

# **PROJECT IDENTIFICATION FORM (PIF)**<sup>1</sup>

PROJECT TYPE: Full-sized Project TYPE OF TRUST FUND:GEF Trust Fund

#### **PART I: PROJECT IDENTIFICATION**

Project Title:	Stabilizing GHG Emissions from Road Transport Through Doubling of Global Vehicle Fuel				
	Economy: Regional Implementation of the Global Fuel Efficiency Initiative (GFEI)				
Country(ies):	In total 20 countries:	GEF Project ID: <sup>2</sup>	4909		
	4 countries through GEF STAR				
	allocations: Mauritius, Montenegro,				
	Jamaica and Peru;				
	11 countries without STAR				
	allocations: Cote d'Ivoire, India,				
	Philippines, Vietnam, Mexico,				
	China, Armenia, Azerbaijan,				
	Georgia, Brazil, Russia;				
	and an additional at least 5 countries				
	to be agreed upon. (see annex 1)				
GEF Agency(ies):	UNEP (select) (select)	GEF Agency Project ID:	00845		
Other Executing Partner(s):	FIA Foundation	Submission Date:	2012-04-17		
GEF Focal Area (s):	Climate Change	Project Duration (Months)	48		
Name of parent program (if		Agency Fee (\$):	171,363		
applicable):					
For SFM/REDD+					

## A. FOCAL AREA STRATEGY FRAMEWORK<sup>3</sup>:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount	Indicative Co-financing
CCM-4 (select)	Outcome 4.1: Sustainable transport and urban policy and regulatory frameworks adopted and implemented	Output 4.3: Energy savings achieved	GEFTF	1,632,035	12,787,553
(select) (select)	· ····· · · · · · · · · · · · · · · ·		(select)		
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(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)	Others		(select)		
		Sub-Total		1,632,035	12,787,553
		Project Management Cost <sup>4</sup>	GEFTF	81,602	673,029
		Total Project Cost		1,713,637	13,460,582

#### **B. PROJECT FRAMEWORK**

<sup>&</sup>lt;sup>1</sup> It is very important to consult the PIF preparation guidelines when completing this template.

<sup>&</sup>lt;sup>2</sup> Project ID number will be assigned by GEFSEC.

<sup>&</sup>lt;sup>3</sup> Refer to the reference attached on the <u>Focal Area Results Framework</u> when filling up the table in item A.

<sup>&</sup>lt;sup>4</sup> GEF will finance management cost that is solely linked to GEF financing of the project. PMC should be charged proportionately to focal areas based on focal area project grant amount.

Project Objective: To support the development of national fuel economy policies in 20 countries, 16 as a baseline and 4 countries through GEF 5, using existing tools developed with GEF4 support (examples are the baseline methodology and online toolkit). In addition, to support coordination of the 20 country projects at the regional level to ensure that results are disseminated to other countries within the region. This will result in reduced vehicle fleet CO2 emissions in these 20 countries inline with the Global Fuel Economy Initiative's target of a 50% improvement of the overall global fleet fuel economy by 2050.

Project	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant	Indicative Cofinancing
Component	Type	Expected Outcomes	Expected Outputs	1 unu	Amount (\$)	(\$)
1. National Activities	ТА	Outcome 1.1: Develop formal agreements with project country governments to work on adopting and implementing automotive fuel economy policies Outcome 1.2: Establish fuel economy baselines in the 20 project countries to determine the national vehicle fleet, average automotive fuel economy, CO2 emissions etc. Additionally, conduct a cost and benefit analysis (CBA) of various fuel economy policy interventions Outcome 1.3: Develop customized automotive fuel economy policies tailored from baseline and CBA for a specific country	Output 1.1: Established agreements with governments of the 20 project countries; Output 1.2: Automotive baseline and fuel economy cost and benefit analysis (CBA) established for at least 20 countries; Output 1.3: National fuel efficiency policies developed and adopted for at least 20 countries, including 4 countries using their GEF STAR allocations.	GEFTF	957,000	8,660,778
2: Regional Replication		regional workshops and follow-up to promote regional replication. Activities will include showcasing of the 20 project countries fuel economy policies to countries without policies to encourage them to adopt similar standards	Output 2.1: Established regional replication processes that resulted in: 2.1a) A workshop in each of the four regions to foster policy coordination and replication at regional and sub-regional level; 2.1b) South-south cooperation and support among project countries; 2.1c) Additional countries in the regions realize the benefits of fuel economy and start developing their own policies.	GEFIF	544,500	3,254,150

3. GFEI Communications	ТА	Outcome 3.1: The communications work will support activities that: 3.1a) Promote fuel economy in general - such as publications, global studies, websites, newsletters, etc. and, 3.1b) Assist the 20 country projects to disseminate their lessons learned globally e.g. via inclusion of country projects into the global toolkit.	Output 3.1: Expanded website, global and regional reports, updated GFEI toolkit (included the progress of the 20 country projects), GFEI information materials etc.	GEFTF	130,535	872,625
	(select)			(select)		
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	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
			Sub-Total		1,632,035	12,787,553
			Project Management Cost <sup>5</sup>	GEFTF	81,602	673,029
			Total Project Costs		1,713,637	13,460,582

