PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: AB4125

Project Name	AR-GEF Sustainable and Transport and Air Quality Project
Region	LATIN AMERICA AND CARIBBEAN
Sector	General transportation sector (60%);Health (25%);Sub-national government administration (10%);General energy sector (5%)
Project ID	P114008
GEF Focal Area	Climate change
Borrower(s)	REGIONAL
Implementing Agency	
Environment Category	[ ] A [X] B [ ] C [ ] FI [ ] TBD (to be determined)
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1. Country and Sector Background

Climate Change and Urban Transport Nexus

1. The transportation sector is currently responsible for more than one-third of the carbon dioxide (CO_2) emissions in Latin America, and is the fastest growing sector. The International Energy Agency projects that CO_2 emissions from vehicles will increase by a factor of 2.4 (or 140%); from about 4.6 gigatonnes in 2000 to 11.2 in 2050. The vast majority of this increase will take place in developing regions, especially Latin America and Asia, as a result of increased motorization and vehicle use.

2. Urban transport represents a key sector for long-run GHG mitigation efforts. Latin American cities are rapidly growing and about 80% of the people currently live in urban areas concentrating most of the vehicle kilometers of travel (VKT). The increasing use of motor vehicles not only generates additional GHG emissions, but also results in growing air pollution and associated health impacts, increased congestion, more accidents and reduced competitiveness of cities.

3. While most cities still have a considerable share of walking and public transport trips, car ownership and use is expected to continue increasing with economic and population growth. In addition, cities in Latin America are expanding and sprawling rapidly as the mobility needs are being primarily satisfied by a growing reliance on motorized vehicles and poor public transit systems, further increasing emissions and reducing energy efficiency. The poor are most affected as they rely on public and non-motorized transport, while investments are increasingly directed to the wealthier car users.

4. Argentina fits this regional trend, and moreover, is one of the most urbanized countries in Latin America. Over 89 percent of its total population lives in urban areas of 2,000 or more

inhabitants. Despite its high degree of urbanization, Argentina is still experiencing significant rates of growth in its urban population. Between 1980 and 1991 urban areas grew from 23.2 million to 28.4 million inhabitants (1.9 percent per year). Today 13 million people, or almost 38 percent of the country's population, are concentrated in the Buenos Aires Metropolitan Area (AMBA). Population densities are high with nearly 14,800 people per km2 in the city of Buenos Aires. The city's population (3 million) is growing at a rate of 0.7 percent a year. Yet some of the suburban municipalities are growing at a rate ten times faster (7 percent per year). Sound urban transport management is critical for meeting the growing transport needs of the fast growing-sprawling regions of Argentina.

5. The effects of increasing urban population, growing motorization, suburbanization, inadequate transport and traffic management, worsening congestion and air pollution have been evident in many metropolitan areas and medium size cities in Argentina. Bus transport is deteriorating and, suburban rail services have become overcrowded, unreliable and subject to much criticism regarding traffic safety and service quality issues. Traffic safety and personal security have become serious issues that impact cities' transport systems. Because of these factors, and the 2001 economic crisis and subsequent reduction in investment, public transport has lost around 50% of its ridership since the early nineties, aggravating the problems of congestion and pollution in some areas, and those of poor access and mobility in others (the poverty zones).

6. To mitigate GHG emissions from transport it is important to mainstream environmental concerns into sectoral policies, programs, and investments. By working closely with the different sectors and stakeholders, GHG emission reductions can be achieved in the long-run, while ensuring other developmental goals are also met.

Opportunity for sustainable transport and sound land-use planning

7. There is still a strong basis to address the trend of growth in unsustainable energy intensive transport in Latin America. Despite the rapid growth in vehicles numbers, most Latin American cities are not yet locked into an absolute automobile dependence pattern. The current car ownership levels of 100 vehicles per 1,000 inhabitants in Latin America are low compared to international standards and provide a great opportunity for maintaining current modal split and seek policies and measures to reduce growth of private vehicle use in cities and create incentives for public and non-motorized transport.

8. Even though Argentina's urbanization and motorization rates are growing rapidly, public transport and alternative modes still play a significant role in providing transport. This gives ample space to design sound long term policies that reinforce the natural link between land use, transport, and environment, guiding urban area growth towards more sustainable patterns.

9. Given its federal nature, each Province has its own constitution and municipalities are autonomous. Each jurisdiction is responsible for transport activities that take place on its territory. Cross-jurisdictional transport activities are managed at the next upper government level. For example, in the greater Buenos Aires area, public transport services operating between the Autonomous City of Buenos Aires (which has quasi-provincial status), and other municipalities of the Province are under the Federal Government's jurisdiction, public transport

services serving two or more municipalities within the Province are under the responsibility of the Province and public transport service routes entirely within the territory of a single municipality are under the responsibility of that municipality.

