

LEADING THE WAY!

HOW THE KYOTO PROTOCOL'S CLEAN DEVELOPMENT MECHANISM CAN PROMOTE SUSTAINABLE DEVELOPMENT IN THE SOUTH

1. INTRODUCTION

The Clean Development Mechanism has been created within the Kyoto Protocol to the United Nations Framework Convention on Climate Change. Together with emissions trading and joint implementation, it is one of the Protocol's "flexibility mechanisms", intended to lower the cost to industrialized countries of complying with commitments to limit and reduce emissions of global warming gases.

The CDM was also established as a means of involving developing countries in the effort to combat climate change and to ensure that these efforts contribute to global sustainable development. Emissions reductions achieved via the CDM must provide real, measurable and long-term benefits in terms of mitigating climate change and be additional to those that would have occurred if a given project had not taken place.

The starting point for developing the Clean Development Mechanism has to be an integrated vision of how the mechanism will be used to further climate protection and sustainable development goals.

WWF considers that environmental problems ranging from local and regional air and water pollution through to global warming illustrate that the current development model based on centralised power production and wasteful use of fossil fuels is unsustainable. Those countries without a fully-developed energy infrastructure have a unique opportunity to 'leapfrog' unsustainable energy technologies and invest instead in a variety of commercially-available technologies that are cleaner and provide better quality services.

WWF's vision is of the CDM acting as a catalyst for this kind of development. To achieve this, the CDM must be focused exclusively on renewable energy sources and demand-side energy efficiency technologies.



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1. DEVELOPMENT DIVIDENDS

Focusing the CDM in this way will pay development dividends in a number of areas:

1.1 Level the international technology playing field and increase technology choices available to developing countries.

WWF believes that the Clean Development Mechanism (CDM) should be used to help kick-start the route to cleaner energy technologies. CDM rules should be designed accordingly. Renewables and demand-side focused approaches often remain marginalized in the development of energy markets in developing countries. One of the main reasons for this is that current subsidies, incentives and export support mechanisms are focused on fossil fuels, large hydro and nuclear technologies.

This situation is then reinforced by the well-documented economic, political and institutional barriers that block consumer access to clean energy technologies in developing countries. Focusing the CDM on disadvantaged clean technologies will begin levelling this playing field, rather than distorting it further. This will also increase the range of technologies available to energy planners in developing countries.

1.2 Improve the provision of energy services

As well as providing important contributions to national grids, many renewable energy technologies do not require the same high level of infrastructure as traditional energy sources and are thus more appropriate in regions with remote and scattered populations. Improving energy efficiency allows more consumers to be served from existing energy sources and reduces investment in new and costly capital stock for energy supply.

Increasing renewables and improving energy efficiency lessens dependence on fuel imports, and reduces the vulnerability of the national energy system.

1.3. Reduce local air and water pollution

Deploying renewables and energy efficiency technologies generally reduces emissions of conventional pollutants such as particulates, nitrogen oxides, sulphur dioxide and contaminated wastewater which can have significant local health effects especially when concentrated in urban areas.

These pollution impacts already generate costs reaching billions of dollars for developing countries in terms of reduced production, increased costs of health care and the loss of natural resources – this slows the pace of development.

1.4. Trigger real technological change

The CDM will represent a new source of finance for sustainable development, particularly in the energy sector. Calculations suggest the CDM could yield between US\$5 and US\$17 billion per year by 2012. World Bank figures, however, show that this is only equivalent to between 1.5 and 5 per cent of total resource flows to developing countries in 1997. It is clear that the CDM cannot change the world on its own. Hence, the CDM must be used selectively as a catalyst for unlocking emerging markets for sunrise technologies and for triggering real technology change.

A well-targeted CDM could kick-start sustainable energy markets in some countries, providing an important stimulus to new industries in both the North and South. By generating economies of scale, this could significantly expand opportunities for sustainable energy globally. In addition it is clear that if sustainable development is to be a realistic and credible goal the CDM will need to be accompanied by a 'greening' of other financial flows, such as the loans and policies of the multilateral development institutions, national export credit agencies and the private sector.

1.5. Enhance developing country access to lucrative markets for sustainable energy investments and exports.

Markets for clean energy technologies are expected to grow rapidly over the next two decades. Global markets for renewable energy alone have been projected by the World Energy Assessment of UNEP and UNDP at between \$40 and \$78 billion per year by 2010. The UN Intergovernmental Panel on Climate Change (IPCC) has estimated world markets for energy efficient technologies at \$87 trillion over 30 years. These figures dwarf the funds likely to be available through the CDM.

The World Energy Council has estimated that by 2020, 50-60 per cent of renewable energy capacity will be located in today's less-developed countries. Industrialised nations are gearing up to exploit this commercial opportunity: the U.S. recently concluded that doubling exports of clean energy technology in five years would create as much as \$5 billion in new export revenues for U.S. companies and generate as many as 100,000 new U.S. jobs.

The CDM gives developing countries the opportunity to develop domestic markets in renewable energy and energy-efficient technologies, supported by their own domestic industries. Those countries that establish a home-grown technology base will be in a strong position to assume the role of exporters in a market of gargantuan proportions.

