

## **International climate change law**

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*This is the first in a series of articles dealing with the law relating to climate change and, more particularly, to the legalities of implementing Clean Development Mechanism (CDM) projects in South Africa. This initial piece describes the international climate change regime and provides a brief perspective on CDM project implementation. Later articles will explore questions of authorisation, contracting and environmental impact assessment in the context of South African CDM projects.*

The international community's response to the problem of global warming dates from the first report of the Intergovernmental Panel on Climate Change (IPCC), which concluded that the issue was already serious enough, by the late 1980s, for the United Nations to initiate negotiations on a treaty seeking to deal with the situation. The United Nations Framework Convention on Climate Change (FCCC) was opened for signature at the Earth Summit in Rio (1992) and has, as its objective, the stabilisation of atmospheric concentrations of greenhouse gas at a level that would prevent dangerous human-induced interference with the climate system. A key element is the categorisation of country Parties, the most important division being that between Annex I countries, i.e., those listed in Annex I to the FCCC (mainly the developed world), and Non-Annex countries, i.e., those that do not appear on Annex I (mainly the developing world). Under the FCCC the developed world has shouldered a greater burden of responsibility, in recognition of the fact that greenhouse gas emissions associated with its development are primarily responsible for the phenomenon. At the first FCCC Conference of the Parties states noted that commitments, which are non-legally binding, were insufficient. A further set of negotiations resulted in the Kyoto Protocol (1997) which includes greenhouse gas emissions limitation and reduction targets, that commit the developed world to reducing its combined greenhouse gas emissions by at least 5%, compared to 1990 levels, during a "first commitment period" between 2008 and 2012.

Kyoto has some serious limitations, most obviously the refusal of two of the world's largest emitters of greenhouse gas, the United States and Australia, to join the "Kyoto Club". However, the international legal regime established by the FCCC and Kyoto Protocol remains the only universal initiative dealing with climate change. The Asia-Pacific Pact, agreed between six countries (the US, Australia, China, South Korea, China and Japan), which does not include emissions reduction targets and relies on technical innovation as a means of tackling the

problem, initially regarded as an attempt to undermine the FCCC and Kyoto, is now seen as an important, regional complement to the UN regime.

While Kyoto requires developed countries to take significant, domestic action to reduce their emissions, the agreement also introduces three so-called "flexible mechanisms" designed to assist these countries in complying with "part" of their commitments. The most important of these, for South Africa, is the Clean Development Mechanism (CDM) because developing countries may participate in the CDM and derive the associated environmental and financial benefits. The CDM permits developed countries to invest in the establishment of projects, located in developing countries, which both assist the developing country in achieving sustainable development and reduce greenhouse gas emissions. For its contribution the investor earns "Certified Emissions Reductions" (CERs) which can be used as offsets against a Kyoto commitment. CDM projects are implemented according to a lengthy set of rules prescribed by the FCCC, including the requirement that such a project should not be business-as-usual. This quality of a CDM project is termed "additionality". The easiest way to explain additionality is to describe what it is not. Thus, if a particular emissions reducing activity is already part of operations at the emitting installation proposed as the site for a CDM project, e.g., a power station, then the activity would have some difficulty qualifying as a CDM project activity.

Measuring the relative effectiveness of projects that reduce emissions of different greenhouse gases (Kyoto applies to six), relies on the "global warming potential" of the gas, i.e., its contribution to global warming over a specified time horizon. The IPCC has assigned each Kyoto gas a separate "global warming potential" relative to that of carbon dioxide, which is regarded as the most potent greenhouse gas. For example, carbon dioxide's global warming potential is one, while methane's is twenty-three. This means that a CDM project which reduces methane emissions, e.g., through the active capture of landfill gas and its combustion to generate electricity, is regarded as twenty-three times more effective in the mitigation of climate change than a project that reduces carbon dioxide emissions. One CER represents the reduction in emissions of one tonne of "carbon dioxide equivalent" (tCO<sub>2</sub>e).

CERs are commodities and a brisk trade, within an increasingly international "carbon market", has developed in these and other so-called "carbon credits". The financing of such projects, e.g., CDM project investment, is termed "carbon finance", which is something of a misnomer because, self-evidently, carbon credit buyers are not purchasing carbon. Rather, they are seeking to obtain a commodity representing a reduction in the emission of one tonne of greenhouse gas. Carbon

credits will never have physical form but will simply exist in an electronic database as a unique string of numbers revealing the origin and vintage of the particular emissions reduction.

Indications are that the future of the CDM in South Africa is bright. By October 2006 twenty proposed CDM projects had been submitted to the relevant national authority for initial review, and twelve for approval. Current projects in the pipeline have the potential to reduce greenhouse gas emissions by approximately four million tCO<sub>2</sub>e during the first Kyoto commitment period. A recent meeting of the CDM Executive Board registered two South African project activities as CDM projects, bringing the national total to four, namely the the Kuyasa; Waverley; Petro SA; and Lawley projects. Finally, it is anticipated that a component of the eThekweni Metropolitan Municipality's landfill gas to power generation project will be registered as a CDM project activity during November 2006

*IMBEWU Enviro-Legal Specialists ([www.imbewu.co.za](http://www.imbewu.co.za)) is a specialist environmental legal consultancy employing five lawyers, each specialising in an aspect of South African environmental, climate change or health & safety law. Andrew Gilder ([andrew@imbewu.co.za](mailto:andrew@imbewu.co.za)) drives IMBEWU's climate change and CDM legal advisory practice which counts among its clients: state and provincial governments, CDM project developers and investors and CER purchasers. This article should not be regarded a comprehensive discussion of the topics addressed, nor should this article be regarded as legal advice.*