LET THEM EAT CARBON: THE END OF THE KYOTO PROTOCOL

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I. INTRODUCTION

Cars, rice farming, coal mining, power plants, and cattle belching all have one thing in common: they emit greenhouse gases.\(^1\) In fact, when measuring greenhouse gas emissions, “[a] herd of cattle belching can be worse than a highway full of Hummers.”\(^2\) It seems strange and somewhat unlikely, but due to the diversity in the types of greenhouse gases that can be emitted, greenhouse gas emissions can come from numerous sources; including cars and power plants emitting carbon dioxide and cows belching methane.

Greenhouse gases are not just varied in means of production, they are also paradoxical. A paradox is defined as something “that is seemingly contradictory or opposed to common sense and yet is . . . true.”\(^3\) Greenhouse gases are one such paradox: “[t]he greenhouse effect keeps the earth warm and habitable . . . [and] is clearly a good thing. But the enhanced greenhouse effect means even more of the sun’s heat is trapped [in the earth’s atmosphere], causing global temperatures to rise,” which is clearly a bad thing.\(^4\) Greenhouse gases, therefore, are necessary to life on Earth as they warm the earth’s surface and, by this means, make the earth inhabitable.\(^5\) However, “as the concentrations of these gases continue to increase . . . the Earth’s temperature is climbing [significantly] above past levels.”\(^6\) Among other things, this results in, an increased frequency of storms, droughts, and floods, an increased danger to coastal areas due to the rise of sea levels, as well as a surge in diseases throughout the world.\(^7\) Therefore, it seems greenhouse gases cannot be eliminated completely, and yet, they cannot continue to be produced at the current rate.

Greenhouse gas emissions have, in fact, drastically increased throughout time, with “[l]evels of several important greenhouse gases . . . increas[ing] by about twenty-five percent since large-scale industrialization began around 150 years ago.”\(^8\) This surge has continued in recent times, as measured by

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2. Id. at 35.
4. FRIEDMAN, supra note 1, at 36.
6. Id.
the Intergovernmental Panel on Climate Change (IPCC), which reports that between the years of 1970 and 2004 greenhouse gas emissions have increased by 70%.9

The IPCC has also found that although some mitigation policies have been effective in reducing greenhouse gas emissions, they have not yet had the effect of counteracting the steady increase of those emissions.10 If current international measures for mitigating greenhouse gases are not modified, the IPCC has projected that greenhouse gas emissions will continue to increase during the next several decades.11 Adding to the complexity of the situation, modifying current measures cannot be accomplished by any country acting on its own, as no single country is currently producing more than one-fifth of the world’s greenhouse gas emissions.12 Only a global solution would have a significant impact on reducing the levels of these gases.13

The international community has taken note of the greenhouse gas problem and has undertaken several different approaches to address the issue. The Kyoto Protocol is one such approach. The Protocol is an international agreement that seeks to reduce greenhouse gas emissions on a global scale.14 The Protocol attempts to reduce emissions by setting binding emission targets for its Annex I Member States, composed of thirty-seven developed countries and the European Union.15 The Kyoto Protocol holds these countries to binding commitments by requiring them to reduce their greenhouse emissions by an average of 5% against 1990 levels, over the period of 2008–2012.16 The Protocol also encourages, but does not commit,

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10 Id.

11 Id. at 4.


13 Id.


15 See id. art. 3 (referring to Annex B of the Protocol, which lists the emission targets set for Annex I countries).

16 Id.
non-Annex I countries, composed of mainly developing nations, to reduce their greenhouse gas emissions.\textsuperscript{17}

The Kyoto Protocol thus symbolizes the world’s realization that greenhouse gas emission levels are an international issue that must be addressed on a global scale.\textsuperscript{18} In spite of this realization, the Protocol, until recently when reinstated for another five-year period during the Durban Conference, was set to expire in 2012 with several of the major Annex I countries refusing to commit to a second period at all.\textsuperscript{19} Additionally, the world’s two biggest greenhouse gas emitters, the United States and China, were never parties to the Kyoto Protocol and are not parties to the five-year extension. The United States seemed reluctant to sign on at all.\textsuperscript{20} The unwillingness of the world’s biggest emitters to sign on to the Protocol, coupled with the fact that some of the world’s largest emitters are developing countries who have no binding commitments under the Protocol, has prompted many critics to label the Kyoto Protocol a failure.\textsuperscript{21} According to one critic: “If cutting global carbon emissions was [the Kyoto Protocol’s] aim, the UN scheme has failed.”\textsuperscript{22}

The lack of a significant and effective international agreement on the reduction of greenhouse gases is a huge issue. In order to fight climate change, and specifically to reduce greenhouse emission levels, there must be a global consensus.\textsuperscript{23} Without international cooperation it is difficult to see how any significant impact upon greenhouse gas levels will be realized as “no single country emits more than approximately 20% of global emissions,” thus making it evident that an effective solution must involve the global community.\textsuperscript{24}

\textsuperscript{17} See id. art. 12 (establishing a mechanism for non-Annex I countries to achieve sustainable development and using the term “developing country Parties” to describe those benefiting from the mechanism).


\textsuperscript{20} See id. (noting a five to eight year extension period for the Kyoto Protocol); UN Climate Talks: Pretty Basic, ECONOMIST, Sept. 3, 2011.

\textsuperscript{21} See, e.g., UN Climate Talks: Pretty Basic, supra note 20.

\textsuperscript{22} Id.

\textsuperscript{23} See GUPTA & TIRPAK, supra note 12 (stating that “successful solutions will need to engage multiple countries”).

\textsuperscript{24} Id.
Part II of this Note considers why greenhouse gas emissions are detrimental to the environment and must be controlled. It details how greenhouse gas emissions are produced, how they affect the environment, and why they are so harmful. Part III will examine the original Kyoto Protocol and its goals and initiatives. This part will detail the Protocol’s structure, focusing on its “common but differentiated responsibilities” principle, its binding nature, and the market-based mechanisms it has employed to reduce greenhouse emissions. Part IV will briefly touch on the international debate over the Protocol’s effectiveness, address the implications of the Durban Conference, which has re-implemented the original Kyoto agreement for five more years, and then take the stance that a new and refreshed Kyoto agreement is absolutely necessary. Part V will conclude by making suggestions on how to restructure this new agreement in order to incentivize countries to sign a new protocol and establish a strong global commitment to reducing greenhouse gas levels and fighting climate change.

II. GREENHOUSE GASES

Since the beginning of pre-historic times, the world’s population, and thus its activity, has continually increased. This burst of human activity has resulted in an increase of various human by-products, including the emission of greenhouse gases. In fact, in the last century the rise in human activity has resulted in a significant increase of greenhouse gases and, thus, a substantial change in the earth’s atmosphere and climate.

Greenhouse gases can be emitted both naturally and via human activity. Emissions can occur naturally through sources such as “animal and plant respiration, volcanic eruptions, and ocean-atmosphere exchange.” They can also occur as a result of human activity, through the “combustion of fossil fuels such as coal, oil and gas in power plants, automobiles, industrial facilities and other sources.” In fact, the majority of greenhouse gas emissions occur as a result of fossil fuel combustion coming from the

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25 Kyoto Protocol, supra note 14, art. 10.
27 Id.
28 See FRIEDMAN, supra note 1 (recognizing that greenhouse gas emissions can come from rice farming, petroleum drilling, coal mining, animal defecation, and cattle belching).
29 Causes of Climate Change, supra note 26.
operation of cars, aircrafts, and other machines.\textsuperscript{31} Thus, greenhouse gases come from a wide variety of both natural and unnatural sources.

