TC DOCUMENT

LOW-CARBON AND EFFICIENT NATIONAL FREIGHT LOGISTICS INITIATIVE

| Country/Region: | Colombia | | | | |
|--|---|--|--|--|--|
| • TC Name: | Low-carbon and Efficient National Freight Logistics Initiative | | | | |
| ■ TC Number: | CO-T1303 | | | | |
| Associated Loan/Guarantee Name: | N/A | | | | |
| Associated Loan/Guarantee Number: | N/A | | | | |
| Team Leader/Members: | Carlos Mojica (Team Leader INE/TSP); Ana María Pinto, Isabel Granada (TSP/CCO); Virginia Navas (INE/TSP); and Guillermo Eschoyez (LEG/SGO) | | | | |
| Date of TC Abstract authorization: | N/A | | | | |
| Beneficiary: | Republic of Colombia | | | | |
| Executing agency and contact name: | Ministry of Transport (MT) | | | | |
| Donors providing funding: | Global Environment Fund (GEF) | | | | |
| IDB Funding Requested: | US\$1,000,000 | | | | |
| Local counterpart funding: | US\$4,000,000 | | | | |
| Disbursement period (which includes execution period): | 36 months disbursement/33 months execution | | | | |
| Required start date: | September 1, 2014 | | | | |
| Types of consultants: | Firms and individual consultants | | | | |
| Prepared by Unit: | INE/TSP | | | | |
| Unit of Disbursement Responsibility: | TSP/CCO | | | | |
| TC Included in Country Strategy (y/n): | N/A | | | | |
| TC included in CPD (y/n): | N/A | | | | |
| GCI-9 Sector Priority: | Protecting the environment, responding to climate change, promoting renewable energy and enhancing food security | | | | |

I. BASIC INFORMATION

II. OBJECTIVE AND JUSTIFICATION

2.1 **Background.** Colombia's domestic transport of goods experienced sustained growth over the past decades and it is expected to continue expanding, given positive economic growth trends of the country's economy. Cargo transport in the country is consolidated in specific market niches for different types of goods: roads (trucks) are used primarily for bulk and general freight; railways and waterways are used for specialized freight transport; and air transportation is used for high value cargo. In 2009, freight transport amounted to about 200 million tons, of which 71.9% were transported by road, 25.3% by rail (mainly coal), 2.5% by water and 1.5% by air. Road transport represents 80% of Colombia's tons-kilometers and the trucking industry corresponds to about 73.4% of the transport sector's GDP. Most of the 217,000 units operating on Colombian roads are relatively small in size, with inefficient highly pollutant combustion engines, and an extended service age (average is about 18.4 years). Official figures show that 35% of the fleet is more than 20 years old and 28% of the fleet is over 30 years old. The average

service age for the Colombian fleet is quite high when compared to international standards (i.e. USA average service age is 7.6 years).

- 2.2 National laws and regulations. The Government of Colombia (GoC) is aware of the need to reform road freight transportation services as a mean to promote national competitiveness, create less polluting and more efficient logistics practices and to reduce the logistic costs of local products and imports. The National Logistics Policy (Política Nacional Logística, CONPES Nº 3547) was issued, outlining the primary strategies to support the strengthening of the national logistical system. This policy is aimed at integrating the supply chain with quality transport infrastructure, promote inter-modality and support it with elements of information technology in order to facilitate trade, generating added value through the continued adoption of best business practices in freight logistics and transport. The GoC issued the 2010-2014 National Development Plan, identifying the key strategies to consolidate the economic gains of the past decade into a path of sustainable development. The Plan supports the implementation of the National Logistics Policy (NLP) identifies the logistic and transport services as priority sectors to foster growth and make the country more competitive. It also proposes the following areas of work in the sector: (i) implementing specialized logistics platforms; (ii) improving the complementarities of multi-modal transport; (iii) developing the industry of logistical services; and (iv) improving trade facilitation and control in border crossings. The NDP identifies the GEF as a partner to implement strategic actions in logistics and transport services that promote environmental sustainability and contribute to mitigate climate change effects.
- 2.3 Sector informality. The high age of the fleet, increasing emissions and low efficiencies are partly explained by the informality of the trucking sector and the fragmentation of vehicle ownership. The current regulations do not require that transport companies provide the actual service. Less than 5% of the fleet is owned by the trucking companies. In practice, these companies become intermediaries between cargo generators (shippers) and transport service providers (carriers). Carriers are highly fragmented as 70% of the fleet is single-owned. Truck owners are hired by the transport companies through informal arrangements where the service and the pricing conditions are negotiated. In turn, the informality in labor arrangements has prevented transport companies and truck owners from internalizing the higher costs of an aging fleet. While the trucking sector generates more than 280,000 jobs, about 65% of these are informal labor relationships (inadequate access to health, insurance, pension programs, etc).
- 2.4 **Limited institutional capacity.** The limited capacity in the sector entities in charge of freight transport regulation has hindered the ability of the government to adequately plan and execute strategies towards a low carbon growth. As per the Ministry of Transport's (MT) assessment, the workforce of relevant entities is limited in capacity and their scope of work rarely incorporates the prospects for climate change mitigation, energy efficiency and environmental protection. Such approaches are, however, considered indispensable in order to modernize the road freight sector in Colombia as a world-class and competitive industry.

