



UNFCCC

Equitable Division of Responsibility in Climate Change Negotiations

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UNFCCC—United Nations Framework Convention on Climate Change

INTRODUCTION

History of the UNFCCC

The United Nations Framework Convention on Climate Change (UNFCCC) is an international convention by the United Nations entered into force in 1994 which now has nearly universal membership. It seeks to establish a structure for international efforts seeking to address the challenges posed by climate change. Under the Convention, governments promise to share information on greenhouse gases and best practices, develop national strategies to address climate change, and cooperate in preparation for the impacts of climate change. The UNFCCC continues to meet yearly in the form of its Conference of Parties (COP) meetings with its members to discuss international climate change policies and plans.

The Kyoto Protocol

Established during one of the COPs, the Kyoto Protocol is an international climate change treaties created under the UNFCCC and often a highlight of the UNFCCC's work. The protocol was adopted in 1997 and entered into force in 2005. However, only those countries that ratified the treaty have accepted their binding targets.

The Kyoto Protocol set binding targets of greenhouse gas reductions for 37 post-industrial countries (termed Annex I countries by the UNFCCC to distinguish them from other participants) and the European Union. Targets were different for every country depending on circumstance, but averaged around a 5% reduction in gases below 1990 levels to be achieved between 2008 and 2012. The targets cover the emissions of six primary greenhouse gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydroflourocarbons (HFC), and perflurocarbons (PFC), and sulphur hexafluoride (SF₆).

An important feature in relation to equitable division of responsibility in the Kyoto Protocol was the division of the UNFCCC countries into Annex I and Non-Annex I countries. The Annex I parties to the Convention include 39 countries, including Australia, European Union, New Zealand, Russian Federation, Turkey, and the US. Non-Annex I parties include the remaining members of the UNFCCC including many



non-industrial or developing nations as well as large industrial and greenhouse gas emitting countries such as China, Brazil, and India. While the Kyoto Protocol gave Annex I countries all binding targets of differing levels, Non-Annex I countries have no such binding target under the Kyoto Protocol.

The Cancun Agreement

Following international attention in 2009 on COP 15 in Copenhagen and what was perceived as a less than successful discussion on a future climate change agreement to take the place of Kyoto in 2012, the 2010 COP 16 in Cancun resulted in an international agreement called the Cancun Agreements. The Cancun Agreements do not create emissions reductions targets, but instead reinforces the need for global cooperation and unites the variety of national plans in existence. The Cancun Agreements also includes more help for developing nations dealing with climate change impacts, for example by promoting the transfer of clean technology and creating a billion dollar funding program to support climate change action in developing countries. The Cancun Agreements may have served well in reestablishing trust and building consensus in the UNFCCC system, which will be needed to establish a new climate agreement to take the place of the Kyoto Protocol. Critics of the Agreement do point out that Cancun failed to make any meaningful step forward towards a new climate change treaty.

Word—definition goes here.

The Future of Climate Discussions

With the end of the Kyoto Protocol's time period coming to a close, the question remains as to what kind, if any, international climate agreement will follow. The much anticipated 2009 COP 15 meeting in Copenhagen led to little to no satisfactory agreement on the future of climate change policy. However, the 2010 COP 16 meeting in Cancun led to more promising results for continuing international discussion regarding climate change. However, what the framework of the future agreement will look like, including how costs of mitigation will be divided equitably among nations, is still unclear.

Explanation of the Problem

A portion of the international discussion surrounding climate change negotiations focuses on how to divide the responsibility for cli-

mate change mitigation. What is equitable and fair for countries of differing wealth and history has serious implications for a climate agreement.

Common but Differentiated Responsibility

anthropogenic—
caused by humans

The principle of “common but differentiated responsibility” helps to answer what is just in climate change negotiations and policy. The principle is based in the idea of the commonality of one planet that humanity shares. It recognizes the historical differences between developed, developing, and non-developed nations in contributing to global environmental problems as well as the differences between nations in their ability to economically and technically contribute to the solutions to these problems. The UNFCCC has adopted a version of the principle in the text of its Convention, saying that parties should work to protect against climate change based upon “the basis of equality and in accordance with their common but differentiated responsibilities and respective capabilities.” Climate change requires common but differentiated responsibility because the global climate is a common problem, not under the control of any sole nation, people or entity. One nation’s actions affects the atmosphere above all the others. But if the historical burning of fossil fuels, the root of anthropogenic climate change, is due to the heavily industrialized or post-industrial countries, shouldn’t they bear a heavier burden of responsibility?

The common but differentiated principle is not a clear method but rather a concept. It is up to policymakers and negotiators to determine how the principle is enacted in a real treaty. If nations are expected to both share the responsibility of climate change adaption and mitigation, but in different proportions to one another, climate accords must decide on the most just and effective way to distribute climate change burden.

Criticisms of the Kyoto Protocol’s Distribution of Responsibility

The failure of the United States to ratify the Kyoto Protocol, as well as its continued reluctance to sign a climate agreement, is often accredited in part to the non-binding targets set for major polluter countries such as China, India, and Brazil. Critics of the Kyoto Protocol say it placed too costly and unfair of burdens on industrialized nations while not requiring developing countries to make commitments to reduce their commissions.