Regardless of their source, greenhouse gases operate by trapping heat in the Earth’s atmosphere.\textsuperscript{32} Generally, if these gases are not present, when sunlight hits the Earth’s surface it is released back into space as infrared radiation.\textsuperscript{33} However, when greenhouse gases are present in the atmosphere, they “absorb this infrared radiation and trap its heat in the atmosphere.”\textsuperscript{34} The effect of this absorption is to warm the earth’s surface as well as the lower portion of the earth’s atmosphere.\textsuperscript{35}

Greenhouse gases, once emitted, can remain in the atmosphere “for tens to hundreds of years.”\textsuperscript{36} This longevity coupled with the steady rise of emissions, has been deemed responsible for the global increase in average temperatures during the twentieth century.\textsuperscript{37} Scientists predict that if greenhouse gas emission levels continue to increase at current levels “by the middle of the next century the Earth’s global temperature may be 1 to 3° Celsius higher than today.”\textsuperscript{38} Although an increase of several degrees Celsius may seem insignificant when compared to the fact that “the difference in global average temperature between an ice age and an interglacial period like we are in now. . . is a mere five to six degrees Celsius.”\textsuperscript{39} Therefore, it is evident that a seemingly small change in global temperatures can lead to drastic differences in the environment.\textsuperscript{40}

Complicating the issue further is that these increases in greenhouse gases do not necessarily correlate to the size of the population within a certain country, making it hard to regulate among countries based only on differences in population.\textsuperscript{41} Rather greenhouse emissions can be related either to the level of industrialization and development in a country or to the

\begin{itemize}
  \item \textsuperscript{31} OBERTHÜR & OTT, supra note 7, at 7.
  \item \textsuperscript{32} Causes of Climate Change, supra note 26.
  \item \textsuperscript{34} Id.
  \item \textsuperscript{35} Id.
  \item \textsuperscript{36} U.S. ENVTL. PROTECTION AGENCY, CLIMATE CHANGE INDICATORS IN THE UNITED STATES 9 (2010), available at http://www.epa.gov/climatechange/pdfs/climateindicators-full.pdf.
  \item \textsuperscript{37} Id. at 2.
  \item \textsuperscript{38} M. Pidwirny, The Greenhouse Effect, in FUNDAMENTALS OF PHYSICAL GEOGRAPHY (2d ed. 2009), available at http://www.physicalgeography.net/fundamentals/7h.html.
  \item \textsuperscript{39} FRIEDMAN, supra note 1, at 37.
  \item \textsuperscript{40} Id.
\end{itemize}
sheer size of the population in the country.\textsuperscript{42} In fact, “[m]ost of the largest . . . emitters have large economies, large populations, or both.”\textsuperscript{43} As a prime example of this issue, the United States “produced about 19\% of global carbon dioxide emissions . . . in 2008 . . . and 18\% in 2009,” and yet it accounted for only 5\% of the world’s population.\textsuperscript{44}

Despite developed countries like the United States producing high levels of greenhouse gases,\textsuperscript{45} studies predict that, “[m]uch of the increase in . . . emissions is expected to occur in the developing world where emerging economies, including China and India, fuel economic development with fossil energy.”\textsuperscript{46} Thus it is not just the developed and industrialized world that threatens to contribute heavily to the greenhouse gas problem, but also the developing world, which is burning fossil fuels at an increased rate in order to jumpstart its economic development.

III. THE KYOTO PROTOCOL

The Kyoto Protocol is an international agreement, adopted in Kyoto, Japan, on December 11, 1997, that has attempted to deal with the issue of greenhouse gas emissions.\textsuperscript{47} The agreement entered into force on February 16, 2005,\textsuperscript{48} and currently includes 194 countries and the European Union as parties to the Protocol.\textsuperscript{49} The Protocol aims to deal with six specific greenhouse gases: (1) carbon dioxide; (2) methane; (3) nitrous oxide; (4) hydrofluorocarbons; (5) perfluorocarbons; and (6) sulphur hexafluoride.\textsuperscript{50} Of the six gases covered, carbon dioxide is by far the most prevalent in the atmosphere, with 76.7\% of global greenhouse gas emissions being attributed to it.\textsuperscript{51}

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\textsuperscript{42} Id.
\textsuperscript{43} Id.
\textsuperscript{44} Id.
\textsuperscript{45} Id.
\textsuperscript{46} Id.
\textsuperscript{47} Essential Background: Kyoto Protocol, supra note 18.
\textsuperscript{48} Id.
\textsuperscript{51} Id.
The Kyoto Protocol is linked to the United Nations Framework Convention on Climate Change (UNFCCC), an international treaty adopted on May 9, 1992, that entered into force on March 21, 1994. The ultimate goal of the UNFCCC is “to stabilize greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous human interference with the climate system.” The Kyoto Protocol was later created as a complement to the UNFCCC and was approved at the 3rd COP.

Although the Kyoto Protocol and its founding Convention are counterparts of one another, they differ in that the UNFCCC simply encourages developed countries to reduce their greenhouse gas emissions, while the Protocol commits them to doing so. Specifically, under Article 3, the Kyoto Protocol commits those countries designated as Annex I countries to reduce their greenhouse gas emissions by 5% below 1990 levels over the period of 2008–2012. These Annex I countries consist of forty-one developed countries as well as the European Union.

The Kyoto Protocol, like its founding Convention, the UNFCCC, differentiates between developed and developing countries by utilizing the principle of common but differentiated responsibilities. This principle, detailed most clearly in the Rio Declaration on Environment and Development, states:

In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies...
place on the global environment and of the technologies and financial resources they command.\textsuperscript{60}

This principle therefore strives to hold developed countries to a higher standard, as its drafters believe that those societies and their by-products have caused more impact on the global environment than those of developing nations.\textsuperscript{61}

The UNFCCC took this common but differentiated principle even further by stating that developed nations are not only responsible for reducing their emissions, but they must also provide funding and resources to assist developing country parties with the costs of compliance.\textsuperscript{62} Therefore, under the UNFCCC, developed countries are not only charged with the responsibility of mitigating their own greenhouse gas emissions, but they must also help fund developing countries in adhering to their obligations.

The common but differentiated responsibilities principle was later incorporated into the Kyoto Protocol as well. As a practical matter, this principle resulted in the Kyoto Protocol member countries being divided into two groups: Annex I and non-Annex I countries.\textsuperscript{63} Developing countries, or non-Annex I countries, have not made binding commitments to reduce greenhouse emissions, while developed countries, or Annex I countries, have agreed to:

- Specific binding emission targets to be achieved in the 2008–2012 commitment period . . .
- Targets [that] can be achieved by domestic action and by the use of international market mechanisms.\textsuperscript{64}

Therefore, Annex I countries are committed to binding targets while developing countries, in recognition of the fact that they have not contributed as much to the greenhouse gas problem, have made no commitments whatsoever.