10. Air quality and land use policies are under the responsibility of the Municipalities, which are in charge of public transport services confined to their jurisdiction and which set the fares. However, the national government sets emission standards. Land use policies must be adopted by the legislative branch of the municipal government (consejo deliberante). This allows to build a national strategy to address environmental issues, more specifically to set climate change and air quality policies and goals, being implemented and monitored at local levels.

Strategic Approach

11. GEF will co-finance technical assistance and pilot investments that are part of comprehensive urban transport and land-use policies, programs and plans aimed at promoting climate friendly transport. The regional approach should foster the development of a critical mass of cities so a greater impact is obtained, but at the national and municipal level decision makers and professionals should focus on fully developing sustainable transport policies to broaden the reach and impact of GEF investments.

12. Contrary to other LAC countries such as Colombia, Chile, and Venezuela, Argentina has traditionally seen urban transport as a sector that lies outside the sphere of action of the National Government, in spite of its widely acknowledged externalities and impact both in terms of poverty reduction and competitiveness, especially taking into account that cities concentrate economic growth, and pockets of poverty and pollution. Other sectors in Argentina (e.g., education) have shown that although decentralization of expenditure and operation (*gasto y ejecución*) is efficient, there needs to be some federal support to make it work.

13. Therefore, the overall purpose of the projects will be to serve as an entry point for a country-wide intervention in the sector, promoting cross-fertilization between cities and the design of national policy guidelines in urban transport, land use and growth patterns, air quality and climate change, preparing the ground for deeper reforms.

Barrier Removal

14. The project will address the most common barriers at city and national level for sustainable transport already identified in Latin America, and others specific to Argentina.

15. One common barrier found in Argentinean urban transportation and environmental agencies is their staff's low capacity and technical skills. Some cities are willing to start working on sustainable transport projects, nevertheless staff and decision makers need technical assistance to commence. The mere fact of preparing the GEF proposals provided a convincing incentive for cities to focus their transport strategies on sustainability and air quality issues. Some cities are aware of their weaknesses in these issues and the support of the GEF project for their transport interventions will contribute to the development of their technical capabilities in the matter. In other places, the lack of technical skills in the municipality staff was overcome by contracting consultants who helped design sound transport projects and even prepared the corresponding

STAQ proposal. This being said, the materialization of the conclusions of feasibility studies require some heavy investments that can be unaffordable for municipal finances or crowded out by other local priorities. The GEF project will kick-start these investments and promote the "clean" tendency in transport and land-use, whereas the local agencies will strive for more funds to continue that way and the private sector will be encouraged to join these investments as a result of the confidence supplied by the presence of the GEF. This "faith" and confidence of the private sector in innovative projects that change the traditional way of thinking is another barrier that the STAQ will overcome.

2. Objectives

16. The Argentina Project follows the higher level objectives of the Regional Program, and have a common focus in assisting participant cities in: (i) towards reducing GHG emissions by increasing use of less energy intensive transport modes in cities; and (ii) inducing policy changes in favor of sustainable transport projects.

17. Key indicators linked to the first Development Objective are: (1) an increase in the number of trips in public transportation by 10% in the intervened corridors (sub-projects under Window 3) in relation to baseline data for the relevant corridor; (2) an increase in the number of NMT trips by 5% in areas of intervention (sub-projects under Window 4) in relation to baseline data for the relevant corridor; and (3) a decrease by 5% of CO2-equivalent tons emitted by ground transport in intervened corridors resulting from improvements to modal split, where applicable. Linked to the second Development Objective are the following indicators: (4) number of transport and urban development plans and regulatory and financial incentives for sustainable transportation at local and national level are in place; and (5) number of internationally recognized validated methodologies to assess GHG and air pollutant emissions as a result of transport and land-use measures are applied.

3. Rationale for Bank Involvement

18. The Bank's involvement in the urban transport sector is a response to the challenges raised by the rapid growth of Latin American cities, and by the need for a coordinated effort to address transport and environment issues at the regional level and to ensure that Latin American cities are well-positioned to meet the demands of an increasingly global economy. The World Bank aims at reducing transport costs – not only in a financial sense, but in terms of time and environmental damage as well – and increasing transport efficiency, enhancing urban productivity, competitiveness and contributing to the region's overall economic growth. By acting on several fronts such as public transport enhancement, freight management, coordination of public sector policies in land use and transport planning, promotion of environment-friendly transport solutions such as non-motorized transport, and traffic demand management, this project aims to reconcile mobility with quality of life and global and local environmental sustainability. It is also a partial response to some of the more intractable problems associated with urban poverty, not only in terms of access to economic opportunity, but also in terms of the broader dimensions of social inclusion through improved access to schools, health facilities, and wider social interaction.

