**Terms of Reference for the “Foundation Paper” section of the report by the Commission for Environmental Cooperation under Article 13 Towards Sustainable Freight Transportation in North America**

**Background**

The reduction of trade barriers in North America has resulted in an increased trade among the three countries. Wider globalization processes have also resulted in increased trade flows around the world, particularly goods flowing from Asia to the North American market through maritime ports. This has resulted in increased pressure both to the environment and to the capacity of existing transportation infrastructure, raising concerns around the sustainability and competitiveness of North American freight transportation system.

In particular, global concern over climate change is likely to become an important driver for changes to a low-carbon economy, which will impact directly the transportation systems in North America. As Canada, Mexico and the United States advance strategies to stimulate their economies, including investments in transportation infrastructure, there is a need and an opportunity to ensure that environmental sustainability is a key consideration.

Despite the recent reduction in trade flows resulting from the economic recession, international trade will increase in the long term, therefore there is a need for a vision with related policies, regulations, incentives and other measures to ensure that North American freight transportation systems are developed in an efficient, competitive and environmentally sustainable manner.

The CEC is preparing a report that will examine the environmental implications of increased freight transportation in North America and how regional action and cooperation on related policies, regulations, incentives and other measures can contribute to an efficient, competitive and environmentally sustainable freight transportation system.

The initial section of the report will be a “Foundation Paper” that will serve as a key component of the overall report. This section entitled “Sustainability and Freight Transportation in North America” will provide:

* Basic facts and figures on freight transportation (and future projections) in North America, particularly cross-border-related trade and major trade corridors
* A description of immediate, medium- and long-term problems and opportunities facing freight transport in North America and globally
* Current freight transportation practices from other countries (e.g., China) and trading blocks (e.g., EU), and threats and opportunities that they present for North America
* Major initiatives are underway in North America?

In order to cover the objectives of the Foundation Paper, the Research Team will develop the following tasks:

**Task 1. Literature Review on Freight Transportation in North America.**

The Research Team will analyze current efforts describing the movement of freight in North America that will help describe the current situation of trade by truck and rail between the three North American countries. Transportation departments in Canada, the U.S. and Mexico are collecting freight transportation data and identifying flows at different levels of disaggregation, and developing plans to improve connectivity and competiveness of their logistics systems. During this task the Team will assemble information with facts and figures that describe current and forecasted volumes (tons, ton-miles, vehicles, etc.) by truck and rail along trade land corridors, as well as at major maritime nodes (maritime ports, ports of entry and in-land terminals). An assessment of current and planned freight transportation-related infrastructure will also be performed during this task to complete the description of the current status.

**Task 2. Identify Freight Transportation-Related Policies**

The Research Team will gather and analyze current and planned freight transportation-related policies in North America and other trade blocks towards modifying current mode split (truck vs. rail) that could result in reduction of GHG. The European Union (EU) has launched several initiatives aiming to increasing the participation of rail, hence reducing GHG. This and other similar policies will be analyzed to identify success or failures and key stakeholders involved. Similar policies in other trading blocks will be identified and documented.

Other initiatives and actions being taken or planned to address GHG in freight transportation will be analyzed. The analysis will include practices around the world and will result in a comparative analysis that would lead to identifying best practices that have the potential of being implemented in North America.

**Task 3. Preliminary quantification of freight transportation-related GHG**

Several methodologies to measure freight transportation-related GHG have been developed. During this task, the Research Team will assess existing methodologies and suggest the methodology that could be applied to quantify the order of magnitude of North American freight transportation GHG emissions. The calculation will be segmented by transportation mode and by facility type.

**Task 4. Identify potential initiatives to reduce freight transportation HGH emissions**

The Research Team will identify and suggest initiatives that could be implemented to reduce GHG emissions in North America. Barriers to the implementation and key stakeholders involved in the process will be identified, as well as alternatives to remove barriers to allow reduction of emissions and a deeper integration of the North American freight transportation systems.

**Deliverable**

The result of these tasks will be documented in a report that could be disseminated to key stakeholders for further discussion.

**Schedule**

The report should be produced in two months