Annex I countries that have signed the Protocol are expected to meet their binding greenhouse gas emissions targets mainly via national measures.\textsuperscript{65}

\begin{footnotesize}
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\begin{enumerate}
\item UNFCCC, supra note 52, arts. 4(2)(a), 4(3).
\item Kyoto Protocol, supra note 14.
\item \textit{The Need for Mitigation}, supra note 50, at 4.
\item Kyoto Protocol, supra note 14, art. 2(1)(a).
\end{enumerate}
\end{footnotesize}
National measures are detailed in Article 2(1)(a) of the Protocol and include, but are not limited to, the following: enhancing energy efficiency, protecting greenhouse gas sinks and reservoirs, promoting sustainable forms of agriculture, researching new forms of renewable energy, phasing out incentives and tax deductions for all greenhouse gas emitting sectors, encouraging reform in those sectors, as well as generally taking steps to limit and reduce greenhouse gas emissions.\footnote{Id.}

Although Annex I countries are to use these national measures in order to meet their targets, the Kyoto Protocol also affords them, and in some cases non-Annex I countries, the opportunity to meet “their targets by way of three market-based mechanisms”:\begin{enumerate}[i]
\item Emissions trading
\item Clean development mechanism (CDM)
\item Joint implementation.\footnote{Essential Background: Kyoto Protocol, supra note 18.}
\end{enumerate}

The emission trading mechanism set out in Article 17 of the Kyoto Protocol created a new commodity.\footnote{Kyoto Protocol, supra note 14, art. 17.} The emissions trading mechanism allows those countries that have accepted greenhouse gas targets, or Annex I countries, to sell or buy additional emission units if they have units to spare or need more units.\footnote{Id.} This mechanism, however, does not apply to non-Annex I countries.\footnote{See id. (discussing Annex B countries, which are also Annex I countries, without mention of developing nations).}

The second mechanism is the clean development mechanism (CDM), which is detailed in Article 12 of the Protocol.\footnote{Id. art. 12.} This mechanism allows countries with binding targets to implement emission-reducing projects in developing countries and “use the certified emission reductions [CERs] accruing from such project activities to contribute to compliance with part of their quantified emission limitation and reduction commitments.”\footnote{Id. art. 12(3)(b).} These projects must be registered and are issued CERs only if approved.\footnote{What Is the Clean Development Mechanism (CDM)?, GUARDIAN (July 26, 2011), available at http://www.guardian.co.uk/environment/2011/jul/26/clean-development-mechanism/} The CDM allows countries to register and accrue credits for numerous types of projects with the exception of projects involving nuclear power and
This mechanism, like the other two, is utilized to help Annex I countries meet their targets. However, a key difference between the CDM and the other two market-based mechanisms is that the CDM’s purpose is to allow both Annex I and non-Annex I countries to participate. The CDM accomplishes this goal by assisting non-Annex I parties in achieving sustainable development while also helping Annex I countries comply with their emission targets. The CDM’s inclusion of all countries allows “[d]eveloping countries [to] benefit from new funding opportunities, and industrialized economies . . . to meet their reduction targets at a lower cost.” The CDM is the first global investment scheme of its kind, and it has registered 4,297 projects thus far, with 95 projects currently requesting registration. It is seen as by far the most successful of the three mechanisms created by the Kyoto Protocol.

The final mechanism of the Kyoto Protocol is the joint implementation mechanism, detailed in Article 6 of the Kyoto Protocol. The joint implementation mechanism allows Annex I countries to invest in greenhouse gas reducing projects in other Annex I countries in order to earn emission reduction units that are counted towards their binding emission targets.

To ensure that Annex I countries adhere to their binding greenhouse gas emissions targets, the Kyoto Protocol also maintains a compliance mechanism. This mechanism is “designed to strengthen the Protocol’s environmental integrity, support the carbon market’s credibility and ensure transparency of accounting by Parties.” In effect, the compliance

74 Id.
75 Id.
76 Id.
77 Id.
81 What Is the Clean Development Mechanism (CDM)?, supra note 73.
83 Joint Implementation, supra note 82.
85 Id.
mechanism and its two branches are to thoroughly assess the performance of all Annex I parties.

The Protocol’s compliance mechanism consists of a Compliance Committee that is subdivided into a facilitative branch and an enforcement branch.86 Each branch is composed of ten members: five from the UN official regions–Africa, Asia, Latin America and the Caribbean, Central and Eastern Europe, and Western Europe and others, one from a small island developing state, two from Annex I States,; and two from non-Annex I States.87

Each branch also has its own separate functions: “the facilitative branch aims to provide advice and assistance to Parties in order to promote compliance, whereas the enforcement branch has the responsibility to determine consequences for Parties not meeting their commitments.”88 The power allocated to the facilitative branch allows it not only to advise countries on how to achieve their targets and reduce emissions, but also gives it the power to help flag potential non-compliance.89 In contrast, the enforcement branch not only notes a Party’s non-compliance but also determines a course of action to be taken to remedy the non-compliance.90

In order to determine compliance, the two branches of the Compliance Committee mainly base their determinations on reports from experts, subsidiary bodies, member Parties, and intergovernmental and non-governmental organizations.91

IV. KYOTO PROTOCOL ISSUES AND EXPIRATION

Through its mechanisms, both market-based and compliance, the Kyoto Protocol has aimed to combat the problem of climate change by reducing greenhouse gas emissions on a global scale. However, the Protocol has hit some significant bumps along the way. One of its most serious setbacks occurred when the world’s biggest greenhouse gas emitter, the United States, refused to ratify the Protocol, stating that complying with the Protocol “would harm the [U.S.] economy and [that the Protocol] is flawed by the lack of restrictions on emissions by China and India.”92 Additionally, there

86 Id.
87 Id.
88 Id.
89 Id.
90 Id.
91 Id.
have been many criticisms that the targets set in the Protocol are insufficient and will not result in any substantial reduction of greenhouse gas emissions, with some critics going so far as to state that “[e]ven if it were implemented at 100% effectiveness, the Kyoto Protocol barely represents any progress at all, both because its reduction targets are low and emissions in developing countries will continue to grow unchecked.”

Though the effectiveness of the agreement is highly debated, it can hardly be refuted that the Kyoto Protocol has prompted a global conversation on climate change and greenhouse emissions. Even in its initial phases, the Protocol was seen as “an important first step towards a truly global emission reduction regime that will stabilize [greenhouse gas] emissions, and provide . . . the essential architecture for any future international agreement on climate change.”

Until recently, the Kyoto Protocol was set to expire in 2012, with neither a concrete plan to reinvigorate it for a second commitment period nor another agreement to take its place, thus leaving the international community without an environmental agreement. Additionally, three of the major countries that signed the original commitment, Japan, Russia, and Canada, have refused to take part in a second commitment period unless the Protocol is modified to bind China and the United States. In an attempt to solve these issues and help find a global consensus on how to reinvigorate and restructure the Kyoto Protocol, several international conferences have been held.