# C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
National Government	Governments of countries where	In-kind	2,800,000
	project is implemented		
GEF Agency	UNEP	In-kind	470,000
GEF Agency	UNEP	Grant	5,268,399
Foundation	FIA Foundation	In-kind	1,542,000
Foundation	FIA Foundation	Grant	400,000
Other Multilateral Agency (ies)	IEA	In-kind	610,000
Other Multilateral Agency (ies)	ITF	In-kind	438,658
Others	ICCT	Grant	907,709
Others	ICCT	In-kind	1,023,816
(select)		(select)	
Total Cofinancing			13,460,582

# **D. GEF/LDCF/SCCF/NPIF** RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY<sup>1</sup>

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b) <sup>2</sup>	Total c=a+b
UNEP	GEFTF	Climate Change	Global	468,181	31,819	500,000
UNEP	GEFTF	Climate Change	Mauritius	363,636	36,364	400,000
UNEP	GEFTF	Climate Change	Montenegro	181,818	18,182	200,000
UNEP	GEFTF	Climate Change	Jamaica	350,000	50,000	400,000
UNEP	GEFTF(select)	Climate Change	Peru	350,002	34,998	385,000

<sup>&</sup>lt;sup>5</sup> Same as footnote #3.

UNEP	GEFTF(select)	(select)			0
(select)	(select)(select)	(select)			0
(select)	(select)(select)	(select)			0
(select)	(select)(select)	(select)			0
(select)	(select)(select)	(select)			0
Total Grant	Resources		1,713,637	171,363	1,885,000

<sup>1</sup> In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table
 <sup>2</sup> Please indicate fees related to this project.

#### PART II: PROJECT JUSTIFICATION

### A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1.1 the <u>GEF focal area/LDCF/SCCF</u> strategies <u>/NPIF</u> Initiative:

The overall goal of the GEF in climate change mitigation is to support developing countries and economies in transition towards a low-carbon development path and thus achieve large GHG reductions. Specifically, Focal Area Objective 4 seeks to "*promote energy efficient, low carbon transport and urban systems*". The GFEI fits perfectly into this as it will lead to the implementation of policies and regulatory frameworks that will improve vehicle fuel efficiency resulting in major CO2 reductions and contributing to the overall move to low carbon transport systems. Automotive fuel efficiency policies will also stimulate the development of, and investment in, cleaner vehicles production in developing and transitional countries.

A.1.2. For projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities: -

A.1.3 For projects funded from NPIF, relevant eligibility criteria and priorities of the Fund:-

A.2. national strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

All 15 confirmed countries for the regional implementation phase have identified vehicle fuel efficiency and/or GHG emission reduction from the transport sector as priorities in their TNA report or national communications to the UNFCCC.

Detailed references for the 4 GEF STAR countries (Mauritius, Montenegro, Jamaica and Peru) include:

• The **Mauritius** TNA and Maintenance and Enhancement of Capacities for Climate Change Activities report observed that the financial conditions in the road transport sector are such that technology changes for mitigation of GHG may be possible in clusters of options such as enhancing traffic management, improving the efficiency of existing transport technologies, pricing and regulatory reforms as well as introduction of advanced transport technologies (http://unfccc.int/ttclear/pdf/TNA/Mauritius/MauritusTNAreport.pdf, Page 47-59).

• The Initial National Communication on Climate Change of **Montenegro** to the UNFCCC highlighted transport as one of the main economic and development priorities due to the significant number of negative environmental impacts linked to the sector ranging from GHG emissions and generation of solid waste to degradation of biodiversity, soil and landscape values due to the construction of transport infrastructure (http://unfccc.int/resource/docs/natc/mnenc1.pdf, Pages 49, 52-53).

• **Jamaica's** Initial Climate Change TNA report stated that the increase in motor vehicles in Jamaica prioritizes the need to address transport sector issues through introduction of various new strategies and technologies that reduce GHG emissions and dependency on gasoline such as low sulphur diesel engines (http://unfccc.int/ttclear/pdf/TNA/Jamaica/870.pdf, Pages 14-15).

• **Peru's** national communication to the UNFCCC highlights that training and increasing of public awareness is needed together with legislation of standards (including incentives) to promote cleaner and more fuel efficient vehicles in order to improve the GHG emissions, air pollution, congestion, and high fuel consumption related to transport in the country. (http://unfccc.int/ttclear/jsp/CountryReports.jsp, Pages 108-128)

#### **B. PROJECT OVERVIEW:**

B.1. Describe the baseline project and the problem that it seeks to address:

#### **Business-As-Usual (BAU) Scenario:**

• The world's light duty vehicle stock is expected to approximately triple from 2012 to 2050 under BAU (0.9 to 2.5 billion vehicles) with 90% this growth taking place in non-OECD countries (Figure 1). A tripling of the global vehicle stock is expected to more than double the global vehicles related CO2 emissions.