19. The World Bank has a long and proven track record and in-house expertise in the design and implementation of transport, urban development, and environmental projects. Its presence in different sectors and various Latin American countries, including Argentina, provides a unique cross-referenced perspective which allows replication of good practices, while drawing from lessons learned and experience.

4. Description

20. Pilot investments, technical assistance, and capacity building activities in selected cities (USD3,987,000) [1] are divided by windows of opportunity briefly described below**.** The specific project component for the Argentina Project consists of pilot investments and technical assistance in 4 selected cities to remove barriers for sustainable transport. This Project and city-projects will co-fund measures in three thematic "Windows" (out of the five identified in the Regional Program[2]), following the World Bank's priorities and GEF priorities for climate change mitigation in the urban transport sector[3]:

Window 2: *Better coordination and integration of transport and land-use planning and environmental management*: technical assistance and measures to foster more integrated transport and land use planning to reduce the use of private motor vehicles, reduce trip lengths, and increase the accessibility to public and non-motorized transport. These activities are intended to address and mitigate barriers to better integrate planning, with the intended outcome of increasing the number of cities with integrated plans, institutional capacity and incentives to incorporate land-use considerations into transport planning processes and, potentially, capture resources from land valuation to finance sustainable transport improvements. Funding is proposed for USD $205,000, to ensure adequate distribution of different types of technical assistance across a range of cities.

Window 3: *Modal Interconnection, and Effectiveness and Efficiency of Public Transport*: Pilot investments, and technical assistance to facilitate the improvement of public transport systems and/or improve the effectiveness and interconnectivity of those systems with other modes of transport and induce mode switching away from the use of private cars. The intended outcome of these activities is to remove barriers that inhibit the development of more efficient and effective public transport systems, and to implement additional measures that help attract mode-switching. Funding of USD $2.382 million for this Window is proposed, in order to ensure that cities with different levels of capacity and at different stages in the planning process for public transport systems are represented.

Window 4: *Non-motorized transport*: pilot investments and technical assistance to better integrate walking and biking into the culture and planning processes of cities, and to create incentives for their use. The intended outcome of these activities is to demonstrate and

[1] See Annex 4 for a detailed relation of activities in each city under each of the Windows or areas of intervention

[2] Windows 1 and 5 are not being included in this specific project, but are addressed through other projects, such as the Infraestructura Puerto Rosario

3 Karekezi, S. , L. Majoro, T. Johnson, 2003. *Climate Change Mitigation in the Urban Transport Sector: Priorities for the World Bank*. The World Bank.

prepare cities to make further investments in non-motorized facilities and to undertake further activities to promote bicycle usage. Funding is proposed at about USD $1.4 million, reflecting the absence of a cultural tradition of bicycle use in the region.

Project Cost By Window and City in Argentina	GEF US $million	Co-financing US $million	Total US $million
Window 2: Integration of Land Use Planning, Transport Management and Environmental Management			
Tucumán	$ 205,000	$ 615,000	$ 820,000
Subtotal Window 2	**$ 205,000**	**$ 615,000**	**$820,000**
Window 3: Modal Interconnection and improved effectiveness and efficiency of public transport			
Córdoba	$ 750,000	$2,666,000	$3,416,000
Posadas	$ 732,000	$2,723,000	$3,455,000
Rosario	$ 900,000	$ 718,000	$1,118,000
Subtotal Window 3	**$2,382,000**	**$6,107,000**	**$8,489,000**
Window 4: Non-motorized Transport			
Córdoba	$ 700,000	$ 60,000	$ 760,000
Rosario	$ 700,000	$ 950,000	$1,650,000
Subtotal Window 4	**$1,400,000**	**$1,010,000**	**$2,410,000**
Total Argentina	**$ 3,987,000**	**$ 7,732,000**	**$ 11,719,000**

4. Lessons Learned and Incorporated in the Program Design

21. The Bank has a long-standing involvement in the sector of climate change and air quality management in general, and its interrelationship with urban transport in particular. The first loan in this regard, approved in 1992, had the objective of reducing traffic-generated air pollution in Mexico City. To disseminate lessons learned and involve other cities, the Bank, with support from other partners, created the Clean Air Initiative in Latin American Cities in 1998. Similar initiatives have now been launched in Asia and Africa. In addition, recent strategy papers on Pollution Management and Urban Transport discuss extensively the effects of urban traffic on air quality, and urban transport operations in Bogotá, Buenos Aires, Lima and Sao Paulo, which include air quality management components in their design.

