

Methodological guide

Emerging Sustainable
Cities Initiative

First Edition
2012

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First edition

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Coordinating team of the Emerging and Sustainable Cities Initiative:

Ellis J. Juan

General Coordinator

Patricia Torres

Coordinator

Horacio Terraza

Coordinator

Carolina Barco

Senior Advisor

Mariana Amat y León

Assistant Coordinator

Ricardo De Vecchi

Consultant

Luis M. Espinoza

Consultant

Luis E. López-Torres

Consultant

Nancy Moreno

Consultant

Federico A. Scodelaro

Consultant

Rebecca T. Sabo

Consultant

Ramón Zamora

Consultant

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Acronyms and Abbreviations

LAC	Latin America and the Caribbean
ESCI	Emerging and Sustainable Cities Initiative
CCS	Climate Change and Sustainability Division
FMM	Fiscal and Municipal Management Division
CGI	Coordinating Group of the Initiative
GCIF	Global City Indicators Facility
GHG	Greenhouse Gases
IFD	Institutions for Development sector
INE	Infrastructure and Environment sector
UBN	Unsatisfied Basic Needs
OECD	Organization for Economic Cooperation and Development
UN-HABITAT	UN Human Settlements Program
GDP	Gross domestic product
UNDP	UN Development Program
PRODEV	Program to Implement the External Pillar of the Medium-Term Action Plan for Development Effectiveness
SECCI	Sustainable Energy and Climate Change Initiative

How to use this guide

This guide is designed for use by the Inter-American Development Bank (IDB) teams that are implementing the Emerging Sustainable Cities (ESC) methodology in one of the cities selected. This guide is the product of a process still under development. As the Initiative taps into a larger number of experiences, the methodological guide will be enriched and adapted to the realities of our cities. Besides being used by Bank staff, the guide will also be useful to the local counterpart teams.

The guide describes the process of implementing the ESC methodology through a series of phases from formation of the teams and collection of basic data (Phase 0) to the planning of strategy implementation (Phase 4) and the start of the sustainability monitoring system (Phase 5). Each chapter includes activities, results and numerous examples, along with definitions and useful advice. Additional details covering certain elements (e.g. data sources, how the topics are prioritized, among others) are available in some of the chapters or annexes.

The guide establishes some working parameters that IDB specialists can use as a reference on the application of the methodology or to obtain advice on matters specific to its different stages.

Each group's work will become the basis for enriching various aspects of this guide. It is therefore important for each team to share its ideas and lessons learned with the aim of improving the instrument.

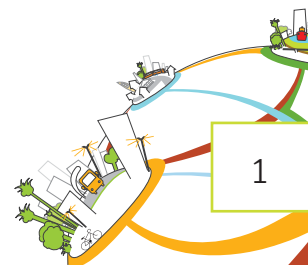
The updated version of the guide will be available at

<http://iadb.org/en/topics/emerging-and-sustainable-cities/emerging-and-sustainable-cities,6656.html>.



A. Background and context







- 1.1** Approximately 75% of the population of Latin America and the Caribbean (LAC) live in cities. Rapid urban growth has created opportunities for millions of people, but has also created immense challenges for governments in terms of delivering basic services, guaranteeing adequate levels of quality of life, promoting job creation, protecting the environment and meeting the challenges of climate change.
- 1.2** Besides the large cities, there are approximately 140 cities with less than two million people whose economies and populations are going through a phase of rapid growth, which is why they are termed “emerging cities.” These cities still have the opportunity to grow in a sustainable way but to do so successfully they need to adopt a planned and integrated approach so that they can offer quality public services, guarantee security, protect the environment, use natural resources efficiently and adapt to the consequences of climate change. To finance this effort over time, these cities must develop good governance and fiscal management strategies. To support them in this difficult task, the Bank has launched the Emerging and Sustainable Cities Initiative (ESCI). The Bank expects to play an important role in these cities with their support in pursuing balanced growth before their sustainability challenges become a limiting factor on development. This support includes helping cities manage their vulnerability to climate change and their need to mitigate its impact, priorities that are not often found in local agendas.



B. Approach

- 1.3** The ESCI is a new way of addressing the most pressing sustainability challenges in cities, by means of an integrated and interdisciplinary approach which is necessary for identifying the path to long-term sustainability. Conceptually the approach uses three dimensions of sustainability: **environment and climate change; urban**, including integrated urban development, mobility/transport, economic and social development, competitiveness and security; and **fiscal and governance** (see Annex 1).
- 1.4** The process of identifying the most pressing sustainability challenges in the city is by means of a rapid evaluation, based on: i) a quantitative analysis using a set of approximately 150 indicators, mostly derived from secondary data; and ii) a technical qualitative analysis, based on deep knowledge and experience of specialists in the sectoral topics covered by the Initiative. This evaluation provides for a diagnosis and prioritization of sector-areas that require further attention. With the information obtained, together with the criteria for prioritizing actions explained later, strategies, action areas and/or solutions can be quickly identified, concluding with preparation of an action plan. A critical part of this approach is the incorporation of the concerns and ambitions of a significant group of citizens and organizations (such as IDB, the city, national government, private sector, nonprofit organizations, and communities). It is anticipated that this process of applying the methodology can be completed in a period of four to six months. Later the preparatory studies of the solutions will be prepared as part of the initial implementation of the action plan (for cities that are formally linked to the ESCI).
- 1.5** As more cities in Latin America and the Caribbean (LAC) apply the ESC methodology, they will become part of a network of sustainable cities. By participating in the network, cities will be able to share experiences, benchmarks, best practices and lessons learned. Capturing and sharing this data and information increases the knowledge of cities, and results in a rapid evaluation and effective follow-up of progress (see Table 1)

Table 1. The ESC Initiative aims to set up a network of cities which can compare and share the best performance practices.

	<p>Rapid evaluation</p>	<ul style="list-style-type: none"> • Evaluate the city based on indicators of the three dimensions • Identify the priority areas for developing and prioritizing solutions 	
	<p>Comparative evaluation</p>	<ul style="list-style-type: none"> • Establish relations with peers (similar cities in LAC) • Compare with benchmark cities, target cities 	
	<p>Share practices</p>	<ul style="list-style-type: none"> • Compare knowledge and best practices in all the dimensions of sustainability • Share effective actions and financial approaches 	

Source: Team Analysis.

1.6 Rapid evaluation based on indicators uses existing data and information, avoiding exhaustive primary research, and proxy variables and/or estimates, when necessary. In cases where the municipalities do not have the indicators disaggregated for the city, the people applying the ESC methodology (IDB and local level) must use their best judgment when obtaining the information from experts on the city and comparing it with that of other cities or with national indicators in order to develop the estimates. However, to achieve the objective of regional comparability, at least the key indicators of the dimensions must be standardized and parameterized. For an explanation of the indicators of the ESC methodology, see Annex 2.

1.7 Because of the speed and complexity of the analysis required (application of the methodology has to be completed in four to six months), the people leading this application will have to make rapid evaluations and decisions. In the absence of perfect information, the teams will have to involve experts with deep understanding of urban problems,

local and national professionals with experience in all the areas, and leaders who consider the topic area a priority. In general, the ESC methodology provides for a diagnosis, prioritization of the topics identified as critical and construction of an action plan for the sustainability of the city. The entire exercise includes multiple actors in the city (e.g. local government, civil society, academia and the private sector).

- 1.8** The main end product of this first stage is an action plan, which identifies strategies and/or actions, timelines, persons responsible and financing sources. The intention is that the actions will be monitored by an independent system of citizen follow-up, whose implementation will be supported by the Bank. The Bank will also assist the city to raise funds and prepare projects to accompany the key interventions included in the action plan. This guide provides detailed information and examples of the methodology to be used by the IDB technical and the local counterpart teams.
- 1.9** If necessary, the Initiative Coordinating Group (ICG) will be available to deal with questions/queries.

C. Organization for implementation of ESCI

- 1.10** For the successful implementation of ESCI, the teams need to have the right combination of leadership and expertise, since it is essentially an interdisciplinary task.
- 1.11** To implement ESCI, the Bank has formed a coordinating group. The ICG is formed by a general coordinator, reporting to the Vice President for Sectors and Knowledge (VPS), and two management coordinators: one representing the Infrastructure and Environment Sector (INE) and one representing Institutions for Development (IFD). For the Office of the Vice President for Countries (VPC), the local ESCI coordinator is the Bank's Country Representative. There is also a technical and administrative support group represented by two experts with extensive experience in urban development and climate change, and two professionals with operational and administrative experience, all with organic-functional dependence on the INE and IFD sectors.