#### Figure 1: Predicted Global Growth in Light Duty Vehicles



• Transportation accounts for a quarter of the world's energy usage and for a quarter of the global CO2 emissions - which is set to increase to a third by 2050 (IEA, 2011). The transport sector CO2 emissions are increasing more rapidly than any other sector.

• Transport is a major contributor to Black Carbon (BC) emissions that is now believed to be the second most important climate change emission.

• To date, global climate change mitigation programmes and initiatives have not given a level of attention to the role of transport that is in proportion to its impact. Given the significant contribution of road transport to emissions, addressing road transport and automotive fuel efficiency forms an integral part of the G8 and IPCC recommendations to limit global warming to 2°C from pre-industrial levels.

#### **Baseline Project**

The first GFEI (GEF4) project established the tools needed for countries to be able to develop fuel economy policies. The baseline project for this new GFEI regional project is that the GFEI is working in 11 countries (see Annex 1) supporting these countries to develop national fuel economy policies. These activities are fully funded by other donors (including EU, US, Germany, and several major Foundations). We are developing at least another 5 country projects using the same resources (see Annex 1). Without GEFV support we will support an estimated 16 countries, with the GEF5 support we will be able to increase this number to 20.

The 20 countries included in this project have not put in place comprehensive policies that promote a shift to cleaner and more efficient vehicles, which would be needed to avoid the scenario of major increases of CO2 emissions as described above in the Business-as-Usual text. However all countries included in the project have requested support in developing such policies, recognizing the multiple benefits of such policies.

The policy baselines in the 4 countries with STAR allocations (Peru, Jamaica, Montenegro and Mauritius) are as follows:

**Peru's** nationwide fuel sulphur level is very high (5,000ppm), with only the cities of Lima and Callao at low levels (50ppm). Although no target date has yet been set for introduction of cleaner fuels and vehicles, Peru has indicated to be ready to move on fuel quality and vehicles issues, with refinery upgrades planned and an inter-ministerial national taskforce set up in 2012 to plan the way forward. The existing vehicle emission standard of Euro 2 (from 2001 law) is currently being revised for Euro 3 - 5. Imported vehicles must be less than 5 years old. There is currently no data on the vehicle fleet (numbers of imports and types of vehicles) and no fuel economy policies. Peru has requested support on cleaner fuels and more efficient vehicles and has committed USD 385,000 of their GEF 5 STAR allocation to the GFEI Project to develop a clean and efficient vehicles policy.

**Jamaica** has a nationwide fuel sulphur level of max 5,000ppm with no target date set for low sulphur fuels. The country has no vehicle emissions standards or fuel economy policies or roadmap in place. However, some regulations have been put in place, for example imported vehicles must be less than 3 years old from the date of manufacture. There is very little information on the vehicle fleet, e.g. number of vehicles, age,

technology, efficiency, etc. Jamaica has requested support to develop a clean and efficient vehicles policy and committed USD 400,000 of their GEF 5 STAR allocation to the GFEI Project.

**Montenegro** transitioned to Euro 5-level fuel quality and vehicle emission standards in early 2011. However, further work on lowering CO2 emissions from vehicles (i.e. fuel economy) has been limited to initial information gathering on the country's vehicle fleet (numbers of imports and types of vehicles). UNEP has invested USD 40,000 in an information-gathering project to form a national working group and determine the country's data availability on its light duty vehicle imports. However, further calculation of a fuel economy/auto CO2 emission baseline and the design and implementation of a policy framework will require a full, multi-year GFEI project.

Even though **Mauritius** has no comprehensive fuel economy policy and road map, the Government is keen to improve the vehicle fleet and has introduced policies/incentives to promote this. For example, there is a 50 % excise duty waiver on electric and hybrid cars and a 50% reduction in registration fee. A vehicle CO2 tax was introduced 2011. Imported vehicles must be less than 4 years old. In March 2012, the Government adopted a Euro-4 equivalent diesel sulphur standard of 50 ppm. Additionally, a national steering committee was set up, with the aim of achieving 50 ppm sulphur level diesel importation and to promote the use of cleaner vehicles. Thus the country is ready to develop and implement a comprehensive fuel economy policy.

#### Alternative Scenario – GFEI intervention - doubling fuel economy:

#### Alternative to business-as- usual

The GFEI aims to improve the global automotive fuel economy from its current global average of 8L/100km to 4L/100km. This will be achieved through having countries that have not yet done so adopt clean and efficient vehicles policies (which in some cases includes the introduction of cleaner fuels that are necessary to allow introduction of modern, more efficient vehicles).

While in OECD countries policies have been put in place to improve efficiency (from 2005-08 average fuel economy improved 2.3%/yr), in non-OECD countries there are only a handful of countries that have policies to promote fuel economy – actually fuel economy got worse in non-OECD countries on average 0.3%/yr from 2005-08 (IEA, 2011).

The trend is that the fuel economy in non-OECD countries is increasingly deteriorating while at the same time almost 2 billion vehicles will be added to these countries in the coming decades.

