

Overview of NAMA Financial Mechanisms

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Introduction

Developing countries have started to pursue nationally appropriate mitigation actions (NAMAs) to reduce greenhouse gas (GHG) emissions in conjunction with national sustainable-development goals. Because NAMAs have the potential to receive international financial support, designing a successful NAMA therefore requires careful integration of climate policy actions, sustainable development goals, and financial mechanisms. This policy brief provides an overview of a number of financial mechanisms and design elements to consider in developing NAMAs that can effectively mobilize investments in mitigation projects.

At the outset it should be noted that there are major differences between NAMA financial mechanisms and carbon credits. While carbon credits are project specific, NAMA financial mechanisms are program based and made available to an entire sector or industry. In this regard, NAMA financial mechanisms are somewhat similar to Global Environments Facility (GEF) projects but with a greater focus on integration of policy actions and financial incentives.

The other factor to keep in mind while designing NAMA financial mechanisms is that due to the lack of definition and precedence in the subject (the world is yet to formally recognize the first NAMA), there exists a tremendous scope for flexibility, customization and innovation. This represents another diversion from the Clean Development Mechanism (CDM) and other offsets-based financing programs where stringent process-based rules related to financial additionality and monitoring, reporting and verification (MRV) made it difficult for both developers and financiers to design financial mechanisms which were tailored to their respective circumstances. The various donor-driven sources of NAMA finance that exist right now are a combination of development banks, specific climate finance programs (mostly related to fast start finance), and multi-lateral institutions among others. Some of these financing programs are in the process of being designed such as the Green Climate Fund (GCF) and hence are also in the "learning-by-doing" mode.

In this interim period, while NAMAs are yet to be defined and financing programs such as the Green Climate Fund are yet to be formally launched, exists the opportunity for developing countries to work in close collaboration with contributing countries to take advantage of their specific climate finance programs.

NAMA Financial Mechanisms

NAMA financial mechanisms should be designed to mobilize and leverage additional investments in mitigation projects. There are a variety of financial mechanisms and programs that can be used to achieve this goal. These financial mechanisms, however, should be tailored to the unique financial markets conditions in the host country. A comprehensive review of existing financial market conditions is therefore a crucial first step in designing a NAMA financial mechanism. This analysis should identify specific financial barriers to NAMA-related projects and identification of uses of NAMA resources to support local financial intermediaries and/or borrowers to overcome these barriers.

The table below lists some typical financial barriers that developing countries face while implementing NAMAs and what financial instruments could be used to overcome them.

Risks/Barriers	Instrument
Perceived credit quality of borrowers or entering a new sector	Partial Credit Risk Guarantee – but not helpful in high interest rate environments
High transaction costs of smaller-scale projects	Creation of Special Purpose Entity (SPE) for project implementation
Lack of familiarity with technology	Performance Guarantee
High interest rate environments and/or lack of project revenues to cover market- terms of financing	Extension of lending maturities Soft loans
Lack of capacity in local banks	Special Funds

Financial Mechanisms To Address Impediments

Detailed below are a number of financial mechanisms that could be incorporated into a NAMA proposal. All of these financial mechanisms serve as credit enhancements for private sector financing of NAMA projects. It is important to emphasize that in the design on a financial mechanism, credit enhancements are not designed to make "bad projects" financially viable. Rather, they are designed to mitigate or remove certain risks to investors/lenders who serve to catalyze investments in NAMA projects.

Partial Credit Risk Guarantees

Partial credit risk guarantees protect lenders from loan defaults for up to a specified portion of the loan. Donor funds are placed in an account to cover a portion (50 percent in many cases) of a project's credit

risk to banks. This mitigates risk to the lender and should reduce the costs of borrowing. Projects will nevertheless need to meet bank credit quality requirements as banks will sustain losses if a project fails.

Debt Service Reserve Accounts

Debt service reserve accounts are similar in many respects to partial credit guarantees. Donor funds are placed in an account to cover a specified number of months of debt service payments. The difference however is that the reserve account is accessed in the event a project fails to generate sufficient revenues to meet debt service payments. This prevents default on a loan if a project runs into short-term operational difficulties. Funds are taken from the reserve account to make timely debt service payments while the project operator seeks to remedy operational problems. Once the project is again financially viable, the operator is required to replenish the reserve account.

Performance Guarantees

Many of the NAMAs being discussed internationally have financial and performance risks. While banks are fully capable of assessing the credit quality of a borrower they often do not have the skills to properly assess performance risk. This is uniquely a challenge for energy efficiency projects where energy and cost savings from investments are expected to be sufficient to cover debt service payments. For large energy projects, banks can retain outside experts to conduct a performance risk assessment of a project but for most energy efficiency and smaller-scale renewable projects this is not cost effective.

To address this impediment, donor funds could be used to capitalize a performance risk guarantee program that provides bankers with assurances of performance (generation of sufficient revenue to meet debt service payments). This is often done by setting up an energy services company (ESCO) which is responsible for providing performance due diligence for the banks and backing up the assessment with a guarantee. If a project fails to meet performance levels, the donor funds are used to make up the difference for banks. The third-party ESCO administrator is selected based on extensive knowledge of the type of projects covered. If properly structured, this guarantee mechanism can achieve much higher leverage than a partial credit guarantee.