Theoretical Perspectives on the Debate

Polluter Pays Principle: Historical Emissions

Those advocating a polluter pays principle believe that those countries historically responsible for greenhouse gas emissions due to their historical industrialization and the proliferation of combustion engines should bear the burden of greenhouse gas reduction. These nations include many post-industrial nations such as the United States and Great Britain. These developed nations continue to have high emissions, particularly the United States. More importantly, those advocating this policy framework suggest that the only equitable action is to allow those nations who have not yet industrialized to develop and improve their economies, just as the post-industrial nations have. Any measure that would bind a nation's development would hamper their nation's right to do so.

Many of the nations who have not historically contributed significantly to greenhouse gases have poorer standard-of-livings. Thus, another common reason used in support of the polluter pays principle is that poorer nations should not be asked to take on the same burden as the developed world because they are less able. However, it is important to not that not all historically low-emitting countries are poor nations today.

Greatest Ability Greatest Effort Principle: Emission Reductions Based on Ability to Pay

Another possible view on mitigation effort distribution is that those nations with the greatest ability to pay should carry the greatest mitigation burden. In the strictest interpretation of this view, the country with the highest GDP (or GDP per capita) should reduce the largest amount of greenhouse gas emissions and contribute the most to mitigation efforts. As economic wealth decreases, mitigation efforts and costs also decrease.

Future Emissions Principle: Accounting for Future Greenhouse Gases

A third potential perspective on how to equitably distribute emission reductions efforts says that any international agreement needs to take into account the future emissions of a country. These advocates point out that the important changes to future fluctuations in greenhouse gases will depend on future emissions, not ones we have already emitted. Thus, emissions reductions should be proportional or at least account for the current and future emissions footprint of a nation. Often, using this approach leads to larger proportions of climate change responsibility for the quickly growing, big industrial nations of the world today such as China and Brazil.

Real-World Perspectives on the Debate

Traditional United States Perspective

The US has shown support for discussions that involve developing countries and has refused to take on binding obligations in an international treaty until key developing nations also participate (Rajamani). The US position is supported by China's recent surpassing of the US as the top greenhouse gas emitter in the world in 2006 in a study by the Netherlands Environmental Assessment Agency, indicating that efforts by post-industrialized countries alone are no longer the only key to meaningful impacts in a climate agreement. The US, alongside other countries in a similar position such as Canada, Japan, and New Zealand, has interpreted the common but differentiated principle as developing countries should adopt legally binding targets, and therefore participate in the common protection of the environment, as their economic growth allows. A concern of some post-industrial countries is that they would suffer an economic disadvantage if only they are expected to meet binding climate change targets, a worry which was likely behind the passage of the Byrd-Hagel Resolution in the US (Rajamani).

AOSIS—*Alliance of Small Island States*

The Changing Chinese Perspective

China and other large-economy industrial countries have traditionally believed that forcing participation of developing countries countered the original language outlined in the UNFCCC (Rajamani). The dependence on the Chinese pursuit of an aggressive energy policy for economic development and historical lack of interest in acting as a partner in a binding climate change agreement supports the idea that for the Chinese, similarly to other heavily-populated industrial nations, their historical perspective will not change (Heggelund). However, for countries such as China, the effects of climate change are emerging to be a central issue for the heavily-populated nation. China has recently agreed to participate in Clean Development Mechanisms, which may also suggest that a changing attitude toward international cooperation in climate change may be underway.

Small Island States Perspective

While understanding the dynamics between China and the US (as two large nations who are the top emitters in the world) is critical to understanding how future climate agreements will proceed, there are many other players whose perspectives are also important to understand. An example of one such group include the small island states, repre-

sented by the Alliance of Small Island States (AOSIS). While traditionally many nations in the Northern hemisphere view climate change as an environmental issue, for those in the Southern hemisphere climate change has more usually presented itself as a humanitarian and human health concern (Muller). Small island states are particularly susceptible to climate change as they will see larger rates of coastal land loss, displacement of populations, increased vulnerability to natural disasters, and economic industries susceptible to the effects of changing weather patterns. Many small island nations have taken an active approach and worked to create their own national plan on mitigation and adaptation. AOSIS has expressed disappointment with the lack of coordinated international action and promotes international measures to address the damages climate change will cause. AOSIS reaffirms the common but differentiated principle in recognizing the differentiating capabilities of nations to contribute to mitigation activity.

Possible Solutions

There is a number of climate agreement models that have been suggested by academics or other research groups, all with a variety of different responsibility distribution schemes that would interpret the common but differentiated principle differently. Joseph Aldy, Scott Barrett, and Robert Stavins in their paper discuss a number of suggested frameworks for an international climate agreement besides that of the Kyoto Protocol which might perform better or be more politically feasible. A few possible frameworks for climate change agreements and how they would distribute costs and responsibility globally are discussed below, but features of different plans will most likely be combined in any final accord.