Doubling fuel economy together with measures promoting public transport, non-motorised transport, better urban planning etc. can actually reduce the overall CO2 emissions of the transport sector.

GEF 5 funding will support the 4 countries listed above to develop a clean and efficient vehicles policy. These 4 countries have prioritized this issue, have been in direct contact with the GFEI partners and have decide to allocate their STAR funds to a national fuel economy project.

Thus GEF5 support will increase the baseline of 16 countries to 20 countries. It will also support a regional component that will coordinate and share information among the 20 project countries and will promote the replication of fuel economy policies to other countries within regions.

#### **Progress to date**

Figure 2: Roadmap for Global Implementation of Cleaner, More Efficient Vehicle Policies



Thus far the GFEI has made excellent progress in the implementation of a global fuel economy program. A comprehensive interactive online tool was developed that includes examples of policy interventions of countries around the world – providing a menu of options for countries developing fuel economy policies.

Baseline methodologies were developed, a secretariat was set-up and four country pilot projects are implemented. GEF4, as one of several partners, provided support to the project that set-up the GFEI and the four pilot country projects. Together the tools, the lessons learned from the pilot projects, the network and institutional set-up now allow the GFEI to start supporting groups of countries in regions.

An independent review by Climate Excellence (an African NGO) established that the GFEI has accomplished most of the major objectives as per the GEF4 Project Agreement. Most notably:

- Developed an online global database on fuel and vehicle characteristics (http://www.unep.org/transport/pcfv/cleanfuelsdata/);
- Created an on-line toolkit (www.unep.org/transport/gfei/autotool) providing details of adopted fuel economy policies and information for countries to develop a fuel economy policy;
- Set up pilot projects in 4 countries (Kenya, Indonesia, Chile and Ethiopia) to develop fuel economy policies;
- Established a Secretariat and a partnership with public and private sector organisations to assist in implementation;
- Created initial informational and awareness raising materials;
- Developed a methodology for country baseline data setting, providing a means to measure progress and policy impacts.

B. 2<u>. incremental /Additional cost reasoning</u>: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated <u>global</u> <u>environmental benefits</u> (GEF Trust Fund/NPIF) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

#### **Incremental activities requested**

The funds requested from GEF5 will allow the project to add four additional countries to the project. It will result in a wider group of countries working on fuel economy policies in each of the regions and thus it will also strengthen the regional component. For example the GEF 5 will add two countries in Latin America and Caribbean (LAC), Peru and Jamaica, doubling the participating countries in the LAC region. This will provide a solid base for the LAC regional phase of the project which is aimed at coordination and replication to other countries in the region.

#### Activities to achieve the outcomes and outputs

The activities to achieve the outcomes and outputs as included in the Project framework are as follows: Under the project the capacity of policy makers in the project countries will be developed through workshops, toolkits, technical advice, regional networking etc., to allow them to develop and implement automotive fuel economy policies.

• **National activities** – the 20 project countries have been selected on the basis of three criteria: *Demand* – countries that are keen to improve the fuel economy of their fleet (often for multiple reasons) (also shown by the five countries that have allocated their GEF STAR allocation to this project); *Regional spread* – to ensure that we have several countries in each region, which would be needed for the regional phase;

*Strategic importance*; ensure a mix of small and large countries and ensure that countries that play a leading role in a (sub) region are included.

The 20 project countries will be supported to develop national fuel economy policies. Depending on the local situation, a typical national project will involve:

- (i) Agreement between the Executing Agency and the country;
- (ii) Creation of a national task force;
- (iii) National launch workshop;
- (iv) Establishment of national baseline– often with help of local partners that show the efficiency of the current national vehicle fleets. By determining the average fuel economy baseline regularly, the project countries will be able to see how fuel economy policies will impact their fleet and result in the introduction of more efficient vehicles and thus reduction of average CO2 emissions and the achievement/ contribution to regional and global targets. A methodology that allows countries to establish their baselines (also in cases with limited data availability) has been developed as part of the first GFEI project (GEF4) and will be used by the 20 project countries to establish their baselines. The tool is online available, and as part of the first GFEI (GEF4) project, local organisations have been trained in its application and these organisations will be used to support the 20 project countries, if needed, to develop their baselines;
- (v) A cost-benefits analysis comparing possible interventions showing where the specific intervention opportunities are in a specific country;
- (vi) National policy workshop identifying policy interventions (often including external support and advise including south-south best practice sharing);
- (vii) Policy decision development of national policy; (viii) adoption of policies. Depending on the specific country this process will add or skip some of the steps, for example, some countries may already have a baseline or do not require a cost benefit analysis. The GFEI toolkit that was developed in the first GFEI (GEF4) project gives a detailed overview of policies that countries can introduce. It also gives case studies of several countries that have introduced these policies. It includes the first 4 GFEI pilot countries that were supported by the first GFEI (GEF4) project. Possible policies that countries may introduce are grouped in 3:
  - a. Regulatory; these are standards, that for example, restrict the importation of used vehicles to a certain age limit or on the basis of another criteria;
  - b. Economic; these are policies that provide economic incentives for more efficient vehicles, e.g. a feebate programme that reduces taxes on efficient vehicles and increases taxes on inefficient vehicles;
  - c. Communication tools; these provide fuel economy information and its benefits e.g. labeling programs, whereby vehicles are labeled to show their efficiency and costs of fuel use to consumers to ensure fuel economy is considered when procuring a vehicle.

