A plan has to be made, trees have to be planted, and these trees then must grow. However if the politician decided to try and tackle a lack of public transport, bus routes could be constructed and in operation before the end of their term. And restoring a forest is an extremely visible example. What if the politicians target was to reduce carbon dioxide and methane emissions. Apart from statistics, there is nothing for the politician to be pictured with and claim credit for.

Similarly, there are usually more urgent issues that governments feel obliged to deal with. An obvious example at the moment would be the COVID pandemic. If the government put all the COVID plans and procedures on hold to focus on the climate there would be considerable uproar. Since in, any western countries the impact of climate change is currently relatively minimal, there is little incentive to address it when the voters are being directly impacted by other issues.

Taking action to prevent climate change would require a lot of money to be invested and this is money that most governments simply do not have. To tackle climate change, taxes would have to be raised. This would make a politician very unpopular with an awful lot of people. In fact, many politicians include lowering taxes as a part of their election campaign so that they appeal to the voters. A politician who intended to raise taxes would be very unlikely to be elected.

As well as that, preventing emissions risks angering a lot of powerful companies. There is a well quoted study that just 100 companies are responsible for 71% of emissions since 1988. Some of these companies are extremely influential, and most politicians wouldn't be willing to risk their career by angering the wrong person. This goes to show that climate action doesn't necessarily happen just because the majority of a population want it . It is instead a few key companies (who are usually extremely rich) who influence policy making.

As well as that, different countries have differing agendas and opinions on climate change, which makes international climate change extremely difficult. While some countries may be concerned with the necessity for immediate climate action, other countries may be preoccupied with more immediate issues including poverty. A big concern is sustainable development. As less developed countries develop, it is key that they do so sustainably. More economically developed countries must cooperate and assist this development. Less economically developed countries are already bearing the brunt of climate change from the emissions that the more economically developed countries have released.

Many countries have set their own personal climate related targets. Ultimately, it is up to the government of each country to determine the country's goals. However, this leaves the all important climate goals in the hands of politicians, who may only be in office for a short period of time. The politicians may be more concerned with image and reelections than setting and maintaining climate targets. It is important that political views do not hinder our progress towards ending the climate emergency.

A good example of the issues that can arise when climate change is used as a political standpoint would be the actions of the USA. Although they are the second high global emitters, the USA were pulled out of the Paris Agreement when President Trump was in office. He also scrapped the Clean Power Plan, relaxed the regulations on air pollution, relaxed the regulations on fuel efficiency in cars, and allowed more mining and drilling to take place. In essence, he reversed many of the plans put in place by President Obama. However, now that President Biden is in office, he has already reversed some of President Trump's environmental policies. He has rejoined the USA to the Paris Agreement. He has been making some climate targets of his own such as the US reaching net-zero emissions no later than 2050. Both presidents have used the climate as a political standpoint, and in doing so, have ensured that it will be among the first things they change once they gain power. How can any climate targets be met, if the person in power simply reverses all the efforts that the other has made after they are only in play for a few years? And this example is just one instance. A similar situation happened in Australia with Prime Ministers Tony Abbot and Malcolm Turnbull. In 2011, the government of Australia proposed a carbon tax. This tax faced backlash from mining companies and some politicians. Because of this, the prime minister was ousted and Tony Abbot was elected. He repealed the law, preventing the tax from entering into effect. In 2015, Malcolm Turnbull was elected Prime Minister. Turnbull created renewable energy plans and entered Australia into the Paris Agreement. This resulted in a lot of criticism from other politicians including Abbot. Again, approaches to the climate emergency were made into political standpoints, which sabotage efforts made to reduce greenhouse gas emissions. For climate targets to work, they must rise above political divisions and outlast differing agendas and personal opinions.

There have been a variety of efforts to establish carbon trading schemes to provide incentive to countries to reduce emissions. As part of the Kyoto Protocol, countries were allotted nation-specific emission caps, based on their targets for reducing emissions of greenhouse gases. These caps were expressed in terms of carbon units. The Kyoto protocol allowed countries which had unused units to sell them to countries whose emissions may be over their allotted units. Because of carbon being the primary greenhouse gas, those units are simply expressed as carbon which gave rise to what is now known as the carbon market, where carbon is bought and sold, just as any other good is.

As well as that, the European Union implemented a similar carbon trading scheme which allotted carbon credits to companies. The companies can buy and sell carbon just as countries can under the Kyoto Protocol. This is the largest carbon trading scheme in operation.

In both schemes, the caps on carbon emission can be controlled by the amount of units given out each year. The caps will be reduced year on year. By monetising carbon, incentive is provided for countries and companies to reduce emissions. The gradually lowering caps allows time for more environmentally friendly policies to be implemented. By reducing their emissions, countries and companies will be saving money by not having to buy extra credits and can even make money off selling the spare credits they have.