22. Regional synergies and holistic approach. Cities and countries facing a similar array of transportation and air quality problems should not need to reinvent the wheel to confront these issues. The concern for a holistic approach to development call for greater integration in GEF funded projects, while separating execution of investments by country and city, lessons and experience across the region should be made available and shared in a common regional framework that leapfrogs advancements and reduces the learning curve for cities undertaking measures similar to those adopted elsewhere. It is expected that starting with Argentinean medium size cities, there will be a ripple effect that will influence policy change at the country level. This is especially important as other fast growing secondary cities in Argentina, and in Latin America as well, will soon reach unsustainable transport and urban development patterns that will be very difficult to change.

23. Specific to the ongoing PTUBA operation, several lessons can be drawn, including:

- Environmental and social assessment and management procedures in place have demonstrated to be effective in identifying, mitigating and/or preventing negative impacts. However, it is recommended to further integrate the public consultation process with the environmental and social assessment and management process. It might be advisable in some cases to involve an independent organization to mediate discussions between municipality and affected population and compile the results and include mechanisms to incorporate the environmental and social evaluations in the decision making, as well as design and technical evaluation process. Furthermore, the Environmental and Social Management Manual (ESMM) has to include measures to ensure access and minimize impacts on local population directly affected by the works.

- Regarding the public consultation process, most consultations took place several years prior to execution of the project (mainly due to the standstill that the project faced between 2000 and 2003). This greatly reduced the effectiveness of the consultation process and resulted in new complaints and conflicts. Therefore, it is important to establish a validation period for public consultation, after which a new consultation must be carried out or the existing one must be updated following clear procedures.

- One final recommendation is that the PTUBA Environmental Unit strengthens its capacity and includes staff to supervise the environmental and social aspects of the project. It is also suggested

that the municipalities should be more closely involved in environmental and social aspects of project preparation and supervision, and implement information programs and provide grievance procedures.

5. Financing

Source:		($m.)
BORROWER/RECIPIENT		7.88
Global Environment Facility (GEF)		3.99
	Total	11.87

6. Implementation

24. Argentina will form part of the learning community being put forth across the three countries that are participating under the Umbrella APL program as described in the program document. This learning component will draw in federal and municipal agencies, such as ministries and secretariats, as well as the World Bank, GTZ, WRI/EMBARQ, ITDP, and the Clean Air Institute to identify and disseminate best practices and strengthen municipal and federal capacity. More specifically, representatives of agencies involving environment, land use, and transport, along with a representative of the Project Implementation Unit (PIU) and from the cities involved, will constitute a Consultative Committee. Institutional arrangements and responsibilities will be defined in two Memoranda of Understanding or Cooperation/Implementation Agreements one signed between the CAI and the PIU, and the other one between the PIU and the Cities.

1. Institutional and implementation arrangements

25. The Grantee is the Argentine Republic and the Executing Agency the Secretariat of Transport within the Ministry of Federal Planning and Public Investment. The management of day-to-day matters related to all stages of project execution will be the responsibility of a Project Implementation Unit already set up for the PTUBA. This PIU is a well established unit, which has performed satisfactorily during the last years of project implementation and which is fully familiar with Bank rules, and will certainly maintain a close relationship with municipalities.

26. In addition, there is a satisfactory multi-year experience of the ongoing project execution with the PIU, which has continually increased its expertise in environmental and procurement issues. Therefore, it seems reasonable to extend the PIU implementation arrangements for the Argentina GEF Project. Nonetheless, as originally envisaged by the PTUBA, part of the staff currently working for the PIU would be gradually integrated into the urban transport planning agency for the Buenos Aires metropolitan area that is expected to be created in the coming years, with support from the new Urban Transport operation under preparation. Thus, the sectoral institutions will capitalize on the experience gained by some of the PIU staff.

27. The PIU will prepare progress reports every six months, replicating the current arrangements. The PIU is headed by a General Coordinator, assisted by various sub-coordinators in the Works, Accounting, Technical Assistance and Administrative areas, in addition to a GEF coordinator, as

well as having support in the different municipalities involved. The composition of the PIU is submitted to the Bank's approval.