Almost always countries combine interventions from these three groups in their national fuel economy policies

The project will focus on the countries' light duty vehicle fleets as the CO2 emissions of these are normally

much bigger than their heavy duty fleet. However, if a country has a specific request and/or heavy duty fleets are a major factor, we may also include heavy duty fleets in the country projects.

• **Regional replication** – to be effective national policies will need to be developed in coordination in the (sub) region. Fuels and also vehicles issues often follow sub-regional and regional markets. For example, some countries refine or import and thus there is trade between countries. Promoting cleaner fuels and vehicles often needs to be done at sub-regional or regional level. For several reasons – for example it does not make sense if land locked Uganda will put standards in place while it is getting all its fuel from Kenya. Also, vehicles are often traded within sub-regions, something which is difficult to control. Governments, and especially also the private sector, insist on sub-regional and regional harmonization.

Each region (Africa/ Latin America & Caribbean/ Central and Eastern Europe/ Asia/ Middle East) will, after two years or so, see a group of countries having developed fuel economy policies or in process of developing these policies. This would be:

(i) The four pilot countries from the earlier (GEF4) project,

(ii) The 20 countries of the current project (including the four countries with GEF STAR support) and (iii) Some countries that have already developed national automotive fuel economy policies on their own.

The intention is to bring all these countries together, at regional level, to

- a) Showcase countries that have developed/are developing national automotive fuel economy policies in the same region;
- b) Develop national pilot projects into regional knowledge sharing hubs ensuring that information of the countries in the region is regionally available;
- c) Invite countries that do not have automotive fuel economy policies to join the workshop and see the progress in policy development in the region, motivating them to start their own national fuel economy processes;
- d) Provide the link to the third (and final) phase of the GFEI to support the development of fuel economy policies in the remaining countries worldwide.

Some regional agreements or initiatives exist on harmonization of clean fuels and vehicles standards. This is for example the case in Latin America and Africa. Although the focus of most of these agreements is on air pollution and health impacts rather than on GHG emissions, they still provide an excellent basis to work with countries to introduce fuel economy policies as they provided agreed, harmonized targets.

**GFEI communications** – a global communications component will provide support to the national and regional activities to ensure that the different regional processes are linked and to ensure that lessons learned and tools developed will be shared among the projects. The global communications component will provide support through the development and/or dissemination of documents, tools, website, newsletters etc. to ensure all best practices are captured and shared among countries and regions.

#### **<u>GHG emissions benefits</u>**

• Developing countries are predicted to invest approximately USD 200 trillion over the next forty years in fuels and motor vehicles (IEA, 2010). With fuel economy policies in place these investments will be made in more efficient vehicles resulting in reduced CO2 emissions as opposed to a BAU scenario of doubling of CO2 emissions from their fleets.

• Besides the GEF5 funding requested, significant funding has already been received from other sources and additional funding is being sought to meet the overall cost of the GFEI Regional Implementation project of four years of approximately USD 15-20 million.

- The overall CO2 emissions from the vehicle fleets of all the countries targeted for the regional GFEI project (Annex1) are an estimated at 1,100 megatonnes per year, Mt/yr (2012). The estimated benefits of doubling fuel economy of these country fleets are reductions of over 900 Mt/yr by 2025 and 2,200 Mt/yr by 2050 of CO2 emission. See Annex 2 for more details on these estimations.
- In specific, the 4 GEF STAR allocation countries included in this project alone currently produce approximately 25 Mt/yr of CO2 emissions from road transport. This figure is projected to more than triple

by 2050 without intervention (UNFCC/IEA, 2009). Introducing policies aimed at a 50% improvement in vehicle fuel efficiency in the 4 GEF STAR allocation countries can result in CO2 emission reductions of approximately 20 Mt/year by 2025 (roughly equivalent to Tunisia's total 2009 CO2 emissions from fuel combustion) and 40 Mt/yr by 2050 (roughly equal to Nigeria's total 2009 CO2 emissions from fuel combustion) (UNFCC/IEA, 2009). See Annex 2.

• In line with GEF CCM-4 FA goals, actualization of 4L/100km (25km/L) global fuel economy will reduce global road transport CO2 emissions by over 1 gigatonne (Gt) a year by 2025 and over 2 Gt/yr by 2050.

B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF). As a background information, read <u>Mainstreaming Gender at the GEF</u>:

#### Local air quality:

• Road transport is responsible for an estimated 70-90% of local air pollution in urban areas, causing health problems, premature deaths and reductions in GDP of up to 5%.

