The Importance of Flexible Bundling Rules for Small CDM Projects

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The drafters of the Marrakesh Accords were fully convinced that small-size projects should not have to follow the same regulatory procedures as large-size projects because they cannot absorb high transaction costs and because it is particularly important to support small technologies, poor communities and smaller countries. One important way of easing the regulatory burden on small-scale projects is to make it possible to bundle several project activities and to process these as one project rather than as several individual projects. However, the rules that are currently under consideration by the CDM EB run counter to the intention of simplifying the rules and procedures for small-scale manifested in the Marrakesh Accords of 2001.

The EB to Restrict the Scope for Bundling

The rules governing bundling of small size CDM activities are – unfortunately – not yet clear. Moreover, the EB seems actually to be in the process of further restricting the scope for bundling. At its most recent meeting, which was held in July 2005, the CDM preliminarily agreed on the following rules1:

“Project activities wishing to be bundled shall indicate as of the request for registration that they will be bundled”;2
“Once a project activity becomes part of a bundle it shall not be de-bundled”;3
“Composition of bundles shall not change over time (i.e. the submission of projects to be used in a bundle shall be made at the same time)”;3 and
All project activities in the bundle shall have the same crediting period.

Moreover, although the EB did not take an explicit decision, it seems quite clear that the total size of a bundle of project activities cannot exceed the limits set for small-scale CDM projects. If formally agreed, this would mean that the size of a bundle should comply with the following rules:

(i) Renewable energy project activities with a maximum output capacity equivalent of up to 15 megawatts (or an appropriate equivalent);
(ii) Energy efficiency improvement project activities which reduce energy consumption, on the supply and/or demand side, by up to the equivalent of 15 gigawatt/hours per year;
(iii) Other project activities that both reduce anthropogenic emissions by sources and directly emit less than 15 kilotonnes of carbon dioxide equivalent annually”4.

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1 These rules build upon recommendations from the recent second meeting of the small-scale working group (16-17 May, 2005). Please confer report at http://cdm.unfccc.int/panels/ssc_wg/sscwg_meetings/SSCWG02_rep_ext.pdf
2 I.e., project activities that are bundled at the registration point should remain part of the bundle.
3 I.e., project activities cannot be substituted for one another later on.
Implications of Inflexible Bundling Rules

Pico- and small-size mitigation technologies that are widely distributed across an area or within a country can only become viable as a small-scale CDM project if it possible to aggregate many such technology units within one single bundle. An intermediary agent will be required in order to implement such a projects bundle, including to carry out marketing to potential participants as well contractual and monitoring-related work with respect to the individual participants or units in a bundle. To make the project itself viable, and to make it worthwhile for the intermediary, it is important that it is possible to add new participants over time.

The case of the Nepal Biogas Project using a small-size technology illustrates well the implications of the bundling rules currently under consideration by the EB. This project is presently under preparation as a small-scale CDM bundle by the project sponsor and the World Bank.

An Example: The Nepal Biogas Project

The Biogas Sector Partnership Nepal (BSP-Nepal) aims to sell biogas digesters, or biogas plants, to households located primarily in the rural areas of Nepal. The project activity will reduce greenhouse gas emissions by displacing conventionally used fuel sources for cooking, such as fuel wood and kerosene, and by introducing a proper disposal of animal waste. The change in fuel use will also reduce CH4 and N2O emissions.

The Nepal Biogas Project is an umbrella program aiming to install a total of 200,000 small biogas digesters in Nepal. The biogas plants under the overall umbrella program will be sold across Nepal. The average capacity of each plant is only 2.3 kilowatt (kW).

At the local level, the BSP-Nepal program has multiple social benefits. A major household benefit is the reduction in time and energy spent by women and children to collect firewood for cooking. The project will attach latrines to biogas plants providing better sanitation to rural households. Potential employment will add more than 15,000 people-years for skilled people in the construction, maintenance, marketing, and financing of biogas plants. The use of biogas means negligible smoke, hence better family health. Moreover, the residual biological slurry from the biogas plants can be used as superior organic fertilizers to enhance agricultural yields.

Inflexible bundling rules for small-size technologies would lead to a significant increase in the preparation and implementation cost of the project, and would unnecessarily increase the effort required by government parties to the project, who would need to approve each single project. In order to stay below the 15 MW threshold for small biogas plants, it would be necessary to split the project in approximately 31 small-scale CDM projects – each project would bundle around 6,500 biogas plants. Assuming a validation cost of US$ 5,000, and an annual certification cost of US$ 5,000 per project, this would mean an increase in validation and certification costs alone from around US$ 110,000 to around US$ 3,400,000. The cost of registration would also increase to US$ 930,000, given that it would be necessary to pay a registration fee of US$ 30,000 for each project. The total cost of validation, registration and certification itself would be US$ 4,330,000 – or an increase of around US$ 4,200,000!
The volume of emission reductions that could be claimed from the project would also be reduced if all biogas plants in a bundle would have the same crediting period. The loss of emission reductions would depend upon the rate at which it would be possible to enroll new biogas plant – in other words, on how long it would take to identify 6,500 new biogas plants that could be put together in a bundle. This loss of ERs could be quite significant in itself.

Conclusions

World Bank experience with CDM project development shows that projects using pico-scale measures/technologies cannot absorb the high costs of project development, validation, monitoring, and verification required even under the simplified small-scale CDM projects rules. Only by creating flexible rules for aggregating or bundling a significant number of units could these measures/technologies become commercially viable as CDM projects. It is therefore essential that the simplified rules governing small-size projects will facilitate bundling small CDM projects.

The project model illustrated by the Nepal Biogas Project would not be possible under the emerging bundling rules. These rules will raise the costs of small-scale projects to a level where such projects might become non-viable and infeasible. The rules will also increase the burden on the involved government agencies in the host country as well as at the international level (in terms of registration, issuance of ERs, etc.). These rules can clearly not be justified by pointing to need for control over potentially large amounts of non-additional emission reductions. Moreover, the technologies in question are environment-friendly and benefit poor communities and smaller countries in the developing world.