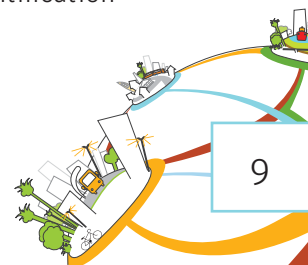
- 1.12** For the individual work in each city, the Bank will form a technical team consisting of: i) a specialist who will act as team leader (TL), ideally based in the Bank's respective country office; and ii) experts with knowledge and experience in each topic of the ESCI dimensions. On average, the technical team should have between seven and nine specialists from the Bank.
- 1.13** If the TL does not reside in the country where the team will work, a specialist familiar with the local reality and institutional context in relation to cities should be assigned from the corresponding country office. The main function of the local specialist is to be the liaison between the technical team and the local counterpart team. If resources are available, the ideal situation would be to have temporary professional support to assist with collecting information and completing the indicator table.
- 1.14** On its side, the city will have to form a local counterpart team with at least one coordinator responsible for interaction with all the areas of the local institution and with the Bank teams, coordinating visits and agendas, coordinating and agreeing on actions and missions, etc. Preferably the person acting as coordinator should be from the executive level of local government with access to the mayor or governor, and key areas (Treasury-Finance, Planning and Infrastructure). In addition, each city government office involved in the process must appoint to a member of the technical staff as responsible for the top-ic area for that agency.



Overview of the process and phases

2

- 2.1** The ESC methodology uses a rapid evaluation method based mainly on secondary data and information, guided by a set of about 150 indicators, 60 basic and the rest support. The methodology uses existing data, supplements them and achieves the necessary depth with the qualitative participation of a select group of specialists and stakeholders in each topic area, resulting in rapid identification of problems, their prioritization and setting of strategies and actions, as well as planning the solutions to be put into practice. This method replaces the traditional approach of collection of studies and detailed information, and time spent on its analysis. An important part of the richness of the knowledge transfer comes from the process that takes place during the dialogue between the Bank's technical team and the local counterpart team. This dialogue produces details of possible technical solutions, together with the Bank's experiences in other places, etc.
- 2.2** The process of implementation of the ESC methodology is designed to take place over four to six months, using a multidisciplinary approach to help the teams find creative methods to solve the problems identified. This can be done by IDB staff, outside experts or a combination of both, with the high technical standards and experience required in the various fields resulting in a multidisciplinary team of high quality and performance.
- 2.3** As a prerequisite for starting the work, the Initiative must have the invitation, commitment and approval of the counterparties of the country concerned, at both local and national level, evidenced by a letter of commitment from the city. This ensures that it is initiating a process of stakeholder demand.
- 2.4** The process has been divided into the following phases described below:
- Phase 0 – Preparation.** Comprises: i) formation of work teams; ii) collection of information on the indicators from secondary research sources; and iii) identification



of the main actors in the city involved in the process and, with them, definition of the overall vision of the city.

At this stage the contracting process begins in order to generate the main technical inputs of the process: basic studies on climate change,¹ a study of the impact of urban growth,² and a public opinion survey. These contracting processes will be carried out by the Bank through CGI.

- b. **Phase 1 – Analysis and diagnosis.** This phase begins with meeting I between the city and the Bank, including the initial visit and workshop. The meetings should involve local officials as well as the national or state agencies which influence the city's development, together with other local agents representing various sectors (local authorities, nongovernmental organizations [NGOs], universities, etc.); these meetings should also identify the general problems of the city.

At this stage the data obtained in Phase 0 is supplemented with data obtained in the field during the interviews mentioned in that phase, and as a result of requests for specific data made to the appropriate authorities. At the end of Phase 1, the teams must have completed the set of indicators and their comparison with the standards set by the Bank for the region and/or country (benchmarks and traffic light exercise), classifying each item as green, red or yellow.

- c. **Phase 2 – Prioritization.** This phase establishes the priority of the areas identified in Phase 1 as critical for the sustainability of the city. Each area or sector characterized by red or yellow (traffic light exercise) is prioritized by the application of four

¹ This field includes the basic technical studies and measuring instruments needed to adopt measures to mitigate and adapt to climate change. These include the following activities: i) GHG inventories, which cities can use to establish their baseline in order to determine reduction targets and access funds from international sources; ii) vulnerability studies of the observed and expected impacts of climate change, including floods, droughts, sea level rise, higher temperatures, reduced rainfall and water supply sources, and iii) analysis of economic, technical and financial viability of mitigation and adaptation measures.

² This study provides the basic quantitative and qualitative information needed to identify past and present growth trends, and to generate long-term urban and regional projections.

filters: public opinion (importance of the topic for citizens), economic cost (what is the cost for society; this quantifies the “cost of inaction” in real terms), environmental cost/climate change (vulnerability to climate change and to levels of greenhouse gas [GHG] emissions), and valuation of specialists. According to these filters, individual scores are assigned for each area identified, obtaining the list of priority intervention areas in the city, which is used to select the ones with the highest scores (ideally three to five priorities per city should be selected). Finally, the list is confirmed with the city. Next the second meeting is held between the city and the Bank to validate the prioritization exercise carried out.

Importantly, in this phase the technical inputs contracted and obtained in Phases 0 and 1 (basic studies of climate change, impact of urban growth, and the public opinion survey) are used to prioritize the topics identified as critical.

- d. **Phase 3 – Development of Strategies.** This phase includes identification, development and selection of strategies and/or actions for each prioritized area. Through close work between the Bank’s technical team and the city counterpart team, the solutions gain technical depth and each party develops a strong sense of commitment to the strategies. In this phase, the prioritized areas are analyzed in more detail, and the opportunities, risks, and key actors for improving the current situation in each area are identified.
- e. **Phase 4 – Action Plan and its implementation.** The city/IDB teams create a plan for implementing each strategy identified. The actions, timelines and costs for their development and those responsible for each activity are determined. The plan must consider a short- and medium-term stage during which the administration has the resources and leadership to initiate specific actions and implement them during their administrative period, considering the policy, results generation and monitoring variables. However, these actions are intended to achieve long-term goals to be met by future administrations of the city. This plan becomes the roadmap for the city along its path to sustainability. At the end of this phase, the third meeting is held between the Bank and the city to finalize the action plan and validate it with the appropriate bodies.

This phase also begins with the stage of initial implementation of the action plan in the cities that are formally part of ESCI, where the Bank will assist the city government with raising financial resources and preparing projects for some of the prioritized solutions in the plan.

- f. **Phase 5 – Monitoring.** An independent civil society organization will administer a system to monitor the city’s progress in terms of sustainability. The particular topics to be included depends on which topics were identified as critical during the development phases of the ESC methodology. The monitoring mechanism will follow the group of indicators that corresponds to the areas prioritized with the city and included in the action plan, along with additional areas where the city shows particular interest in follow-up, and public perceptions.

- 2.5 All the meetings of the team that is applying the methodology in the city will be divided into two stages: initially the technical bodies (counterpart and IDB teams and/or consultants) followed by the meetings with civil society. As mentioned above, three meetings are planned between the Bank and the city: i) launch and opening workshop; ii) validation of prioritization; and iii) closure and validation of the action plan.

Table 2. Phases of the process					
Phase 0	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Obtain data, identify actors interested (1–2 weeks)	Identify problems (2 weeks)	Prioritize problems (2 weeks)	Identify strategies and/or actions (2 weeks)	Prepare Action Plan (2 weeks)	Design and start up monitoring system
	I		II		III
Activities					
<ul style="list-style-type: none"> Form the team Identify critical stakeholders Carry out desk research 	<ul style="list-style-type: none"> Meet with stakeholders Complete data collection and analysis of indicators Understand the operation of the Initiative (including size, time, policies) 	<ul style="list-style-type: none"> Prioritize areas based on: <ul style="list-style-type: none"> Public opinion Economic cost Vulnerability/ impact climate change Evaluation by specialists 	<ul style="list-style-type: none"> Define strategies with IDB, external experts and stakeholders Filter actions based on: <ul style="list-style-type: none"> Feasibility Impact 	<ul style="list-style-type: none"> Formulate action plans for identified strategies Set up a monitoring board Identify possible sources of financing 	<ul style="list-style-type: none"> Design and program implementation of monitoring system Create a monitoring dashboard
Deliverables					
<ul style="list-style-type: none"> List of stakeholders. Initial view of strengths and problem areas 	<ul style="list-style-type: none"> Set of indicators with traffic light analysis and comparisons with other cities 	<ul style="list-style-type: none"> List of areas/sectors prioritized 	<ul style="list-style-type: none"> Set of defined actions, with basic descriptions 	<ul style="list-style-type: none"> High level action plan per city 	<ul style="list-style-type: none"> Monitoring system started and operating

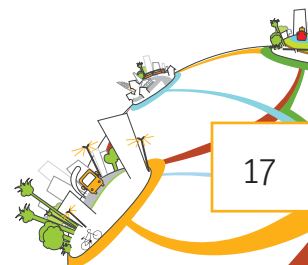
○ Moments of meetings (missions) city/IBD and/or consultants



Phase 0 – Preparation: Collection of basic data and identification of stakeholders

3

- 3.1** The city must formalize its participation in the process. Before the first mission of the Bank's technical team, the city must have applied to be included in the Initiative and have entered into the corresponding agreement with the national government, in order to maintain a dialogue on the action and programming in the country. There must also be confirmation that the Bank's country strategy includes sustainability in cities and integrated urban development.
- 3.2** The details of the actual start date and the project timetable must be coordinated with the local counterpart, so that it takes place at a time convenient for the IDB technical team and the local counterpart.
- 3.3** The Bank Country Representative will notify the city of its acceptance in the ESCI. The city government must designate a focal point in the city, with whom the leader of the IDB technical team will draw up the timetable of activities. This coordination should be in writing, and include the timetable of the high-level meetings to be held during the first mission to the city.
- 3.4** Phase 0 starts after completion of the preliminary dialogue with local authorities. This phase has four objectives: i) form and start up the Bank's technical team; ii) identify a manager/coordinator of the process in the beneficiary city, appointed by the mayor; iii) obtain an initial idea of the most critical challenges in the city in terms of sustainability, as background to the main diagnosis to be developed in Phase 1; and iv) identify the main actors/stakeholders.