1.6 Promote equitable distribution of CDM projects

Concerns have been expressed about a possibly unequal regional distribution of CDM projects, with larger and wealthier countries with abundant opportunities for investment in upgrading energy production and energy-intensive industry and/or forestry activities being favoured over others. Many of the technologies and processes involved in harnessing renewable energy resources and increasing demand-side energy efficiency do

not require economies of scale at the project level.

As a result they are more likely to be viable in a greater number of countries and permit a wider distribution of projects both within and among Parties. Relaxing the eligibility criteria would be likely to lead to CDM funds being captured by a few large projects, principally in larger countries, and with lower secondary benefits. Indeed, smaller projects will often have considerable advantages in terms of employment creation and income generation over larger and more concentrated projects.

1.7 Pave the way for future emissions limitations and reductions

Although developing countries that are Parties to the UN Climate Convention are not currently required to limit their emissions of global warming gases, at some stage all Parties are likely to have to reduce the carbon intensity of their energy systems. By laying the foundations now through steering CDM financing towards sustainable energy technologies, the costs of these future efforts can be significantly reduced.

2. ACTIVATING THE VISION

The following seven rules and modalities would create a framework allowing WWF's vision of the CDM to become reality.

2.1 Define clear technological priorities

Definition of a priority shortlist of cutting-edge renewable and demand-side energy efficiency technologies with access to a preferential set of CDM rules.

WWF believes that the prioritised technologies should meet 2 basic criteria:

- They should be inherently very low emitters of global warming gases – virtually “guaranteed additional”.
- They should be small project technologies.

Prioritised Technology Shortlist

Renewable energy sources

- Wind power
- Wind pumps
- Biogas
- Geothermal heat and power
- Biomass gasification of forest products and agricultural residues
- Small hydro under 10 Megawatt (MW)
- Photovoltaic (PV) solar electric systems
- Solar thermal heat
- Solar thermal electricity
- Fuel-efficient stoves
- Solar cookers
- Wave power
- Renewable fuel cells

Demand-side technologies

- Energy-efficient domestic appliances (refrigerators, washing machines, lighting, air conditioners, etc)
- Energy-efficient industrial plant (e.g. iron & steel, cement, ammonia, pulp & paper, cogeneration, etc.)

2.2 Devise the rules of the CDM to promote technological solutions

The rules for the CDM can most effectively promote the priority technologies in two main ways:

- *Prompt start.* Given the lack of experience with the CDM, a successful start could be safeguarded by restricting all early projects to prioritised technologies until final rules are approved by the COP/MOP. This would simplify certification, allow experience to be gained without risking the Annex I target and would create a positive atmosphere for the CDM's continued development.
- *Baselines.* Priority technologies should have access to a simpler set of baseline rules, thereby minimising project feasibility assessment, reporting, monitoring and verification expenses.

This is essential, particularly if small projects are to be encouraged.

2.3 Environmental screening process

An environmental screening process, involving project eligibility criteria, must be applied to all projects. Its purpose would be to ensure sustainability in terms of long-run positive environmental impacts and the minimization of adverse risks. Additionally, projects should comply with the provisions of those international treaties to which either Party is a signatory.

2.4 Sparing use of flexibility mechanisms

A quantified cap, or limit, should be set on the use of the flexibility mechanisms by Annex B parties, in accordance with the terms "part of" and "supplemental" contained the Protocol. This will ensure that a reasonable price is maintained for carbon credits and that the cutting-edge renewables and demand-side energy efficiency technologies on the shortlist receive investment.

Enabling higher cost projects to be financed will also result in a greater share of CDM funds remaining in developing countries, thus increasing overall investment levels. WWF proposes that reliance on the three mechanisms should not account for more than 30% of a given Party's reduction commitment or 1% of their assigned amount in the case of Parties with growth caps.

2.5 Supporting adaptation measure

The "share of the proceeds" to be used to cover administrative expenses and assist developing countries to reduce their vulnerability to the adverse effects of climate change to meet the costs of adaptation should be extended to the two other mechanisms.

This will contribute to a greater number of projects being able to attract funding through the CDM, because they will become more competitive relative to emissions trading and joint implementation, increase the cost of competing JI and ET investments and ensure that more funds are available for adaptation expenditures in the South.

2.6 ODA additionality

Baseline assessment should also ensure that CDM funding is additional to all Overseas Development Assistance, so that the CDM investment is not accompanied by reduced resource flows to developing countries from other sources.

2.7 Additional funds should be provided to strengthen CDM capacity in developing countries.

This will enable Parties to invest in those countries where technical and institutional capacity is weak and where investment opportunities are less obvious. This capacity building might include the definition of priority areas, direct support for the formulation of project ideas and initial project design and help with establishing monitoring and verification systems.

3. CONCLUSION

WWF urges Parties to adopt these rules for the Clean Development Mechanism during the Sixth Conference of the Parties to the UN Climate Convention (COP6), in The Hague in November 2000.

Unless the CDM is focused on promoting sustainable energy technologies, a "race to the bottom" will ensue in which rules for additionality and environmental screening could be relaxed, the funds received by developing countries could be reduced and sustainable development opportunities could be missed.

In this scenario, far from constituting an innovative new source of funding to developing countries, the CDM would provide benefits almost exclusively to the industrialised world. Developing countries would then suffer the impacts of climate change without the promise of increased funds for adaptation or for technology development, and they would face higher costs for compliance in the future.

WWF's proposals offer an alternative that is beneficial for the world's climate and for the sound development of industrialising nations.