- 2.5 **Outdated information systems.** Additionally, the information captured by the current systems available to the industry is incomplete, making it difficult to plan the operation of the sector. The National Registry Cargo Delivery (RNDC), which should register the majority, if not all of the industry transactions, is only capturing 30% of all freight operations. In addition, the Cost Efficient Information System (SICE) is utilizing outdated data to assess the freight rates and carry out the market regulation computations. The Model of Vehicle Supply (MOV) is a system to monitor and diagnose the conditions and amounts of vehicle supply and freight demand throughout the country, however, it is currently operating with sub-optimal data.
- 2.6 **High emissions in the sector.** The inefficiencies of the ground carrier industry contribute to the sector's low energy efficiency performance and significant CO_2 emissions. The transport sector represents 12% of the country's total CO_2 emissions (180 Mt CO_2 -eq per year)¹ and 32% of the total CO_2 emissions from national energy consumption. Of this, road transport accounts for about 90% of the sector's CO_2 emissions. Under a Business As Usual (BAU) scenario, where no major policy changes are placed to formalize the industry and renew the transport fleet, road freight transport emissions would increase from 3.6 MtCO₂eq in 2004 to 4.6 Mt CO₂eq in 2030.
- 2.7 **Undesirable driving patterns**. One of the determinants of fuel consumption (and emissions) corresponds to the patterns to which the engine is subjected (rpm, position the gearbox, acceleration, deceleration). This condition is mainly determined by the attitude and driving skills of the driver and is influenced by the type of vehicle, the slope of the terrain, traffic conditions and weather variables among others. Generally these individual routines are called "driving pattern" and correspond to a particular case of combining multiple traffic and transport conditions for the movement of a vehicle. According to the SICE, 35% of all freight transport costs are related to fuel consumption, stressing the importance of having efficient driving practices to minimize logistical costs.
- 2.8 **Inefficient supply distribution.** According to the MOV, the estimated load factor of freight commercial vehicles in the country is only 65%. This is showing an excess of capacity to carry more freight than it is needed. There is a large number of partially filled or almost empty trips performed, meaning less energy efficiency due to increased fuel consumption and higher emissions per ton of cargo. This means higher costs of operation and maintenance for the owner, which will ultimately be paid by the final consumer, hindering the competitiveness of the products.
- 2.9 **Objective:** The general objective of this operation is to reduce the Green House Gas (GHG) emissions from the freight transport sector. The GEF donation will finance Technical Cooperation (TC) activities with the specific objectives of: (i) training truck drivers towards more efficient and cleaner driving practices; and (ii) developing and implementing a pilot program for freight broker service. The GEF donation will be leveraged by national counterpart funding that will finance ongoing efforts with the objectives of: (a) train local staff and freight transport stakeholders; and (b) design, develop and improve the existing freight information systems at the MT.

¹ Colombia UNFCCC Second National Communication (2010).

