



Enhancing Mitigation Ambition by Promoting Paradigm Shifting Actions Through the Green Climate Fund

Submission to the Conference of the Parties on the Durban Platform Workplan on Enhancing Mitigation Ambition

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The Sierra Club welcomes the Durban Platform's expression of "grave concern" that existing 2020 mitigation pledges fall well short of a 2° Celsius emissions pathway, and the Parties' decision to launch a workplan "to explore options for a range of actions that can close the ambition gap with a view to ensuring the highest possible mitigation efforts by all Parties." (para. 7). We also appreciate the Parties' decision to solicit the views of observer organizations on how the ambition gap should be closed. (para. 8). In this submission, we offer our views on how the Green Climate Fund (GCF) can best maximize its mitigation impact and catalyze more aggressive mitigation actions in countries that seek its support.

In order to close the "significant gap" in the ambition of existing 2020 pledges, dramatic technological, market, and social advances are needed in the very near term. The governing instrument of the Green Climate Fund recognizes the need for such a holistic approach to the climate challenge, and provides that the GCF will "promote the paradigm shift towards low-emission and climate-resilient development pathways..." (para. 2). *Given the scale of the challenge and the unique mandate of the GCF, the objective of achieving this "paradigm shift" should be the central organizing principle of the GCF's mitigation work.* Accordingly, how the GCF defines and prioritizes actions to spur a "paradigm shift" will be a key determinant of its impact and effectiveness.

Under Article 11 of the Convention and the Durban decisions, the COP is empowered to provide guidance to the Board of the GCF on matters related to policies, programme priorities and eligibility criteria. As part of the Durban workplan on enhancing mitigation ambition, the Parties should develop guidance on the policies, programme priorities and eligibility criteria that the GCF should employ to catalyze the necessary paradigm shift.

To help advance this effort, this submission proposes a definition of "paradigm shift" that can guide GCF mitigation support, and that incorporates the agreed objectives of leveraging private-sector investment and engaging non-governmental stakeholders in decision-making and

implementation. It also outlines indicators and modalities that the GCF should use to ensure that its resources are used in the most impactful and cost-effective ways possible.

The need to prioritize “market transformation” to leverage private-sector investment

In order to advance the necessary paradigm shift, the GCF should focus its mitigation efforts on two categories of actions.

First and foremost, the GCF should concentrate on *market transformation*. It should support policy-level initiatives that will fundamentally transform patterns of consumption and investment by systematically reducing costs and risks and eliminating non-financial barriers¹ to the widespread deployment of efficiency improvements and low-carbon technologies. To fully effect a paradigm shift, such initiatives must be self-sustaining—they should catalyze large changes in the behavior of market participants that will persist after GCF support has ended.

The principal advantage of such market transformation initiatives is their capacity to redirect enormous flows of private-sector capital towards more climate-friendly investments. Such systemic approaches to “leveraging private-sector investment” have far greater potential to catalyze action at the necessary scale and duration than a “project-by-project” approach that focuses more narrowly on providing financial assistance to specific private-sector investments.

Second, economy-wide or sector-wide initiatives that may not permanently alter market incentives should also be considered paradigm shifting if they would rapidly and significantly lower the emissions trajectory of a country or region, or if they would demonstrate the feasibility of replicable and scalable low-carbon approaches. An investment in an urban mass transit system, for example, might meet this criterion. However, one-off investments in more efficient fossil fuel based energy sources would not meet this test.

Examples of paradigm shifting mitigation actions

First, the GCF should *prioritize improvements in end-use efficiency*. Catalyzing systemic improvements in end-use efficiency is the single most important strategy for facilitating the transition to sustainable, low-carbon energy systems at least cost and risk.² End-use efficiency improvements offer the greatest benefits and lowest opportunity costs—they can eliminate by far the most CO₂ emissions per year and per dollar spent. Indeed, many efficiency initiatives can reduce emissions almost immediately, with very attractive returns on investment and short pay-back periods,³ and while delivering substantial local benefits such as facilitating the deployment

¹ Numerous market failures have been identified that cause available and profitable alternatives to receive only a small fraction of the investment they would in an efficient market. See, Amory Lovins, 2005. *Energy End-Use Efficiency*. www.rmi.org.

² World Bank Independent Evaluation Group, (2008). Climate Change and the World Bank Group, Phase I: An Evaluation of World Bank Win-Win Energy Policy Reforms; UN Secretary General’s Advisory Group on Energy and Climate Change, 2010. *Energy for a Sustainable Future*. McKinsey & Company, 2009. *Pathways to a Low Carbon Economy: Version 2 of the Global Greenhouse Gas Abatement Cost Curve*; Amory Lovins, 2005. *Energy End-Use Efficiency*. www.rmi.org.

