



Why REDD Matters

Scientific evidence indicates that avoiding dangerous interference with the climate system will require large-scale reductions in greenhouse gas (GHG) emissions from both developed and major developing countries as soon as possible. The best available scientific evidence indicates that the risk of such dangerous, global-scale impacts would rise substantially if warming exceeds 2°C above the pre-industrial level (3.6°F above pre-industrial, or 2.2°F above today). To avoid this risk, global GHG emissions must be reduced by more than 50 percent below 1990 levels by 2050. Insufficient action will guarantee the need for higher and costlier emissions cutbacks in the future, and even greater negative climatic impacts.

Deforestation and forest degradation contribute at least 18% of global greenhouse gas emissions. Without addressing these emissions the world will not be able to limit warming to below 2°C. Reducing emissions from tropical forests offers the potential to mitigate a major source of global emissions at relatively low estimated costs with readily-available technologies. It also offers critical co-benefits in biodiversity conservation, maintenance of ecosystem health and poverty alleviation. Some key REDD benefits include:

- Estimated cost savings from REDD could buy deeper emissions cuts than could be achieved with the same global expenditure without REDD.
- Important co-benefits such as conservation of forest ecosystems on which human societies depend for clean water, food, fiber, crop pollination and other ecosystem services, for the continuation of traditional cultures and livelihoods and protection of the Earth's irreplaceable biodiversity.
- Provision of a new source of sustainable, predictable, and potentially pro-poor revenue to developing countries.
- Offers the potential of revenue to indigenous peoples and other forest dependent communities to support their continued stewardship of forest ecosystems and their services.

REDD is an immediate mitigation option and a critical element of climate change stabilization efforts long-term. In the absence of REDD, deforestation will likely continue or increase. At current tropical deforestation rates, another 312 to 477 billion tons of CO₂ will be emitted over the next hundred years (Houghton 2005¹) if no action is taken. This would increase the atmospheric concentration of CO₂ by nearly 130 parts per million, further heightening the risk of catastrophic climate impacts.

¹ Houghton, R.A. 2005. Tropical deforestation as a source of greenhouse gas emissions. Pp. 13-21 in P. Moutinho and S. Schwartzman (Eds.) *Tropical Deforestation and Climate Change*. Instituto da Pesquisa Ambiental da Amazonia, Belem, Brazil.

The emissions reduction potential and the economic impacts of REDD will depend on:

- The overall climate targets and policy architecture. Annex I countries can commit to more ambitious targets more affordably with REDD than without REDD. In response, more ambitious targets could drive increased provision of REDD by non-Annex I countries, and greater investment in sustainable development in these countries.
- The design and implementation of a REDD mechanism.
An equitable and efficient REDD mechanism would both reduce deforestation in countries where rates are currently high and forestall deforestation in countries where rates are currently low.
- The timely provision of adequate levels of funding from public and private sources for capacity building and market readiness in high forest countries.
- Rigorous standards for monitoring, reporting and verifying REDD activities that ensure reductions from REDD are real, additional, permanent and verifiable.

Under a broad range of assumptions, economic models indicate that REDD can make a significant contribution to cost-effectively stabilizing GHG concentrations at the required scale and speed required to avoid dangerous climate change (Stern Review², Eliasch Review³). REDD should therefore be an integral component of a Post-2012 agreement and sufficient and stable market and non-market sources of financing should be created to incentivize broad emissions reductions from REDD as soon as possible. In particular, there is an urgent need for capacity-building funds from developed countries to prepare developing countries to participate. Equitable, efficient and effective sources of funding will ensure real, long-term results that are needed.

Both the cost and timing of REDD are critically important to climate change mitigation and the overall health of the planet. Estimated cost savings from REDD could buy greater and faster reductions than could be achieved with the same global expenditure but without REDD. Early emissions reductions have particular value as a global insurance policy for maintaining climatic options in light of scientific uncertainty⁴. Because forests are rapidly disappearing, REDD is also a cost-effective opportunity for reducing emissions that is available for a limited time only.

The time-limited and irreversible nature of REDD — once deforestation occurs, it cannot be avoided in the future — adds a further value to protecting tropical forests now rather than foreclosing future options for lowering global emissions.

² Stern, N. 2007. *The Economics of Climate Change: The Stern Review*. Cambridge University Press, Cambridge, U.K.

³ Per the Eliasch Review, the cost of cutting global carbon emissions 50% below 1990 levels could be reduced by up to 50 per cent in 2030 and up to 40 per cent in 2050 if the forest sector is included in a global trading system. (Eliasch Review, *Climate Change: Financing Global Forests*, 2008, UK Office of Climate Change, www.occ.gov.uk)

⁴ Fisher, B., Nakicenovic, N., Alfsen, K., Corfee Morlot, J., de la Chesnaye, F., Hourcade, J-C., Jiang, K., Kainuma, M., La Rovere, E., Matysek, A. et al. 2007 Issues related to mitigation in the long term context. In: Metz, B., Davidson, O.R., Bosch, P.R., Dave, R. and Meyer, L.A. (eds.) *Climate Change 2007: Contribution of Working Group III to the Fourth Assessment Report of the Inter-governmental Panel on Climate Change*, Cambridge University Press, Cambridge, UK.