• More efficient vehicles are cleaner, smaller, use modern engine design and emission control technologies, and use cleaner fuels - all helping to reduce emissions of pollutants up to 90% - especially nitrogen oxides, hydrocarbons and particulate matter (PM), including BC.

#### Black Carbon:

• Road transport (specifically diesel engines) is a significant source of BC emissions globally (estimated at 18-24% of total BC emissions) which has negative impacts on human health and is an important contributor to climate change. IPCC now believes that BC is the second largest contributor to global warming. Cleaner, modern, more efficient vehicles with matching fuels will contribute to immediate and substantial reductions in BC emissions.

#### Oil consumption & Energy dependence:

• Improving fuel efficiency will also reduce the dependency of many countries on oil imports and decrease the burden on government budgets for these imports, which can result in savings in annual oil import bills worth over US\$ 300 billion in 2025 and US\$ 600 billion in 2050 (based on an oil price of US\$ 100/barrel).

• As many countries are faced with wildly fluctuating oil prices and energy dependence, energy efficient vehicles will conserve a valuable and finite resource.

#### Introduction/ dissemination of cleaner vehicles technologies:

• The coming decade will see massive penetration of low and zero emissions vehicles in some markets (mainly OECD), especially hybrid, plug-in-hybrid and electric vehicles. This project will support countries in developing policies and standards ensuring optimal introduction of these clean vehicle technologies.

• Gender considerations: women and vulnerable groups, esp. children and elderly, are adversely affected by poor air quality as they relatively spend more time outside and along roads. As the project will have major air quality benefits, it will especially benefit women and vulnerable groups.

B.4 Indicate risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design

<ul> <li>Possible Risks</li> <li>Lack of political interest in countries on the issue of fuel efficiency;</li> <li>Lack of implementation of global, regional and national commitments made by involved stakeholders.</li> </ul>	<ul> <li>Mitigating Actions</li> <li>GFEI has been raising awareness on clean fuels and vehicles for a number of years and from a number of perspectives, including climate change, local air quality and national energy security;</li> <li>GFEI has been introduced at a number of regional and national conferences, and much interest has been generated, leading to requests by several countries for a GFEI national project.</li> </ul>			
B.5. Identify key stakeholders involved in the project including the private sector, civil society				

B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

The **FIA Foundation**, which hosts the GFEI Secretariat, is an independent UK registered charity which supports an international programme of activities promoting road safety, the environment and sustainable mobility. The FIA Foundation has dedicated staff responsible for overall coordination and implementation of the GFEI workplan, including this project. In addition, the FIA Foundation will also take the lead in communication issues in the GFEI. The other GFEI partners lead in other areas as follows:

**International Energy Agency (IEA):** Research, data collection, support for baseline setting and evaluation of policy options. It produces an annual Fuel Economy Assessment report.

The International Transport Forum (ITF): Engaging auto manufacturers to harmonize standards.

The **UN Environment Programme (UNEP)**: support to policy development at national level in developing countries.

The **International Council for Clean Transport (ICCT)**: to provide specialised technical support to countries developing fuel economy policies and standards, mainly focusing on large countries.

**Institutional setup:** The five GFEI partners (UNEP, IEA, ITF, ICCT and FIA Foundation) coordinate and implement the GFEI with the support of a **GFEI Secretariat** that is hosted by the FIA Foundation. Advice and guidance is provided by the **GFEI Contact Group** and the **GFEI Advisory Group**. The Contact Group includes donors, representatives of the vehicle and oil industries, experts, governments and civil society. The Advisory Group consists of internationally recognised transport experts - it provides technical and policy guidance to the GFEI partners and projects.

The GFEI has a tri-annual **work programme** with 5 regional sub-programmes in: Asia; Africa; Latin America and the Caribbean; Central and Eastern Europe; and OECD countries. All sub-programmes include outreach and awareness raising, policy support, and data generation and analysis.

The GFEI has developed a number of **strategic partnerships** around the issues of cleaner fuels and vehicles with various regional organisations such as Mario Molina Centre (Latin America and the Caribbean), Regional Environment Centre (Central and Eastern Europe), Clean Air Initiative for Asia (Asia), and Air Pollution Information Network for Africa (Southern Africa). These partners assist governments through awareness raising and technical support.

The **National Stakeholders** that will take the lead in in-country implementation of the 4 GEF5 supported national projects are: The Ministry of Housing, Environment and Water (Jamaica), The Ministry of Finance and Economic Development (Mauritius), The Ministry of Sustainable Development and Tourism (Montenegro) and The Ministry of Environment (Peru). In the case a particular Ministry is not in charge of setting fuel economy regulations, they will work with other ministries. In most cases setting fuel economy regulations is undertaken by several Ministries together - Ministries of Environment, Energy, Transport and often also Finance (for example in the case of economic interventions such as feebate systems). These Ministries are involved in the national project through project steering committees and taskforces.

**National NGO's** are involved as local partners for specific tasks in specific countries. For example, in the first GFEI project national NGOs (for example in Indonesia) have worked with the government to develop national cost benefits study. In other cases national NGOs play a role in the communication and awareness activities or the baseline data gathering.

