What is the Kyoto Protocol? A refresher for 2012

by Carbon Trade Watch Tuesday, 28 February 2012

The Kyoto Protocol will complete its commitment period at the end of 2012, the same year RIO+20 will meet to hammer out another chapter of neoliberal green economics. But what was built from Kyoto and how will Kyoto continue? CTW has put together a short review outlining what the Kyoto Protocol is and what mechanisms will continue to function after 2012. This short review highlights Land Use and Land Use Change and Forestry (LULUCF) due to the critical importance this sector plays in policies and the expansion of future carbon markets.

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What is the Kyoto Protocol?

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The 1992 Earth Summit in Rio de Janeiro, Brazil created international bodies on climate change and biodiversity. Within a neoliberal economic system that coupled economic growth with †sustainabilityâ€[™], these entities became the UN Framework Convention on Climate Change (UNFCCC) and the UN Convention on Biological Diversity (CBD) which officially began in 1994. The UNFCCC adopted the Kyoto Protocol at the third Conference of the Parties (COP) in 1997, which entered into force in February 2005. The Kyoto Protocol set the target of reducing emissions by a minimum of 5.2 percent below 1990 greenhouse gas levels within a five-year timeframe (2008-2012).

Emissions trading, the main mechanism adopted for achieving this target, was introduced by the US in response to heavy corporate lobbying during negotiations in the 1990s but later the Bush administration pulled out of the agreement. The US has since never ratified the Kyoto Protocol. Emissions trading was set up with a combination of cap and trade and offset schemes. The arrangement partitions the atmosphere and institutes the privitisation of emissions through buying and selling of †permits to pollute' just as any other international commodity.

What are rights to pollute and how can they be traded?

Due to historical responsibilities of emissions from Northern countries recognized in the †common but differentiated responsibilitiesâ€[™] principle of the UNFCCC, under the Kyoto Protocol the †pollutersâ€[™] are industrialised countries (†Annex lâ€[™], referring to a list of 37 such countries under the UNFCCC) that have agreed to targets for reducing their greenhouse gas emissions in a pre-defined timeframe, called a †commitment periodâ€[™]. Countries from the Global South do not have a reduction target in this first commitment of the Kyoto Protocol although are encouraged to take on voluntary mitigation actions. Under the cap and trade

mechanism, polluters are given a number of †emissions permits' called Assigned Amount Units (AAUs). The volume of permits is equivalent to their 1990 levels of emissions plus/minus their reduction commitment. These permits are measured in †tons of carbon dioxide equivalent' gas (tCO2e). Carbon dioxide (CO2) is one of the main greenhouse gases, although the Protocol covers six gases in total (CO2, CH4, N2O, HFCs, PFCs and SF6). The AAUs are permits to pollute up to the overall limits set by the commitment agreed in Kyoto.

There are several ways in which the industrialised countries can use these permits:

1. If a polluting country has a surplus of permits it can sell them to another polluting country or keep them for a future commitment period.

2. If a polluting country uses up all of its allowances, but pollutes more, it must buy permits from another polluting country that has not used up its full allowance.

3. The country (or companies within that country) can invest in "emissions-saving― projects in other countries – mostly in the South – and in this way â€~produce' extra permits that can then be sold, banked, or used to make up the deficit in its original allowance.

The first two options above occur in countries which can redistribute their targets among themselves (industrialised countries), either through direct re-allocations (called †burden sharing') or by means of cap and trade carbon markets. The largest such scheme is the European Union Emissions Trading Scheme (EU ETS), which covers almost half of the greenhouse gas emissions in 30 of the 37 Annex I countries.

The third option above is referred to as offsetting. For industrialised countries with targets that cannot be met, they can buy offset credits to †compensate' their pollution by investing in †emission-saving' projects. Projects that are implemented in the global South (countries with no reduction targets) can be registered under the †Clean Development Mechanism' (CDM). Projects which take place in countries with reduction targets come under †Joint Implementation' (JI), these are mostly implemented in Eastern Europe.