The first attempt at reinvigorating the Kyoto Protocol occurred at the fifteenth session of the Conference of the Parties (COP) at the Copenhagen Conference in December 2009. The Conference was attended by

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94 UN Climate Talks: Pretty Basic, supra note 20.
95 Essential Background: Kyoto Protocol, supra note 18.
96 Kyoto Protocol, supra note 14, art. 3, para. 1 (setting overall emission reduction targets for Annex I countries with an end year of 2012).
99 Copenhagen Accord, supra note 97 (committing “to enable . . . sustained implementation
approximately 120 heads of state, and was seen as “rais[ing] climate change policy to the highest political level.” However, though hopes were high for the Copenhagen Conference, it concluded with only the signing of a political agreement, the Copenhagen Accord, negotiated by approximately twenty-eight countries. The Copenhagen Accord’s main goals were to limit “climate change to no more than two degrees Celsius, [to establish] systems of ‘pledge and review’ for mitigation commitments or actions by both developed and developing countries, and [to identify] significant new financial resources.” However, several countries, including Bolivia, Sudan, and Venezuela, objected to the Accord, and thereby prevented the Convention from formally adopting the agreement. Therefore, because the Copenhagen Accord was simply a political agreement, the substantive pieces of the Accord were never technically accepted.

Another attempt to discuss and detail the Kyoto Protocol was recently made at the United Nations Climate Change Conference in Panama. This meeting, which began on October 1, 2011, and culminated on October 7, 2011, was the last official Conference held before the annual Climate Change Conference, which took place in Durban during November 2011. It resulted in very little headway and, according to commentators, “barely made progress in resolving the thorniest issues, stalling negotiations to conclude a global agreement later this year in Durban, South Africa to save the planet from overheating.”

102 Id. at 231.
103 Id. (implying that the COP requires a consensus to adopt a legal agreement).
104 Summary: Copenhagen Climate Summit, CENTER FOR CLIMATE AND ENERGY SOLUTIONS, http://www.c2es.org/international/negotiations/cop-15/summary (last visited June 30, 2012) (noting how the outcome leaves uncertainty about the formal standing of the Copenhagen Accord under the U.N. climate regime and about the nature of any future agreement).
A. COP 17: Durban, South Africa

A third meeting was held in Durban, South Africa at the seventeenth meeting of the COP on November 28, 2011. The Conference’s aim was to host “discussions . . . to advance, in a balanced fashion, the implementation of the Convention and the Kyoto Protocol. . . .” Many saw the Conference as the final opportunity “to ensure that internationally binding emission reduction commitments with international rules and compliance continue and do not lapse or end altogether.”

The Durban Conference, unlike its predecessors, made some headway. First, Durban officially launched the Green Climate Fund, originally contemplated in the Copenhagen Accord, as an operating entity of the Convention’s financial mechanism under Article 11. The fund’s purpose is to help support various projects, policies, and activities in developing countries. It is unclear, however, how the Green Climate Fund will be funded as the Conference did not identify a means for financing. The final version of the Green Climate Fund is to be detailed at the eighteenth COP.

The Durban Conference also resulted in the Durban Platform, which “legally require[s] all nations — including the two biggest emitters, China and the United States — to meet as-yet-unspecified emissions targets.” The Durban Platform’s main aim was to initiate a process to develop a Protocol that would legally bind all countries. The Platform, therefore, envisions “a non-binding agreement to reach an agreement by 2015,” in which both developing and developed countries have legally binding obligations. Some critics, however, believe that the Durban Platform is

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109 Id.
110 Obeng, supra note 107.
111 Launching the Green Climate Fund, supra note 19. See Copenhagen Accord, supra note 97, at 7 (discussing the “Copenhagen Green Climate Fund”).
112 Id.
114 Launching the Green Climate Fund, supra note 19.
115 Tollefson, supra note 113.
117 Robert Stavins, Assessing the Climate Talks — Did Durban Succeed?, HUFFINGTON
not as significant a step as it appears to be but is simply legal jargon that will delay any significant action for a number of years.\textsuperscript{118} It remains to be seen how the world’s nations will structure this legal agreement, and if in fact they will be able to agree to bind both developing and developed nations.

Perhaps most significantly, the Durban Conference also declared that a second commitment period of the Kyoto Protocol is set to begin in January 2013 and end in either December 2017 or December 2020.\textsuperscript{119} By thus stating, the Durban Conference officially announced a second Kyoto Protocol commitment period. However, the Conference did not change the emission targets or the binding commitments for this second Kyoto Protocol period but instead “renew[ed] . . . the fraying 1997 emissions agreement that sets different terms for advanced and developing countries, for several more years.”\textsuperscript{120} Therefore, this second commitment period is simply an extension of the first, with no significant additions or edits.\textsuperscript{121}

Thus, although the Durban Conference made some progress, it remains highly debated whether the Conference was a success or simply another example of the COP kicking the can down the road.\textsuperscript{122} Regardless, it seems that the door has been left open for the formation of a new and restructured Kyoto Protocol.

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\textsuperscript{118} See, e.g., Tollefson, \textit{supra} note 113 (“Despite the celebratory atmosphere, the platform represents an exercise in legalese that does little or nothing to reduce emissions, and defers action for almost a decade.”).
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\textsuperscript{121} See \textit{id.} (noting the extension of the Protocol as well as debate of the deal on a future treaty meant to replace the Protocol).
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\textsuperscript{122} \textit{Climate change: an Agreement to Make an Agreement}, \textit{Wk. Mag.}, Dec. 23, 2011, at 18 (stating that “agreeing to reach an agreement in the future would be fine if we had all the time in the world[,] [c]limate change, though, is happening now”).
\end{flushleft}
V. ANALYSIS

The Kyoto Protocol, although a good first step, is by no means a perfect solution to the world’s greenhouse gas problem. The Protocol initiated a process whereby countries could take note of their individual impact on the global greenhouse gas levels and pledge to reduce that impact appropriately. The Protocol also gave countries a new way to meet their reductions targets by introducing three market-based mechanisms. Additionally, and perhaps most importantly, the Kyoto Protocol started a necessary global conversation on the issue of greenhouse gas emissions and what should be done about the problem.

Despite all of the Kyoto Protocol’s contributions, a reinvigorated Protocol will necessitate that countries address several very important issues. If these issues are not addressed, the Protocol will fail and be rendered a useless political agreement.

A. Common but Differentiated Responsibilities

The first issue that must be discussed and decided is which countries should be held responsible for reducing greenhouse gas emissions going forward. Should the list of Annex I countries stay the same, or should more countries be added? Most importantly, should the Protocol even discern between Annex I and non-Annex I countries?

