# Submission to the Standing Committee on Finance in Relation to its Biennial Assessment of Climate Finance

Erik Haites Margaree Consultants Inc. Toronto, Canada

July 31, 2013

#### Introduction

The mandate of the Standing Committee on Finance includes a biennial assessment of climate finance. Each assessment is expected to include an overview of climate finance flows, including their geographical and thematic balance, as well as assessments of climate finance needs. The first biennial assessment is to be undertaken in 2014.

This is a daunting challenge because there is no agreed definition of "climate finance" and, as a result, no systematic data on climate finance flows or needs. Given the limited time available, the 2014 assessment will be constrained by the incomplete data available now or in the near future. However, by identifying the data it believes are relevant and the limitations of existing sources, the Standing Committee on Finance can stimulate efforts to improve the situation for future assessments.

This submission discusses (1) the definition of climate finance, (2) data on existing flows and (3) estimates of needs.

### **Definition of Climate Finance**

The Standing Committee on Finance (SCF) will need to adopt a definition of "climate finance" for its assessment. Currently, there is no agreed definition of climate finance. The term "climate finance" is applied both to the **financial resources devoted to addressing climate change globally** and to **financial flows to developing countries to assist them in addressing climate change**. The literature includes multiple concepts within each of these broad categories.

Globally, financial resources devoted to addressing climate change are measured as total climate finance, incremental investment and incremental cost.

- *Total climate finance* includes all financial flows whose expected effect is to reduce net greenhouse emissions and/or to enhance resilience to the impacts of climate variability and the projected climate change. This covers private and public funds, domestic and international flows, expenditures for mitigation and adaptation, and adaptation to current climate variability as well as future climate change. It covers the full value of the financial flow rather than the share associated with the climate change benefit; e.g. the entire investment in a wind turbine rather than the portion attributed to the emission reductions.
- The *incremental investment* is the extra capital cost required to implement a mitigation or adaptation measure, for example the investment in wind turbines less the investment that would have been required for the coal or natural gas generating unit displaced. Since the value depends on the unknown investment in a hypothetical alternative, the incremental investment is uncertain.
- The *incremental cost* is the present value of the extra capital and operating costs associated with a mitigation or adaptation measure over its lifetime, for example the present value of the capital and operating costs of a wind turbine less the present value of the capital and operating costs of

the coal or natural gas unit displaced. Values depend on the incremental investment as well as projected operating costs, including fossil fuel prices, and the discount rate.

Financial flows to developing countries to assist them in addressing climate change are measured as total climate finance, public climate finance provided to developing countries and climate finance under the UNFCCC.

- The *total climate finance* flowing to developing countries is the amount of the total climate finance invested in developing countries that comes from developed countries. This covers private and public funds for mitigation and adaptation.
- **Public climate finance provided to developing countries** is the finance provided by bilateral and multilateral institutions for mitigation and adaptation activities in developing countries. Most of the funds provided are concessional loans and grants.
- Climate finance under the UNFCCC is funding provided to developing countries by Annex II
  Parties for climate related activities. Most of the funds provided are concessional loans and
  grants.

The definition must also specify the activities that contribute to addressing climate change so that their costs counts as climate finance. For example, are high efficiency coal-fired generation plants a mitigation measure? Is planting a different crop an adaptation measure? What research activities help address climate change? Defining the scope of climate change activities is challenging, especially for adaptation, research and capacity building. In practice, the scope may be determined by the availability of data.

## **Data on Existing Flows**

Some data on existing flows are available for four of the concepts identified in the previous section. Data for current incremental investment and incremental cost are not available, but estimates of future incremental investment and incremental cost are available.

The Landscape of Climate Finance estimates correspond roughly to the *total climate finance* concept. Updated estimates should be available prior to completion of the SCF's 2014 assessment.

Estimates of the *total climate finance* flowing to developing countries can be derived from the Landscape of Climate Finance data with the assistance of the authors. The OECD has also produced an estimate that corresponds to this concept and there is a published estimate of the private flows to developing countries.

The *public climate finance provided to developing countries* includes resources provided by bilateral and multilateral financial institutions. The OECD maintains a database of projects supported by 23 Development Assistance Committee members that have climate change mitigation or adaptation as a principal or significant objective. Data on support provided by multilateral financial institutions can be compiled from their reports.

Annex II Parties report the *climate finance under the UNFCCC* in their national communications. Although there is an agreed reporting format, the UNFCCC secretariat notes that many data gaps and inconsistencies persist in the reporting approaches of Annex II Parties. The latest data cover 2006 through 2010. Annual reports on fast-start finance for the years 2010 through 2012 are available, but they may be more appropriately included in the previous concept.

In each case some geographical and thematic disaggregation should be possible although it may involve some effort and the results will be subject to considerable uncertainty.

#### **Estimates of Needs**

There also is no agreed definition of "needs". Model estimates can be developed by specifying goals such as a global emissions trajectory consistent with a 2°C average temperature increase. Individual projects can be justified in terms of their anticipated contribution to specific objectives.

The biennial assessment, since it will be updated every two years, may wish to consider both short and long term estimates of needs.

Estimates of short term needs could be compiled from NAPAs, NAMAs and similar reports as well as projects submitted to multilateral funding entities for which resources are not available. Including bilateral institutions would increase the compilation effort significantly. Such a compilation would cover most projects for which funding could be committed during the next two years.

Estimates of long term needs can be compiled from relevant studies and modeling exercises both for mitigation and adaptation. Summaries of mitigation and adaptation estimates can be found in Olbrisch et al. and Smith et al. chapters 3 and 4 respectively of *International Climate Finance*, Erik Haites, ed., 2013.