



REQUEST FOR CEO ENDORSEMENT/APPROVAL

PROJECT TYPE: Medium-sized Project

THE GEF TRUST FUND

Submission Date: December 17, 2010

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December 22, 2011

February 1, 2012

February 10, 2012

PART I: PROJECT INFORMATION

GEFSEC PROJECT ID 4236

GEF AGENCY PROJECT ID: 44381

COUNTRY(IES): Regional

PROJECT TITLE:

GHG Assessment Methodologies in Sustainable Transport

GEF AGENCY(IES): AsDB,

OTHER EXECUTING PARTNER(S): none

GEF FOCAL AREA(S): Climate Change

GEF-4 STRATEGIC PROGRAM(S): SP5 Promoting Sustainable Innovative Systems or Urban Transport

NAME OF PARENT PROGRAM/UMBRELLA PROJECT: Not Applicable

Expected Calendar (mm/dd/yy)	
Milestones	Dates
Work Program (for FSPs only)	NA
Agency Approval date	28/02/2012
Implementation Start	1/05/2012
Mid-term Evaluation (if planned)	NA
Project Closing Date	31/12/2013

A. PROJECT FRAMEWORK (see page 2)

B. SOURCES OF CONFIRMED CO-FINANCING FOR THE PROJECT (expand the table line items as necessary)

Name of Co-financier (source)	Classification	Type	Project	%*
GEF Agency(ies)-ADB	Multilat. Agency	Grant	1,000,000	50%
Total Co-financing			1,000,000	50%

* Percentage of each co-financier's contribution at CEO endorsement to total co-financing.

C. FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	Project Preparation <i>a</i>	Project <i>b</i>	Total <i>c = a + b</i>	Agency Fee	For comparison: GEF and Co-financing at PIF
GEF financing	0	1,000,000	1,000,000	100,000	1,000,000
Co-financing	0	1,000,000	1,000,000	0	1,000,000
Total	0	2,000,000	2,000,000	100,000	2,000,000

D. GEF RESOURCES REQUESTED BY AGENCY(IES), FOCAL AREA(S) AND COUNTRY(IES)¹

Not Applicable.

B. PROJECT FRAMEWORK

Project Objective: Promote sustainable, low-carbon public transport through development and deployment of calculation methodologies to quantify both global and local benefits with greater ease and higher accuracy, and also to increase the engagement of national and international funding for sustainable urban transport.

Project Components	Indicate whether Investment, TA, or STA ²	Expected Outcomes	Expected Outputs	GEF Financing ¹		Co-Financing ¹		Total (\$) c=a+ b
				(\$ a)	%	(\$ b)	%	
1. GHG Impact Assessment Methodology Refinement, Application, and Validation	STA	A cost-effective and robust methodology for the assessment of GHG emission impact and associated local co-benefits from public transport systems	<p>Review of past work on methodologies and lessons from case studies in terms of data requirements, model structure, alternatives, and accuracy of results</p> <p>Expert inputs to the methodology through (a) facilitated online discussion, (b) selected technical papers, and (c) a regional work shop with participation from international organizations, universities, NGOs, etc.</p> <p>Methodology applied to four (4) cities: Ahmedabad (India), Lanzhou and Guangzhou (China), and Jakarta (Indonesia)</p>	180,000	60%	120,000	40%	300,000
2. Policy recommendations to catalyze mainstreaming GHG calculations into public transit operations	TA	Climate change mainstreamed in business development strategies of public transport operators and local as well as national level policies guiding and regulating public transport operations and operators	<p>Policy, technical, financial, institutional and other barriers identified which hamper the mainstreaming of climate change considerations in operations of public transport operators.</p> <p>Business Plans of at least 3 public transport companies incorporate climate change oriented sustainability indicators and system for periodic measurement is in place.</p> <p>Recommendations for enabling local national policies to promote mainstreaming of climate change considerations by public transport operators have been formulated in at least three (3) cities</p> <p>Development of recognition programme for bus companies incorporating quality components and fulfilling system monitoring; programme development shall include a full branding and marketing plan. Trial of recognition programme with at least two public transport operators with the aim to develop roll-out of recognition system on larger scale</p>	339,000	60%	225,000	40%	564,000
3. Mobilization of financing and partnerships	TA	Increased engagement of national and international financing	Financing models which enable Public Transport Operators to mainstream climate change through a	253,000	55%	210,000	45%	463,000

for sustainable, low carbon public transportation in developing countries		organizations for sustainable, low-carbon public transport systems	<p>combination of internal resource mobilization and external measures including better utilization of climate finance, MDB finance, land value capture, parking levies and leveraging public-private sector partnerships.</p> <p>Recommendations on conditions and methodologies under which public transport operators can better access climate finance (including but not limited to CDM and NAMAs) for mainstreaming climate change in public transport.</p> <p>Financing Plans for intensified mainstreaming of climate change in operations of at least 3 public transport operators</p>					
4 Dissemination of project Results	TA	Urban Public Transport Systems have integrated GHG assessment methodologies and reduction strategies in their operations	<p>Manual on the Sustainable Transport GHG Calculation Tool. On-line user-friendly version of the Sustainable Transport GHG Calculator, distributed through the sites of ADB, CAI-Asia Center, UITP, GIZ SUTP, and ITDP</p> <p>Presentations at minimum Five (5) workshops to explain the usage of the Sustainable Transport GHG Calculator and to mainstream its application, in coordination and cooperation with amongst others UITP</p> <p>Proposal for roll-out of recognition scheme on national or regional level.</p> <p>Regional workshop, in cooperation with Partnership for Sustainable Low Carbon Transport and UITP, on results of the project</p>	172,980	39%	275,000	61%	447,980
5. Project management				55,020	23%	170,000	77%	225,020
Total Project Costs				1,000,000	50%	1,000,000	50%	2,000,000

¹ List the \$ by project components. The percentage is the share of GEF and Co-financing respectively of the total amount for the component.

² TA = Technical Assistance; STA = Scientific & Technical Analysis.

E. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

<i>Component</i>	<i>Estimated person weeks</i>	<i>GEF amount (\$)</i>	<i>Co-financing (\$)</i>	<i>Project total (\$)</i>
<i>Local consultants*</i>	112	146,920	120,000	267,032
<i>International consultants*</i>	90	292,500	400,000	692,590
Total	202	439,420	520,000	959,622

* Details to be provided in Annex C.

F. PROJECT MANAGEMENT BUDGET/COST

<i>Cost Items</i>	<i>Total Estimated person/weeks</i>	<i>GEF amount (\$)</i>	<i>Co-financing (\$)</i>	<i>Project total (\$)</i>
<i>Local consultants*</i>	8	\$10,520	8,000	18,520
<i>International consultants*</i>	6	\$19,500	72,000	\$91,500
<i>Office facilities, equipment, vehicles and communications*</i>		25,000	90,000	115,000
<i>Travel*</i>		0	0	0
Total	14	\$55,020	\$170,000	\$225,020

* Details to be provided in Annex C.

G. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? yes no

(If non-grant instruments are used, provide in Annex E an indicative calendar of expected reflows to your agency and to the GEF Trust Fund).

