Conventions and Laws Concerning Climate Change: Analytical Essay

Introductory statement

Through the publication of scientific reports, the Global community became aware of a possible issue that could have deadly implications for humanity and the environment, called climate change. In short, climate change is the adverse effects of greenhouse gases such as Carbon dioxide, Methane, Nitrous oxide Hydrofluorocarbons, Perfluorocarbons and Sulphur hexafluoride have on the environment. This was accelerated as a direct result of the burning of coal during the Industrial Revolution [18th-19th century]. However, this issue wasn't addressed until the 20th century as there were two world wars, a cold war and society were focused on individual rights as seen in ICCPR and ICESCR during the mid-1960s. Nonetheless, international and domestic law responded to this issue as was an increased pressure from law reform agencies to define nation-states obligations to the environment, the global community and individual citizens. However, the fundamental condition of initiating these responses was the advancements in technology being able to provide evidence of the change in climatic conditions through numerical data and visual images. This is evident in scientific tests as scientists are able to determine the CO2 concentration of the entire planet and monitor the change in levels This was aided by the gradual transition from an anthropocentric to an ecocentric worldview. These conditions were aided by mechanisms of law reform including:

- 1972 United Nations Conference on the Human Environment Formation of the IPCC
- 1992 Rio Earth Summit
- 1997 Kyoto Protocol
- 2015 Paris Agreement

These conferences were very effective in gaining high levels of participation and the eventual laws did somewhat decrease emissions is some nation-states but as a whole globe emissions rose exponentially.

1992 Conference on the Human Environment

This conference came to fruition as a result of a shift in societal values and in particular many nation-states shift from an anthropocentric to a more ecocentric view. The anthropocentric view refers to the placement of humanity above anything and everything else. This was the general consensus 50 years ago as Katie Mcshane from Wiley online library discusses how the gradual shift in social values from anthropocentric view to a more ecocentric view influenced the creation of environmental laws . This was a contributing factor to the initiation of the Stockholm conference and was aided by the 1968 proposal from Sweden. This proposal noted that the UN should hold an international conference to examine environmental problems and identify those that required international cooperation to resolve. This was proposed due to scientific reports by John Sawyer, detailing the increase of temperatures around the world and the effects this would have on the entire planet due to atmospheric boundaries having no limits. Extracts from Johns 1972, Man-made Carbon Dioxide and the "Greenhouse" Effect report are seen below:

Through this report and many others including the WMO annual report on weather patterns, there was an overwhelming amount of evidence to the validity of climate change which resulted in the conference providing an environmental manifesto which stated the finite nature of Earth's resources and the necessity for humans to safeguard them. This resulted in the formation of the United Nations Environment Programme [UNEP]. This organisation is an "authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system, and serves as an authoritative advocate for the global environment". Furthermore, the Stockholm Conference acknowledges 'In the industrialized countries, environmental problems are generally related to industrialization and technological development'. Therefore, the conference highlighted the need for nation-states to combine resources to try and reduce emissions.

Before 1997 Kyoto Protocol

After the Stockholm conference, the 1976 AAS, the report reinforces how human activity is impacting the environment but notes that 'there is no evidence that the world is now on the brink of a major climatic change'. This shows how in Australia, there was no sense of urgency to solve the issue. On the contrary, internationally the conference leads to the 1979 WMO world climate conference where for the first time the link between human activities and climate change was made clear. This is seen in the extracts below: Sourced from Library.wmo.int. (1979) https://library.wmo.int/pmb_ged/wmo_537_en.pdf

This conference was where the first International Emission Targets were proposed. The target was a 20% reduction in greenhouse gas emissions by 2005 on 1988 levels. Even though many nation-states disregarded this conference and couldn't see its merits as it was proposed that industrialized countries would significantly have to fund and support non industrialized countries, it encouraged Australia's policymakers to make policies to protect the environment. This is seen in the 1989 proposal from Graham Richardson to the cabinet for a 20% reduction in 1988 Australian greenhouse gas emissions levels by 2005. This was rejected but after the first IPCC released its First Assessment Report [Far] 1990 which noted 'a natural greenhouse effect warms the Earth, human activities contribute to atmospheric, concentrations of greenhouse gases, Several predictions are made about the effect of an enhanced greenhouse effect on the climate', Australia decided to adopt the proposal which is seen below. Sourced from 'Australian climate change policy to 2015: a chronology'

This demonstrates the persuasive powers of the IPCC and shows Australia's slow transitions to an ecocentric worldview. However, these were just targets stated in a press release and didn't create any pieces of legislation. The next key meeting was the Rio Earth Summit 1992.

