

Project 10: Improving the Economic and Environmental Performance of the North American Truck and Bus Manufacturing Supply Chain		Operating Year(s): 2013–2014
Planned Budget for two years: \$250,000 Year 1: C\$130,000 Year 2: C\$120,000		
Strategic Priority: Greening the Economy in North America / Improved Private Sector Environmental Performance in North America		
Project Summary This project will establish a public-private sustainability partnership among the bus and heavy-duty truck manufacturing sectors modeled on the one established by the United States, Mexico and Canada for the North American auto manufacturers. This partnership will accelerate the adoption of innovative technologies and best practices in the industry to reduce environmental impacts by agreeing on realistic targets and commitments. Models of best practices associated with each focus area will be show cased and discussed during workshops to identify opportunities and obstacles for implementation across North America. A trilateral forum will be held to identify barriers and opportunities for improving efforts to greening the North American bus and heavy-duty truck supply chain.		
Short-term Outcomes (at halfway point) <ul style="list-style-type: none">Established North American bus and heavy-duty truck manufacturing sectors partnership(s)Focus areas and models identified for increased environmental and economic performance		
Long-term Outcomes (by the end of the project) <ul style="list-style-type: none">Toolkit of best practices for each focus areaOutreach materialTrinational forum with relevant agency representatives and stakeholders		
Longer-term, environmental outcome (post project) <ul style="list-style-type: none">Improve the overall environmental performance throughout the North American heavy-duty truck and bus manufacturing supply chain in areas such as greenhouse gas and black carbon emission, energy and water efficiency, and waste managementIncreased information sharing, best practices, and integration of innovative technologies		
Tasks necessary to reach the environmental outcome: <ol style="list-style-type: none">Build a suppliers' partnership(s) and a framework for the bus and heavy-duty truck original equipment manufacturers (OEMs) and suppliers in the three countries.Create working groups with partnership members to create training programs focused on improving the environmental performance of the bus and heavy-duty truck sector.Trinational forum.		

Task 1) Build a suppliers partnership(s) and a framework for the bus and truck manufacturing OEMs and suppliers in the three countries				
Subtask	Project outputs	How does the subtask/output move the project towards the environmental outcome	Timing	Budget (activities)
1.1 Work with the bus and heavy-duty truck sectors to identify champions with strong commitment to establish and foster a self-sustaining greening the supply chain effort in this sector.	Establish a manufacturers and suppliers partnership network in each country and work plans for each network.	These networks will facilitate the sharing of best practices regarding innovative technologies and best practices throughout the North American truck and heavy-duty bus manufacturing supply chain.	Fall 2013	Year 1: C\$10,000
1.2 Establish a sector profile of the bus and heavy-duty truck manufacturing OEMs.	Develop a baseline report to describe the sector profile and assess existing benchmarks (e.g., ISO14001), including a gap analysis and identification of other opportunities.	This task will inform the development of benchmarks in each focus area (task 2.3).	Fall 2013	Year 1: C\$20,000
1.3 Meetings to define sustainability challenges and opportunities, establish specific goals and objectives, set measurable targets, and obtain commitments.	Trilateral meetings with supply chain stakeholders, objectives, targets and commitments, create subgroups for each focus area identified.	These meetings will facilitate the implementation of the work plans developed in 1.1.	Fall and Winter 2013-2014	Year 1: C\$60,000
Task 2) Create working groups with partnership members to create training programs focused on improving the environmental performance of the bus and truck sector				
Subtask	Project outputs	How does the subtask/output move the project towards the environmental outcome	Timing	Budget (activities)
2.1 Identification and assessment of potential models in each focus area.	Model of best practices in each focus area identified.	Manufacturers and suppliers are already implementing successful practices that	Spring 2014	Year 1: C\$40,000

		improve environmental performance in areas such as energy and water efficiency, and waste and chemicals management. These practices can be grouped into models in specific focus areas.		
<p>2.2 Meetings with each subgroup to find solutions and benchmarking goals in each focus area, and showcasing model(s) of on-the-ground implementation.</p> <p>Focus areas may include: carbon footprint, efficiency, integration of innovation and best practices into the supply chain, and decrease “black carbon” emissions associated with the bus and trucking products.</p>	Workshops to discuss the implementation opportunities and challenges of each model.	These workshops will facilitate the implementation and adaptation of selected models to specific manufacturing and suppliers contexts.	Summer and Fall 2014	Year 2: C\$60,000
2.3 Development of a benchmark in each focus area.	<p>Toolkit of best practices to facilitate the implementation and achievement of benchmarks.</p> <p>Outreach material (e.g., video of models)</p>	Benchmarks will be determined from the best practices across the industry, and will improve environmental performance in areas such as energy and water efficiency, and waste and chemicals management throughout the supply chain.	Late Fall 2014	Year 2: C\$30,000