3.5 Phase 0 lasts approximately two weeks and must take place before the IDB technical team begins work in the country and/or city. This is the time to use the knowledge of the IDB experts on each matter and its situation in the country and the specific city, as well as to collect existing and additional data and information on the city and identify the most important stakeholders. This will maximize the working time of the IDB technical team and the local counterparts team in later phases.

3.6 Five basic steps that the team leader and focal point of the Bank in the country (they may coincide) must follow:

- Prepare a work schedule, a start date and the time periods of each phase.
- Identify key actors in the country/city. Special care should be taken in centralized countries where national authorities can be more active than local; in this case efforts should be made to achieve adequate and timely representation of both levels of government.
- Collect available information on basic city data and indicators.
- Identify and use data/information to create a proxy, when accurate data are not available.
- Arrange for the city's letter of commitment.

3.7 Indicator values should be collected by specialists from the city (city government). However, in some cases, during this phase it may be necessary to hire a local junior professional (economist or planner) who will begin the search for statistical information to set up the indicator table.¹ This activity is critical for the next phase. Cities do not generally have this information, and considerable time is spent on collecting it, so this activity should be started as soon as possible.

¹ This search will be supplemented and checked with local specialists, later in Phase 1.

A. Identification of competent country and city authorities involved

- 3.8** In Phase 0 (preparation), it is essential to identify and organize meetings with key officials who could take part in the process at the national and local or state level, along with other stakeholders (civil society). These actors may be the main government authorities, decision makers, important sources of information and knowledge, or influential members of the community and civil society. The participation of each of these groups is essential for the later development of strategies and solutions. Some of the stakeholders can play an important role in supporting or implementing the monitoring system.
- 3.9** To identify the key stakeholders—both for the rapid assessment and the proposed actions—the IDB technical team must have a clear understanding of the political and institutional reality in the city, that is of the network of responsibilities of local, state and central government as well as the share of the local budget from resources from central level and the city. The latter analysis in particular can help to understand the role of central government in meeting the challenges facing this city.
- 3.10** The Bank technical team can use the government Internet spaces which often list useful sources or references. Whenever possible, the team should make a list of the entities and organizations in the stakeholder sectors (government, private sector, etc.) and of the entities and officials that work in the dimensions and topic areas related to sustainability of ESCI. A brief note describing the organization would also be useful. Table 3 gives an example.

Table 3. Example of list of stakeholders in interviews

Stakeholders	Type	Dimension(s)	Pillar(s)	Address	Contact	Comments
<i>El Guardián</i>	Media	Environmental, fiscal, urban	All	Office in Port of Spain: 22-24 St Vincent Street (PO Box 122)	Tel.: Gabriel Faria(director), Douglas Wilson (manager) 623-8870/9, 623-7543, 625-7380/3	<i>El Guardián</i> is one of the leading newspapers in Trinidad and Tobago.
World Health Organization (WHO)	International Organization	Environment	Air pollution			
Atlantic LNG	Private	Environment, fiscal, urban	Transport	Office in Port of Spain: PO Box 1337, Corner Keith and Pembroke Street	Oscar Prieto, CEO. Tel.: (868) 624-2916	Natural gas liquids (NGL) producer, owned by NGC, Trinidad and Tobago.
First Citizen's Bank	Private	Fiscal	All	Office in Port of Spain: 9 Queen's Park East	Larry Howai, CEO	Has assets over TT\$15 billion, 22 branches in Trinidad and Tobago.
North West Regional Health Authority (NWRHA)	Public	Urban	Health	Office in Port of Spain: 39 Dundonald Street.	Tel.: (868) 627-2874	Responsible for most populous area of Trinidad and Tobago (including Port of Spain).
Ministry of Labor and Transport	Public	Urban	Transport	Office in Port of Spain: Corner Richmond and London Streets.	Jack Warner, Stacy Roopnarine	Responsible for providing infrastructure in transport services.

3.11 The groups that form the core stakeholders are normally:

- Local, regional and national governments.
- Local institutions (public utilities, planning agencies, public-private agencies providing household services, etc.)
- Private sector (chambers of commerce, industry groups, etc.)
- Civil society (local or international NGOs).
- Community groups.
- Schools and universities.
- Other multilateral organizations.

B. Secondary sources of research

3.12 One way to collect information on the city quickly and efficiently is by using as much existing data and information as possible. Specific information can be obtained from official city data and from local IDB specialists, while local newspapers offer particular points of view and perspectives of local politics and events. Government Internet spaces also provide information on their functions and initiatives. National statistical reports very often provide valuable information on historical trends and future projections.

3.13 Other sources that offer quick access to information include the Bank's resources (for example, the search system on the Zahori Intranet, sectoral notes, reports, project evaluation reports), and external sources (ABI/Proquest, Lexis/Nexis Académico, Estadístico, The Economist Intelligence Unit, Global Insight, CountryData.com, Standard & Poor's Rating Direct, World Bank data, World Factbook, GCIF, relevant reports and studies by other development agencies, etc.).

3.14 The Bank technical team should also gather information from stakeholders (other than local government), information that gives a valuable insight into how various interest groups see the indicators and problems facing the city. Without such information, the

team will not be able to efficiently prioritize the topics or successfully implement the action plans.

C. Use of proxy variables

- 3.15** When no information on the indicators is available, the team can fill them out with regional or national information, or estimated calculations.
- 3.16** It is important to define the functional limits of the city on which the measurements will be made. Although it is desirable that the measurements use the political-administrative area of the city as reference, this may vary depending on each measurement and city. The basic point is to specify the assumptions used and the area under consideration, maintaining these data consistently throughout the entire analysis process.
- 3.17** For example, although the official administrative boundaries of Port of Spain cover approximately 50,000 people, in fact 250,000 people live in greater Port of Spain and are an essential part of the city's economic and social life.

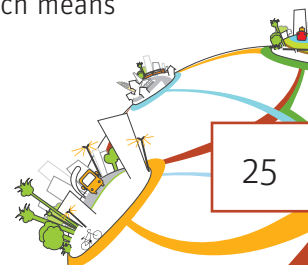
A series of horizontal dotted lines for writing notes.



Phase 1 – Analysis and Diagnosis: Identifying Problems

4

- 4.1** Phase 1 is the main diagnostic phase of the ESCI exercise. Its aim is to identify the city's most pressing sustainability challenges, by means of a rapid evaluation based on a set of indicators (about 150). These indicators integrate the three sustainability dimensions of the methodology (urban, environmental and fiscal) and are grouped into topics and subtopics.
- 4.2** Analysis of the indicators is a systematic exercise that requires appropriate information and the methodology used should be as simple as possible. When completing the indicators form, whether the data are obtained from secondary or tertiary sources (e.g. interviews with sectoral experts in the municipality), the following information must be included: source and year, methodology used to obtain values and for the calculation, if applicable, and any other comment on the limitations or weaknesses of the value found (e.g. if a proxy variable or national averages were used for the local situation). (See Annex 2.)
- 4.3** Once the indicators table is complete, the values obtained for the city are compared with comparative values. There are two types of benchmark: i) regional, with values resulting from consultation with sectoral experts, representing a view of the IDB for the region; and ii) comparator cities, whose relative values correspond to the analysis of indicators for similar cities in the region, which have generally already participated in the Initiative in the past. In certain cases, such as the fiscal indicators, the comparisons can be with cities in the same country, which adopt the same fiscal or governance model (e.g. centralized organization based on transfers from the provincial or national government).
- 4.4** The comparative values are grouped into three ranges which are assigned a traffic light color as follows: i) green, which means that an indicator is within the desired parameters; ii) yellow, meaning the indicator shows some difficulty; and iii) red, which means



that the indicator is in a critical condition. The city indicators found are compared with regional benchmarks, and a traffic light color is obtained (green, yellow, red) depending on how close the value found is to the desired range of sustainability for the region. Also, as an analytical tool, each indicator can be assigned a traffic light color according to the cities used as comparators.

- 4.5** A topic is composed of several indicators; in turn, the pillar is made up of several topics, and the pillars are part of the dimensions of the Initiative. With this in mind, the final classification of a topic results from averaging the final traffic lights for all indicators included in the topic. The final decision on the color to adopt for the topic may be difficult in certain cases (e.g. when a topic contains some indicators in red, others in yellow and others in green). In these cases, the opinion of sectoral experts is sought. Discussions with these experts can shed light on the challenges and opportunities in the sector and help determine the traffic light color.