The UNCED [Rio Earth Summit] was an unprecedented meeting which included 108 heads of state, 2,400 representatives from various non-governmental organizations (NGOs), and nearly 10,000 journalists with the purpose of addressing the issues of climate change and how the entire global community can join resources to try and fix the issue and use their resources efficiently. This was influenced by various NGOs as 17,000 NGO representatives attended a forum that provided recommendations to the Earth Summit. Furthermore, this summit created the Rio Declaration on Environment and Development, the Statement of Forest Principles, and Agenda 21. The Rio Declaration on Environment and Development goal is seen below:

This is significant as the UNFCCC seeks to stabilise atmospheric greenhouse gas concentrations in time to protect ecosystems, food security and economic development from the threat of climate change. The overwhelming amount of media coverage, NGO involvement lead to 190 nation-states ratifying the laws. The law states 'greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous [human-induced] interference with the climate system', 'such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that production is not threatened and to enable economic development to proceed in a sustainable manner' This resulted in the treaty being an international law and enforceable from 21 March 1994. The UNFCCC influenced Australia’s policy The National Greenhouse Response Strategy (NGRS). The NGRS is a mechanism to audit and expedite national approaches to reduce greenhouse emissions, in order to meet the UNFCCC commitment. This caused the formation of the National GreenhouseAdvisory Panel. Furthermore, the government introduced the Greenhouse 21C plan which includes the Greenhouse Challenge program, a voluntary scheme for major companies and industry sectors to reduce greenhouse

gas emissions. This demonstrates how Australia was further shifting towards an ecocentric worldview as they were creating reform agencies. However, no laws were created from this conference which leads to the first legally binding targets from the 1997 Kyoto Protocol.

1997 Kyoto Protocol

The Kyoto Protocol was the first agreement between nations to mandate individual countries greenhouse emissions for uniform reduction targets. In short, each industrialised country had to pledge an amount of greenhouse emission which they would reduce between 1990 and 2012 in the first instalment, followed by the second between 2013-2020. Nonetheless, emissions targets were created which saw Australia pledge to increase emissions by 8% between 2008 and 2012 on 1990 levels. Other countries pledged targets are seen below: Sourced from UNFCC website.

However, these laws didn’t come to fruition until 2005 as the United States decided not to ratify the treaty due to China not having a sign as they weren’t an industrialised country which required Russia to ratify, in order for the law to be enforced. This suggests a lack of compliance of enforcement of conventions as the US was able not to ratify the law without any legal repercussions.

A further key flaw and ineffectiveness of this agreement are the world's two largest greenhouse emitters according to Global carbon atlas are America and China where this Protocol doesn’t apply to. Furthermore, ‘the rough guard to climate change’ states “the two biggest emitters of all – the United States and China – churned out more than enough extra greenhouse gas to erase all the reductions made by other countries during the Kyoto period.” Therefore this protocol is ineffective in providing protection to the environment as it doesn’t have compliance from the two biggest greenhouse contributors and isn’t effectively protecting the environment.

On the contrary, the treaty established an international trading system where countries could earn credits towards their emission targets by investing in other countries clean ups known as ‘Activities Implemented Jointly’. The Clean Development Mechanism (CDM) and Joint Implementation (JI), allow countries to purchase certified emissions from [JI] and implement projects to reduce other countries emissions [JI]. This is very effective as industrialized

countries such as Australia and Russia have been involved in these programs to offset their emissions in order to reach the proposed targets. This is an optimal example of resource efficiency. These programs still remain today and have been why many countries have been able to adhere to their pledged targets, however, the globe as a whole has continued to rise emissions. This lack of decreased emissions, increasing media attention and NGOs involvement lead to the improved version of the protocol: the 2015 Paris Agreement. However, during 1997 and 2015, Australia introduced a wide range of schemes including:

- 1999: ‘Measures for a better environment’- funding placed in reducing emissions
- 2001: ‘Mandatory Renewable Energy Target Scheme’- Source 2% of electricity from renewable sources
- 2001: ‘Greenhouse Gas Reduction Scheme’- First mandatory trading scheme
- 2007: National Greenhouse and Energy Reporting Bill 2007- requires industry to report its greenhouse gas emissions, abatement actions, energy consumption and production
- 2007: ratification of the Kyoto Protocol
- 2011: Clean energy ACT 2011
- 2012: $10 billion Clean Energy Finance Corporation (CEFC)- Legislation is passed for a $10 billion fund dedicated to investing in clean energy.