The Kyoto Protocol and its founding charter, the UNFCCC, currently differentiate between member countries by using the common but differentiated responsibilities principle. This principle begins with the idea that “certain risks affect . . . every nation on earth . . . includ[ing] not only [risks such as] the climate and the ozone . . . but [also] all risk-related global public goods.” These risks are deemed to be common, as all countries, regardless of development or economic prosperity, share them. The principle also dictates that regardless of these common risks the responsibilities attributed to each nation should be differentiated: “not all countries should contribute equally . . . [and] some nations . . . [should be

123 See Barker et al., supra note 9, at 21 (stating that the “impact of the Protocol’s first commitment period relative to global emissions is projected to be limited”).
124 See generally Kyoto Protocol, supra note 14.
125 Id. arts. 6, 12, 17.
126 See Bond, supra note 93 (noting various countries that participated in the Protocol).
127 Essential Background: Kyoto Protocol, supra note 18.
129 Id.
charged] with carrying a greater burden than others.” A multi-national agreement can implement this principle in multiple ways. For example, it can allow some parties more time to implement certain measures, give them special defenses, or turn a blind eye to areas of non-compliance. The Kyoto Protocol utilizes the principle of common but differentiated responsibilities in the latter manner. It does so by committing developed countries to binding reductions of their greenhouse gas emissions, while simply urging developing countries to reduce their emissions, thereby effectively overlooking a developing country’s non-compliance. The justification for this principle stems from the idea that historically not only have developed countries contributed more to the climate change problem, but they also have greater capabilities to address the problem. In contrast, developing countries have not been emitting greenhouse gases for as long a period of time, as they have taken longer to develop and industrialize their economies. Additionally, due to this lag in industrialization, developing countries lack the economic and technological resources to deal with the greenhouse emissions problem. Therefore, the justification concludes that developed countries should shoulder a greater portion of the greenhouse gas reduction burden, as historically they have contributed exponentially more to the greenhouse gas emission problem and they have the funds to make the problem better.

Another reason used to support the application of the common but differentiated principle is that if developing countries are bound to greenhouse gas targets, implementing this obligation will severely burden their economies. Developing countries worry that if they take on substantial environmental obligations under the Kyoto Protocol these obligations will come at the expense of economic development as they will need to utilize precious financial resources to build environmentally friendly infrastructures, rather than invest them in building up their economies.

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130 Id. at 277.
131 Id. at 277–78.
132 Id.
133 Kyoto Protocol, supra note 14, arts. 3, 12(3)(a).
135 Id.
136 Id.
137 Id.
139 Id. at 3 (noting that “the differing situations of the developing countries need to be
The United Nations Conference on the Human Environment in Stockholm illustrated one of the first uses of this reasoning when the Conference stated in its final declaration that:


By making this statement, the Conference adhered to the notion that developing countries should simply worry about their economic development and deal with their environmental impact as a secondary and much later issue.\footnote{\textit{Id.} (noting that “developing countries must direct their efforts to development”).} In contrast, developed countries should step in and “take the lead in combating climate change,” and do so not only for themselves but for developing countries as well.\footnote{UNFCCC, \textit{supra} note 52, art. 3(1).}

This unequal burden, justified by historical levels of emissions, has therefore been incorporated into environmental agreements and conferences from the UNFCCC to the Copenhagen Conference to the Kyoto Protocol. However, questions remain. How long should these differentiated responsibilities last? Is this burden to be carried indefinitely? Or, does it ultimately expire as time goes on and developing economies begin to produce more greenhouse gas emissions?

There are also several strong rationales espoused against utilizing this principle, especially in an environmental agreement such as the Kyoto Protocol. The first argument against using this principle targets the notion that binding obligations for developing countries will somehow unduly burden their economic development. That notion arguably places too large of an emphasis on the economic concerns involved, and does so at the expense of environmental ones.\footnote{Michael Weisslitz, \textit{Note, Rethinking the Equitable Principle of Common But Differentiated Responsibility: Differential Versus Absolute Norms of Compliance and Contribution in the Global Climate Change Context}, 13 \textit{COLO. J. INT’L ENVTL. L. \\& POL’Y} 473, 489 (2002).} By placing more emphasis on the
economies of these developing countries, instead of their environments, the international community is disregarding the gravity of the global warming problem and allowing developing countries to pollute in favor of their economies.\footnote{Id.} Under this view, a focus on the environment is as important, if not more so, than a focus on the economy and its development.\footnote{Id.} Additionally, this argument emphasizes that “[b]y placing economic concerns ahead of environmental ones, the international community is ignoring the severity of the current global warming crisis,” which will ultimately have a net adverse effect on all countries.\footnote{Id.}

Another case for not implementing the common but differentiated responsibilities principle is that studies have predicted that in the future it will be the developing countries that will cause much of the greenhouse gas emission damage.\footnote{Energy and the Environment Explained: Outlook for Future Emissions, supra note 44.} In fact, “[e]missions growth rates are highest among developing countries . . . , where collectively CO2 emissions increased by forty-seven percent over the 1990–2002 period.”\footnote{BAUMERT, HERZOG & PERSHING, supra note 41, at 13.} In stark contrast, over the same time period, carbon dioxide emissions remained constant in developed countries\footnote{Id.} Although this number is slightly misleading since some developed countries, like the United States and Australia, have actually increased their carbon dioxide emissions, the overall change for the developed countries was still a net neutral.\footnote{Id.} This lack of growth illustrates that focusing exclusively on developed countries would not be effective, as it is the developing countries whose greenhouse gas emissions are exponentially increasing.

Another reason advocated against the common but differentiated responsibilities principle, particularly against its implementation in the Kyoto Protocol, is that it at its most extreme it incentivizes developing countries to ignore their greenhouse gas emissions completely or, at the very least, it encourages them to not make emissions reduction a priority.\footnote{See Weisslitz, supra note 143, at 492–93.} By not requiring any commitment from the developing countries, the Kyoto Protocol “licenses a continuing wrong, allowing developing states to structure their industr[ies] in environmentally unfriendly and fossil fuel-reliant directions.”\footnote{Id.} The main concern is that developing countries will use
the leeway afforded to them by the Kyoto Protocol to not only further emit greenhouse gases but also, and perhaps more significantly, create permanent infrastructures that are fueled by carbon and prolong this problem for generations to come. However, if under a new Kyoto regime developing countries are required to abide by binding greenhouse emissions then they may be incentivized to build clean energy sources from the start, forcing them to address the greenhouse gas problem at its root.

As a result of the changing situation in developing countries, the Kyoto Protocol’s focus on developing versus developed countries is no longer realistic. The common but differentiated responsibilities principle, which the Kyoto Protocol utilizes in order to commit developed countries to binding targets while allowing developing countries to continue unhindered, cannot be maintained. In a world where China and India are two of the largest greenhouse gas emitters, and where eleven of the top twenty-five gas emitters are non-Annex I countries, this common but differentiated responsibilities principle simply exacerbates the greenhouse gas problem and hinders the development of a legitimate solution.

Thus, by allowing the common but differentiated responsibilities principle to control simply because there is a belief that “developed countries [should] acknowledge the responsibility that they bear . . . in view of the pressures their societies place on the global environment,” the Protocol is not addressing a large source of the greenhouse emission problem. China and India, along with the United States, the European Union, and Russia account for about 61% of greenhouse emissions. Of these five major greenhouse gas emitters, only India and China are left out of the binding obligations scheme due to the common but differentiated responsibilities principle, while the United States will not ratify the Protocol because of the fact that large developing countries are not bound by the Protocol.