H. DESCRIBE THE BUDGETED M & E PLAN:

Type of M&E Activity	Responsible Parties	Project Budget (\$) (Excluding Project Team Staff Time)	Time Frame
Inception Workshop and Report	• ADB	\$25,000	At project inception.
Project Implementation Report (PIR)	• ADB		Annual reporting to GEF and participating governments.
Mid-term Evaluation	• ADB		ADB will create a detailed status report on project implementation at the mid-point of project implementation.
Final Evaluation; Terminal Evaluation Report	• ADB • External Consultants	\$20,000	At least three months before the end of project implementation
Preparation of Project Completion Report	• ADB	None	Within one year of project completion
Audit	• ADB	None	Yearly

PART II: PROJECT JUSTIFICATION:

A. STATE THE ISSUE, HOW THE PROJECT SEEKS TO ADDRESS IT, AND THE EXPECTED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED:

Between 2000 and 2030 the urban population in Asia is expected to increase from 1.36 to 2.64 billion (UNFPA, 2007), representing the largest increase of any region in the world. In 2006, transport was responsible for 13% of all world greenhouse gas emissions (GHG) and 23% of global carbon dioxide (CO₂) emissions from fuel combustion (IEA, 2009). Transport related CO₂ emissions are expected to increase 57% worldwide in the period 2005–2030 and China and India alone will account for 56% of the global increase (ADB and CAI-Asia, 2009), mostly due to large increases in private vehicle ownership. Transport trends in Asia, like in other parts

the developing world, are increasingly unsustainable not only in terms of GHG emissions but also congestion, air pollution and road safety.

There is a growing awareness that a new transport paradigm is required. The concept of “Avoid-Shift-Improve” (ASI) is viewed as a core organizing principle for a more sustainable sector. The emphasis is on "avoiding" future emissions by reducing the need to travel through better city planning, "shifting" transport to the more efficient modes, and "improving" vehicle and fuel technologies to achieve greater efficiencies. Improving public transport is central to this new approach, and reflecting the realities on the ground in Asian cities this will be especially by bus in the majority of cases. More than 50% of daily urban trips are less than 5 km and could easily be changed to more sustainable modes making substantial reductions in CO2 emissions (UITP 2009).

Recent experience in improving public transport in various Asian countries, following the experiences in Latin America, through the Bus Rapid Transit (BRT) concept, as well as improvements in traditional bus services illuminate a path for implementing the ASI paradigm. However, the investments necessary for wide-scale implementation of this new low-carbon transport paradigm by public transport companies, governments, and development organizations are being held back by the lack of a reliable and easily applicable framework for the measurement of CO2 emissions as well as other local co-benefits in sustainable public transport systems. The absence of such measurement systems is a barrier for policy initiatives to strengthen regulation and for climate funds to invest in the fastest growing sector in terms of GHGs and is likely to also handicap future nationally appropriate mitigation actions (NAMAs) in the public transport sector.

The successful implementation of this regional MSP will help to break down methodological barriers which hold back the strengthening of public transport systems in Asia and will help to guide and prioritize more sustainable investments in the transport sector in Asia. The project consists of four (4) main components. The storyline of the project is: component 1 develops a methodology to assess global (CO2) and local (air pollution, congestion, noise, safety) benefits from urban public transport, and applies this in selected public transport companies; component 2 determines what barriers exist to mainstreaming climate change in operations of public transport companies and suggests policy and other recommendations to overcome these barriers; component 3 then assesses what financing models can be developed to catalyse mainstreaming of climate change in public transport companies; the 4th and last component disseminates the results of the project with the aim to promote replication and mainstreaming of results with the Asian region.

The developed methodology will make active use of the Manual for Calculating the GHG Impacts of Transportation Projects,¹ as well as the models developed for the manual, as developed by ITDP for GEF-STAP. The project will also coordinate with the WB-GEF Latin American Transport and Air Quality project,² which has a methodology component to assess co-benefits and baselines for city wide transport systems in 12 project cities. The project also makes use of existing work being carried out on NAMAs carried out under the ADB-IDB funded project on "Post 2012 Climate Instruments for the Transport Sector."

Primary target group of the project is public transport operators. The GHG calculator developed under component 1 is for use by public transport operators. Target group of component 2 is also the public transport operators; secondary target group is local and national policy institutions whose policies regulate and guide the operations of public transport operators. Component 3 has a wider target group and includes all those organizations which control or influence potential funding for public transport operators. Financing of mainstreaming climate change in public transport operations is however at the centre of all activities under component 3. Target group of component 4 is the widest and will include urban public transport industry as well as other local, national, and regional stakeholders which are involved with urban public transport.

The project will be implemented through the ADB Capacity Development Technical Assistance (CDTA) on the “Implementation of Sustainable Transport in Asia and the Pacific”, (see Attachment 2). The project will incorporate findings from 2 ADB projects currently under implementation: (i) *Technical Assistance for Sustainable Fuel Partnership Study: Exploring an Innovative Market Scheme to Advance Sustainable Transport and Fuel Security*, and (ii) *Preparing the Implementation of Asian City Transport – Promoting Sustainable Urban Transport in Asia Project*.

¹ http://www.thegef.org/gef/sites/thegef.org/files/documents/C.39.Inf_16%20STAP%20-%20Manual%20for%20Calculating%20Greenhouse%20Gas%20Benefits_0.pdf

² <http://gefonline.org/projectDetailsSQL.cfm?projID=2767>

Expected Global Environmental Benefits

Implementation of this project will create a tool which will enable stakeholders involved with public transport companies to consider the carbon footprint of public transport companies and investments to mainstream climate change on a routine basis, and consider related co-benefits such as improvements in transit service and reductions in air pollution. The easier and more accurate methodology for assessing the impacts of urban public transport companies that the project will develop and disseminates will help policy-makers identify low-carbon options for urban public transport and remove the barriers for climate change funds to investment in such companies and their projects. Also, more regular and reliable monitoring of GHG emissions will enable public transport managers to initiate actions to reduce GHG emissions, achieve operational cost benefits, and realise other associated co-benefits. The creation of the assessment tool and its application also creates a common language that can be used by transport policy and decision makers and external development organizations to discuss specific measures and investments in global environmental benefits. So far, while there is, in many cases, a general awareness on climate change and the role of transport, this is not translated in specific activities because there is no suitable methodology or metric to do so. This will be crucial for the development of transport NAMAs, and also for MDBs who are expected to increase their funding substantially for sustainable low carbon transport (independent from possible carbon financing). The actual expected global environmental benefits will be accomplished through increased investments in sustainable, low carbon transport from different sources including national and local governments, private sector, development organizations and carbon funding.

The global benefits of the projects be further enhanced by the development of enabling policies which will address barriers identified through analysis of the results of applying the GHG assessment tool. The beneficiaries of such policies will not be limited to participating countries but will extend to the public transport sector at large. The project has a dissemination component which will help the roll-out of the GHG assessment tool and associated policies on climate change in urban public transport.

Initial analysis indicates that access to financing is one of the most important barriers for public transport companies to undertake changes required to reduce the GHG emissions from their daily operations. The project will therefore pay specific attention to the development of realistic financing models which will allow the companies to implement policies and measures to realize actual reductions in GHG emissions.

The GHG emission reductions resulting from this project depends largely on the extent to which the developed methodology is utilized effectively by bus operators.³ In most direct terms, were the methodology to be applied effectively in the four proposed pilot cities, GHG emission savings would amount to around 11,650tCO₂/year.⁴ Were this to be replicated across the countries which this project targets (PRC, India and Indonesia) at the conservatively estimated success rate of 5%, the total savings would be roughly 112,142 tCO₂/year⁵. Over 10 years, the cumulative emissions reduction would be 1,121,416 tCO₂, assuming that the effectiveness remains constant over the 10 years. Further reductions would materialize if the methodology is effectively utilized in other countries in the region and beyond, and/or if the effectiveness of the methodology being applied to bus operators is enhanced further. Further details on the calculation of the GHG emissions from the project are provided in Attachment 4. The Climate Change Mitigation Tracking Tool is also provided in Attachment 3.