2.10 **Corporate alignment.** The project is aligned with the Bank's institutional priorities as outlined in the Report on the Ninth General Increase in Resources for the Inter-American Development Bank (GCI-9) (AB-2764) as it contributes to the goals of "supporting climate change initiatives, sustainable energy and environmental sustainability". The project is aligned with the sector priorities of "protecting the environment, responding to climate change, promoting renewable energy and enhancing food security". The project is aligned with the "Integrated Strategy for Climate Change Adaptation and Mitigation, and Sustainable and Renewable Energy" (GN-2609-1) in the line of intervention to expand lending and technical assistance in climate change relevant sectors. The project is aligned with the Bank's Country Strategy for Colombia (GN-2648-1) which sets as a priority to support the implementation of the NLP to improve the efficiency of freight transport services.

III. DESCRIPTION OF COMPONENTS AND BUDGET

3.1 **Component 1. Institutional strengthening and capacity building.**

- 3.2 Sub-component 1.1. Training. This component will finance training and outreach programs for stakeholders in the road (freight) transport sector including public officials, trucking companies and other stakeholders, in matters of climate change, energy efficiency and environmental protection. This activity is expected to generate awareness and ownership about the importance and opportunities posed by the National Logistics Policy to develop the sector in a more efficient and lower emission path. The training program will be complemented by linking experts in the field of sustainable transport with industry officials to obtain expert advice during the implementation of Components 2 and 3. The implementation of the NLP will require a robust institutional support to manage and coordinate the implementation of measures to mitigate climate change and to efficiency in transport increase energy operations. This implies the need to forming teams, in the public and private sectors, with a clear understanding of the principles of sustainable transport. The component it will train about 200 individuals involved in the regulation and operation of the sector, officers and employees of decentralized government agencies, labor leaders and transport entrepreneurs, among others. The component will also finance the design and preparation of this capacity building program.
- 3.3 Sub-component 1.2. Information systems. This component will finance strengthening the information systems utilized to plan, monitor and supervise freight transport in component includes major consultancy to evaluate Colombia. This a the performance of the existing information systems in the sector and develop technology solutions for their improvement. This consultancy will diagnose, along the chain of freight transport operation, the causes of inefficiencies and formulate solutions. The consultancy will formulate guidelines in order to improve the: (i) data collection and data processing systems and procedures; (ii) tools and procedures for assigning priorities; and (iii) information technology and communication systems for monitoring and supervision. A better information system on freight transport and logistics performance will provide better coordination and will provide a common data between the public and private sectors in Colombia. The study will analyze the freight transport cycles, logistics operations and the relationships between the different logistics agents that are involved in the chain.

- Component 2. Efficient driving practices. This component will finance the design, 3.4 implementation and monitoring of an efficient driving program demonstration pilot, which consist in training truck drivers in efficient driving principles and techniques to reduce the consumption of diesel, and thereby, GHG emissions. Emission reductions result from fuel savings associated to the right acceleration cycles, slow stopping, less frequent high boost acceleration. These initiatives have been implemented at a smaller scale by private companies within their own fleet, however the MT wants to carry out this initiative while monitoring the effectiveness to reduce fuel consumption, GHG emissions. The training program will be designed for about 200 drivers. This training program will complement ongoing efforts towards better understanding the drivers and the trucking industry. Understanding the background of participants will be necessary to prepare a tailor-made program for their needs and possibilities and an eco-driving guideline to share with truck drivers. This component will be executed with the support of the National Learning Service (SENA) leveraging the experience of this institution delivering efficient driving programs in other transport sub-sectors (public transport). Throughout the completion of this project, two instructors will be certified to participate in the program.
- 3.5 **Component 3. Freight demand management.** This component will finance the design, implementation and monitoring of a freight broker pilot project. Freight brokers are technologies that collect demand information from both the freight generator (shipper) and the transport companies (carriers). The freight generator reports the broker the amount required to be transported and the system assigns, based on criteria of availability, capacity and wait times among others, the vehicles that can carry out the operation. In other words, freight broker projects centralize information regarding the demand requirements in order to assign vehicles in the most efficient and safe manner.
- 3.6 This demand management tool will stream the processes of cargo procurement and transport operations planning in order to improve the utilization of transport fleet, minimize empty and light trips, and cut travel distances. It will benefit fleet operations by improving loading and unloading times, minimizing waiting times, and reducing fuel consumption. Furthermore, these benefits can be translated into lower emissions of GHG and air pollutants, and fuel and costs savings. International experience implementing freight broker programs suggest a reduction of empty trips up to 22%. A freight broker system has the potential to provide greater security for all actors in the supply chain by providing direct verification and monitoring of vehicle, driver and cargo information. A technology service provider will develop and implement their own freight information exchange application; beneficiaries of the use of this application can include single truck owners to any structured vehicle or service association. The implementation of this component will help remove risks and market barriers, as it will serve as a trial, which can later be used for studying results, failures, and solving possible obstacles in the future. If successful, it could be expanded to the whole road freight transportation sector.
- 3.7 **Component 4. Project management, monitoring and evaluation.** This component will finance all activities related to project management, monitoring and evaluation. These include: (i) hiring a supporting team for the implementation of this technical cooperation; (ii) monitoring the completion of the results indicators, identify key implementation issues and propose actions in order to solve them; (iii) developing