By not including developing countries that are emitting large levels of greenhouse gases from its binding mechanism, the Protocol will likely never make a significant impact on greenhouse gas emissions and, therefore, will fail in its purpose. Similar observations have prompted organizations such as

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153 Id.
154 BAUMERT, HERZOG & PERSHING, supra note 41, at 11.
155 Rio Declaration, supra note 60, princ. 7.
156 BAUMERT, HERZOG & PERSHING, supra note 41, at 11.
157 See List of Annex I Countries to the Convention, supra note 58 (omitting China and India from the list of Annex I countries); Energy and the Environment Explained: Outlook for Future Emissions, supra note 44 (identifying China and India as developing nations, which are not bound to the Protocol).
the World Resource Institute (WRI), a well regarded environmental think
tank, to insist that “it is simply not possible to adequately address the
climate change problem without engaging both developed and developing
countries.”

The developing-versus-developed issue was also at the forefront of
discussions at the United Nations Climate Change Conference held in
Copenhagen, Denmark. At this Fifteenth session of the COP, developed
and developing nations disagreed when discussing whether developing
countries should take on more vigorous and perhaps binding emission
targets. The United States and other developed countries demanded that
developing countries take on reporting and measurement obligations, while
large developing economies such as China expressly rejected such
demands.

Although no concrete agreement was reached at Copenhagen, the
discussions held made it evident that the United States and other developed
countries are not willing to sign on to an international environmental
agreement that requires them to shoulder all the binding responsibilities of
reducing greenhouse gas emissions. This reluctance and the fact that the
world’s largest greenhouse gas emitter, the United States, is unwilling to sign
a new environmental agreement without the binding commitment of
developing countries is an additional incentive to bind developing
countries.

At the Seventeenth COP in Durban, South Africa this issue came up
again. Despite the European Union’s attempts to push “for . . . a ‘road map’
to a legally binding treaty, [they met] against fierce resistance from China
and India, whose delegates argued passionately against it . . . [stating] that
mandatory cuts would slow their growth and condemn millions to
poverty.” Eventually, developing and developed countries seemed to
agree that all nations should be bound; however, this agreement was not

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159 See generally World Resources Institute, SUPEGREENME, http://www.supergreenme.com/
WorldResourcesInstitute (last visited June 30, 2012).
160 BAUMERT, HERZOG & PERSHING, supra note 41, at 16.
161 Copenhagen Climate Change Conference, supra note 100.
162 Bodansky, supra note 101, at 235–36.
163 Id. at 236.
164 Id. at 235 (noting that the Copenhagen Accord is a political document lacking legal force).
165 See id. at 236 (relating the displeasure of developed nations at the idea of monitoring
practices that would allow developing nations to remain unaccountable for their emissions).
166 See Harris, supra note 158 (expressing continued reluctance of the U.S. to agree to
anything that does not bind developing nations).
167 Broder, supra note 120.
binding, but was simply an “agreement to agree” at a future date.  

Therefore, the agreement allows countries like China to potentially stall until 2020 before being legally bound by the treaty.  

Thus, although the Kyoto Protocol is to be renewed in January 2013, this second commitment period will not change the common but differentiated responsibilities principle but will allow developing countries to continue evading legally binding obligations.  

A new Kyoto Protocol must equalize the burdens between developed and developing nations in order to be effective. Not only would such equalization ensure that the Protocol makes a significant impact by reducing greenhouse gas emissions, but it would also ensure that heavily emitting developed countries are incentivized to sign-on. In fact, “[t]he United States never ratified the agreement because . . . [the Protocol] doesn't require any action from the developing world . . . [t]he Bush administration considered that a fatal flaw . . . [a]nd so does the Obama White House.”  

Additionally, the European Union, as evidenced in Durban, seems intent on getting a legally binding commitment for all nations.  

Furthermore, three of the major countries that signed the initial commitment, Japan, Russia and Canada, have refused to commit to a second period unless China and the United States are held to binding commitments as well.  

Therefore, in order to incentivize the United States as well as the European Union to join the Kyoto Protocol regime, the common but differentiated responsibilities doctrine must be done away with. Doing away with this doctrine would, in turn, result in China and India being bound, thereby incentivizing Japan, Canada, and most importantly Russia, to sign on to another commitment period.  

By eliminating its common but differentiated responsibilities principle and simply focusing on binding targets for the top twenty-five greenhouse gas emitters, this new Kyoto Protocol would then include those countries that “contribute approximately

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168 Id.
170 Broder, supra note 120 (noting that the extended Kyoto Protocol simply renews “the fraying 1997 emissions agreement that sets different terms for advanced and developing countries, for several more years”).
171 Harris, supra note 158.
172 Broder, supra note 120.
173 Efstathiou, supra note 98.
174 Id. (stating that Japan, Canada, and Russia refuse to sign another Protocol agreement unless the United States and China sign binding commitments as well).
61 percent of global emissions.” These changes would put a new Kyoto Protocol on the right path to effective reduction of emissions.

The top greenhouse gas emitters must be bound to a new Kyoto regime, as organizations such as the WRI have found that the top twenty-five emitters generate 83% of the world’s greenhouse gas emissions, with the remaining countries only generating 17%. Therefore, in order to tackle a significant portion of the problem, a new Kyoto Protocol must require, at a minimum, that the top twenty-five greenhouse gas emitters adhere to binding targets.

Admittedly, eliminating this principle may be harder than it seems. The Kyoto Protocol is linked to the UNFCCC, which also espouses the common but differentiated responsibilities principle. Therefore, although it is outside the scope of this Note, an additional issue to consider may be an amendment to the UNFCCC. This Note will proceed under the assumption that amending the UNFCCC is possible.

B. Funding Issue

Although developing countries should take on a more serious obligation under a new Kyoto Protocol framework and do away with the common but differentiated responsibilities principle, some remnants of the principle will inevitably need to be retained as developing and developed countries have different access to resources. Historically, developed countries have contributed more to the environmental issues that are present today. Nevertheless, developed countries should not be forever obligated to take the lead and thereby be forced to combat climate change for themselves as well as for developing countries. In order to address these competing rationales, there must be some sort of compromise.

Perhaps the most fair and effective way to deal with this historical conundrum is to move forward by binding developing as well as developed countries to greenhouse gas emission targets. However, in recognition of the burden this would place on the economies of the developing world, a new Protocol should also obligate developed countries to help finance the necessary infrastructures in developing nations in order to help make these binding obligations feasible.

175 BAUMERT, HERZOG & PERSHING, supra note 41, at 11.
176 Id. at 12.
177 UNFCCC, supra note 52, at 1.
178 Halvorssen, supra note 134, at 254.
179 UNFCCC, supra note 52, art. 3(1).
Upon application of binding targets, many developing countries may have trouble abiding by their greenhouse gas emission goals “due to limited economic means, lack of technological know-how, and insufficient infrastructure.” Thus, their biggest concern may be balancing their tentative economic development while still taking into account environmental concerns. In a new Kyoto framework, developing countries can make their adherence to binding targets “conditional on the receipt of assistance from developed countries.” Maintaining this aspect of the common but differentiated responsibilities principle, while still binding both developed and developing countries, allows developed countries to share their environmental burden while helping developing countries shoulder their new financial burden.