Possible Solutions

Target setting is one of the most popular ways that companies and countries set and publicise their climate actions. There is good reason for this. By setting and publishing a goal, a company or country is publicising it's intentions and will be held accountable if they fail to reach them. The goal gives them something set and physical that they can work toward. Achieving a goal is satisfying and will make you more likely to set a new more ambitious target once it is achieved.

Target setting is very versatile and can be used in almost every aspect of climate action. From emissions targets to plastic waste, climate targets can be set and achieved. By putting the goals in terms of numbers it is extremely easy to see the progress that has been made. Anyone is able to interpret these numbers and understand what the goal is. Larger goals can also be broken down into smaller actionable goals. Net zero emissions is a common goal, but it is extremely ambitious. By breaking it down into 20, 10, 5, or even 1 year emissions targets, it is much easier to evaluate progress. Setting targets that are unachievable is demotivating, so a careful balance must be kept between ambitious and impossible targets.

Targets can be set according to the state that the country is in. Realistically, some countries are ill equipped to start huge climate action at this time. Lower targets can be made, to ensure that climate action is not forgotten about, until such time that a larger commitment to the climate can be made. Countries that are in a comfortable state and are capable of making a large commitment can make more ambitious targets and pick of the slack for the countries that are less capable of dedicating many resources to the climate emergency.

Reaching targets can be used as a measure on how companies, cities, and countries are reacting to the climate emergency. Climate targets can be allocated depending on the body's specific circumstances. Tax breaks or funding can be allocated depending on whether climate targets are met or not. This provides incentive for these bodies to dedicate resources to meeting their targets. Such a system would not be possible without targets being set. They provide a measuring stick to compare how well the different bodies are performing.

Translating the broader international climate targets into workable local targets and actions is an integral part of the process to ensure the targets are being acted upon. Norway's "Zero Growth Objective" is a good example of this. This objective was related to the international 2 degree target. This national target is that any growth in traffic in cities will be covered by public transport, cycling, or walking, i.e. that there will be no growth in the use of private cars. The National Transport Plan adopted this target as one of their key targets for transport in cities. The government has contacted all relevant authorities in cities and they are to sign a binding agreement on how to meet the zero growth target, and this will be the basis for government funding for local transport. The amount that the cities received towards transport costs will now be directly tied to how well the city works towards meeting the target. In 2016 and 2017, the largest Norwegian cities including Oslo and Trondheim signed such an agreement. Thus, the zero growth objective has been mainstreamed and absorbed into planning and land use regulations of the cities themselves.

Bibliography

[CLIMATE EMERGENCY | meaning in the Cambridge English Dictionary](#)

[State of the Global Climate 2020](#)

[THE 17 GOALS | Sustainable Development](#)

[The Paris Agreement](#)

[Enabling Sustainable Energy Transitions](#)

[Which nations are most responsible for climate change?](#)

[ClimateChange](#)

[15 ways the Trump administration has impacted the environment](#)

[Donald Trump's five most dangerous attacks on the environment](#)

[Plan for Climate Change and Environmental Justice | Joe Biden](#)

[President Donald Trump isn't the only world leader denying climate change](#)

<https://www.newscientist.com/article/dn9912-timeline-climate-change/>

<https://www.ipcc.ch>

<https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

<https://www.theguardian.com/us-news/2021/jun/20/line-3-pipeline-indigenous-environmental-justice>

<https://eandt.theiet.org/content/articles/2021/05/china-emitting-more-greenhouse-gases-than-oecd-and-eu-combined/>

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/957687/2019_Final_emissions_statistics_one_page_summary.pdf

<https://www.gov.uk/government/news/uk-enshrines-new-target-in-law-to-slash-emissions-by-78-by-2035>

<https://www.thebalance.com/carbon-emissions-trading-3305652>

<https://unfccc.int/process/the-kyoto-protocol/mechanisms/emissions-trading>

<https://unfccc.int/process-and-meetings/the-convention/what-is-the-united-nations-framework-convention-on-climate-change>

https://unfccc.int/kyoto_protocol

<https://unfccc.int/process-and-meetings/conferences/past-conferences/copenhagen-climate-change-conference-december-2009/copenhagen-climate-change-conference-december-2009>

<https://www.theguardian.com/commentisfree/2019/apr/23/politicians-reluctance-on-climate-change-is-bizarre-action-would-not-only-be-right-but-popular>

<https://www.theguardian.com/sustainable-business/2017/jul/10/100-fossil-fuel-companies-investors-responsible-71-global-emissions-cdp-study-climate-change>

<https://www.irishtimes.com/opinion/why-the-government-ignores-climate-change-1.3660441>

<https://positivepsychology.com/benefits-goal-setting/>