³ Note that due to the nature of this project which focuses on methodology development, the quantification of emission reductions arising from the project is not directly comparable to other projects which include physical changes to transport infrastructure and/or services.

⁴ A rapid assessment has been conducted whereby the number of buses that is likely to be affected has been estimated, together with the fleet characteristics (fuel type and fuel efficiency) and operating environments (typical speeds and load factors) It is assumed that the number of buses that are affected positively by the methodology amount to 1,500 in Jakarta, 2,135 in Lanzhou, 1500 in Guangzhou, and 1180 in Ahmedabad. These figures focused on municipal buses (excluding minibuses and microbuses) and were derived through interviews with transport experts in each of these cities, and validated wherever possible with data from the International Energy Agency. We assumed that of these buses, 25% would practice eco-driving, 25% would conduct better maintenance practices and that a 5% increase in bus occupancy will be achieved through modal shift. All of this would be facilitated by the effective utilization of the developed methodology. The percentage reduction of GHG emissions per bus would be around 2.7% per year, compared to the baseline.

⁵ To arrive at this figure, we estimated (using IEA data or in the case of Indonesia a study by the Institute for Transport Policy Studies) the total number of buses in Indonesia, PRC and India, and calculated the emission savings under a 5% achievement rate – that is, if 5% of these buses were able to have access to the methodology. Of this 5%, it was further assumed that 25% would practice eco-driving, 25% would benefit from better maintenance practices and that there would be a 5% increase in bus occupancy, as a result of modal shift. The resulting figure can therefore be considered as significantly conservative.

B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL AND/OR REGIONAL PRIORITIES/PLANS:

At an international level, the need for better transport data and methodologies was expressed by Yvo de Boer, Executive Secretary of the UNFCCC in a speech at the International Transport Forum in Leipzig in May 2008 when he mentioned that “there is an obvious need to improve the data quality, as we cannot master what we cannot measure”. At a regional level, Asian governments have recently indicated their commitment to environmentally sustainable transport in various policy forums and international meetings, including the Ministerial Meeting on Energy, Environment and Transport (MEET) – Ministerial Declaration (2009). The MEET statement specifically highlighted the importance of improved transport data: “the improvement of the accuracy, adequacy and comparability of statistics on environment and energy for transport to support effective policy making and assessment of progress”. Specifically for countries targeted in this project: India has a National Urban Transport Policy (NUTP) that accords priority to the development of public transport systems and encourages greater use of public transport and non-motorized modes by offering Central financial assistance for this purpose. It also aims to enable the establishment of quality focused multi-modal public transport systems that are well integrated, providing seamless travel across modes. The project is also consistent with the goals of Indonesia's new National Energy Policy focuses on energy efficiency, cleaner fuels, and demand management including in the transport sector. While the PRC's National Action Plan addressing climate change does not specifically discuss the transport sector, the development of relevant data for the reduction in emissions from public transport is consistent with the overall Chinese policy to reduce the energy intensity of the Chinese economy. The project is also in line with the efforts of PRC to strengthen public transport.

C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH GEF STRATEGIES AND STRATEGIC PROGRAMS:

This project fits well with the desire of GEF to strengthen targeted research to be able to quantify with some degree of accuracy the global environmental benefits in terms of GHG emissions avoided from SUT projects it supports. The project has a strong component on goal-oriented and "learning by doing" research and will be of great help in providing better scientific underpinnings to the strategic program on sustainable urban transport. The proposed MSP fits well with the objectives of GEF. It particularly provides support to (CC-SP5): Promoting Sustainable Innovative Systems for Urban Transport. It aims to promote sustainable innovative systems for urban transport, amongst others, through modal shifts to lower GHG-emitting modes of public transport, public rapid transit (including BRT). GEF has made specific reference to the quality of the data on transport which needs to be improved. It is suggested that a common set of indicators for measuring, reporting and verifying national and international action on mitigation of climate change in the transport sector needs to be developed and put in place. Developing such a table of indicators for transport and climate change, as input to the UNFCCC processes, would be the task of the community of international transport experts. This project would be an important contribution.

D. JUSTIFY THE TYPE OF FINANCING SUPPORT PROVIDED WITH THE GEF RESOURCES.

The activities supported by GEF resources are methodology development, capacity building, and outreach. They are best implemented with grant funds. The implementation of the project during the early stages of GEF-5 will provide support for further up-scaling sustainable transport investments using both GEF resources and public and private funding.

E. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

As indicated above the project will make use of the general framework for GHG assessment of transport projects as recently developed by GEF-STAP. It will also link up with the ongoing GEF co-financed WB project in Latin America – LAC Regional Sustainable Transport and Air Quality Project.⁶ This project has started implementation recently and is focused on 12 cities in three (3) Latin American countries. The methodologies

⁶ Note: this project has been approved under GEF-4 and has therefore been designed to be consistent with the GEF-4 Focal Area Strategic Priorities. The project outcomes will however have significant application to the GEF-5 Climate Change Focal Area – Objective 4 (CC4)- Promote energy efficient, low-carbon transport and urban systems. In particular, it will provide support for the achievement of CC4 indicators (i) sustainable transport and urban policy and regulatory frameworks adopted and implemented; and (ii) Increased investment in less-GHG intensive transport and urban systems.

developed and tested in the proposed MSP, as well capacity building materials developed, will aid the Latin America Project. The work of the project will also be an important contribution to existing GEF projects in the transport sector in India, China, and Indonesia. Furthermore, it can help facilitate the further development of methodologies for GHG reductions and other co-benefits in cities with transport sector CTF components in Egypt, Columbia, Mexico, Morocco, Philippines, Thailand, and Viet Nam.

The methodology development will also be an important contribution to the GHG footprinting and GHG assessment methodologies which MDBs such as ADB are currently developing. Within the MDB community, ADB was assigned a lead role in the area of transport and climate change as a follow up to the G8 meeting in Gleneagles in 2005. In 2009, ADB has initiated together with other international stakeholders the Partnership on Sustainable Low Carbon Transport (SLoCaT), which currently has over 50 members from amongst UN, multilateral and bilateral development organizations, governments, NGOs, academe, and private sector (see www.slocat.net). Significant first outputs have been the Bellagio Declaration on Transportation and Climate Change and the Common Policy Framework on Transport and Climate Change in Developing countries, which calls for " Support improved, simple and transparent evaluation tools suitable to the transport sector, designed to enhance the sector's ability to measure, report and verify GHG reductions at project and national level benefits as well as the co-benefits associated with policies, measures and projects in support of low carbon sustainable transport."