Task 3) Trinational forum				
Subtask	Project outputs	How does the subtask/output move the project towards the environmental outcome	Timing	Budget (activities)
3.1 Hold a forum with relevant government agency representatives of each country to present the results and obstacles identified in each focus area of the bus and heavy-duty truck manufacturing supply chain.	Identification of barriers and opportunities for improving efforts to green the North American bus and heavy-duty truck supply chain.	Inform the governments on ways to enhance national and trilateral opportunities to support greening supply chain in the heavy-duty truck and bus sector.	Winter 2015	Year 2: C\$30,000

Explain how this project meets the selection criteria adopted by Council in the Strategic Plan (See below)

The goal of all projects funded by the CEC will be to support the efforts of the Parties to conserve, protect and/or enhance the North American environment. The following criteria will guide the Secretariat, Working Groups, Committees, and other appropriate officials of the Parties in considering cooperative activities for Council approval under operational plans. These selection criteria do not apply for activities to be funded through the NAPECA grant program.

- **How does the project contribute to achieving Council's strategic objectives as described within the current Strategic Plan, or as related to other priorities subsequently confirmed by Council?**

In the Strategic Plan, Strategic Objective # 1 under the third Council priority ("Greening the Economy of North America") is "Improved private sector environmental performance in North America." This project aims to improve private sector environmental performance by forging partnerships between manufacturers and suppliers in the bus and heavy-duty truck industry across North America to 'green the bus and truck supply chain.' The competitive advantage of the approach is that it aims to simultaneously reduce costs/increase profits while saving the environment, offering a sustainable business model that will reap long-term benefits. In addition, it will provide a self-sustaining forum for continued improvement, innovation and success, and will draw on lessons-learned from the work carried out by the Auto Suppliers Partnership for the Environment.

In the "Greening the Economy in North America" priority, there is also emphasis on "Engaging experts and strengthening information and data sharing to assess and promote private sector environmental performance in North America as a tool to support the Strategic Objective." A Green Supply Chain or Supplier Partnership program initiative creates an environment to carry this out through engaging private sector experts with support of a facilitator to organize, develop and implement green supply chain programs with manufacturers and key suppliers.

Bus and truck manufacturers and their suppliers across North America will be able to share information and practices that will improve the environmental and economic performance capacity of small and medium-size enterprises within this sectoral supply chain.

- **Are the proposed objectives North American in scope? In other words, how are the proposed results relevant to protecting the environment in North America? (For example, what would Council members announce to the press at the successful completion of this project?)**

This project will establish a North American private and government partnership to identify a strategic approach to greening the supply chain of the bus and heavy-duty truck sector. This initiative will improve North America's environmental performance in a growing and evolving manufacturing sector.

- **What are the specific, clear and tangible results that will be achieved and how will progress toward each result be measured over time? Identify performance measures to be used to indicate success at reaching all outcomes and/or performance.**

Decreased environmental impact related to manufacturing processes, including air emissions, waste, and energy use.

Possible performance measures include:

- Energy metrics: energy conserved, energy intensity per unit of production, carbon reductions
- Economic metrics: number of manufacturers, small businesses, and other stakeholders engaged, jobs created, individual trained.
- Environmental metrics: air emissions reduced, solid- and hazardous waste reduced, water pollution reduced, water used/conserved, water intensity per unit of production, and expediency and accuracy of information sharing on chemicals in products used in the supply chain.
- Number of new, more efficient technologies, practices and services used by the in the supply chain.

- **Explain why the CEC is the most effective vehicle for the Parties to undertake the project, considering:**

The CEC has existing experience established through the Suppliers Partnership for the Environment in the automobile sector. Also, the CEC has the ability to bring together private and public stakeholders from the three countries into one North American forum. Partnership members (private and public) will have the opportunity to share experiences and enhance cooperation in all areas of the supply chain.

- **Does the project propose a clear timeline for implementation of the activities, including a target end date for CEC's involvement? Where applicable, describe how the work will continue after CEC involvement ends.**

Yes, the CEC will facilitate trilateral partnership between manufacturers and suppliers, as well as opportunities to align and improve best practices at the North American scale.

- **Where applicable, identify with reasonable specificity:**
 - **Linkages with other relevant CEC projects, past or present, in order to create synergies, capitalize on experience, or avoid duplication**

This project builds on the 2011–2012 Greening Auto Supply Manufacturing in North America project. The environmental outcomes are complementary to the project on air quality and chemicals.

- **The target audience, as well as its receptivity and capacity to use the information that may be produced as a result of the project**

Truck and bus manufacturers and suppliers, and relevant government agencies.

- **The beneficiaries of capacity building activities that the project may include**

All three countries, and possibly countries outside of North America that produce truck and bus components.

- **The relevant stakeholders, with particular attention to communities, academia, NGOs and industry, and their involvement and contribution to a successful outcome**

Representatives from public and private organizations and trade associations established within the three countries whose primary focus is on sustainability within this sector, and major North American bus and truck manufacturers and their parts/components suppliers.