28. Supervision of activities will be done by the World Bank and the national PIU with support from the Consulting Committee and the regional executing agency, the Clean Air Institute. In the case of the Bank, it will benefit from the staff already involved in dialogue and urban transport and environment operations in Argentina and the selected cities. This will also ensure consistency with the overall development policies and activities on urban transport already taking place, and will enable economies of scale to be seized across cities.

29. Additionally, the Consultative Committee will provide support and guidance on policy matters that relate to urban transport, environment, land-use and urban development. The Committee will have a consultative role and will be a forum of debate and deliberation regarding cross-sectoral issues. Furthermore, it will be the recipient of experiences and information to be gleaned from the GEF program in other participating countries and cities. Finally, it is hoped that this entity will be at the forefront of developing an approach to integrated transport, environmental aspects, and land-use at a national level as a result of the lessons learned in Argentina through the GEF program and also through the experiences shared with other countries.

7. Sustainability

30. *Grantee's commitment to and ownership of the project.* All the city-projects recommended for inclusion in the Argentina GEF Project have undergone a rigorous review in the context of a national and international competition. While the guidelines of this competition established the broad windows to be funded, all specific activities in the competition were proposed by the cities, in the context of that competition. Proposals lacking clear political and institutional commitment were rejected by either Blue Ribbon Panel or subsequently the Bank. (See Annex 20 of Regional PAD for additional details).

31. The selected city proposals were assessed based on technical quality, local capacity, commitment and political support to assure that the four selected city projects are expected to have the highest direct GHG impact and indirect impact through dissemination of lesson-learned. There is a sound basis for successful implementation and there is a good change for long-term investments in follow up projects in the country. To ensure overall sustainability, the project will focus on strengthening institutional and regulatory frameworks and financial sustainability at the city and country level.

32. At city and metropolitan level, the Argentina GEF Project will assist in creating mechanisms and institutional frameworks to coordinate planning and decision making on transport, environment and urban development. The project will help strengthen the institutional and human capacity to prepare, plan, implement, monitor and evaluate the performance and environmental benefits of sustainable transport projects. The project will also help strengthen public private partnerships in financing and operation of urban transport systems. The project will foster the implementation of economic and regulatory incentives at national and regional to

mainstream environmental considerations into the urban planning and transport planning process, as well as in specific bidding and contract documents for operators and contractors. Proposed policies at local and national level will provide the basis for long-term promotion of more efficient and cleaner transportation systems.

8. Lessons Learned from Past Operations in the Country/Sector

33. Specific to the ongoing PTUBA operation, several lessons can be drawn, including:

- Environmental and social assessment and management procedures in place have demonstrated to be effective in identifying, mitigating and/or preventing negative impacts. However, it is recommended to further integrate the public consultation process with the environmental and social assessment and management process. It might be advisable in some cases to involve an independent organization to mediate discussions between municipality and affected population and compile the results and include mechanisms to incorporate the environmental and social evaluations in the decision making, as well as design and technical evaluation process. Furthermore, the Environmental and Social Management Manual (ESMM) has to include measures to ensure access and minimize impacts on local population directly affected by the works.

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- One final recommendation is that the PTUBA Environmental Unit strengthens its capacity and includes staff to supervise the environmental and social aspects of the project. It is also suggested that the municipalities should be more closely involved in environmental and social aspects of project preparation and supervision, and implement information programs and provide grievance procedures.

9. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	[X]	[ ]
Natural Habitats (OP/BP 4.04)	[ ]	[X]
Forests (OP/BP 4.36)	[ ]	[X]
Pest Management (OP 4.09)	[ ]	[X]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[ ]	[X]
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	[ ]	[X]
Involuntary Resettlement (OP/BP 4.12)	[X]	[ ]
Safety of Dams (OP/BP 4.37)	[ ]	[X]

Projects on International Waterways (OP/BP/GP 7.50)	[ ]	[X]
Projects in Disputed Areas (OP/BP/GP 7.60)*	[ ]	[X]

34. Based on the assessments carried out during project preparation, the Project has been qualified as "Category B", following the Operational Bank Policy OP 4.01 and 4.12. The Environmental and Social Manuals provide adequate prevention, mitigation and compensation measures to address the potential impacts identified during project preparation, and specify procedures and responsibilities of contractors and the municipalities and PIU staff to minimize the negative environmental and social impacts during preparation, construction and delivery of works.

10. List of Factual Technical Documents
Documents can be found in IRIS folder: P096017
Argentina GEF Proposals
Blue Ribbon Panel Evaluation

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* *By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas.*