The proposed MSP is part of a larger set of activities on transport data and data collection methodologies which the ADB and IDB support under the SLoCaT Partnership. In the implementation, ADB will coordinate with UITP which is building a network of public transport operators in Asia. ADB will also work directly with ITDP which has worked with GEF-STAP to develop a draft methodologies, has several on-going sustainable transport projects in Asia, and has recently been assigned the role of lead specialist on urban transport by the Climate Works Initiative, a major climate change-oriented trust fund and civil society initiative. The project will coordinate with other regional GEF programs under CC-SP5, especially the Regional Project in Latin America (Brazil, Mexico and Argentina). The project builds on the work that ADB and other organizations (e.g. EMBARQ, World Resources Institute) have been doing in terms of development of indicators on sustainable transport and the improvement of the quality of transport data and transport emission forecasts. ADB will make use of the UN-DESA/UNCRD-managed Environmentally Sustainable Transport Forum which incorporates all major Asian countries and about 50 cities. This will strengthen the ownership of developing countries and cities in Asia. ADB will also work with the CAI-Asia Center whose work focuses on air pollution and GHG management in Asian cities, especially in the field of transport where it has been instrumental in raising the awareness on the need to address GHG emissions from the transport sector.

F. DISCUSS THE VALUE-ADDED OF GEF INVOLVEMENT IN THE PROJECT DEMONSTRATED THROUGH INCREMENTAL REASONING :

The project will be linked to an ADB Capacity Development Technical Assistance (CDTA) on the "Implementation of Sustainable Transport in Asia and the Pacific". The CDTA will be implemented through a "cluster" of sub-projects targeting three of the four key pillars of ADB's Sustainable Transport Initiative Operational Plan. The CDTA project will develop subprojects at interregional, subregional, country, and city levels that contribute toward building capacity among DMCs to develop and implement policies, programs, and projects that will enhance the economic, social, and environmental sustainability of transport infrastructure and services. The impact of the CDTA will be to establish a trend toward enhanced sustainability of transport systems in participating DMCs in the Asia and Pacific region. The overall outcome of the CDTA will be increased awareness of the critical importance of sustainability in transport system development, and a greater readiness and capacity of DMCs in the Asia and Pacific region to identify, develop, and implement sustainable transport policies, programs, and projects. This will be measured by the number of participating DMCs having initiated development of sustainable transport-related policies while having identified and initiated development of sustainable transport programs and projects.

The CDTA will have six subprojects (including one focused on "greenhouse gas assessment methodologies in sustainable public transport", funded by the GEF), that together will provide an integrated approach to

addressing sustainable transport capacity issues in the region. Additional subprojects, or topping up of initial subprojects, may be proposed later:

Subproject A: Greenhouse gas assessment methodologies in sustainable public transport (proposed for GEF funding). It will develop a GHG calculator that can be integrated into the existing planning and management of public transport operating companies. The main target group is public transport operators and government entities regulating these companies. Many existing tools for assessing the GHG impacts of public transport operations and investments are too complex for regular use by public transport managers. New sketch-type methodologies, such as the transportation emissions evaluation model for projects, offer the potential cost-effectively to provide emission estimates in a user-friendly manner. The subproject will refine the existing transportation emissions evaluation model for projects GHG calculator and apply the methodology in selected cities in several DMCs, develop a recognition program for bus operating firms achieving excellence in GHG reduction, examine barriers to mainstreaming climate change into operations, suggest ways to overcome these barriers, and recommend financing options for their implementation.

Subproject B: New approaches to implement sustainable low-carbon transport in the Asia and Pacific region. It will address climate change in transport through knowledge and conceptual approaches for sustainable transport support in key subsectors, including railways, inland water transport, urban transport, and freight and logistics. Activities under this subproject will help to identify and address barriers preventing DMCs from strengthening these subsectors and will identify future lending opportunities for these subsectors. This subproject will support identification, processing, and/or implementation of sustainable low-carbon ADB transport projects. Such support will enable mitigation activities to be incorporated into project selection and design, allow assessing GHG impacts of specific project components, and support capacity building on mitigating climate change through transport-related activities. This subproject is expected to include \$500,000 in support of scaling up public transport across Asia and the Pacific, e.g. via developing favorable urban conditions for public transport operation through traffic demand management, and providing local and central governments with additional opportunities for climate finance through the formulation of Nationally Appropriate Mitigation Actions in the transport sector. These activities will directly complement the GEF project by developing the capacity of government institutions to support public transport operators' efforts to mitigate greenhouse gases.

Subproject C: Promoting socially sustainable transport through improving nonmotorized transport. It will pilot NMT components aimed at improving integrated and inclusive public transport systems in DMCs. Improving walking and cycling facilities while linking these to improved public transport will help provide affordable door-to-door mobility. The results of these pilots will be utilized in designing regional guidelines on integrating NMT with public transport systems. This subproject will (i) support the addition of NMT components to existing ADB transport projects, (ii) help catalyze new NMT initiatives, and (iii) provide formal social impact analysis of selected ADB transport projects. The support will deliver high-quality demonstration efforts and create the methodological basis for future social impact analysis of ADB projects. This subproject also will provide demonstration units of NMT technologies (e.g., public bicycles and pedicabs) for outreach purposes to cities.

Subproject D: Better transport data for sustainable transport policies and investment planning. This subproject will help improve the availability and quality of transport data in the Asia and Pacific region. Current data availability and quality limit the development of sustainable transport policies and investment strategies and constrain the ability to evaluate impacts of such policies and investments. The subproject will include at least \$500,000 in support of establishing historical (2000–2010) data sets on transport infrastructure and services as well as their social and environmental impacts, as well as an outlook up to 2030. The information gathered through this subproject, in particular those surrounding modal split and fleet characteristics of public transport vehicles will complement the GEF project by allowing public transport operators to identify their progress against a baseline.

Subproject E: Intelligent transport systems for better urban transport. It will contribute to the development of strategies for implementing information and communication technologies for better public transport service and travel demand management in urban areas. In particular, it will focus on integrated ticketing and vehicle management systems based upon an on-board fuel and GHG indicator unit, wireless communication, and global

positioning systems. The subproject will review the state of the art in these areas and conduct case studies of several cities in Asia. Guidelines and recommendations will be developed on how best to use intelligent transport systems in ADB projects on sustainable urban transport presently in processing and in future projects.

Subproject F: Innovative financing of sustainable transport through market mechanisms. Capturing value from externalities offers the potential to greatly enhance and diversify existing financing portfolios for sustainable transport initiatives. It is recognized that carbon markets to date are not sufficient in and of themselves to alter project economics. For this reason, capturing value from other sources, such as energy security, air quality and health, and road safety, will assist in making projects bankable. ADB has already developed the rationale behind a scheme for fuel security credits and has undertaken conceptual work on the idea of health credits. ADB has also conducted research on parking levies, land value capture, and congestion pricing. This subproject will support the development of a pilot demonstration of new mechanisms, as well as strengthen the conceptual basis for emerging mechanisms.

Without the inclusion of GEF funding, Sub-project A would not be funded, and the assessment of global and local benefits of public urban transport systems would take longer to develop and introduce. The timely availability of such a methodology is important because of its potential impact on the follow-up of COP 16 and 17 decisions for transport. COP 16 has resulted in stronger mitigation commitments by developing countries, and has laid the groundwork for the creation of mechanisms and instruments to make this possible, and financial commitments for assistance by developed countries for developing countries. For transport in Asian cities to benefit from this, there is a need for robust mechanism to measure baselines and impacts quickly. The proposed project in Asia is an important component in the overall efforts by GEF to improve the assessment of GHG reductions from transport interventions. The GEF-STAP methodology provides an overall framework for GHG reduction assessment, while acknowledging that additional studies are needed to help refine and validate it. The project proposed here for Asia and the WB-GEF project in Latin America will each contribute in their own manner: the latter by focusing on co-benefits and city wide baselines, while the former by focusing on public transport companies and the integration of GHG assessment in their routine management information systems and in the policy making on SUT by cities.

G. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED AND OUTLINE RISK MANAGEMENT MEASURES:

A key risk is that bus companies and local governments will not fully engage in the project and/or will not have the capacity to fully utilise the developed GHG Calculator. For this reason, ADB is placing much emphasis and investment on the development of a user-friendly manual and on-line version, in addition to the direct outreach through workshops with national and local government officials and with bus companies. The outcomes of the project will also be further supported through mainstreaming within ADB's Sustainable Transport Initiative in Asia and the Pacific.

H. EXPLAIN HOW COST-EFFECTIVENESS IS REFLECTED IN THE PROJECT DESIGN:

The project has a very favorable cost-effectiveness. The investments in the development of the methodology, capacity-building in support of the GHG assessment tool can directly result in substantial fuel savings for participating countries. In addition, establishing better relations between local government and MDBs has the potential to not only trigger investments of several billions of dollars for sustainable transport, but also decrease risk and improve project quality. The costs of the project are also relatively low because of the linkage with organizations like ITDP, EMBARQ, UITP and CAI-Asia which have extensive activities in Asia. The proposed project makes use of earlier work done by ADB in the area of transport indicators and transport data management. It also builds on the work by GEF-STAP on methodology development and the ongoing work in the WB-GEF project in Latin America. By making working closely with other organizations the project will be able to make use of extensive local knowledge on public transport, enabling verification of the methodology and development of a robust tool.

PART III: INSTITUTIONAL COORDINATION AND SUPPORT

A. INSTITUTIONAL ARRANGEMENT:

Not applicable as only one GEF Agency is involved.

B. PROJECT IMPLEMENTATION ARRANGEMENT:

ADB is the Executing Agency on this project and will work closely with bus companies and relevant local and national governments. The technical assistance in this project will be implemented through ADB’s Regional and Sustainable Development Department, with support from the Environment and Safeguards Division. The ADB project specialist will provide oversight in implementation of the TA, in close consultation with GEF focal point in RSES. TA progress will be monitored through regular reports and meetings with consultants.

PART IV: EXPLAIN THE ALIGNMENT OF PROJECT DESIGN WITH THE ORIGINAL PIF:

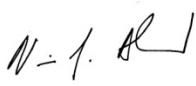
Some of the components and sub-components have been somehow re-organized according to comments from the PIF. The changes made reinforce the focus of the project on public transport companies and have ensured that all components and activities are now geared towards the mainstreaming of climate change by public transport companies. The per-component allocation of the GEF and co-finance contributions has also been revised according to these changes and the development of a more detailed budget. Overall, the substance of the project remains the same with the exception of changes called for by comments on the PIF, as noted below.

Project Component 1 expanded the number of cities to test the methodology from 2 to 4 and also reduced the budget for this activity. Component 1 has also been modified so that the case studies focus on bus companies in response to GEF-STAP comments. The creation of the Manual sub-component was moved to Component 2, Dissemination. In response to GEF-STAP comments, some activities in the original Component 4 were reformulated into the new Component 2. The policy briefs were focused more clearly on enabling climate change mitigation by bus companies. In component 3, of the PIF has been revised to reflect the need to also engage the companies / cities more directly on awareness of operational and technological innovations that both reduce GHG emissions and result in operational cost savings. Component 3 has been strengthened and now includes the development of business plans for introducing public transport systems that effectively leverage private sector financing. The business plans will also consider the potential for accessing carbon financing. Component 4 has been restructured so that it now includes all the regional outreach activities beyond the direct target group of the project (bus companies and relevant local and national governments) and is now a more meaningful component in support of replication and scaling up of project activities and results.

While ADB will still work closely with bus companies, local governments, and organizations such as UITP, CAI-Asia and the Institute of Transportation and Development Policy, endorsement of funding commitments was problematic and ADB will now provide the entirety of the co-financing obligation of \$1 million.

PART V: AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for CEO Endorsement.

Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
N.J. Ahmad Director, Environment and Safeguards concurrently Practice Leader (Environment) Asian Development Bank		February 10, 2012	Ko Sakamoto Transport Economist	+63 2 683 1664	ksakamoto@adb.org

ANNEX A: PROJECT RESULTS FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>Impact</p> <p>GHG impacts of urban public transport companies in developing Asia is reduced and environmental sustainability is enhanced.</p>	<p>GHG emissions on a per passenger kilometer basis of public transport companies with a climate change Action Plan have decreased 5-10% compared to companies without climate change action plans.</p>	<p>Survey among sample of bus companies administered jointly with UITP or other organization with regional outreach.</p>	<p>Assumptions</p> <ul style="list-style-type: none"> Local and National governments increase their attention for mitigation of climate change in urban transport sector. Local and national governments recognize the critical importance of the role of urban public transport system development, and develop and implement coherent and integrated development strategies and plans. <p>Risks</p> <ul style="list-style-type: none"> Urban public transport companies are not able to implement climate change action plans due to inadequate internal understanding and capacity and inappropriate pricing policies.
<p>Outcome</p> <p>Sustainable, low-carbon public transport is promoted through development and deployment of calculation methodologies to quantify both global and local benefits with greater ease and higher accuracy, and an increased engagement of policy makers and funders for sustainable urban transport.</p>	<ul style="list-style-type: none"> Participating public transport companies have included assessment of GHG gasses and subsequent mitigation action in their MIS and business plans. At least 5-10 additional companies have indicated their intention to assess GHG emissions on a regular basis 	<ul style="list-style-type: none"> Company records and interviews with participating companies Correspondence with additional companies 	<p>Assumptions</p> <ul style="list-style-type: none"> Methodology is designed to address a range of project types and local conditions. Outreach and technical assistance efforts related to the methodology are sufficient to motivate national governments to make use of the tool for decision-making purposes. <p>Risks</p> <ul style="list-style-type: none"> Methodology is of limited use due to the complex and diverse nature of local transport initiatives. Existing policies and practices with national investment decisions in transport do not permit wide-spread use of the methodology.

Outputs			Assumptions
<p>1. GHG Impact Assessment Methodology Refinement, Application, and Validation developed and tested, is operational.</p> <p>2. Policy recommendations to catalyze mainstreaming GHG calculations into public transit operations have been developed and submitted for approval to relevant bodies</p>	<ul style="list-style-type: none"> • Methodology is tested and validated in four cities • Methodology integrated in the Management Information System of at least 2 of the participating 4 bus companies • Policy, technical, financial, institutional and other barriers identified which hamper the mainstreaming of climate change considerations in operations of public transport operators. • Business Plans of at least 3 public transport companies incorporate climate change oriented sustainability indicators and system for periodic measurement is in place. • Recommendations for enabling local and/or national policies to promote mainstreaming of climate change considerations by public transport operators have been formulated in at least three (3) cities • Recognition programme for bus companies incorporating quality components and fulfilling system monitoring; programme development developed 	<ul style="list-style-type: none"> • Consultant's final report on case studies • Meetings with participating bus companies, and MISs of participating companies. • Barrier analysis reports • Company records • Draft Policy documents • Annual report from the recognition program. 	<ul style="list-style-type: none"> • Bus companies possess the capacity to use the GHG assessment methodology. • GHG assessment methodology users fully recognize the usefulness and flexibility of the methodology to accurately assess a wide range of sustainable transport measures. • Information and communications technologies are available to bus companies to access on-line tool. • The public transport companies possess the capacity to understand the indicators and to integrate them into their quality control programs. • The recognition program for high-quality sustainable public transport companies becomes well established and widely recognized by the public and private sectors. • National and international financing organizations show strong interest in the sustainable transport GHG calculator.
<p>3. Mobilization of financing and partnerships for sustainable, low carbon public transportation in developing countries</p>	<ul style="list-style-type: none"> • Financing models which enable Public Transport Operators to implement sustainability policy recommendations developed incorporating diversification of funding sources. • Recommendations on conditions and methodologies under which public transport operators can better access climate finance (including but not limited to CDM and NAMAs) for mainstreaming climate change in public transport. • Financing Plans for intensified mainstreaming of climate change in operations of at least 3 public transport operators 	<ul style="list-style-type: none"> • Peer reviewed document • Peer reviewed document • Company documents 	<p>Risks</p> <ul style="list-style-type: none"> • Neither the public nor private sector entities possess the capacity to fully utilize the methodology. • Other similar GHG calculators are developed within similar timeframe as this project. • ICT infrastructure within government departments and private bus companies is not sufficient to make use of the GHG calculator. • The public transport companies do not have sufficient financial motivation to improve the quality of their services.