A. Preliminary diagnosis

- 4.6** *General knowledge of the city (collecting information from officials and stakeholders).* The process starts with the first mission of the IDB technical team to the city (meeting I) which begins with a plenary session in which the city presents its work teams and the general and sectoral plans. With this general knowledge of the situation and future vision of the city, individual meetings are scheduled with managers of the topic areas of each dimension, in which the IDB technical team and local counterpart team take part. The sectoral plans, main problems and activities in execution in each sector and area are presented and discussed in more detail. Meetings are also held with a broad group of city stakeholders (foundations, NGOs, labor unions, etc.) to find out their priorities.
- 4.7** Following these sessions, each specialist in the IDB technical team should have a clear view of the state of each topic/sector. The mission ends with a synthesis meeting of all the Bank technical team. Based on these inputs, together with the sectoral knowledge of the Bank specialists, it will be possible to formulate early hypotheses on problems, strategic lines of action and potential actions. It is important for this process to

be documented. In the case of Santa Ana, record sheets by topic area and meeting were prepared (see Annex 3).

B. Identifying sustainability challenges

- 4.8** *Analysis and interpretation of the information.* In this stage of Phase 1 the indicators obtained (150) are evaluated, using information collected during Phases 0 and 1; the preliminary hypotheses are tested and strengthened, with any necessary adjustments (see Table 4).
- 4.9** The IDB technical team will classify the indicator, comparing their data with the red-yellow-green criteria which are mainly derived from the regional and international benchmarks (see Annex 2 for details).
- 4.10** In the case of the fiscal dimension, reference data on good practices are obtained from the cities in the same country. In the experience of one of the pilot cities, this type of local comparison was also useful as a stimulus for motivating the actions of the city authorities (this is useful especially when the authorities can evaluate their city’s situation in comparison with their national peers). For the other two dimensions a comparison with cities of similar characteristics at the national or regional level will be more fruitful.
- 4.11** It is important for the team to get a sound view of the current and future initiatives that the city is promoting. This is essential for later prioritization. Rating the effectiveness of the city’s initiatives and their current state can be particularly difficult, so the more information that can be obtained at this point, the more accurate the prioritization will be in Phase 2. For examples of an analysis of indicators in pilot cities, see Annex 4.
- 4.12** Annex 2 contains the detailed list of indicators for the three dimensions and benchmarks for LAC, potential sources and the rationale of the “red-yellow-green” classification.
- 4.13** The final result of this phase is rating all topics with a final color (traffic lights exercise), as shown in Figure 1

Table 4. Phase 1 the team measures the efficiency of the city and identifies problems

Step 1: Compare and quantify gaps against the standard objectives

- Collect data for each indicator.
- Compare information with the standards, using the traffic light approach. The standards are determined by experts (e.g. WHO, IDB, others) and by comparative evaluation with similar cities (benchmarks)

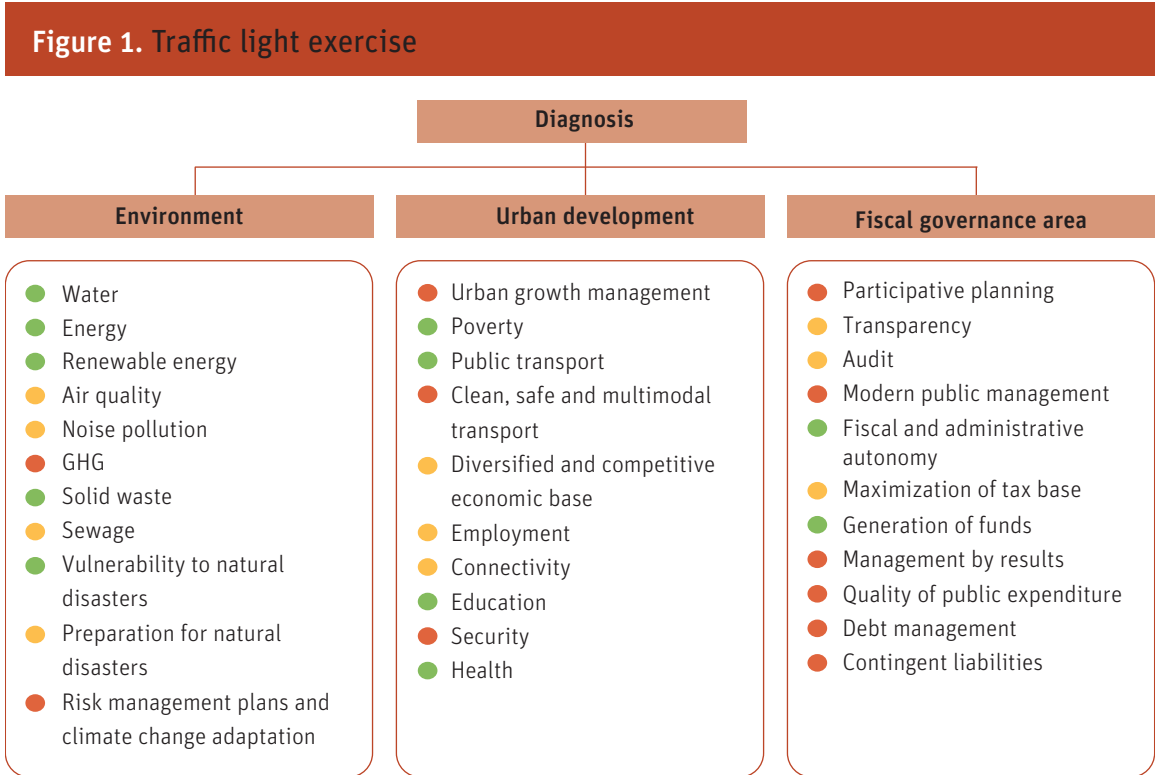
Definition	Illustrative Indicator: air quality
● Under minimum acceptable for sustainability	> 100
● Sustainability gap needs improving	51-100
● Sustainable execution	0-50

Step 2: Determine points in common between gaps

- Understand the interdependence between areas of concern
- Identify key actors and obstacles to be overcome

Step 3: Synthesize the city's problems

- Summary of results
- Attention targeted on areas of concern



Phase 1 – Analysis and Diagnosis

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Phase 2 – Prioritization: Selection of the topics for the city to target

5

- 5.1** The objectives of Phase 2 are to identify priority topics that reflect the greatest challenges for sustainability and help the city concentrate its efforts on finding solutions. The Bank also contributes to incorporating important topics for the emerging cities of LAC in local agendas. Topics to be considered in the prioritization are those rated red (critical topics), and yellow in the traffic light analysis of Phase 1. The topics that were rated green in the traffic light exercise may eventually be considered for prioritizing, provided there is adequate technical justification from the TL. The result of Phase 1 generally identifies about eight to ten significant topics. A city is unlikely to achieve results in the medium term with such a wide range of topics; for this reason, the ESC methodology proposes a broader prioritization by applying the four prioritization filters.
- 5.2** Each topic characterized by red or yellow is prioritized by applying four filters: i) public opinion, ii) economic cost (what it costs for society; this quantifies the “cost of inaction”), iii) environment/climate change (vulnerability to climate change and GHG emission levels), and iv) an assessment by the specialists. Individual scores of 1 to 5 are assigned for each critical topic according to the above criteria. These values are added to produce a total score for each critical area of the city and those with the highest score are then selected. Finally, the list is validated with the counterpart team and key stakeholders.
- 5.3** The total score for each critical topic, after evaluation through the four filters, identifies three to five topics with the highest score (read “most critical score”). The city can then use its limited resources to concentrate on the areas which are most important for achieving the sustainability of the city and which are more likely to give concrete results in the medium term.

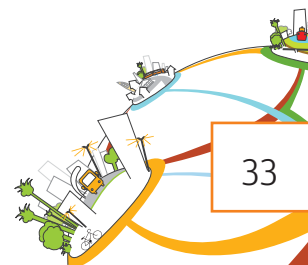
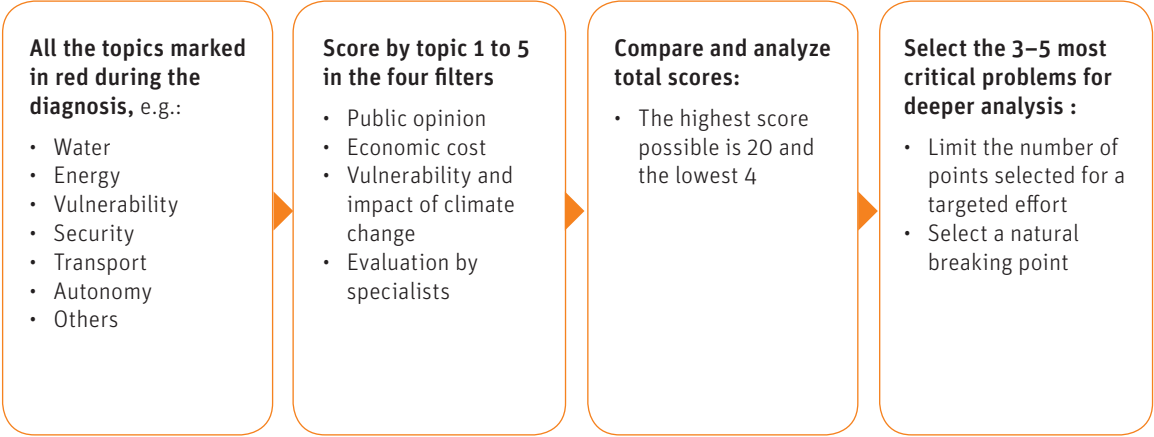


Figure 2. Phase 2 of the process: prioritization of topics



5.4 Although the teams will initially focus on the priority topics with the highest score, the additional areas identified by red or yellow must be reported to local authorities and key stakeholders so that they are not neglected and can be dealt with by those responsible for the sector or topic. To some extent the monitoring system described later has this function.