In recognition of the new burden being allotted to developing countries, developed countries can assist by contributing to a fund managed by an official of the Kyoto Protocol. This fund will funnel the necessary resources to those developing countries that require them, and be managed by the UNFCCC, with some oversight by the donating country in order to allow assurance that their investment is being used appropriately. This form of assistance should thereby help to alleviate some of the economic concerns of developing nations, by helping them build clean energy infrastructures without greatly hampering their economic development.

The Copenhagen Accord, the political agreement of the Copenhagen Conference, envisioned a similar financial solution. The Accord included several financial elements: (1) a “collective commitment by developed countries . . . to provide new and additional resources . . . approaching USD 30 billion”; (2) a longer term commitment by developed countries “to a goal of mobilizing jointly USD 100 billion dollars a year by 2020”; and (3) a Copenhagen Green Climate fund, which would be the “operating entity of the [Convention’s] financial mechanism.” All of these funding mechanisms were to be tied to actions showing meaningful mitigation of greenhouse gas emissions by the developing country receiving assistance. However, because the Copenhagen Accord was never adopted by a consensus, and was simply taken note of, it is not a legally binding

181 See id.
182 Halvorssen, supra note 134, at 255.
183 Copenhagen Accord, supra note 97.
184 Id. arts. 8, 10.
185 Id. art. 8.
Therefore, none of its recommendations were ever implemented.186

The solution conceived of in the Copenhagen Accord could and should be implemented in a reinvigorated Kyoto Protocol. One major advantage of this solution is it would likely have significant buy-in as the Copenhagen Accord was drafted by a group of about twenty-eight countries, including all of the major economies of the world.188 Additionally, “114 countries . . . associated themselves with the . . . Accord” and seventy-three of those countries, “representing more than 80 percent of global greenhouse gas emissions,” pledged to limit their emissions.189 Thus, a funding solution dictated by the Copenhagen Accord likely has the backing and support of numerous countries, including the world’s largest greenhouse gas emitters.190

All countries involved in the Copenhagen Accord discussions agreed that developing countries would need assistance in reducing greenhouse gas emissions; however, developing and developed countries envisioned this funding differently.191 Developed countries believed that any financial assistance should be “linked to developing country mitigation commitments,” while developing countries believed that this funding was “payment of the ‘carbon debt’ that . . . developed countries owe[d] for their historical emissions.”192 However, despite this difference, the funding solution that eventually developed was in fact linked to mitigation action by the developing countries, demonstrating that there was eventually a consensus on the issue.193 Therefore, as over one hundred countries associated themselves with the Accord, and all the major economies were involved in drafting it, a solution contained within the Accord would likely have more buy-in than one created completely from scratch.194

Another indication that a Copenhagen Accord-like solution would have significant buy-in is the decision to formally establish a Green Climate Fund at the Durban Conference.195 At the Durban Conference, countries “designate[d] the Green Climate Fund as an operating entity of the financial

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186 Summary: Copenhagen Climate Summit, supra note 104.
187 Id.
188 Bodansky, supra note 101, at 230.
189 Id. at 231.
190 Id. (noting that the EU, United States, Japan, Russia, China, and India all associated themselves with the Accord).
191 Id. at 237.
192 Id.
193 Copenhagen Accord, supra note 97, art. 8.
194 See Bodansky, supra note 101, at 231 (listing nations willing to associate with the Accord).
195 See Launching the Green Climate Fund, supra note 19, para. 3 (establishing Green Climate Fund).
mechanism of the Convention, in accordance with Article 11 of the Convention, with arrangements to be concluded between the Conference of the Parties and the Fund at the eighteenth session of the Conference of the Parties.” \footnote{Id.} However, although the Conference officially made the Green Climate Fund part of its financial mechanism, it did not designate how the Green Climate Fund would be funded. \footnote{Tollefson, supra note 113.} The Conference simply established that developed countries would “boost funding for developing countries to US$100 billion annually by 2020.”\footnote{Id.} Therefore, although a fund was established, it remains to be determined how the Green Climate Fund will be financed. Should the funding come exclusively from developed countries? Or should private sources also be used? One solution to this problem has already been contemplated in the Kyoto Protocol, via the Kyoto Protocol Adaptation Fund. \footnote{Id.} This Fund, developed during the Marrakesh Accords, “was established to finance concrete adaptation projects and programmes in developing country parties to the Kyoto Protocol,” with financing to come from a “share of proceeds on the clean development mechanism project activities . . . amount[ing] to 2% of . . . [CERs] issued for a CDM project activity.” \footnote{Id.} The idea of financing by using a percentage of CER’s issued per CDM project could be leveraged and utilized when funding the Green Climate Fund as well.

Therefore, by implementing the Green Climate Fund solution crafted in the Copenhagen and Durban Conferences, and financing the fund not only via mandatory and voluntary contributions from developed countries, but also via a share of the proceeds of CDM projects, the new Kyoto Protocol would incentivize both developed and developing countries to sign a new commitment. A new Kyoto Protocol should also follow the lead of the Copenhagen Accord by linking the receipt of funding to significant mitigation action from any developing country receiving assistance, which can shown by them taking on binding greenhouse gas commitments under the Kyoto Protocol.

In taking a harder stance on developing countries, the new Protocol would garner greater buy-in from developed countries that have expressed dissatisfaction with this issue in the past. The Protocol could, however, simultaneously incentivize developing countries to sign on by providing

\footnotesize{\begin{itemize}
\item \footnote{Id.} \footnote{Tollefson, supra note 113.} \footnote{Id.} \footnote{Adaptation Fund, United Nations Framework Convention on Climate Change, http://unfccc.int/cooperation_and_support/financial_mechanism/adaptation_fund/items/3659.php (last updated June 27, 2012).}
\end{itemize}}
them with the necessary financial assistance to meet their binding goals and thereby showing them that the world understands the difficulties they face in meeting their commitments.

C. Measures to Reduce Emissions and Market-Based Mechanisms

Another issue that has arisen, mostly between developed countries, is how countries should adhere to their binding emissions targets. Should they primarily implement national measures? Or should they take full advantage of the mechanisms created by the Kyoto Protocol?

The Kyoto Protocol affords Annex I countries multiple ways to meet their binding greenhouse gas emission targets. It recommends national measures that countries can take in Article 2(1)(a) of the Protocol. It also allows Annex-I countries to meet their targets via three market-based mechanisms: the clean development mechanism (CDM), the emissions trading mechanism, and the joint implementation mechanism. The Kyoto Protocol, however, is careful to limit these market-based solutions. In detailing its emissions trading and joint implementation mechanisms, the Protocol explicitly states that these mechanisms are supplemental to national measures for the purpose of meeting binding commitments. This concept of “supplementarity” stands for the idea that the “investor country has to pursue an independent climate policy apart from . . . [these market-based] measures,” and therefore cannot exclusively rely on these measures to meet its targets.

Although not limited in the text of the Protocol itself, the CDM was also made supplemental to national measures in the Marrakesh Accords. In its Addendum to the Report of the Marrakesh Accords, the COP clarified that under Article 12 of the Kyoto Protocol, which details the CDM, use of the mechanism is to be supplemental to national measures, and that national measures should not only be used first, but must be the most significant

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201 Kyoto Protocol, supranote 14, art. 2(1)(a).
202 See id. arts. 6, 12, 17.
203 Id. arts. 6(1)(d), 17.
portion of the mitigation action taken. Consequently, because non-Annex I countries are not held to binding commitments, the Marrakesh Accords only held Annex I countries to this supplementarity criterion. It did not restrict those states hosting the CDM projects to this criterion, thus leaving the supplementarity criterion as a restriction upon only developed countries. This oversight thus allows developing countries to take advantage of CDM-based projects without first being bound to utilize national measures to reduce their own emissions.