<p>4. Project experiences have been disseminated to relevant stakeholders in Asia</p>	<ul style="list-style-type: none"> • Manual on the Sustainable Transport GHG Calculation Tool. On-line user-friendly version of the Sustainable Transport GHG Calculator, distributed through the sites of ADB, CAI-Asia Center, UITP, GIZ SUTP, and ITDP • Presentations at minimum Five (5) workshops to explain the usage of the Sustainable Transport GHG Calculator and to mainstream its application, in coordination and cooperation with amongst others UITP. • Proposal for roll-out of recognition scheme on national or regional level. • Regional workshop, in cooperation with Partnership for Sustainable Low Carbon Transport and UITP, on results of the project. 	<ul style="list-style-type: none"> • Hard copy peer reviewed manual and online version • Workshop documents • Project documents • Workshop documentation 	
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<p>Activities with Milestones</p> <p>1. GHG Impact Assessment Methodology Refinement, Application, and Validation developed and tested, is operational</p> <p>1.1. Review existing GHG assessment methodologies, extract lessons from other GHG methodology case studies; and prepare the summary of review focusing on data requirements, model structure, alternatives, and accuracy of methodologies (complete within four months of project initiation)</p> <p>1.2. Develop an comprehensive and robust GHG assessment to assess GHG emissions and co-benefits from urban public transport companies (complete within six months of project initiation)</p> <p>1.3. Apply the developed GHG assessment methodology to bus companies in four city case studies on sustainable transport initiatives and validate the methodology: Ahmedabad (India), Guangzhou (PRC), Jakarta (Indonesia), and Lanzhou (PRC) (complete within 18 months of project initiation)</p> <p>2. Dissemination of the GHG Calculation Tools Component</p> <p>2.1. Conduct barrier analysis for the 4 public transport companies concerning different types of barriers which prevent GHG reduction measures</p> <p>2.2. Analyze and revise business plans for participating bus companies to ensure mainstreaming of GHG emission reduction in day to day operations</p> <p>2.3 Formulate policy recommendations for relevant local and national authorities to facilitate mainstreaming of GHG emission reductions by public bus companies</p> <p>2.4 Develop a set of indicators to examine quality public bus transport systems and also to assess GHG emissions</p> <p>2.5 Develop bus recognition program which enables bus companies to benchmark their GHG emission reductions as well as overall sustainability activities</p> <p>2.6 Test BRP in at least 2 bus companies</p>	<p>Inputs</p> <ul style="list-style-type: none"> • GEF - \$1,000,000 Consultants: International – 26 person-months National – 20 person-months • ADB: Parallel co-finance - Capacity Development Technical Assistance (CDTA) on the “Implementation of Sustainable Transport in Asia and the Pacific” (sub-projects B and D) • ADB - staff time
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3 Mobilization of financing and partnerships for sustainable, low carbon public transportation in developing countries

- 3.1. Review current financing arrangements for public bus companies in Asia
- 3.2 Develop alternative financing models which consider a broader range of internal and external financing sources
- 3.3 Building on emerging consensus on post 2012 climate financing modalities assess how these can be used to promote mainstreaming of GHG emission reductions in public transport companies
- 3.4 Develop specific financing plans for mainstreaming GHG emission reductions in participating bus companies

4. Mobilization of Financing and Partnerships Component

- 4.1 Develop a manual on the sustainable transport GHG calculation tool (complete within ten months of project initiation)
- 4.2. Create on-line user friendly version of the sustainable transport GHG calculator and distribute it through websites of ADB, GTZ SUTP, and ITDP (complete within 12 months of project initiation)
- 4.3. Deliver presentations to at least 5 workshops on transport and climate change on the GHG calculator
- 4.4 Roll out the BRP to public transport community in Asia
- 4.5 Conduct regional workshop on results of the project

ANNEX B: RESPONSES TO PROJECT REVIEWS

(from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF) – December 27, 2010, GEF Secretariat review

Overall the project design looks sound but clarifications are needed in a few points.

1. The scope of the region needs to be specified. At least it needs to clarify which countries will be targeted.

For component 1 (methodology) The targeted cities for the analysis are: Ahmedabad (India), Guangzhou (China), Jakarta (Indonesia), and Lanzhou (China); Component 2 (Policy) – local (four cities) and national India, Indonesia and PRC ; Component 3 (Financing) local (four cities) and national India, Indonesia and PRC as well as Regional. At least two cities (if possible all four) will be targeted for the development of business /finance plans; Component 4 (Outreach). Regional,

2. The methodology to be developed should be the one for monitoring carbon benefits but not just for monitoring carbon emissions. (The STAP-GEF methodology which is a base of this project is so designed.) In other words, it should be a methodology to assess the difference of GHG emission between the cases with and without specific interventions. Therefore its applicability etc. can be tested only if specific interventions are identified and introduced. How those kinds of interventions are identified and introduced are not clear yet in this PIF. Please explain and elaborate the PIF.

Yes it is clear that the detailed methodology will have to compare a baseline scenario with the measurement of emissions resulting from an GHG Action Plan for the company or an external project specific to the company. In this respect it will follow the draft GEF GHG manual. The added value of the methodology under this project will be that (a) it assesses the impacts of all measures undertaken to reduce GHG emissions and not just those which are part of a possible GEF project, and (b) it puts in place a monitoring scheme for continuous monitoring of GHG emissions (integrated into the project development plan for each company) which will enable the company to adjust where needed its GHG reduction strategy on an ongoing basis. The need for ongoing data collection was identified as a major priority in the draft GEF GHG manual.

3. If the methodology will be integrated in the Management Information Systems of public transport companies/cities, it will have only limited value if they are not informed about possible options/interventions for improving their carbon footprint. In that sense, maybe, for example, a list of good practices need to be developed and to be integrated in the Management Information System as well. Please explain how public transport companies can learn their potentials and where the opportunities exists. And please revise the PIF if appropriate.

First, the methodology itself leads companies through the possible options and the amount of expected emission reductions. As the companies complete the methodology, the potential savings are highlighted for each type of intervention. Second, component 2 and 3 of the PIF has been revised to reflect the need to also engage the companies more directly on awareness of operational and technological innovations that both reduce GHG emissions and result in operational cost savings. The addition of the Bus Recognition Program with associated public transport quality indicators will assist in this regard.