A. Filters

5.5 Based on the traffic light exercise conducted in Phase 1 which identified the topic areas critical to sustainability, this phase determines if a problem is a high priority for the city by applying four filters:

- **Public opinion:** studies the perception of the importance of the problem by the city’s residents, which is essential for gaining support for the process and its sustainability over time.
- **Environmental/climate change:** assesses the effects of climate change on each area; in this case identifying the areas that have the greatest impact from/on climate change, in order to mitigate these effects or adapt to them.

- **Economic cost:** examines the economic impact of a key problem of the city on society. An attempt is made to quantify the socioeconomic benefits that would be gained by solving the problems in each topic, and quantifying the economic impact of the present inaction on society.
- **Evaluation by specialists:** analysis by specialists and their knowledge of the topics establishes whether there is a topic of critical importance in the priority group or another priority topic has been left out. This filter provides additional tools that can be used for prioritization, such as the impact of each topic on the rest of the topics analyzed.

5.6 Each filter is explained in more detail below

- a. **Public opinion filter.** The filter is taken from the public opinion survey conducted by the city or the Bank early in the process. It provides information on people’s perceptions of the priority level of the topics under analysis. To obtain the broad support of the city’s residents, it is essential to know what people think is important for the future of the city and incorporate it into the process. Part of this information can be obtained from recent or past public opinion surveys, although there are other options, including targeted surveys, interviews and focus groups.

Focus groups and interviews are an appropriate supplement to the surveys. They are not perfect but they can add a broad and specific coverage of interest groups. The Bank technical team can obtain a large amount of data from well designed interviews and focus groups. The combination of the best available surveys with interviews and focus groups gives a strong image of what concerns and interests the stakeholders about the city.

The ideal is to have a statistically significant public opinion survey specifically designed for the needs of the IDB and counterpart teams. This requires delivery time, intelligent design, a good sampling method and additional cost. The survey also has a high political-institutional value added for the city. As a pilot city, Montevideo used this method—see Annex 5, Annex 5(a) and Annex 5(b)—and enhanced it

Figure 3. Potential sources of information on public opinion

	Description	Advantages	Comment
General Surveys	<ul style="list-style-type: none"> Use general public opinion surveys to provide information on popular topics. 	<ul style="list-style-type: none"> Ready to use. High probability of being rigorous and representative. 	<ul style="list-style-type: none"> Point covered. Population surveyed.
Interviews	<ul style="list-style-type: none"> During the interviews with stakeholders the team should develop a sense of the most common problems. 	<ul style="list-style-type: none"> First hand information Reliable sources 	<ul style="list-style-type: none"> May not be representative of public opinion.
Focus groups	<ul style="list-style-type: none"> Put discussion questions to a representative sample. 	<ul style="list-style-type: none"> Contain more detailed comments than the interviews. Opportunity to ask follow up questions. 	<ul style="list-style-type: none"> They lack the total breadth of the statistical surveys.
Targeted surveys	<ul style="list-style-type: none"> Develop specific surveys for application by the teams, if no other sources are available. 	<ul style="list-style-type: none"> Specific to needs of ESC. Statistically relevant (when applied correctly). 	<ul style="list-style-type: none"> Require time limit. Need careful design of questions and approach to sample.
Media coverage	<ul style="list-style-type: none"> Search media to determine the amount of coverage of the problems. 	<ul style="list-style-type: none"> Always available. Easy to obtain. 	<ul style="list-style-type: none"> Media coverage may not represent true public opinion.

through territorial disaggregation, analyzing each area of the city and more accurately identifying those that needed more attention.

If no survey is possible, other options are interviews and focus groups. The former provide first hand information that helps teams understand common issues, but may not represent the general public. Focus groups, while offering a slightly broader perspective, are not as complete as surveys. Although follow-up questions are possible, they offer more general comments and generally do not provide quantitative responses to specific questions. These groups may also be subject to bias based on their selection. (See Annex 5, Annex 5(c) and Annex 5(d) for an example of best practices with respect to effective use of focus groups.)

Focus groups can be conducted face-to-face or by Internet. In face-to-face groups the moderators can read nonverbal and verbal cues, and use group exercises and specific tools for exploring questions and topics. Internet groups are more appropriate for geographically dispersed participants, which can be difficult to recruit.

The teams can avoid a number of difficulties as they prepare for and obtain information from focus groups (see Box 1). The most important include use of an experienced moderator, creating a well planned design and a questionnaire for the group itself. Otherwise, the results will not provide the type of knowledge needed for setting priorities.

- b. **Environment-climate change filter.** This filter determines the vulnerability of the prioritized areas, if they are affected by climate change (adaptation), and to what extent this happens compared with other priority areas. The important question is if the effects of climate change could worsen the identified problem. Likewise, areas are prioritized which contribute to mitigating climate change when addressed (e.g. improving public transport reduces GHG emissions). This topic would be prioritized over one that had no effect or was considered less important. In this case, both are important because, even though climate change has the potential to radically alter the environment in many LAC cities, it is a force that has not yet been fully recognized by most local governments and citizens.

Adaptation. To make this assessment, the ideal would be to have vulnerability maps of the city which identify and territorialize the main threats. This information is superimposed on the prioritized areas in the process. When this information is not available, a group of experts (IDB/city/country teams, if possible) assesses the areas identified.¹

If it is a topic which will be affected by phenomena associated with climate change, which require adaptation measures, the score will be assigned as follows: i) score of 1 to 2: climate change is unlikely to have an impact on the topic; ii) score of 3:

¹ ESCI includes preparing vulnerability maps and GHG inventories. This filter will be systematized during 2012.

Figure 4. Examples of objectives of focus groups and discussion guide

Objectives of focus groups

- Obtain a detailed understanding of the public opinion topics. How do they rate the importance of each issue?
- Evaluate various problems with indicators to explore the real depth of their concerns.
- Determine what underlies their concerns in each topic.

Discussion/ conversation guide

- What topics concern the participants most?
 - What are the most important needs of the participants (the three dimensions and indicators), and which areas are not covered?
 - Of those that have not yet been worked on, which are the most problematic and why?
 - Is there any other important point for the participants?
- How do the participants rate their 10 most important topics on a scale of 1 to 5, with 1 being the least concern and 5 the greatest? (Give specific rating criteria by group)
- Why did the participants rate each indicator as they did? What are the reasons for concern or lack of concern?
- What things could the city do to improve each of the five main indicators?

climate change could have an impact on the selected topic, but the magnitude and type of impact are not fully documented; iii) score of 4 to 5: current research indicates that climate change would be likely to impact the topic in question (e.g. changes in global patterns of water distribution, reversal of water currents, etc.).

Mitigation. Like the vulnerability filter, the GHG emissions (mitigation) filter evaluates the priority topics and their potential to reduce these emissions. The relevant question here is if the identified problem is an area with high potential for reducing GHG emissions.

To make this assessment, the ideal would be to have the GHG emissions inventory at the city level which identifies and quantifies the main emitting sectors (i.e. sectors that generate the greatest potential for mitigation). This information is superimposed on the topic areas prioritized in the rapid evaluation process. The assessment is made by a group of experts including specialists from the Bank and the city who evaluate the topics identified.

Box 1. Focus group best practices

Focus groups are usually small groups of eight to twelve people. They are a relatively low cost way of covering a wide range of topics. Participants must be carefully selected to represent all key stakeholder groups in the city (that is, they must come from all sectors: business, civil society, nonprofit sector, and public sector), and demographic groups (minorities, residents from different areas and a wide range of age, gender, income, religion, ethnicity, etc.). A moderator will facilitate a free-flowing group discussion where participants express their views, influences/factors of influence and behavior in their own words.

Although the discussions are free flowing, the moderator spends some time preparing to ensure success. Groups require very clear objectives, excellent design (e.g. clear questions and topics, careful selection of the group) and good execution, with a complete synthesis of the results. These groups encourage responses and discussions, but may not actually represent public opinion (unless the representatives are carefully selected, and the participation of influential personalities who can introduce bias into the opinion avoided).