Extension of Lending Maturities

Local banks in most countries will not issue loans with maturities greater than 7-10 years, however, many renewable energy projects have useful lives of 15-30 years. Short-term lending is often not a viable financial arrangement because the annual debt service payments on such loans are often prohibitively high. Extension of loan terms can dramatically reduce annual debt service payments and make a project financially viable.

For example, by extending the maturity of a \$100 million loan from 7 years to 15 years, the annual debt service payment would be reduced from \$21.8 million to \$15.2 million, assuming a commercial interest rate of 13 percent (See Table Below).

Interest	Annual Payment
13%	\$21.8 million
6%	\$17.5 milion
13%	\$15.2 million
6%	\$10.1 million
	13% 6% 13%

Comparative Debt Service Table on a \$100 Million Loan

Maturity extension programs can be designed in many different ways. One example used in the Philippines involved an agreement between the government and local banks that allowed banks to make 7-year loans with a 15-year payback period. Under this arrangement a balloon payment for the balance of the loan was due in year 8. If a bank decided not to renew the loan up to 15 years, the government made the balloon payment to the bank and the borrower made annual debt service payments to the government for years 8-15.

Co-Financing with Local Banks

In high interest rate environments many renewable projects are unable to generate sufficient revenues to meet high annual debt service payments. A project that produces a given amount of annual revenue may be financially viable when interest rates are at 5 percent but would not be viable if rates were at 12 percent. In addition to the soundness of a project, the costs of financing can have a major impact on the credit-worthiness of a project. In these circumstances, NAMA grants could be deployed in the form of below-market rate co-financing with local banks. The banks would conduct the financial analysis and lend at prevailing rates (e.g. 12 percent) for 50 percent of the loan amount and the NAMA loan would be provided at below market (e.g. 2 percent) for 50 percent. The resulting blended rate of 7 percent could make a project financially viable. As the NAMA loans are repaid, the reflows are used to co-finance future projects.

Special Purpose Entities

Many renewable and energy efficiency projects are often too small to be effectively financed on an individual basis. The transaction costs relative to loan amounts are such that banks don't find the projects attractive.

Special Purpose Entities (SPE) which bundle multiple projects for financing through one debt instrument have been established in many countries to address this barrier to finance. The SPE uses standard

eligibility requirements, financial analysis and legal agreements to lower the transaction costs of projects and reach critical mass of financing to attract private sector lenders/investors. A NAMA proposal could create an SPE for this purpose and use any of the above mentioned mechanism to finance NAMA projects on affordable terms.

Principles of NAMA Financial Mechanisms

There are several overarching principles to consider when designing NAMA financial mechanisms. Effective financial mechanisms can catalyze additional investments from the private sector and lead to significant transformation in the target sector in reducing GHG emissions and achieving sustainable development goals.

Sustainability

Donor funds should be deployed in a sustainable fashion. NAMA financial mechanisms that are designed to be self-funding (i.e. returns from investment are re-invested in the mechanism to fund more NAMAs) are preferable to those that simply buy down project costs or interest rates. Donor grants, for example, can be used to co-finance local bank lending to eligible projects. Even if the donor portion of the loan is at 0 percent interest, the repayment of loan principle can be used for future projects. This mechanism can mobilize private sector funds on affordable terms in high interest rate environments.

Leverage

Public climate finance interventions often demonstrate the extent to which other public and private money has been "leveraged" or catalyzed as a result of their investment. It is often argued that the higher the ratio, the more effective the use of limited public funds and the more attractive an investment. The amount of private investment leveraged by public funding instruments varies considerably according to the barrier being addressed, location, instrument used, and project specific characteristics. High leverage ratios can demonstrate that public finance was used to de-risk investment and overcome barriers to encourage greater flows of finance to climate-friendly areas.

NAMA financial programs should seek to leverage as much private sector investment per dollar of donor assistance as possible. Leveraging can be accomplished through co-financing programs, partial risk guarantees, insurance programs, concessional loans etc. The amount of private investment leveraged by public funding instruments varies considerably according to the barrier being addressed, location, instrument used, and project specific characteristics. A 3-1 ratio of private funding to NAMA dollars is a good starting benchmark for partial credit risk guarantees. Insurance and guarantee mechanisms can reach higher leverage ratios if they focus on a specific project risk. As programs become more successful, leverage can increase accordingly.

Private sector acceptance

Extensive consultation with local and international financial institutions is critical to designing a financial mechanism that works. During the design stage, an overview of the proposed financial mechanism should be shared with potential investors to ensure private sector receptiveness. Bankers/investors will provide important insight on the value of the financial mechanism in the private market. After the initial consultation, appropriate revisions should be made to reflect private sector input while being mindful of donor requirements and host country acceptance. A second round of consultations should then take place with the private sector to provide a final "ground testing" of the proposal.

Affordability

Effective NAMA financial mechanisms would not only have to meet leverage benchmarks for private sector capital but also mobilize private investments at the lowest possible costs. High financing costs can reduce the viability of a sound project. Consultations with local project developers will be critical to achieving this objective. In some cases, for example, partial guarantees have been provided to banks for clean energy projects, but were not utilized because interest rates were too expensive for local developers.