These offset credits or permits, which are treated as equivalent to and can be exchanged with AAUs, include: Emission Reduction Units (ERUs) generated from the Joint Implementation mechanism; Certified Emission Reductions (CERs) generated from the Clean Development Mechanism; and Removal Units (RMUs) generated from land use, land use change and forestry offset activities. The latter apply special rules since they cannot be transferred to the next commitment period and are not accepted under the EU Emissions Trading Scheme. Countries could then use RMUs for their own compliance and hand out other types of credits in exchange.

CDM and JI

projects can take a variety of forms: hydroelectric dams; basic upgrading to polluting factories (mostly concerning potent greenhouse gases other than CO2); methane capture from landfills; renewable energy projects such as solar or wind power; enhancement to existing energy generation; biomass and agrofuel projects; carbon sequestration from monoculture tree plantations and so on.

The amount of credits earned by each project is calculated as the difference between the level of emissions without the project and the level of emissions with the implementation of the project. However, all offset projects require the proof of †additionalityâ€TM, which is to say that all projects must ensure †real, measurable and verifiable emission reductions that are additional to what would have occurred without the projectâ€TM. With countless †without-projectâ€TM scenarios, a corporate polluter can design huge estimates of the emissions that would have been produced without the companyâ€TM soffset project. The bigger the hypothetical emissions, the bigger the reductions that can be claimed and the larger the volume of credits that can be sold. Because it is impossible to verify how many emissions would have been generated without the project, the amount of credits generated through †additionalityâ€TM is largely exaggerated.

Land Use and Land-Use Change and Forestry (LULUCF)

The Kyoto Protocol maps out LULUCF based on the concept that trees absorb carbon dioxide and therefore can assist in mitigating climate change while at the same time land use and land use change releases carbon dioxide and exacerbates climate change. The task of establishing specific rules was mandated to the Subsidiary Body for Scientific and Technological Advice (SBSTA) which were accepted at COP 7 in Marrakech in 2001, despite important uncertainties and concerns over liabilities.

Nonetheless, the Kyoto Protocol identifies separate rules for LULUCF activities for several reasons, including:

LULUCF activities can remove carbon dioxide from the atmosphere (called in the jargon removals by sinks) – however this removal can be also reversed and result in emissions, i.e. by fires and fast-growing monocultures.

The estimation of LULUCF emissions and removals is way more uncertain than those of fossil fuels since they rely mainly on biological variables.

Forestry emissions and removals may still occur many years after a project or intervention happens, while emissions from fossil fuels occur immediately when the fuel is burnt.

The main features to the forest sector in Annex I countries (polluter countries) of the LULUCF agreements are reflected in two articles of the Kyoto Protocol:

Article 3.3, which requests these countries to take into account the emissions and removals (carbon stock changes) of direct human-induced

afforestation (new forest areas), reforestation and deforestation since 1990. Accounting for these activities is mandatory and must be considered in the national greenhouse gas balances.

Article 3.4 states that polluter countries may choose to account, in order to meet their commitments, carbon stock changes (emissions and removals) due to forest management, cropland management, grazing land management or re-vegetation. If a country elects to account for any of these activities, it must account on all lands subject to these activity. Yet, including any of these activities under Article 3.4 is voluntary. The main concern is that countries do not want to be accountable for natural disturbances or other emissions over which they have no control.

During the COP 9 in Milan in 2003, detailed rules on sinks under the Clean Development Mechanism (CDM) were included, confining these to afforestation and reforestation (A/R) activities and recognizing their temporary nature. These offsets are restricted to areas that were not forested in 1990 and are supposed to be also †additional' to what would have happened without the project. A/R credits can be used by polluting countries for up to one per cent of its base year emissions times five. This was a major step back in the struggle against the expansion of large-scale monoculture plantations in the South which entail heavy social, economic and environmental impacts.

The temporary nature of these A/R CDM projects is another important difference. Polluting countries can choose between temporary (tCERs) and long-term (ICERs) credits. The EU ETS excluded the use of any of these credits in the first commitment period of the Protocol, which ends in 2012.