periodic reports every year showing the progress in the completion of products and results; (iv) carrying out periodic meetings and visits to assess stakeholder's needs and challenges; (vi) measuring performance, results, and impact for each of the results indicators; and (vii) preparing a final evaluation of the program. This component will also finance a financial audit once the activities are completed

| Table 1. Budget Table | | | | | |
|--|----------------------------|-------------------------------|-------------------------|--|--|
| Activity/Component | IDB/Fund Funding (US\$) | Counterpart Funding (US\$) | Total Funding (US\$) | | |
| 1. Institutional strengthening and capacity building | - | 3,150,000 | 3,150,000 | | |
| 2. Efficient driving practices | 450,000 | 200,000 | 650,000 | | |
| 3. Freight demand management | 500,000 | 400,000 | 900,000 | | |
| 4. Project management and monitoring costs | 50,000 | 250,000* | 300,000 | | |
| Total | 1,000,000 | 4,000,000 | 5,000,000 | | |

* In-kind contribution

| Activity/ Component | Outcome (indicator) | Baseline | Target | Completion date (months after approval date) |
|------------------------------------|---|----------|--------|--|
| 1. Institutional strengthening and | A sustainable transport training program is prepared (unit) | 0 | 1 | 6 |
| capacity building | A sustainable transport training program is delivered (number of individuals) | 0 | 200 | 18 |
| | An evaluation of the existing information systems is concluded (unit) | 0 | 1 | 9 |
| | The National Registry of Cargo Delivery (RNDC), the Cost Efficient Information System (SICE) and the Model of Vehicle Supply (MOV) have been upgraded and improved (unit) | 0 | 3 | 30 |
| 2. Efficient driving practices | An efficient driving training program is prepared (unit) | 0 | 1 | 9 |
| | Local trainers are trained (number of individuals) | 0 | 5 | 15 |
| | Truck drivers are trained (number of individuals) | 0 | 300 | 24 |
| 3. Freight demand management | Technical, legal and financial design for an online freight information exchange service (unit) | 0 | 1 | 9 |
| | Launch an online freight exchange application (unit) | 0 | 1 | 15 |
| | Truck owners using the application (number of users) | 0 | 1000 | 24 |
| 4. Project management and | Technical Execution Group is fully hired (number of individuals) | 0 | 4 | 3 |
| monitoring costs | Yearly monitoring report prepared by the TEG (number) | 0 | 3 | 12/24/36 |
| | Final evaluation completed (number) | 0 | 1 | 36 |
| | Financial audit completed (number) | 0 | 1 | 36 |