³ McKinsey & Company, *Pathways to a Low Carbon Economy. Version 2 of the Global Greenhouse Gas Abatement Cost Curve* (2009); Lovins, *Id.*

of distributed renewable energy and expanding and improving energy service delivery for the poor in both urban and rural settings.⁴

For example, the World Bank has found that its support for programs to distribute compact fluorescent light-bulbs (CFLs) has been its most successful energy sector investment, both in terms of cheaply eliminating CO₂ emissions and producing local economic benefits.⁵ Because the returns and co-benefits of end-use efficiency programs can be so dramatic, India's Planning Commission has recommended that energy efficiency options "should be the 'first resource' considered for fulfilling demand."⁶

Accordingly, the GCF should prioritize support for programs to catalyze large-scale improvements in end-use efficiency in uses such as lighting, buildings, vehicles, industrial systems, and consumer appliances. It should support policy initiatives to eliminate financial and non-financial barriers to these improvements and to enable efficiency programs to compete on an equal footing with expanded supply as a means to meet energy demand.⁷ And it should strive to become the global leader in supporting "efficiency power plants"—bundled sets of energy efficiency programs that can deliver the capacity equivalent of a large conventional power plant.⁸

There is already a wealth of experience from around the globe with other successful initiatives that would meet the proposed understanding of a "paradigm shift." Examples include:

1. **"Decoupling" of utility revenue from sales** to incentivize investment in cost-effective improvements in end-use efficiency and clean energy generation.⁹
2. **Feed-in tariffs, renewable portfolio standards, renewable energy auctions, production tax credits** and other results-oriented approaches to reduce costs, perceived risks and non-financial barriers to the deployment of near market low- and zero- carbon technologies and approaches, so that they can more quickly outcompete high-emitting technologies without ongoing public support.

⁴ Casillas, C. and Kammen, D. M. (2010) "The energy-poverty-climate nexus," *Science*, 330, 1182 – 1182.

⁵ World Bank Independent Evaluation Group, 2010. *Phase II: The Challenge of Low-Carbon Development: Climate Change and the World Bank Group*, at 81.

⁶ Planning Commission, 2011. *Interim Report of the Expert Group on Low-Carbon Strategies for Inclusive Growth*, at 31.

⁷ See, e.g., the World Bank's recent support for mass distribution of compact fluorescent light bulbs in Bangladesh. http://siteresources.worldbank.org/EXTENERGY2/Resources/ELIB_Presentation.pdf. Meg Gottstein, *Planning, Financing and Building Efficiency Power Plants: Regulatory Practices in California and Other States*, The Regulatory Assistance Project (2008), available at www.raponline.org; David Moskovits, *Meeting China's Energy Efficiency Goals Means China Needs to Start Building Efficiency Power Plants (EPP)*, The Regulatory Assistance Project (2005), available at www.raponline.org.

⁸ See, e.g., the World Bank's recent support for mass distribution of compact fluorescent light bulbs in Bangladesh. http://siteresources.worldbank.org/EXTENERGY2/Resources/ELIB_Presentation.pdf. Meg Gottstein, *Planning, Financing and Building Efficiency Power Plants: Regulatory Practices in California and Other States*, The Regulatory Assistance Project (2008), available at www.raponline.org; David Moskovits, *Meeting China's Energy Efficiency Goals Means China Needs to Start Building Efficiency Power Plants (EPP)*, The Regulatory Assistance Project (2005), available at www.raponline.org.

⁹ See e.g., California Energy Commission. 2007. *Integrated Energy Policy Report*, November 2007, CEC-100-2007-008-CTF, www.californiaenergyefficiency.com/; California Public Utility Commission. 2008. *California energy efficiency strategic plan* (draft) Rulemaking 06-04-010, 8 February 2008, www.californiaenergyefficiency.com/

3. *Life-cycle GHG assessment of energy projects* to identify alternatives with the lowest ‘cradle to grave’ climate impact.
4. *Elimination of fossil fuel subsidies* and other policies that incentivize higher emissions and insulate market participants from the true costs and risks of their decisions.¹⁰
5. *Support for mass transit systems, better building codes* and other low-carbon urban planning approaches.

Maximize impact and incentivize ambitious action

Like the Clean Technology Fund, the Adaptation Fund, and the Global Fund to Fight AIDS, Tuberculosis and Malaria, the GCF should incentivize more ambitious proposals by clearly articulating the criteria it will use to prioritize the use of its limited resources. This will help ensure that GCF resources are devoted to securing the fastest, cheapest, and most sustainable elimination of tonnes of CO₂ (taking into account national development objectives and safeguards). Among other criteria, the GCF should seek to identify proposals that will (1) deliver the most tonnes of CO₂ abated per dollar spent and per year; (2) most quickly and dramatically reduce the costs, risks, and non-financial barriers to investment in low- and zero-carbon technologies; and/or (3) demonstrate the feasibility of replicable and scalable low- and zero-carbon policies and approaches.

Inclusive national planning for paradigm shifts

In accordance with the Cancun Agreements, the GCF will finance developing country mitigation actions that are consistent with country-driven low-carbon development strategies (LCDS), and are reflected in specific “nationally appropriate mitigation actions” (NAMAs).¹¹ Ensuring that these LCDs and NAMAs are suitably ambitious and paradigm shifting, and that they reflect local development priorities, will require that they are developed with broad and meaningful public participation. As experience with other funding mechanisms such as the Global Fund to Fight AIDS, Tuberculosis and Malaria has shown, multi-stakeholder processes that include a range of interests and expertise (1) improves the quality of strategic plans and funding proposals, (2) helps ensure that they reflect local needs, and (3) can help broaden and strengthen the political commitment to successful implementation. This last consideration is especially important with regard to paradigm shifting mitigation action, which may be vigorously opposed by those with a vested interest in the perpetuation of the *status quo*.

¹⁰ IEA, OPEC, OECD, World Bank, *Analysis of the Scope of Energy Subsidies and Suggestions for the G-20 Initiative: Joint Report Prepared for submission to the G-20 Summit Meeting, Toronto, Canada, 26-27 June 2010.*

¹¹ Cancun Agreement, paras. 53, 65.