During COP 11 in Montreal in 2005 a new process was initiated to discuss ways to further reduce emissions from deforestation (RED) in Southern countries and later on, added $\hat{a} \in \mathbb{C}$ degradation $\hat{a} \in \mathbb{T}^{M}$ (the second D). Afterwards, during the negotiations in Bali in 2007, the UNFCCC repackaged the concept of forestry offsets and adopted REDD+ which resides in both the AWG-LCA and the AWG-KP tracks (Ad Hoc Working Groups on Long-Term Cooperative Action and on the Kyoto Protocol). By adding an extra + (or $\hat{a} \in \mathbb{T}^{M}$) the Bali Action Plan includes the role of $\hat{A} \in \mathbb{C}$ conservation $\hat{a} \in \mathbb{T}^{M}$, $\hat{a} \in \mathbb{C}$ sustainable management of forests $\hat{a} \in \mathbb{T}^{M}$ and $\hat{a} \in \mathbb{C}^{M}$ for REDD+ projects.

The Intergovernmental Panel on Climate Change (IPCC) inventory guidelines of 2006 merged the categories of Agriculture, Forestry and Other Land Use (AFOLU) in one sector, adding the agriculture to LULUCF. Agriculture as a whole though is being addressed under a separate stream of negotiations referred to as the Ad Hoc Working Group on Long-term Cooperative Action (or AWG-LCA). A compromise text from COP 17 in Durban 2011 requests the Scientific and Technological Advisory Body of the UNFCCC to consider issues related to agriculture at its next session in May 2012, in other words, agriculture is now on the official UNFCCC agenda.

In this regard, REDD+, AFOLU and LULUCF are connected in the

negotiations because one outcome will affect another. Along with the emissions trading markets, these three issues will undoubtedly continue playing a substantial part of the post-2012 negotiations regardless if and how Kyoto is resurrected. In fact, they are set up to be build-in to the carbon trading markets.

As Christiana Figueres, Executive Secretary to the UNFCCC, announced during Forest Day on 4th December 2011, $\hat{a} \in \mathfrak{E}$ The governments of the world are writing a global business plan for the planet . . . and REDD+ is its spiritual core. $\hat{a} \in \bullet$

"Kyoto is dead, long live Kyoto―

The shaky future of Kyoto was a raging debate in Durban at the UNFCCC COP17 in December 2011 which took the form of whether or not to abandon the Kyoto Protocol after its first commitment period ends in 2012. Most industrialised countries called for the end of Kyoto, which is tied to the UNFCCC convention and thus to the †common but differentiated responsibilitiesâ€TM principle, and pushed for a system of carbon trading without a joint emission reduction target but with voluntary commitments. After days of haggling over †to Kyoto or not to Kyotoâ€TM the countries agreed upon stalling the process until 2015 and re-implementing a new system †which remains to be seen †set to begin in 2020. This debate has generally manifested itself in the form of which countries should have to comply to targets and technical debates about the †legal formâ€TM taken by a new global climate treaty.

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Although Kyoto was set up to field emissions trading markets, by the end of 2012 the time will come where only the emissions trading markets will continue.

Pollution trading is not a solution to climate change!

The Kyoto Protocol built the architecture of global carbon trading, an elaborate means of dangerously delaying the changes that need to happen in the transition to a global, low-carbon economy. These changes are simple enough in theory, namely, reducing our energy use, switching away from fossil fuels and towards justice-based models of renewable energy production and consumption. In practice, these changes constitute a global challenge that involves social and political change, and encompasses a wide variety of issues including land and forest peoples rights, colonial practices and exploitation, free trade economies, South-North relations, among others.

De-colonizing and therefore re-structuring these South-North relationships and addressing historical ecological debt are critical. The South is not a (carbon) dump for the North and should not be viewed as such. The failure of the Kyoto Protocol to deal adequately with climate change is also representative of wider issues of undemocratic decision-making and symptomatic of the injustices that permeate an economic and political system that benefits few while marginalizing and dispossessing the majority of the population that have had the least responsibility of the climate problem. Leaving the †solution' to corporations has proven to be fundamentally unjust. In this way, seeing climate change through the lens of climate justice can be a window into addressing profound social transformations.

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The preamble of the UNFCCC acknowledges "that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their common but differentiated responsibilities and respective capabilities and their social and economic conditions". Article 3(1) of the Convention adds the leadership role that developed countries should take, and after reaffirming the principle of common but differentiated responsibility, it states that "the developed country Parties should take the lead in combating climate change and the adverse effects thereof."

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