Table 2. Results Matrix

IV. EXECUTING AGENCY

- 4.1 Execution structure. The MT, through the Office of the Deputy Minister for Transport, will be responsible for executing this TC. This office has appointed a Technical Execution Group (TEG), which is in charge of implementing IDB Loan (Support to the Implementation of the National Logistics Policy (CO-L1109)). The TEG includes a sector coordinator, a financial-accounting specialist, a procurement specialist, and a project technical assistant, and will be will be supported by a group of experts to be hired resources program, including: project with of the (i) manager; (ii) technical leader; and (iii) administrative assistant. Among the main responsibilities of the executing agency are: (i) act as the counterpart to the Bank in relation to the TC; (ii) coordinate and articulate the different components and actors; (iii) carry out and manage procurement processes; (iv) act as the counterpart for any audit process relevant to the Bank; and (v) be responsible for the execution of this operation. There is a framework cooperation agreement between the MT and the National Learning Service (SENA) in order to coordinate the definition of activities and training programs and related to the promotion of professional drivers of public transport service. Before the commencement of the execution of activities comprised within Component 2, SENA and the MT, will enter into a specific arrangement to establish their roles and responsibilities in the execution of training elements of Component 2. The Ministry of Transport will also coordinate the execution of the project with other relevant agencies such as the National Planning Department.
- 4.2 **Procurement and audits**. Activities financed by the TC resources will follow the IDB Procedures and Procurement Policies GN-2350-9 and GN-2349-9. The procurement processes will be supervised by the Bank team to supervise the project. A financial audit will be conducted once the TC is finalized.
- 4.3 **Supervision and monitoring.** Implementation of TC will be overseen by the Transportation Division (INE/TSP). Monitoring includes supporting the TEG during the preparation of the Terms of Reference, reviewing the procurement processes and provide technical concepts along reports produced as part of the cooperation. Meetings with the TEG will be carried out every 3 months, which will be led by the team of TSP.
- 4.4 **Evaluation and audits.** Once 90% of the resources of the program have been disbursed, the executing agency will hire an independent consultant to conduct the final evaluation of the program. In addition, within 90 days following the expiration date of the disbursement period, the executing agency will submit to the Bank the program's audited financial statements.

V. RISKS

5.1 Difficulty in engaging the truck drivers to participate in Component 2. It is possible that the program might not be sufficiently attractive for drivers to join. However, both drivers and owners will benefit from the program because the economic incentives for them are aligned with the environment. The executing agency will carefully prepare an outreach strategy for drivers to explain the relevant benefits and incentives of participating in the efficient program for drivers and owners. The participation of SENA should also strengthen and bring credibility to the program due to their prior experiences with drivers in the transport sector.

5.2 Willingness of individual truck owners to participate in Component 3 and difficulty in changing the way they currently operate. While the use of the demand management tool will benefit individual truck owners economically, it is possible that the use of this technology might not be increasingly attractive for truck owners. The executing agency must ensure the participation of the individuals prior to implementing the system by consulting this proposal with various members of the trucking industry.

VI. EXCEPTIONS TO BANK POLICIES

6.1 No exceptions are required for this TC.

VII. SOCIAL AND ENVIRONMENTAL STRATEGY

7.1 This TC does not have negative environmental and social risk associated with it. In accordance with IDB's Environmental and Safeguards Policy (OP-703) and under the framework of this TC's objectives this operation is classified as Classification "C". See Safeguard Policy Filter Report (SPF) and Safeguard Screening Form (SSF).

Required annexes:

- <u>Annex I. Goverment Letter</u>
- Annex II. Terms of Reference
- <u>Annex III. Procurement Plan</u>







Bogotá D. C.

Mr. RAFAEL DE LA CRUZ Representante Banco Interamericano de Desarrollo - BID Ciudad

Subject: Endorsement for GEF Project "Low-carbon and Efficient National Freight Logistics Initiative

Dear Mr. De La Cruz,

In my capacity as GEF Operational Focal Point for Colombia, I confirm that the above Project proposal (a) is in accordance with my government's national priorities and our commitment to the relevant global environment conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above Project proposal with the support of Interamerican Development Bank (IADB). If approved, the proposal will be prepared and implemented by the Ministry of Transport of Colombia. I request the IADB to provide a copy of the project document before it is submitted to the GEF Secretariat for CEO endorsement.