Through the creation of these schemes, it highlights the enforcement capabilities of COP conferences which are meetings to discuss and reinforces ideals mentioned in the initial convention. This continuous reinstalling of ideals persuaded Australia to ratify the protocol and to be bound by pledged targets. These pledged targets initiated the Clean Energy Act 2011. This legislation comprises of the emissions trading scheme and a 3 year period of carbon pricing, known as the carbon tax. In short, this tax works by charging companies for the amount of carbon they produce with the goal of the largest emitters to increase energy efficiency and invest in sustainable energy. This shows an effective use of resources as companies were using their resources to find better energy solutions. Furthermore, the legislation was effective in protecting the environment as emissions decreased after the legislation was passed in 2012 which is seen in the graph below:

The graph clearly shows between 2012 and 2014 emissions were on a decrease but in 2014 they began to rise again. This was the case the clean energy Act was amended in 2014 and the carbon pricing was repealed. This shows a lack of compliance from the law as many citizens wanted the carbon tax removed. Furthermore, this shows how Australia's values were shifting back to a more anthropocentric view as they had a solution which was working to decrease emissions and decided they wanted it abandoned.

2015 Paris Agreement

In 2015, 196 parties came together to transform their current development trajectories in order to create a more sustainable environment and development with the ultimate goal of limiting the effects of global warming by limiting the warming between 1.5 to 2 degrees Celsius above pre-industrial levels. Additionally, the parties agreed to increase their ability to adapt to the adverse impacts of climate change and lower the greenhouse emission without threatening food production. This was aided by their agreement to work towards making finance flows consistent, to lower emissions and aid climate-resilient development. This conference was initiated as a direct result of the pronounced effects of climate change, the increasing development of

technology being able to further provide evidence of this theory. These agencies of law reform have been influential and effective as they have changed or initiated discussions in society about this topic. Examples of this are seen below: Sourced from climate Change: Vital Signs of the Planet. (2019) https://climate.nasa.gov/evidence/

These examples show how scientific evidence has provided an explanation for erratic weather conditions which results in the onus to make a change being placed on the individual in society as the issue is directly affecting individuals. These changes in societal values and ethics were aided by the involvement of NGOs to initiate the mechanisms of law reform [UN]. An optimal example is Ceres and their involvement with international businesses. This organisation works with the most influential investors and companies to create relationships in order to find solutions in the economy to create a sustainable environment and in particular lessening the effects of climate change. Since this organisation has a major network and advocacy, they had an active and powerful voice in initiating and making suggestions for law reform. This was evident through the NGO recommendations and other agencies of law reform, as this convention was able to get compliance from China and India to join the agreement. This is significant as China and India are some of the biggest greenhouse emitters and with their support, it cemented the power and enforceability of the United Nations.

Additionally, this agreement rests solely on Nationally determined contributions (NDCs) which outlines how much each signature needs to reduce their states emissions by. This is presented in Article 4, paragraph 2 which requires each Party to prepare, communicate and maintain their NDCs. This places the requirement of individual countries to contribute to decreasing their greenhouse emissions and maintain their targets. This is an effective use of resources as nation-states are combining their resources to reduce greenhouse emissions. Examples of this are seen below: Sourced from climate action tracker website

Furthermore, this agreement has influenced Australian domestic law as the following schemes were introduced:

- Australia’s National Climate Resilience and Adaptation Strategy released- sets out how Australia is managing climate risks for the benefit of the community, economy and environment
- Australia establishes International Partnership for Blue Carbon- accelerate action on the use of ‘blue carbon’ ecosystems, such as mangroves, seagrass beds and salt marshes.

This demonstrates how the Australian government introduced schemes which highlight their compliance to the Paris Agreement. Additionally, individual states created their own legislations which are seen in Victoria's 2017 Climate Change Act. The Act is seen below: Sourced from the Victorian Parliament website

Even though this law only applies to a single state, it shows how Australia's attitudes towards climate change are shifting and with one state creating legislation, it can influence the others to follow.