4. It can be easily envisaged that there are plenty of room for improving carbon footprint through daily operations for bus companies by, for example, controlling its speed and frequency, finding best routes, developing renewal plans of fleet, and improving maintenance scheme. But on the other hand, those

opportunities on daily operations can be very limited for rails. Then why one of the two focuses needs to be given to rails? It could be much more useful to devote two opportunities both to bus transport in different settings. Please explain and modify the plan if needed.

While we feel that it is possible to accomplish emission reductions from urban rail projects, we agree that this might be easier to achieve from bus systems. We have modified the PIF so that the case studies focus upon bus companies.

5. On Component 4, what will be done through this project is not clear except PPP concept papers. What will be the means to "increase MDB funding" and to find "Opportunities for carbon financing" and what will be done specifically for them through this project? Please explain and elaborate the PIF.

Over past years there have been efforts to mobilize climate funds for gap financing. The same can be said about private sector financing (e.g. through HSBC). So far there are no examples in which these two forms of gap financing are blended. The component on Financing has been restructured and now consists of three parts: (a) development of alternative financing models making use of a diversified series of sources, (b) critical look at how climate financing (especially NAMAs) could help bus companies, and (d) the development of actual financing plans for bus companies on how to implement GHG reduction measures. Leverage private sector financing is considered a priority. The business plans will also consider the potential for accessing carbon financing.

6. The first and second expected outputs of Component 4 in Table A, sound very much overlapping with the ones in Component 1. Please rephrase them to clarify the difference or integrate them if needed.

Activities have been reformulated.

GEF SECRETARIAT REVIEW FOR FULL/MEDIUM-SIZED PROJECTS

Country/Region: Regional
 Project Title: Regional: GHG Assessment Methodologies in Public Transport
 GEFSEC Project ID: **4236**
 GEF Agency Project ID: GEF Agency: ADB
 GEF Focal Area (s): Climate Change
 GEF-4 Strategic Program (s): CC-5;
 Anticipated Project Financing (\$): PPG: \$0 GEF Project Allocation: \$1,000,000 Co-financing:\$1,000,000
 Total Project Cost:\$2,000,000
 PIF Approval Date: April 23, 2010 Anticipated Work Program Inclusion:
 Program Manager: Osamu Mizuno GEF Agency Contact Person: Sharad Saxena

Response to GEF Secretariat Comments Dated 5/17/2011

GEF Comment	ADB Response	Document Reference
<p>20. Is the GEF funding level of other cost items (consultants, travel, etc.) appropriate?</p> <p>5/17/2011, <i>The charge for international consultants (\$4,500 per week) looks high. Please provide justifications for it.</i></p> <p><i>In table E and F, the number calculated by (\$/person week times (estimated person weeks) in Annex C cannot be found anywhere. Please keep consistency.</i></p>	<p>The rates provided in the earlier submission included per-diem for mission travel. This has been removed so that the amount for remuneration can be provided. The effective rate is \$3,250 per person week, calculated on a 5 day work week. Contracting for the consultants will be through a firm, which will be selected on a Quality on Cost Based Selection Process.</p> <p>Table E and F have been corrected so that they are consistent with Annex C.</p>	<p>Table E and F</p> <p>Annex C.</p> <p>ADB CDTA Paper – Appendix 2 – Cost Estimate and Financing Plan.</p>
<p>22.Are the confirmed co-financing amounts adequate for each project component?</p> <p><i>1. No confirmation letter is provided from ADB for their \$1 million contribution. Please attach it.</i></p> <p><i>2. The paper submitted together with CEO endorsement document "Concept paper clearance" is not consistent with CEO endorsement document. It does not specify contribution from ADB as \$1 million while it has \$200k contribution from</i></p>	<p>Since the last submission, ADB has decided to link the GEF funding under ADB Capacity Development Technical Assistance (CDTA) on the “Implementation of Sustainable Transport in Asia and the Pacific. The total funding for the TA (excluding GEF) will be \$6,698.00. This includes \$2.298 in funding from ADB’s Climate Change B and \$1 million from ADB’s Technical Assistance Special Fund. Of this, \$1 million in parallel co-financing will be provided to the GEF</p>	<p>Please see attached the ADB approved Capacity Development Technical Assistance (CDTA) on the “Implementation of Sustainable Transport in Asia and the Pacific, which will provide co-financing.</p>

<p><i>"government." Please keep them consistent.</i></p>	<p>components. Specifically, the following sub-projects will have direct linkage with the GEF funded components. Subproject B: New approaches to implement sustainable low-carbon transport in the Asia and Pacific region; and Subproject D: Better transport data for sustainable transport policies and investment planning.</p>	
<p>23.Has the Tracking Tool been included with information for all relevant indicators?</p> <p><i>5/17/2011, No. Please provide.</i></p>	<p>The CC Tracking Tool has been prepared. It should be noted however that as the project will focus on the development and testing of GHG assessment methods, the actual GHG emission reductions resulting from this project depends largely on the extent to which the developed methodology is utilized effectively by bus operators.</p>	<p>Further details on the calculation of the GHG emissions from the project are provided in Attachment 2. The Climate Change Mitigation Tracking Tool is also provided in Attachment 3.</p> <p>A summary description of the GHG emission reduction calculations is provided in Part 2, Section A - Expected Global Environmental Benefits (within the CEO Endorsement Document).</p>

GEF SECRETARIAT REVIEW FOR FULL/MEDIUM-SIZED PROJECTS

Country/Region: Regional

Project Title: Regional: GHG Assessment Methodologies in Public Transport

GEFSEC Project ID: **4236**

GEF Agency Project ID: GEF Agency: ADB

GEF Focal Area (s): Climate Change

GEF-4 Strategic Program (s): CC-5;

Anticipated Project Financing (\$): PPG: \$0 GEF Project Allocation: \$1,000,000 Co-financing:\$1,000,000

Total Project Cost:\$2,000,000

PIF Approval Date: April 23, 2010 Anticipated Work Program Inclusion:

Program Manager: Hiroaki Takiguchi GEF Agency Contact Person: Sharad Saxena

Response to GEF Secretariat Comments Dated 1/13/2012

GEF Comment	ADB Response	Document Reference
<p>8. Is the global environmental benefit measurable?</p> <p><i>a) In the example of Ahmedabad, the share of the CNG bus is 80 %. Is this true? If that's the case, how can such a high share be realized at a country level?</i></p>	<p>Thank you for pointing this out. We have reviewed all figures/assumptions in consultation with local experts in each country/city, as well as external sources of data especially from the IEA. The 80% figure was based on figures obtained via the Gujarat Pollution Control Board. Whilst this is true for Ahmedabad, the figures have been amended for India as a whole, based on local expert inputs.</p>	<p>GEF CC Tracking Tool Data Estimates January 2012, sheet "India", cells C11-15.</p>
<p><i>b) In the example of Ahmedabad, the emission factor of the CNG bus is higher than that of the diesel bus. Is this true? Please check it.</i></p>	<p>Upon inspecting the spreadsheet, we do not believe the figures for CNG was inputted as higher than diesel bus. After calibration with other data sources, we are using 2.9 kgCO₂/liter of gasoline equivalent for diesel, and 2.28 kgCO₂/liter of gasoline equivalent for CNG.</p>	<p>GEF CC Tracking Tool Data Estimates January 2012, sheet "Ahmedabad", cell L13.</p>
<p><i>c) In some calculations, liter is used for the unit of CNG and LPG. However, cubic meter and kilogram are usually used for units of CNG and LPG, respectively. Please check it.</i></p>	<p>Thank you for pointing this out. We used km/l of gasoline equivalent to allow comparison between fuel types.</p>	<p>GEF CC Tracking Tool Data Estimates January 2012 (Cells E11-15 in sheets PRC, Indonesia, India, Jakarta, Lanzhou, Guangzhou and Ahmedabad)</p>