Annex 5(c) and Annex 5(d) give details and results of a focus group held in Santa Ana.

For the mitigation area, the score is assigned as follows: i) score of 1 to 2: the area identified has little impact and potential for reducing GHG; ii) score of 3: the area could have an impact on emission reduction but is heavily dependent on the type of solution identified, or the magnitude and type of impact cannot be identified in advance; iii) score of 4 to 5: the area in question is a priority area for reduction of the city's emission reduction inventory. The mitigation prioritization, and climate change adaptation filters produce an average value for the environmental filter.

Finally, once the scores for adaptation and mitigation are available, the results for obtaining the overall score of the environmental change filter can be averaged.

- c. **Economic filter.** The purpose of this filter is to identify, in the preselected critical topic areas, the economic impact of each problem for society, as well as observe the opportunity cost of doing nothing. Or what is the same thing: attempt to quantify

the socioeconomic benefits to be gained by solving the problems of each topic. Using data provided by the city, IDB, municipal statistics, regional and national institutes and through studies of local and international costs or interviews with local experts, IDB specialists, government leaders or academics, and bearing in mind that the spirit of ESCI is to rapidly evaluate the situation of the city, the methodology has developed two possibilities for estimating this filter: i) back-of-envelope estimate of the cost to society of doing nothing about the problems of each action area (the analysis should consider externalities) and ii) the multi-criteria evaluation methodology.

The former approach requires quantification of the economic impact of the problem, including social and environmental externalities, irrespective of the amount of investment needed to solve it. It is an estimate of the total cost to society of each problem in each action area defined as priority by the methodology. To do this, the methodology recommends making assumptions about the key cost factors, using available information and studies of comparable localities for its quantification. The score given by this approach using this methodology correspond to half of the percentage of local gross domestic product (GDP) represented by the estimated cost. If the percentage exceeds 10%, the score will always be 5.

In the preparation of the estimates, the impacts are quantified on the stock of the economy (e.g. revaluation of property) and on economic flows (e.g. annual savings in vehicle operating and maintenance costs). Consequently, to ensure that the impacts are comparable, the flow variables must be projected into the future and adjusted to the present at a rate of 12%.

The issues discussed are not intended to cover the universe of each problem area, but to concentrate on the most important determinant factors. In the conceptual determination of what is considered a problem that needs to be improved, and thus quantified economically, the reference used should be the ideal values at the Latin American level established by experts in each topic in the construction of the regional benchmark of the diagnostic stage.

Annex 5 gives examples of the calculations made to find the value of this filter for the topics of transportation, citizen security and sanitation in Montevideo.

The second approach to implementation of this filter relates to the multi-criterion evaluation,² which was used in the case of Santa Ana and Goiania. Specifically, three aspects of the impact of each area prioritized were evaluated: i) GDP growth; ii) creation of employment; and iii) improving the competitiveness of the municipality. Joint analysis of these three variables confirms the importance of each topic area in the economic growth of the city. The set of three analyses gives the final score for the economic cost filter under this methodology.

This economic filter follows these steps:

- The relationship matrix is constructed on the topics identified as critical (rows) and sectors of the economy (columns) to analyze the relationship between the topic areas identified by the ESCI, GDP and employment. In the case of competitiveness, the relationship is between the topic areas identified by the ESCI and the aspects of competitiveness in the city. In total three relationship matrixes are constructed (GDP, employment and competitiveness). To assign values to each cell in each matrix, sector specialists, in a joint analysis, give a value of 1 if there is a relationship, and 0 if there is no relationship between the critical topics and economic sectors or the aspects of competitiveness.
- Boxes are constructed from the city's official statistics on the contribution of each economic sector to GDP and employment creation based on nominal values, calculation of each sector's contribution, and normalized data, which gives results between 0 and 5. For the weighting associated with competitiveness, the data defined in the competitiveness index estimated for the city is used.

² Barredo, José Ignacio and Joaquín Bosque-Sendra, *Comparison of Multi-criteria Evaluation Methods Integrated in Geographical Information Systems to Allocate Urban-Areas*.

Table 5. Matrix of relationships

Priority topic / GDP sectors	Links (0 = no; 1 = yes)			
	Services	Industry	Agriculture	Public admin. and tax
Disaster management and climate change adaptation	0.0	1.0	1.0	1.0
Air quality (monitoring and improvement plans)	1.0	1.0	0.0	0.0
Greenhouse gas effect (monitoring and reduction plans)	0.0	1.0	1.0	1.0
Solid waste management	1.0	1.0	1.0	1.0
Urban growth management (minimize impact of urban growth on environment)	1.0	0.0	0.0	1.0
Favor clean and multimodal public transport	1.0	0.0	0.0	1.0
Manage population density	1.0	0.0	0.0	1.0
Promote rational use of urban space, which give rise to a cohesive city (barrio, neighborhood)	1.0	1.0	0.0	1.0
Security	1.0	1.0	0.0	1.0
Connectivity (Broadband Internet)	1.0	1.0	0.0	1.0
Diversified and competitive economy	1.0	1.0	1.0	1.0
Quality of public expenditure (financial autonomy, own revenue and investments)	1.0	1.0	0.0	1.0
Management by results	1.0	1.0	0.0	1.0
Participative planning	1.0	0.0	0.0	1.0
Modern Public Management (multi-year, bottom-up budget, with programs and activities)	0.0	0.0	0.0	1.0
TOTAL	4.0	3.3	1.3	4.7

Table 6. Statistical data

	Services	Industry	Agriculture	Public admin. and tax	Total
Annual GDP	13,530	2,811	20	3,097	19,457
Percentage	70%	14%	0%	16%	100%
Level 1 to 5	3.5	0.7	0.0	0.8	5

Table 7. Prioritization matrix for GDP variable

Priority topic / GDP sectors	Weighted value				Weighted result
	Services	Industry	Agriculture	Public admin. and tax	Weighted priority 1 – Low 5 – High
Disaster management and climate change adaptation	–	0.7	0.0	0.8	1.5
Air quality (monitoring and improvement plans)	3.5	0.7	–	–	4.2
Greenhouse gas effect (monitoring and reduction plans)	–	0.7	0.0	0.8	1.5
Solid waste management	3.5	0.7	0.0	0.8	5.0
Urban growth management (minimize impact of urban growth on environment)	3.5	–	–	0.8	4.3
Favor clean and multimodal public transport	3.5	–	–	0.8	4.3
Manage population density	3.5	–	–	0.8	4.3
Promote rational use of urban space, which give rise to a cohesive city (barrio, neighborhood)	3.5	–	–	0.8	4.3
Security	3.5	0.7	–	0.8	5.0
Connectivity (Broadband Internet)	3.5	0.7	–	0.8	5.0
Diversified and competitive economy	3.5	0.7	–	0.8	5.0
Quality of public expenditure (financial autonomy, own revenue and investments)	3.5	0.7	0.0	0.8	5.0
Management by results	3.5	0.7	–	0.8	5.0
Participative planning	3.5	–	–	0.8	4.3
Modern Public Management (multi-year, bottom-up budget, with programs and activities)	–	–	–	0.8	0.8
TOTAL	3.5	0.6	0.0	0.9	

- Next, each impact value of the critical topic areas of the Initiative (0 or 1) are weighted by each economic sector's contribution to GDP, to employment creation and to competitiveness; the results are then standardized again between

