

Transportation NAMAs: A Proposed Framework

OVERVIEW

Any realistic strategy to reduce global GHG emissions must address transportation in the developing world. Most of the growth in transportation GHGs by 2050 will be in the developing world, and by 2030, more than half of all vehicles will be in non-OECD countries. Failure to address this sector will shift mitigation responsibilities and costs to other sectors, such as electricity generation, or jeopardize achieving targets for atmospheric CO₂ concentrations.

TRANSPORTATION NAMAS

Nationally Appropriate Mitigation Actions (NAMAs) can provide a framework to achieve substantial reductions in transportation emissions in developing countries. Broadly defined, NAMAs are actions voluntarily proposed by developing countries that significantly reduce emissions below business-as-usual levels. NAMAs can be categorized into three groups. *Unilateral NAMAs* are autonomous actions taken by developing countries to achieve emissions reductions without outside support or financing, typically low-cost mitigation measures. *Supported/cooperative NAMAs* are developing-country actions undertaken with financial or other support from developed-country Parties that result in more aggressive emissions reductions. *Credit-generating NAMAs* are actions that could be partially or fully credited for sale in the global carbon market after an agreed-upon crediting baseline has been reached.

Unilateral NAMAs are an important piece of a climate policy package for transportation, representing developing countries' own contributions to mitigation efforts. There are numerous revenue-generating and low-cost mitigation options in the transportation sector, including fuel taxation reform, fuel economy standards, and smart growth land-use planning.

Supported NAMAs for transportation could include capacity-building measures, particularly the development of Low Carbon Transportation Plans; policy and regulatory measures, such as congestion pricing; and physical infrastructure, such as Bus Rapid Transit. Support could come in the form of direct financing, technology transfer, or capacity-building assistance. CCAP proposes the following principles for funding supported transportation NAMAs:

- **Create a transportation “window” with dedicated funding and evaluation criteria.** Metrics for evaluating NAMA proposals should be sector-specific. CCAP suggests several appropriate evaluation criteria for supported transportation NAMAs: consistency with a comprehensive Low Carbon Transportation Plan; long-term GHG reduction potential; cost effectiveness of the integrated bundle of measures; co-benefits (e.g., economic development, public health); local implementation capacity; and cost-sharing.
- **Earmark planning and capacity-building funding.** Some of the most important long-term actions, such as planning, economic studies and professional education, do not directly translate into emission reductions. A portion of funding under the transportation NAMA window should be set aside for these types of enabling measures.
- **Develop Low Carbon Transportation Plans for countries and metropolitan regions.** Low Carbon Transportation Plans would chart a course for short- and long-term GHG reductions by specifying a comprehensive set of policy, infrastructure and funding measures, assessing full costs and co-benefits, modeling GHG emission reductions and identifying key implementation steps. An effective plan would likely include public transportation; bicycling and walking infrastructure; smart growth land-use planning; efficient vehicles; low carbon fuels; and economic measures such as congestion pricing.
- **Fund bundles of projects and policies.** By itself, NAMA financing will be able to support only a limited number of emission-reduction policies and projects. Moreover, for many of the most effective emissions-reducing policies, funding is not the main barrier to their implementation. Therefore, the funds available to support NAMAs should be leveraged by funding “bundles” of projects and policies established in Low Carbon Transportation Plans. Each bundle will include some low- or negative-cost policies that the host country will implement unilaterally. “Bundled NAMAs,” in which funding for infrastructure projects is conditioned upon unilateral implementation of supportive measures, would leverage NAMA

funding. For example, funding for a rail system could be conditional on the implementation of smart growth land use measures in the corridor.

- **Accept uncertainty.** There will be considerable uncertainty in modeling emissions reductions and developing baselines, especially for some of the most transformational projects. At least initially, evaluation decisions will need to take account of this uncertainty, and focus on funding packages that are directionally correct, i.e., those that reduce emissions, even though the volume of reductions is uncertain.

Credit-generating NAMAs are not promising for the transportation sector. Credit-generation programs for policies and bundles of projects are likely to face two of the same challenges – quantifying emission reductions and demonstrating additionality – that have virtually excluded transportation from the existing Clean Development Mechanism. Emissions reductions from transportation projects are often difficult to measure precisely, particularly for measures that address travel demand and mode shifts. For land-use planning measures and public transportation infrastructure, for example, reductions in vehicle travel through changes in development patterns are perhaps the most important long-term strategy for emissions reductions, but these impacts are measured imprecisely through metropolitan travel demand models. Sector-wide credit-generation mechanisms, such as sectoral no-lose targets, will thus be hampered by uncertainties in setting the crediting baseline. Even so, it is questionable how big a difference credit-generating NAMAs could make to the implementation of emission reduction policies and projects. Decisions on land-use and transportation infrastructure in particular are fairly insensitive to costs at the margin; they represent broader policy decisions.

IMPLICATIONS

There is a clear funding gap for sustainable transportation projects in developing countries, due to the high costs of transportation infrastructure and the limited resources available in many regions. Even though total benefits, including economic development and improved air quality, may outweigh total project costs -- even before factoring in GHG reductions -- many developing countries do not have the resources to realize these opportunities. There are also many mitigation opportunities, especially from pricing, vehicle regulation and land-use policies that generate revenue or can be implemented with minimal public expenditure. These negative-cost opportunities have not been pursued due to a range of barriers, including local political challenges or a lack of implementation and enforcement capacity.

CCAP's proposal for bundling supported NAMAs addresses both of these issues. It uses the "carrot" of funding from supported NAMAs to leverage the negative-cost opportunities that would otherwise be difficult to incentivize through an international fund. In addition, these negative-cost opportunities will improve the cost-effectiveness and competitiveness of the overall bundle. Bundling also promotes synergies among measures such as public transportation, land-use policies and economic measures such as fuel subsidy reductions.

CONCLUSION

Climate funding currently represents a very small part of overall transportation investment. CCAP's proposed framework shows how the NAMA financing mechanism can be leveraged to help direct more substantial financial resources from public and private investment toward lower-carbon transportation choices. The benefits for climate may be large, but the local impacts may be even larger, as improved travel choices foster economic development, better quality of life and reduced air pollution. Climate funding cannot be the only driver, but it can help catalyze the transformation to an environmentally and economically sustainable transportation system.

CCAP will be releasing a more detailed white paper on transportation NAMAs in January 2010. For more information please contact: Steve Winkelman, Transportation Program Director, swinkelman@ccap.org

Since 1985, CCAP has been a recognized world leader in climate and air quality policy and is the only independent, non-profit think tank working exclusively on those issues at the local, national and international levels. Headquartered in Washington, D.C., CCAP helps policymakers around the world to develop, promote and implement innovative, market-based solutions to major climate, air quality and energy problems that balance both environmental and economic interests. For more information, please visit www.ccap.org.

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