Re-adoption of Kyoto Protocol Standards

Kyoto Protocol standards include short-term, aggressive targets for industrialized countries. Re-adoption of standards would be a straight-forward way to continue to provide extensive goals for those countries who choose to ratify them, as well as provide the flexibility for a market-based trading system. However, the issue of common but differentiated responsibility is a potential concern for many countries as the standards have no obligations for developing (non-Annex I) countries.

More Extensive Targets

A second avenue of climate change negotiation would be to broaden the participation of countries that would be included in emissions reductions targets. These expanded targets provide an opportunity to address equity concerns in climate change responsibility. While post-industrial countries of a certain GDP would have required reductions targets as discussed, more flexible targets could be established for developing nations who worry that climate change action will hurt their economic growth. One such way to develop flexible targets would be to develop a mechanism that allowed for unlimited growth and emissions until a particular wealth level (such as GDP or per capita income) was achieved in a country, after which emission reductions quotas would be required of that country (Stavins).

CDM—*Clean development mechanism*

In addition, expanding the number of nations with targets would engage a larger breadth of countries to substantially and truly commit to a climate change reduction program, even if targets are at first modest. Richard Schmalensee in his research has said this broad participation is the first step necessary to long-term climate change solutions.

International Trading Program

In general, an international trading program would attempt to create a global credit system for reductions in which countries could buy or sell emissions credits (the right to emit a certain amount of greenhouse gases) from one another. Economists prefer trading program or taxes because they allow for the most economically efficient distribution of mitigation activity (those whose mitigation is least expensive will do so). How credits were distributed though under the “common but differentiated principle” would need to be decided.

Clean-Development Mechanisms

While implementing a clean-development mechanism (CDM) policy in itself is not sufficient to create a complete climate change agreement, its possible role in addressing equity and the issue of responsibility between countries make it worth further discussing as a potential portion of a framework. CDMs allow for developed, high-GDP, or high-technology countries to propose and fund sustainable and green projects in developing countries such as a solar energy plant.

On one hand, CDMs allow for a more equitable distribution of climate change responsibility as historical emitters can help reduce

greenhouse gases while helping developing countries economically grow. However, critics of CDM say that the projects would have occurred regardless of international investment and therefore let developed countries shirk their emissions reductions responsibilities. In addition, in analyses of the CDMs under the Kyoto Protocol, none of the assessed projects through 2007 were found to both reduce greenhouse gases and contribute to a country's sustainable development simultaneously (Sutter).

Questions a Climate Accord Should Address

1. Philosophically, who should bear the greatest burden for climate change mitigation?
2. Practically, should each country be asked to reduce their emissions equally? If not, how would you distribute emissions reductions?
3. Should the Annex 1 and Non-Annex 1 distinctions continue in future climate accords?
4. Should there be binding targets set for all countries to reduce their emissions? Or should international climate accords take a different route?
5. What role, if any, should a global cap-and-trade system play in emissions reductions target and an international climate agreement?
6. The Cancun Agreement established a Green Trust Fund in which developed countries will contribute \$100 billion by 2020 to help developing nations invest in green infrastructure and technology. Which nations and in what amount should the various parties be expected to contribute?
7. Should carbon sequestration efforts be taken into account in climate change discussions? If so, what kind of role should they play?
8. Should carbon credits be given to those countries who invest in green development in another country be counted towards emissions reductions? Should CDMs be a part of an agreement?

Summary

International climate change agreements are a complicated networks of agreements. Climate change mitigation is expensive, and how to divide the responsibility and cost of adaptation to make an agreement

both politically palatable and scientifically meaningful continues to be a central issue which the UNFCCC has attempted to address through the adoption of the common but differentiated principle. Various countries interpret how to make mitigation equitable in different manners; and how to account for historical actions, current and future projections, and helping the most vulnerable populations in a just manner has proven to be contested in negotiations. A future climate accord, no matter if it is another series of emissions reductions targets, an international cap-and-trade system, or a carbon-like tax, will have to address how to distribute climate change mitigation while still making progress in addressing climate change in order to be successful.

Glossary

cap and trade system - a system in which a good in question is limited or capped at an agreed level, divided into quotas or portions, and then traded on the market between parties for rights to that good

carbon credit - a credit received by a country or region for a project reducing greenhouse gas emissions from a business-as-usual scenario

carbon sequestration - the process of removing carbon from the atmosphere and depositing it into a reservoir such as rock or other substances

climate change - the pattern of significant changes to weather conditions around the globe, causing changes in temperature, local climates, and water patterns among others

greenhouse gases - those substances in the atmosphere that absorb infrared radiation from the earth to emit back to the surface, causing the greenhouse effect

GDP - gross domestic product (GDP) is an indicator of wealth or standard-of-living of a country that measures the market value of all final goods and services produced in a country's boundary

mitigation - alleviation efforts by a country or people to relieve or make milder the effects of climate change on area or the effects of greenhouse gas exposure to the atmosphere

per capita income - an indicator of economic wealth or standard-of-living of a country that is the income per person in the country

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