The issue of supplementarity was also heavily discussed during the Copenhagen Conference, where there was a split between developed countries as to which methods should be used most aggressively going forward. The European Union member states pushed for emissions reduction via domestic measures while the “United States . . . [and] Australia and Japan[ ] push[ed] for the unrestricted use of market-based mechanisms.”

The argument that countries should utilize primarily domestic measures and minimize use of the Kyoto Protocol’s market-based mechanisms stems from the idea that allowing developed countries to use CDM projects and other such mechanisms to meet their targets “can be at odds with the principle of joint but differentiated responsibility, which requires that . . . states . . . enact climate policies at home.” By allowing developed countries to reduce their emissions via certified emission reduction units, some argue that the countries are not reducing their own emissions, as dictated in the Kyoto Protocol, but are in fact “distort[ing] the wording and original goal of the provision.”

However, there are also strong arguments in support of market-based mechanisms, and specifically of the CDM. By allowing developed countries to fund projects in developing countries and receive credits for their funding the CDM helps with two aspects of climate change: “industrialized economies can fund environment-friendly projects in an effort to receive carbon credits . . . [and] developing countries [can] support their economies in a sustainable way because of the funding from industrialized countries.” The CDM is seen as the best way to encourage developing countries to reduce emissions while also helping them promote sustainable growth.

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206 Id. at 3.
207 Winter, supra note 204, at 20.
208 Bodansky, supra note 101, at 232.
209 Id.
210 Id.
211 Id.
212 Weber & Darbellay, supra note 78, at 276.
The CDM system would, of course inevitably change if developed and developing nations had binding obligations, in that all of them would have an incentive to utilize the mechanism to offset their emissions in order to meet their binding targets. However, the CDM could still work in such an environment, and would arguably work more cohesively within the new Kyoto framework.

For example, a country like the United States, which would already be contributing to a fund in order to help developing countries build clean infrastructures, would register a CDM project in a developing country like India. This project, if approved, would give the United States carbon certified emission reductions and contribute to their emission reduction goals. Additionally, a percentage of these certified emission reduction credits would go to help fund the Green Climate Fund. This project, however, would also assist the developing nation in this example. India, via this CDM project, would have an emission-reducing project implemented in its country, a project that would effectively reduce India’s greenhouse gas emissions, thus making India’s compliance goals easier to fulfill, and promoting sustainable development in the country. Additionally, India would receive funding to build further clean energy sources from the percentage of CERs contributed to the Green Climate Fund from that CDM project. Thus, India would receive financing as well as a clean-energy CDM project to help it meet its new binding emissions targets.

In a world where both developing and developed countries have binding obligations, the CDM would ensure not only that the developed nation could meet its greenhouse gas emission targets, but also that it would assist developing nations in doing so by implementing projects with clean energy sources.

Additionally, if both developed and developing countries are committed to binding targets, the concept of complementarity would no longer apply only to developed nations. The developing nation would have to implement national measures first, and do so before utilizing the emission

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213 Id.
214 Id.
215 See Kyoto Protocol, supra note 14, art. 12.
217 Winter, supra note 204, at 20.
reductions generated from CDM projects. Therefore, the concept of supplementarity would apply to developing countries in the inverse. Although the CDM project would technically be within the developing country’s borders, they would have to implement other national measures, unrelated to market-based mechanisms, first. By this means, the new Kyoto Protocol would ensure that developing and developed countries were both implementing national measures before taking advantage of market-based mechanisms like the CDM.

Consequently, if a new Protocol puts a stringent cap on the amount of reductions allowed via market-based mechanisms, such as the CDM, it would make the cost of adherence to greenhouse gas targets higher for both developed and developing nations, as the CDM mechanism provides monetary benefits for both developed and developing nations. Therefore, because one of the major concerns for developing nations in committing to binding targets is that they cannot commit the necessary resources to the climate change problem, limiting such a cost-effective method would be counter-productive in incentivizing them to commit. Additionally, if a cap were placed on the amount of reductions allowed via the CDM this would hinder financing for the Green Climate Fund, part of which would come from a percentage of the certified emission reduction credits. Thus, the more CDM projects, the more credits, and the more funding provided. Therefore, although undoubtedly, an unfettered use of market-based mechanisms would run afoul of the Protocol’s purpose to have countries reduce their own emissions, putting a stringent cap on the CDM would not only result in higher costs for developing countries, but would also hinder funding for these countries.

VI. CONCLUSION: A NEW INTERNATIONAL AGREEMENT IS NECESSARY

Climate change is a global issue that requires a global commitment. Studies predict that if greenhouse gas emissions continue as they are “the global average surface temperature is expected to rise by 0.2°C to 0.4°C per decade throughout the 21st century and would continue to rise thereafter. The cumulative warming by 2100 would [thus] be approximately 3°C

218 See Andrew Schatz, Note, Discounting the Clean Development Mechanism, 20 Geo. INT’L. ENVTL. L. REV. 703, 717 (2008) (noting that the CDM mechanism provides monetary benefits for both developed and developing nations).
219 See Halvorssen, supra note 134, at 255 (noting that historically, developing countries “lack the resources to address the problem”).
220 See Burleson, supra note 216 (discussing funding options available for the Green Climate Fund).
to 5°C... This will result in more than just an increase in day-to-day temperatures. It will shift climate zones, destroy forests, endanger ecosystems such as mountains and wetlands, result in a surge of diseases, and affect agricultural and fishery production, thus resulting in the risk of famine.\footnote{221} These drastic effects require that the world come together to design a global solution that will not only be acceptable to both developing and developed countries but also be effective at fighting global warming.

Such a solution demands that the common but differentiated responsibilities principle is not utilized in a reinvigorated Kyoto Protocol. This change to the Protocol would necessitate that the top twenty-five greenhouse gas emitters, whether they be developed or developing countries, contribute equally to reducing emissions by committing to binding greenhouse gas targets.

At the same time, an effective global agreement requires that developed nations, who have stronger economies and have historically contributed more to the climate change problem, help their developing country brothers by funding clean infrastructures in those countries. Funding can be managed via the Green Climate Fund, which is now part of the financial mechanism of the Kyoto Protocol. Financing for the fund would come from voluntary and mandatory contributions from developed countries, as well as from a percentage of the CER credits of CDM projects. Additionally, to ensure that both developed and developing nations are willing to commit, mechanisms like the CDM cannot be strictly capped as they provide the most cost-effective way to meet binding emissions targets.

If these issues are addressed, and the interests of both developed and developing nations are balanced, a new Kyoto Protocol would present a viable solution to the climate change problem. However, if, like at the Durban Conference, nations continue to kick the can down the road and simply make agreements to agree, the problem of greenhouse gas emissions and global warming will only become more pervasive in the future.


\footnote{222} Obertühr \& Ott, supra note 7.