The total financing being requested for this Project is US\$ 1,000,000 from the Climate Change Focal Area, inclusive of Agency Fees for the project cycle. The financing request for Colombia is detailed in the table below.

| | | Amount (in US\$) | | | |
|-----------|---------|------------------|-----------|--------|-----------|
| Funds | Agency | Area | Project | Fée | Total |
| GEF TF | IDB | ССМ | 1,000,000 | 95.000 | 1.095.000 |
| Total GEF | Resourc | es | 1.000.000 | 95.000 | 1.095.000 |

Sincerely,

Head, Office of International Affairs GEF-OFP Colombia

Copia: Claudia Cuevas, Coordinadora de Asuntos Ambientales-Dirección de Asuntos Económicos, Sociales y Ambientales, MRE y GEF-PFP Colombia, Pablo Vieira, Viceministro de Ambiente y Desarrollo Sostenible, Rodrigo Suarez, Director de Cambio Climatico, MADS

لالمجمع . Elaboró: Laura Bermúdez, Tatiana Nuñez – OAI الالالا Fecha: Abril 25 de 2014

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COLOMBIA

Low-carbon and Efficient National Freight Logistics Initiative Diseño del Programa de Conducción Eficiente para el Transporte de Carga

CO-T1303

TÉRMINOS DE REFERENCIA (BORRADOR)

Antecedentes

Dentro de la ejecución de las políticas rectoras el transporte carretero en Colombia se han identificado objetivos comunes referentes a optimizar las prácticas logísticas y procurar por un sector más eficiente y competitivo. Bajo estas circunstancias se adelanta la formulación de proyectos enmarcados en el discurso de cambio climático cuyo objetivo es el de reducir el consumo de combustible y las emisiones de contaminantes atmosféricos. Dentro de las diferentes iniciativas que se pueden formular al respecto se encuentra que inducir a los conductores de vehículos a que cambien su actitud al manejar, de tal manera que la exigencia sobre el motor sea mas regular y menos precipitada, trae grandes beneficios no solo para el ahorro de combustible sino en la ocurrencia de accidentes de transito y en la longevidad del vehículo

Objetivos

- 1. Desarrollar una metodología y consecuente línea base que permita identificar la demanda de energía requerida en los viajes realizados en la operación del transporte carretero de carga
- 2. Desarrollar un programa de conducción eficiente orientado a reducir el consumo de energía, la emisión de contaminantes atmosféricos y la probabilidad de la ocurrencia de accidentes en la operación del transporte carretero de carga.
- 3. Desarrollar un sistema de Monitoreo, Reporte, y Verificación (MRV) que permita evaluar el desarrollo e impacto del programa de conducción eficiente.

Actividades de la consultoría

El consultor deberá desarrollar las actividades principales, como se definen a continuación:

- 1. Revisión de experiencias internacionales en programas de conducción eficiente y su aplicabilidad en el contexto colombiano
- 2. Análisis DOFA de los diferentes esquemas de programas de conducción eficiente establecidos a nivel mundial
- 3. Identificación de los corredores logísticos más representativos en la operación del transporte carretero de carga.
- 4. Caracterización de los corredores logísticos más representativos en la operación del transporte carretero de carga en términos de la distribución del parque automotor de carga circulante.

- 5. Caracterización de los corredores logísticos más representativos en la operación del transporte carretero de carga en términos de la energía requerida para transitar el mismo de acuerdo con la metodología de Potencia Especifica Vehicular (VSP)
- 6. Determinación de ciclos de manejo representativos de los corredores logísticos identificados en el numeral 3.
- 7. Desarrollo de un programa de conducción eficiente teórico y práctico basado en el análisis de los resultados obtenidos en los numerales anteriores. Con esto se pretende dirigir los esfuerzos hacia la población que mayor influencia tiene en el consumo de energía y emisiones vehiculares en el sector carretero de carga.
- 8. Desarrollo de un sistema de Monitoreo, Reporte y Verificación (MRV) que permita cuantificar los beneficios obtenidos con la ejecución del programa así como evaluar la gestión administrativa del mismo.