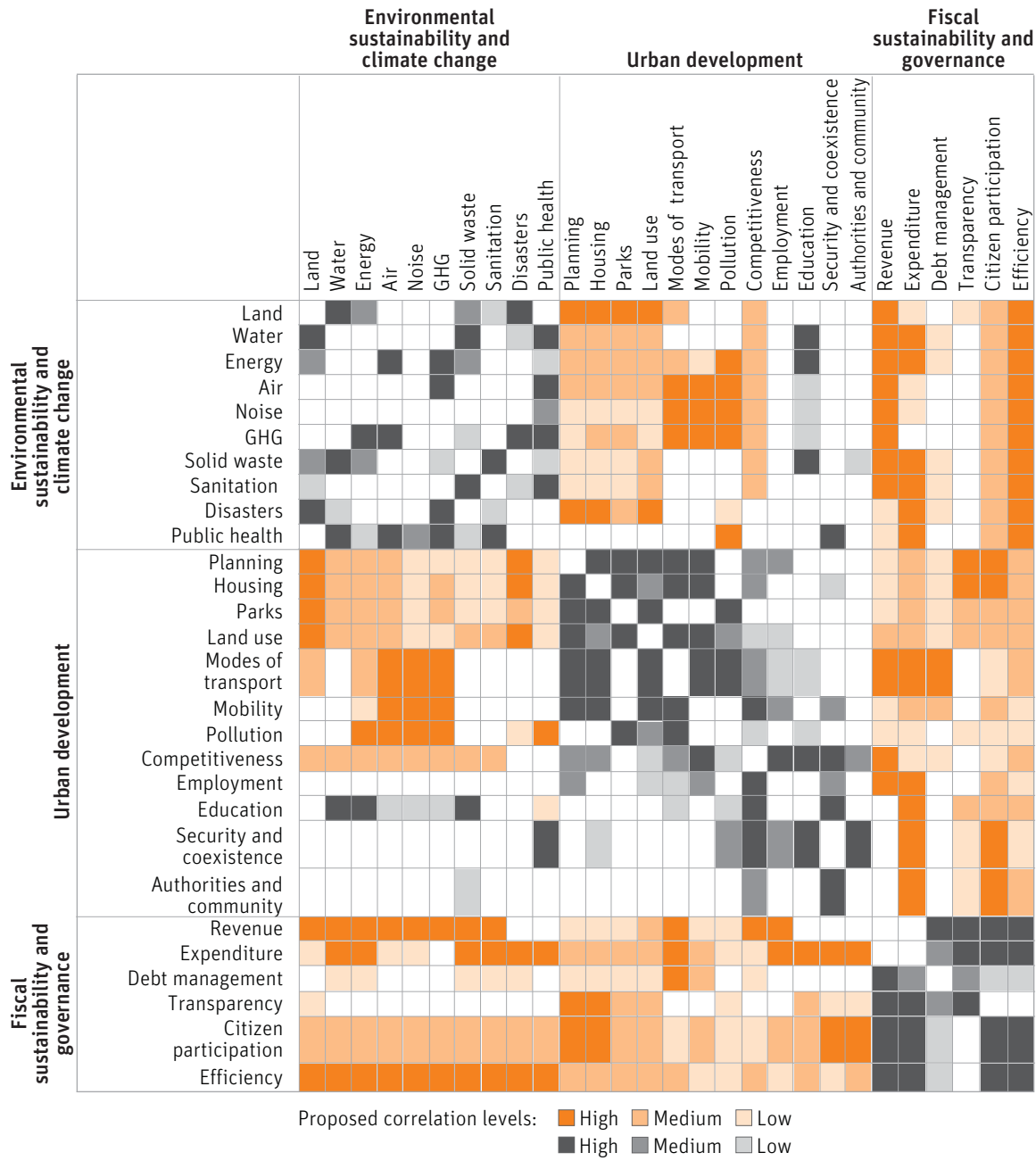
Table 8. Links between critical topics and GDP, and employment and competitiveness

Priority topic / GDP sectors	GDP	Employment	Competitiveness	Total	Level 1 to 5
Disaster management and climate change adaptation	2	3	2	7	2
Air quality (monitoring and improvement plans)	4	4	1	9	3
Greenhouse gas effect (monitoring and reduction plans)	2	0	1	3	1
Solid waste management	5	5	3	13	4
Urban growth management (minimize impact of urban growth on environment)	4	4	2	10	3
Favor clean and multimodal public transport	4	5	2	11	4
Manage population density	4	5	1	10	3
Promote rational use of urban space, which give rise to a cohesive city (barrio, neighborhood)	5	4	1	10	3
Security	5	4	2	11	4
Connectivity (Broadband Internet)	5	4	3	12	4
Diversified and competitive economy	5	5	5	15	5
Quality of public expenditure (financial autonomy, own revenue and investments)	5	5	3	13	4
Management by results	5	5	3	13	4
Participative planning	4	5	2	11	4
Modern Public Management (multi-year, bottom-up budget, with programs and activities)	1	0	2	3	1
TOTAL	4	4	2	10	3

0 and 5. The weighted and normalized values by critical topic area are added and, based on the results, the attention priority of each critical topic in relation to GDP, employment and competitiveness is identified, 1 being the lowest priority and 5 the highest.

- Finally, a matrix is developed which summarizes the results of the prioritization for each variable (GDP, employment and competitiveness). To determine the total prioritization of the economic cost filter, the priorities for each critical issue are added horizontally and divided by the highest possible score (15): lastly, these data are normalized between 0 and 5, the total result of the prioritization of this filter is established following the same scale used in the prioritization for each variable (1 for the lowest priority and 5 for the highest).
- d. **Evaluation by specialists.** Based on the traffic light exercise, the topics identified as critical are compared and rated by the following parameters: i) technical score based on the color obtained and ii) greater interdependence with the other areas. Use of the tools provided in this filter is subject to the decision of the specialists and the TL, who will ultimately determine the relevance of each analysis. In other words, the teams will select one of these analyses or a combination of them. The result of this exercise can add new areas and/or change the order of the priority topic areas, provided there is technical justification.
- i) *Technical scores.* The topics that have been classified as red in the traffic light exercise receive a higher score than the yellow because of the greater need for improvement in the first case. The score is 5 for topics in red and 2 for topics in yellow.
 - ii) *Interdependence with other areas.* This parameter summarizes the degree to which any given topic affects or is affected by the other topics important to sustainability. A model interrelations table of the areas was designed, which serves as a guide for assigning the rating that the specialists must give in this respect. This table has to be adapted to the topics that emerge in each city. In the table, the topics identified in the traffic light exercise (reds and yellows, and greens when inclusion is justified by the TL) are arranged in rows and columns. Reading the matrix horizontally, the specialists assign a score of 1 to 3 (low, medium and high) to the effect or impact of the topic located in the row on the topics located in the columns, with 3 being the score that indicates the greatest impact. The sum of the scores horizontally gives a total score for the impact of the topic on

Table 9. Model of interrelations of the areas



the development of the other topics studied, and opens the possibility of designing an overall ranking. The ranking is divided into five strata, with the topics of greatest interaction and impact located in the upper stratum (which should receive the highest score (5) and the lowest interaction located in the lowest stratum (receiving a score of 1).

The transport sector is an example of the importance of this sub-filter, which exerts an impact on several areas (among others, on climate change). Transport directly affects GHG generation due to the change of fleet which discourages private vehicle use, and can lead to improved public transport services. All of which also affects air quality and noise pollution, among others.

- 5.7** In any event, the Bank technical team and the local counterpart team have the possibility of including an area which has come out green in the traffic light exercise and which has not been prioritized, with adequate justification of its importance. An example of this situation is the case of revenue in Trujillo. This is a topic which, considering the indicators and current state of the municipality, is rated as green and therefore does not appear included in the prioritization exercise. However, at the end of the process, it was found that if the municipality wished to deal with priority issues (mainly transport), it had to improve its revenue, otherwise it could not act in these areas. So this topic was considered a key element of the action plan. Inclusion of these topics does not necessarily alter the overall prioritization, except that the new topic could be treated as additional to those already prioritized
- 5.8** At the start of the process it is essential to ensure that all involved understand the purpose of each filter and the objective of the different ratings (especially for the sub-filter impact matrix). If this is not done, prioritization will lose meaning, as the rating will not mean the same for all the participants in the process.
- 5.9** While it is true that the action areas of the ESC methodology respond to the priority areas that the cities define based on evaluation of their indicators, benchmarks and filters, the IDB can propose to the city and its citizens additional topics related to new

instruments that lead to increased sustainability of the city in terms of environment and climate change as well as governance, productivity and competitiveness. In fulfilling its objective of promoting the economic and social development of the region, the IDB is constantly evaluating and developing new instruments and mechanisms in favor of more equitable, efficient and effective growth.

- 5.10** As noted, the Bank decided to work with dynamically growing medium-sized cities because of the opportunity to improve the trajectory of their development. These cities are in the process of defining their structure, transportation systems, and water supply and solid waste management, as well as their planning, management and financing instruments. With these cities, the Bank intends to work on new topics.
- 5.11** A priority area for the IDB is addressing the situations that create climate change and which are created by it. Now that there is a better understanding of the impact of cities on climate change through the effect of GHG emissions, the Bank will make available to municipalities proposed instruments for adopting new strategies of clean energy, energy efficiency, and renewable energy. The analysis of climate change also identifies the damage that cities and their population will probably suffer in the not so distant future. The vulnerability of cities to rising sea level, or landslides caused by heavy rains, or lack of water due to extreme drought or the disappearance of water sources and glaciers, is another area attracting a good deal of attention in the scientific and urban world. A better understanding of the effects of these problems and the proposals for dealing with these topics will be the subject of dialogue and proposals by the IDB.
- 5.12** Increased connectivity and improved delivery of broadband service, as well as proposals to make progress with intelligent cities with governments online and greater citizen participation, are other areas of the work of the IDB. The institution is also making progress with promoting security programs and generating more knowledge on the richness and vulnerability of our biodiversity, an area in which it will be important to understand the relationship with the city.

5.13 These are just some examples of the dynamic and informed dialogue that the IDB will propose to cities seeking support for improving the management and development of their urban centers.

B. Selection of the topics with the highest scores

5.14 Once all the topics have individual scores with criteria for each filter, the Bank technical team adds the numbers to create a scale of topic priorities (the maximum possible score is 25 and minimum 5).

5.15 The Bank technical team can select a small number of topics with high scores (ideally three to five) for detailed analysis and development of strategies to address them. Limiting the number of topics will help the city and the teams to stay focused during Phases 3 and 4, which is important when taking into account the limitations on financial and human resources in local government.