**Consumers/ public participation** - in the end consumers will be responsible for the CO2 emissions reductions as they will procure more efficient vehicles as a result of the national policies. Thus consumers are an important group to involve in the national projects right from the start. All country projects will invite consumer organisations, often the national automobile federations, to join the project taskforce or steering committee. Consumer organisations will also be used for communications and awareness raising activities within the country projects.

**The private sector** has a keen interest in the GFEI. The **GFEI Contact Group** includes major vehicles and oil companies and their representative organisations. In addition, in the national GFEI projects the private sector has always shown a keen interest and is almost always included in the national taskforce or committee that most countries have set up to guide the project and develop the fuel economy policy. There is interest from both the petroleum and vehicles industry.

B.6. Outline the coordination with other related initiatives:

• The 20 country projects will be supported using financial support from many partners/ sources. GEF STAR allocation will support four countries implement their national project (Jamaica, Peru, Montenegro and Mauritius). Other countries will be supported from different sources, including EU, Germany, USA, FIA Foundation, UNEP, IEA, ITF, Climate Works Foundation, European Climate Foundation, Bloomberg Foundation and others.

• The Russia national project will have multiple sources of funding. One source is a GEF supported UNDP/ Russian Government transport project. This project has a fuel economy component. UNDP and the Russian Government have asked the GFEI to work with them in implementing this component. GFEI partners, esp. ICCT and UNEP, will take the lead in this component of the UNDP/ Russian Government project.

• On 17 February 2012, The US Government, represented by Secretary of State Clinton, and UNEP, together with five other countries, launched the Climate and Clean Air Coalition that is focusing on short lived climate forcers. UNEP's work to promote cleaner and more efficient vehicles has a significant impact on BC emissions globally and will be one of the pillars of this new global Coalition.

• The UN Secretary General launched the high level Sustainable Energy for All initiative (SE4ALL). Panel members are interested to include the issue of automotive fuel economy in the top priority list of short term actions to be undertaken in the area of energy efficiency and are in contact with the GFEI partners on this. The final draft includes automotive fuel economy , and in specific the work of the GFEI, as a suggested priority intervention in the area of energy efficiency.

#### C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

• This project fits with the ongoing transport projects and programs that UNEP is implementing, and in specific programs on cleaner and more efficient fuels and vehicles. UNEP has a team of 15 staff working on this with a biennial budget of over USD 5 million.

• UNEP is heading the leading global initiative to promote cleaner fuels and vehicles world wide – the Partnership for Clean Fuels and Vehicles (PCFV). UNEP is also a leading partner, and responsible for policy development activities, in the Global Fuel Economy Initiative (GFEI). In this capacity UNEP has supported more than 80 countries world-wide.

• UNEP's work to promote sustainable transport through cleaner and more efficient fuels and vehicles is a core element of UNEP's overall climate sub-programme and green economy initiative.

• The GFEI is the leading global programme supporting fuel economy policy development in developing and transitional countries. Through its GEF4 supported GFEI set-up project, the GFEI has developed best practices, baseline data setting methodology, public-private partnerships and strategic partners at the national and regional levels. These will be essential tools to develop a regional approach and support a larger group of between 16-20 countries in developing fuel economy policies.

C.1 Indicate the co-financing amount the GEF agency is bringing to the project:

UNEP has already secured more than USD 5.5 million in financial and in-kind contributions to the GFEI regional project. Several major donors are considering increasing their support to UNEP's clean and efficient

fuels and vehicles work. More than 10 donors have already committed support to UNEP's clean fuels and vehicles work - governments, international organisations, private sector and civil society organisations. Major donors are the UN, US Government, Germany, European Union and Bloomberg Foundation.

C.2 How does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

GFEI is indicated in the UNEP 2012 - 2013 work programme adopted by the Governing Council. Staff based in the UNEP Regional Offices will assist in the implementation of activities within their respective regions. Regional Offices will work closely with the strategic partners at the regional level (such as the Clean Air Initiative in Asia, the Mario Molina Centre in Latin America, etc. - see B5) to support the national projects.

# PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the <u>Operational Focal Point endorsement letter(s)</u> with this template. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	<b>DATE</b> ( <i>MM/dd/yyyy</i> )
Leonie Barnaby	GEF Operational Focal	MINISTRY OF	08/12/2011
	Point, Jamaica	HOUSING,	
		<b>ENVIRONMENT &amp;</b>	
		WATER,	
		JAMAICA	
José Antonio González	GEF Operational Focal	MINISTRY OF	
Norris	Point, Peru	ENVIRONMENT,	
		PERU	
Andro Drecun	GEF Operational Focal	MINISTRY OF	02/04/2012
	Points, Montenegro	SUSTAINABLE	
		DEVELOPMENT	
		& TOURISM,	
		MONTENEGRO	
Ali Mansoor	GEF Operational Focal	MINISTRY OF	11/07/2011
	Point, Mauritius	FINANCE AND	
		DEVELOPMENT,	
		MAURITIUS	

#### **B. GEF AGENCY(IES) CERTIFICATION**

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.