	In addition, we revised the figures for the total number of buses in each of the cities – to have a better focus on municipal buses (excluding mini and minibuses which may not be directly comparable. This provides a more conservative estimate for the GHG emission reductions.	GEF CC Tracking Tool Data Estimates January 2012 (cell C6 in sheets Jakarta, Lanzhou, Guangzhou, Ahmedabad)
<p>9. Is the project design sound, its framework consistent & sufficiently clear (in particular for the outputs)?</p> <p><i>a) In the Project Results Framework (Annex A), some letters are missing in the Performance Targets/Indicators (page 14). Please correct them.</i></p> <p><i>b) The revised CEO Endorsement Request Document has explained that, in the CDTA project, Subproject B and D serve as the baseline project for the GEF project. Please clarify what activities in Subproject B and D serve as the baseline project and how they fit with the project components.</i></p>	<p>This is duly noted and rectified.</p> <p>We have provided further details of how Subprojects B and D serve as the baseline project and how they fit with the project components.</p>	<p>Annex A, Page 14</p> <p>Page 9, paragraphs 11 and 13.</p>
<p>22. Are the confirmed co-financing amounts adequate for each project component?</p> <p><i>The attached report is not served as alternate to the co-financing confirmation letter, because it is not considered a legal document signed by co-financers. In addition, the attached report does not confirm the amount of co-financing for the GEF project. Please submit the credible alternative document.</i></p>	<p>We have prepared a co-financing confirmation letter signed clarifying the relationship between the GEF project and the Cluster TA.</p>	<p>Attached letter “Confirmation of co-financing for proposed project “GHG Assessment Methodologies in Public Transport” – GEFSEC Project ID 4236”</p>

GEF SECRETARIAT REVIEW FOR FULL/MEDIUM-SIZED PROJECTS

Country/Region: Regional
 Project Title: Regional: GHG Assessment Methodologies in Public Transport
 GEFSEC Project ID: **4236**
 GEF Agency Project ID: GEF Agency: ADB
 GEF Focal Area (s): Climate Change
 GEF-4 Strategic Program (s): CC-5;
 Anticipated Project Financing (\$): PPG: \$0 GEF Project Allocation: \$1,000,000 Co-financing:\$1,000,000
 Total Project Cost:\$2,000,000
 PIF Approval Date: April 23, 2010 Anticipated Work Program Inclusion:
 Program Manager: Hiroaki Takiguchi GEF Agency Contact Person: Ko Sakamoto

Response to GEF Secretariat Comments Dated 2/8/2012

GEF Comment	ADB Response	Document Reference
<p>8. Is the global environmental benefit measurable?</p> <p><i>d) The calculations are inconsistent with the description in the CEO endorsement request document (p6). Please clarify it.</i></p> <p><i>e) In the revised calculations, the total numbers of buses in the target cities have been revised, excluding mini and microbuses. On the other hand, the calculations do not revise the numbers of buses at a national level.</i></p> <p><i>In addition, the calculations at a national level use the same assumption used for the target cities (ex. 25% of the buses</i></p>	<p>This was an oversight from our side. We have rectified this information so that the information in the CEO endorsement request document is consistent with the calculations.</p> <p>We initially included minibuses in the national level as they may also be users of the methodology developed. However to improve consistency, we have updated the figures to exclude mini and microbuses, using data from the IEA. Matching data on Indonesia at national level was unavailable, and the original conservative figure (which is likely to exclude mini and microbuses) has been retained. This brings down the emission reductions envisaged at the national levels to a more conservative figure.</p> <p>We are assuming the 25% penetration of eco-driving, 25% of penetration in improved maintenance and mode shift of</p>	<p>Page 6, CEO endorsement request document</p> <p>Att 4. GEF CC Tracking Tool Data Estimates 10 Feb 2012, sheets “PRC”, “Indonesia” and “India”, “ cell C6.</p> <p>Att 4. GEF CC Tracking Tool Data Estimates 10 Feb 2012, sheet “Summary”, rows 27-57.</p>

<p><i>practicing eco-driving and better maintenance). This assumption seems to be very optimistic. If this assumption is still used, please explain how to achieve it.</i></p>	<p>5% from private cars to buses as a case in which the tool is fully effective and used by all bus operators at the country level (i.e. a 100% achievement rate). To calculate the national figures, we are applying to this a 5% achievement rate, which in our view is sufficiently conservative. We have modified the presentation of these figures in the Tracking Tool to make the calculations easier to follow.</p> <p>We have also recalibrated the number of buses at the regional level to cover “other Asian countries” using figures from the IEA. This figure covers the whole Asian region as defined by IEA, minus PRC, India and China, rather than the selective list of countries provided in a previous version. Hence, despite deducting for minibuses and microbuses the figure is higher compared to the previous submission. We then calculated the potential CO2 reduction in these countries, at both 100% achievement rate and 5% achievement rate for reference purposes. However, we have refrained from reporting these figures as these countries fall out of the project boundary.</p> <p>Through the above considerations, we believe the newly calculated CO2 reduction estimates (lifetime indirect GHG emissions avoided) are sufficiently conservative. This has been described in the CEO endorsement request document in footnotes.</p>	<p>Page 6, CEO endorsement request document</p>
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ANNEX C: CONSULTANTS TO BE HIRED FOR THE PROJECT USING GEF RESOURCES

<i>Position Titles</i>	<i>\$/ person week*</i>	<i>Estimated person weeks**</i>	<i>Tasks to be performed</i>
For Project Management			
Local			
	\$1,315	8	
International			
	\$3,250	6	
Total		14	
For Technical Assistance			
Local			
Transport specialist	\$1,315	38	Collect local data for analysis in 4 cities. Contribute to Manual development
Policy analysts	\$1,315	30	Contribute towards barrier analysis and formulation policy recommendations
Business Development Specialists / Financial Planner	\$1,315	25	Assist in development of company business plans. Develop financial plans for bus companies
Recognition Program Specialist	\$1,315	15	Assist in roll out of BRP
Web designer	\$1,225	4	Prepare user-friendly web access version of the sustainable transport GHG calculator suitable linked to websites as those of ADB, GEF, Clean Air Initiative for Asian Cities, International Association of Public Transport, Sustainable Urban Transport Project, and Institute for Transportation and Development Policy.
Total		112	
International			
GHG Methodology Specialists	\$3,250	26	Development and application of GHG assessment tool, draft Manual and present results in workshops
Transport Policy Analysts	\$3,250	25	Barrier analysis and formulation policy recommendations
Business Development and or Finance Specialists	\$3,250	20	Develop company business plans. Develop financial plans for bus companies. Develop recommendations on post 2012 financing.
Recognition Program Specialist	\$3,250	19	Create Bus Recognition program and roll out
Total		90	
Justification for Travel, if any: International Consultants will require travel to cities for analysis work and coordination and workshops.			

ANNEX D: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS

Does not apply – no PPG requested.

ANNEX E: CALENDAR OF EXPECTED REFLOWS

Provide a calendar of expected reflows to the GEF Trust Fund or to your Agency (and/or revolving fund that will be set up)

The project requests only grant funds for investments that will not accrue a return, no reflows are expected.