Entregables

- 1. Informe Inicial, revisión bibliográfica y metodología. El consultor presentará un informe que describa los aspectos más importantes de la experiencia internacional en la ejecución de programas de conducción eficiente. Adicionalmente presentará la metodología detallada de los trabajos a desarrollar durante la consultoría.
- 2. Caracterización de los corredores: En este informe se deberán identificar y describir los corredores logísticos de mayor importancia en la operación del transporte carretero de carga. En este análisis debe determinarse la distribución del parque automotor que circula por dichos corredores así como la frecuencia de operación.
- 3. Determinación del consumo energético: En este informe se deberán presentar los ciclos de manejo representativos para cada uno de los corredores logísticos identificados. En conjunto se deberá calcular la demanda de energía requerida por los vehículos (de acuerdo al numeral anterior) para transitar dichos corredores así como la estimación de las emisiones de contaminantes atmosféricos asociada.
- 4. Diseño del programa: En este informe se deberá presentar el diseño del programa de conducción eficiente orientado a la reducción del consumo de combustible, la emisión de contaminantes atmosféricos, y la ocurrencia de accidentes de transito en la operación del transporte carretero de carga. En este informe se deberá presentar el diseño de un sistema de Medición, Reporte y Verificación que permita evaluar el impacto y desempeño del programa en mención.

Personal Requerido

Especialista Senior en Transporte: Profesional de cualquier rama del saber, con estudios de posgrado en Transporte. Experiencia específica mínima de cuatro (4) años en el sector, de los cuales dos (2) años deben ser proyectos internacionales. Sus funciones principales serán:

Especialista en Emisiones Vehiculares: Profesional de cualquier rama del saber con estudios de posgrado en el área ambiental, mecánica o química con conocimiento en calidad del aire y emisiones vehiculares. Experiencia certificable minima de tres (3) años en la medición de de emisiones vehiculares, desarrollo de ciclos o patrones de manejo y calculo de la demanda energética vehicular.

PROCUREMENT PLAN

| Country | Colombia |
|------------------------------------|--|
| Executing Agency | Ministry of Transport |
| Project | Low-carbon and Efficient National Freight Logistics Initiative |
| Project number | CO-1303 |
| Description | The general objective of this operation is to reduce the Green House Gas (GHG) emissions from the freight transport sector. The GEF donation will finance technical cooperation activities with the specific objectives of: (i) training truck drivers towards more efficient and cleaner driving practices; (ii) developing and implementing a pilot program for a freight broker service. The GEF donation will be leveraged by national counterpart funding that will finance ongoing efforts with the objectives of: (i) train local staff and freight transport stakeholders; and (ii) design, develop and improve the existing freight information systems at the Ministry of Transport. |
| Approx. date of approval | August 1, 2014 |
| Approx. date of final disbursement | August 1, 2017 |

| Contract | Estimated Cost (US\$) | Procurement | Financing source | | Status |
|--|------------------------------|----------------------------|------------------|---------------|--------|
| | | method ¹ | IDB% | Counterpart % | |
| Component 2 | | | | | |
| Design a training program for efficient driving in freight transport and train local instructors | 150.000 | QBCS | 70% | 30% | |
| Delivery of training program for efficient drivers to truck drivers | 500.000 | QBCS | 70% | 30% | |
| Component 3 | | | | | |
| Technical, legal and financial design for an online freight information exchange service | 450.000 | QCBS | 55% | 45% | |
| Development of an online freight information exchange application | 450.000 | QCBS | 55% | 45% | |
| Component 4 | | | | | |
| Consultancy services for the CO-T1303 project | 220,000 | NICO | 17% | 830/ | |
| management | 220.000 | NICQ | 1 / 70 | 05% | |
| Final program evaluation | 50.000 | QCBS | 17% | 83% | |
| Financial Audit | 30.000 | QCBS | 17% | 83% | |

¹ Consulting Firms: QCBS: Quality- and cost-based selection QBS: Quality-based selection FBS: Selection under a fixed budget; LCS: Least-cost selection; CQS: Selection based on the consultants' qualifications; SSS: Single-source selection. Individual Consultants: NICQ: National Individual Consultant Selection based on Qualifications; IICC: International Individual Consultant selection based on Qualifications.