However, this unlikely as many news articles provide the point that this is just a front as the government has dismissed the IPCC special report on global warming and announced that they will no longer provide funds to the Green Climate Fund [GCF]. Also, the government continues

to subsidise fossil fuels, extraction and exports which has resulted in 7% increase on 2005 levels of greenhouse emissions, rather than the 14-17% decrease in these emissions required to meet the Paris Agreement. These climate policies are further deteriorating as a focus is placed upon the coal industry which was evident in the approval of the major coal mine Ahani on the 18th June 2019.

However, through the approval of this coal mine, it has highlighted how the attitudes of society are changing as ‘Australia's standing in Pacific has plummeted because of our climate change failure’ raises points that Australia's reputation across the pacific has diminished over the last 10 years over their lacklustre approach to strong climate change action. This and Australia’s current climate policy emphasises the lack of compliance from Australia and the ineffectiveness of the Paris agreement in protecting the environment but highlights how societal values of other countries have shifted. This is evident in the EU’s adaptation of climate policies which is significant as they are the third-highest greenhouse gas emitter.

The EU's policies include:

- carbon market. With the Emissions Trading System (ETS), companies have to buy permits to emit CO2, so the less they pollute, the less they pay
- The EU agreed to make at least 20% of EU expenditure climate-related in 2014-2020
- using water resources more efficiently, developing drought-tolerant
- setting aside land corridors to help species migrate

These policies have proved successful as according to Climate action trackers ‘EU efforts are paying off. In 2008, the EU set the target to cut emissions by 20% compared to 1990 levels by 2020. It is well on track to reach this goal: in 2015 the level of greenhouse gas emissions in the EU represented a decrease of 22% compared with 1990 levels’. This is further seen in the graph below: Sourced from the climate action tracker website

Furthermore, through the EU's actions, they have been able to reduce their emissions which shows the somewhat effectiveness of the agreement as the nation has complied to their targets, thus they are trying to protect the environment. However, this level of compliance is undermined through the US’ decision to withdraw from the agreement without any penalties or official retaliation. This ineffectiveness is further seen through the breakdown of many countries below:

Through this breakdown, it is evident that the Paris agreement is currently ineffective in protecting the environment through their NDCs as even though countries are complying with their agreements, only 7 countries are reducing their emissions enough to prevent warming of 2 degrees.

Contemporary Litigation cases

- The notion of climate change litigation has been/ will be tested through civil cases which are seen below:
- Challenges to decisions approving projects and developments
- Challenges to corporate decision-making and disclosures
- Litigation against companies responsible for significant emissions
- Suing governments for failing to take steps to mitigate climate change

Through these different forms of litigation, it highlights how societal values are changing and how the law has to address humanity's legal responsibility in protecting and preventing future harm to the environment. An example of a case is the successful Dutch NGO complaint against the Netherlands Government which was found to be breaching their duty of care to Dutch citizens as there weren't sufficient steps taken to meet and reduce greenhouse targets. This landmark decision demonstrates the enforcement capabilities of nation-state citizens to ensure their states try to take appropriate action against climate change. This further seen internationally through the Torres Strait Islander community complaint against Australia. ClientEarth who is representing the group is lodging a complaint against the Human Rights Committee of the United Nations about the Australian Governments inaction towards climate change. The complaints merits lie with the threat to Torres Strait Islander culture and the complainants' ability to live on their home islands. ClientEarth is seeking 20 million dollars as an emergency fund and requesting Australia cut their emissions by 65% on 2005 levels by 2030 with net-zero emissions by 2050. There has yet to be a decision made by the UN towards these allegations but through this lawsuit, it demonstrates the further shift towards an ecocentric worldview and how there is an increasing pressure on nation-states to make suitable climate change legislation as they can be sued for not doing so. This increases the chance of high compliant legislations to protect the environment

Summary

All the conventions and laws created as mentioned in this report are ineffective in protecting the environment from climate change, except for the Montreal Protocol laws. This demonstrates how the environment won't be protected from the adverse effects of greenhouse emissions until an alternate means of energy is developed or a substitute for fossil fuels is created as seen in the Montreal Protocol with the substitute of HFCs for CFCs.