Municipalities and clean development projects

The emission of greenhouse gases into the atmosphere is a major factor in climate change. The most recent scientific evidence shows that global warming is happening at an alarming and an increasing rate.

The Kyoto Protocol is a treaty created to combat global climate change. The treaty established a 'baseline' of total greenhouse gas emissions to which, or below which, each developed country must reduce their emissions in a fixed timeframe. Greenhouse gases include carbon dioxide, methane and nitrous oxide, among others. The Protocol's principal reduction mechanism requires, first, that greenhouse gas emitters (for example, factories) reduce their emissions to an agreed level. Those whose emissions are lower than they are permitted are allowed to sell the difference between the amount they are permitted to emit and the amount that they actually emit. Buyers include those emitters who have not managed to reduce their emissions to the required levels. Since they can't meet their targets themselves, buying the difference from someone else gives them an alternative way to meet those targets. By establishing a system that gives financial value to emissions

reductions and creates penalties for failing to meet targets, an emissions market has been created.

The Kyoto Protocol distinguishes between developed and developing countries. Developed countries have a positive duty to reduce emissions to agreed levels. Developing countries, including South Africa, do not have an immediate obligation to reduce carbon emissions. However, developing countries are nonetheless able to participate in, and earn revenue from, the growing emissions market. The Kyoto Protocol allows developed countries to meet their reduction targets by buying carbon credits (known as Certified Emission Reductions, or CERs) from sellers who have developed emissions reduction projects (known as a Clean Development Mechanism, or CDM, projects) in developing countries.

The CDM market is growing. In 2005 there were five registered CDM projects but now, nearing the end of 2006, there are more than 250. Only a handful of the registered projects are South African. India, China and countries in South America – notably Brazil – account for the majority. An investor's guide focusing on the South African market for emissions finance published earlier this year argued that,

although on paper South Africa has the capacity to be a major recipient of emissions finance, it lags far behind other developing countries in the development of such projects.

How does this affect South African municipalities?

The most direct way is in relation to municipal landfills or solid waste disposal sites. Many South African municipalities own and often operate landfill sites within their areas of jurisdiction ('refuse removal, refuse dumps and solid waste disposal' is a Schedule 5B functional area of local government competence). Landfill sites produce landfill gas, which consists mostly of carbon dioxide and methane and is a greenhouse gas with a high global warming potential. A reduction in landfill gas emissions is therefore also a reduction in greenhouse gas emissions.

The Kyoto Protocol – and particularly the creation of the carbon market – now gives municipalities a commercial incentive to reduce landfill gas at their landfill sites.

Municipalities can develop CDM-registered projects in which they extract and use, or flare this gas from their landfill sites. They may then sell the CERs generated by

these projects to buyers (including governments, financial institutions and investment funds) in the European Union, Japan, Canada and, more recently, the United States. Some South African municipalities are already far down the line in the process (most notably Ethekwini, through its waste utility DSW, and Ekurhuleni).

How does a municipality go about developing a CDM project? While landfill sites create excellent opportunities for municipalities to develop CDM projects, the regulatory regime governing their development by municipalities is complex. Complying with the local government legislation – including the procedural requirements of, and the regulations published under, the MFMA – and with the Kyoto Protocol rules takes time. In the next issue of the *Bulletin*, we will set out in broad terms the major steps for a municipality to develop a CDM project.



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