Agency Coordinator, Agency name	Signature	<b>DATE</b> ( <i>MM/dd/yyyy</i> )	Project Contact Person	Telephone	Email Address
Maryam Niamir- Fuller, Director, GEF Coordination Office, UNEP	U. Mian Juller	04/17/2012	Edu Hassing	+33 1 4 4371472	edu.hassing@unep.org

## <u>Annex 1 – Countries involved in Regional Implementation of the Global Fuel Efficiency Initiative</u> (GFEI) project

<u>COUNTRY</u>	<b>REGION</b>
STAR allocation	S
1. Mauritius	AFRICA
2. Montenegro	CEE
3. Jamaica	LAC
4. Peru	LAC
Ongoing project	S
5. Côte d'Ivoire	AFRICA
6. India	ASIA PACIFIC
7. Philippines	ASIA PACIFIC
8. Viet Nam	ASIA PACIFIC
9. China	ASIA PACIFIC
10. Mexico	LAC
11. Brazil	LAC
12. Armenia	CEE
13. Azerbaijan	CEE
14. Georgia	CEE
15. Russia	CEE
Possible – under devel	opment
Benin	AFRICA
Mali	AFRICA
Morocco	AFRICA
Nigeria	AFRICA
Zambia	AFRICA
Bangladesh	ASIA PACIFIC
Bosnia and Herzegovina	CEE
Colombia	LAC
Costa Rica	LAC
Paraguay	LAC
Syria	MEWA

#### Annex 2 – Methodology to estimate GHG emissions vehicle fleets

Often specific data on the CO2 emissions of vehicle fleets is not available. Part of the country projects is to establish this data – by establishing a baseline the country can be compared with other countries and trends in improvement (or worsening) in fuel economy can be compared to other countries in the region and countries worldwide. Such information is essential for decision makers. The illustration shows how the Chile pilot country project, part of the first GFEI (GEF4) project, has enabled Chile to establish their baseline and compare it to other countries. As a result Chile has now prepared a fuel economy policy (based on a feebate system), that is submitted to congress for approval this month.



#### ACTUAL FLEET AVERAGE FUEL ECONOMY DATA THROUGH 2008 AND NEAREST TARGETS ENACTED OR PROPOSED THEREAFTER BY REGION

The Regional Implementation of the Global Fuel Efficiency Initiative (GFEI) project will consist of at least 20 countries selected from a list of 26 potential countries (Annex 1). Of these countries, 4 have already committed part their STAR allocations to this project (Jamaica, Mauritius, Montenegro and Peru). CO2 emissions profiles for the list of potential countries were downloaded from the United Nations Framework Convention on Climate Change (UNFCCC) website<sup>6</sup>.

From these profiles, the total CO2 emissions for a given year as well as the transport-related CO2 emissions without Land Use Change and Forestry (LUCF) were derived. Data for transport CO2 emissions from fuel combustion for 2009, as derived from the International Energy Agency<sup>7</sup> was also included. Thus two independent sources of emissions data was used to increase statistical significance of the dataset from which extrapolation was going to be based as well as to provide added data verification.

For each country, the combined UNFCCC and IEA transport CO2 emissions dataset was described using best-fit models, taking into account the expected population growth<sup>8</sup> as well as motorization<sup>9</sup>. Based on

<sup>&</sup>lt;sup>6</sup> <u>http://unfccc.int/ghg\_data/ghg\_data\_unfccc/ghg\_profiles/items/4626.php</u>

<sup>&</sup>lt;sup>7</sup> CO2 Emissions from Fuel Combustion (2011 Edition), IEA, Paris.

<sup>&</sup>lt;sup>8</sup> United Nations Department of Social and Economic Affairs, Population Division, World Urbanization Prospects: The 2009 Revision, POP/DB/WUP/Rev.2009/1/

<sup>&</sup>lt;sup>9</sup> LDV growth - prediction baseline scenario from ETP 2010 (IEA 2010)

the best fit models described, Table 1 summarizes the Business-As-Usual (BAU) CO2 emissions extrapolation scenario for the Regional Implementation of the GFEI project, including the GEF5 countries

Table 1. UNFCCC and IEA Transport CO2 Emissions (in Mt) without LUCF:BUSINESS-AS-USUAL (BAU) EXTRAPOLATION							
2012 2025 2050							
Peru	12	22	63				
Montenegro	1.3	1.8	2.9				
Mauritius	8.3	8.9	10				
Jamaica	1.7	2.9	5.2				
TOTAL GEF5 BAU EMISSIONS (4 Countries) 24		35	81				
TOTAL GFEI BAU EMISSIONS (26 countries)	1,146	1,850	4,560				
Total GEF5 Intervention Emissions Savin	18	40					
Total GFEI Regional Implementation Emissions Savir	925	2,280					

\*Assumes 50% reduction in vehicle emissions due to doubling of vehicle fuel efficiency