Phase 2 – Prioritization

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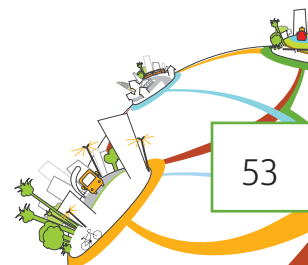
Phase 3 – Activities: Development of strategies, solutions and specific actions

6

- 6.1** Phases 3 and 4 are the final part of the process. The IDB and counterpart teams will identify the strategic lines to be deepened, specific actions with measurable and verifiable impact, on critical topics for the sustainable development of the city. These strategies will be based on the extensive work done in Phases 1 and 2, and are part of the content of the action plan.
- 6.2** The objective of Phase 3 is to: i) deepen the analysis of priority topics; ii) brainstorm to identify the strategic lines; iii) identify specific technical solutions that lead to an action plan; and iv) identify the resources required, the persons responsible and the time required, as well as prioritize solutions based on their impact and feasibility. This will be included in the action plan, the main product of the process.

A. Deepening the analysis of priority topics

- 6.3** To develop specific strategies that are locally significant and relevant, the teams will need more detailed analysis based on initial indicators but supplemented with more detailed information in each area. This generally means deeper diagnoses by sector or specific topic. However, it can mean identifying specific actions, for which the recommendation is to break the problem down into a series of (more manageable) subtopics. For example, traffic congestion can be divided into sub-topics related to demand for road space, availability and quality of public traffic, and parking. Each of these is a more manageable problem on which to develop ideas, than the general macro problem of “traffic congestion.”



B. Identifying strategies

- 6.4** The Bank technical team will begin the task of identifying strategic lines to guide the sustainable growth of the city based on the prioritized areas or topics. Work will go forward on an integrated sectoral consultation between Bank experts and local professionals, and in parallel, with the aim of achieving appropriation of the process and its outcomes, this stage must actively involve civil society stakeholders.
- 6.5** Based on feedback from experts, and the importance and potential of each local area, the team selects the strategies for making a detailed description of the identified solution. This selection is based in part on a critical review of existing initiatives or solutions for these topic areas, ensuring that the team focuses on areas where their work will not duplicate efforts already underway.
- 6.6** The detailed descriptions are summaries of one to two pages agreed between the IDB technical team and the local counterpart team. Ideally, for the technical validation of these descriptions, other IDB sectoral, local and/or international experts should be consulted.

C. Validation with local authorities and prioritization

- 6.7** Once the Bank technical team has developed a series of strategies and actions for each topic and has their detailed descriptions ready, they will be presented to key stakeholders at other levels of government (municipal, departmental, state or national) for consensus. In a pilot city the team met with the city government, the ministers most relevant to the topics in question (such as the ministers of Finance, Public Services, Transport and Planning) and officials from key services (e.g. waterworks, public transportation agency, police, and the office of planning and disaster relief). These meetings have two objectives: to share the findings of the diagnoses (basis for prioritization of the topics), and verify the political alignment of stakeholders in relation to the strategies or actions obtained.

6.8 The team then analyzes the options for solutions, together with their objective diagnosis, in order to prioritize the possible options by potential impact and feasibility.

- a. **Impact.** This evaluation should focus on the greatest impact that can be created, and its timing. An action that meets an unsatisfied need should receive a higher impact score than an initiative that is merely adapted to existing efforts. The initiatives that generate rapid results should have higher impact scores than those that take longer to show results.

For example, in a pilot city where security was a priority, the government had initiated a comprehensive program of transformation of the police which was already achieving promising results with improved protection and response capacity. As a result, the team decided that a strategy aimed at a more effective police action would have a lower impact than initiatives targeted at other parts of the crime life cycle (e.g. prevention and punishment). As critical gaps, these would have a greater impact.

The impact information also provides a financial idea of what the returns from the solution will be and when they will happen. It also clarifies any assumptions or problems about the expected impacts so that stakeholders can examine them while they evaluate the actions.

- b. **Feasibility.** Feasibility evaluations consider political and economic aspects. They should also avoid the tendency to exclude actions with low feasibility and the opposite tendency, which implies assuming that high-impact ideas are feasible.

Feasibility should contain several elements: political commitment (e.g. how much enthusiasm is shown by the stakeholders in relation to the action); measurement of operational difficulties (e.g. what is the probability that the city and/or Bank can manage and execute the action); and financing possibilities. The team needs to carefully consider how to make high impact activities more attractive to stakeholders,

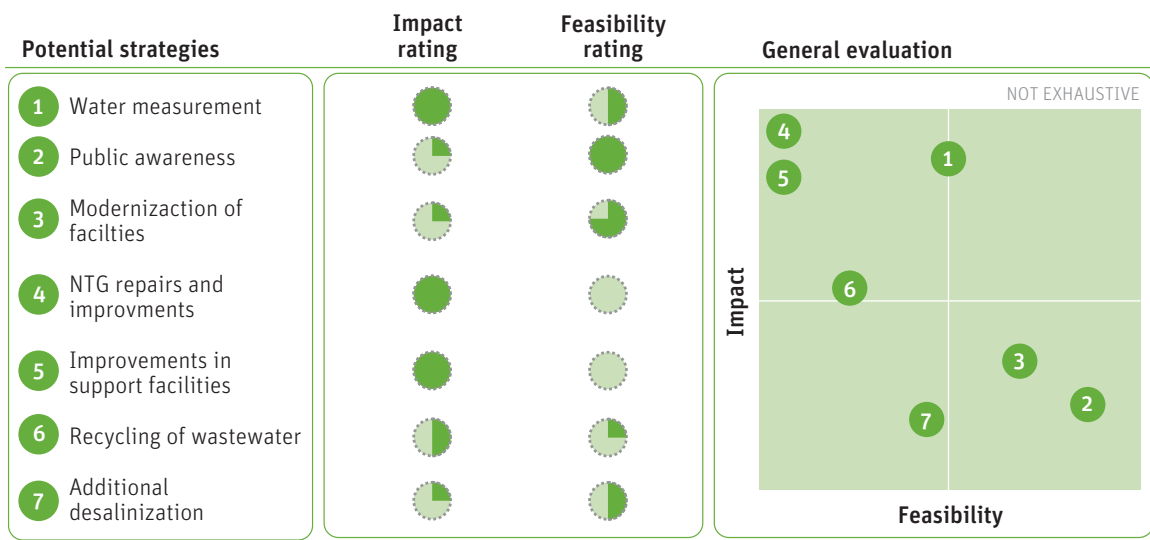
how to obtain the necessary resources for implementation, and how to ensure optimal management of the process.

6.9 The following tables show an example of the evaluation of the feasibility and impact of each action in a pilot city, and their respective mapping on an impact/feasibility matrix.

Table 10. Evaluation of impact and feasibility: Actions for water resource management

Overall rank	Action/idea	Rationale	
		Impact	Feasibility
1	Water measurement	<ul style="list-style-type: none"> Provide data needed for all the other performance management strategies Potential for reduction of demand from 10% to 30% 	<ul style="list-style-type: none"> Lessons recently learned make measurement more feasible than in the past. Well designed small-scale pilot to prove that the concept is achievable in the short term.
2	Public awareness	<ul style="list-style-type: none"> Effective campaigns result in an immediate 10% reduction in water use 	<ul style="list-style-type: none"> Public awareness campaigns have high political popularity and small-scale efforts are in progress.
3	Modernization of facilities	<ul style="list-style-type: none"> A 10% to 15% reduction in demand is likely 	<ul style="list-style-type: none"> High popularity, especially when the tariffs are based on use.
4	NTG repairs and adjustments	<ul style="list-style-type: none"> Would reduce water loss from ~50% to 20% in 5–10 years when fully implemented 	<ul style="list-style-type: none"> Very costly, decade-long effort. Measurement required for effective management of improvement actions.
5	Recycling wastewater	<ul style="list-style-type: none"> Provides additional 50 MCM annually 	<ul style="list-style-type: none"> High capital spending due to long distances between users and potential supply
6	Improvements in support facilities	<ul style="list-style-type: none"> Eliminates seasonal fluctuations and improves pressure regulation 	<ul style="list-style-type: none"> Very costly (more than NTG), decade long effort. Requires measurement to manage efficiency.
7	Additional desalination	<ul style="list-style-type: none"> Would be possible to eliminate the deficit with large volumes of desalinated water 	<ul style="list-style-type: none"> Analysis shows that this option is too costly until water loss is controlled.

Figure 5. Evaluation of impact and feasibility: Plotting the map of the initiatives in the matrix



6.10 For analysis of the solutions the following parameters may also be considered as:

- i. *Existing initiatives.* The state of the initiatives under way shows the solid progress made with the activities being implemented by the city or institutions to solve the problems of each topic. Is the problem on the way to being solved? Do the actions implemented have sufficient scale? What stage of development of the process has currently been reached? (Are the measures being implemented, or are they only in the early planning stages?) Are there resources available to implement the process? This analysis is important because if the city is already dealing with the topic there could be duplication of efforts or, conversely, it might be assumed that the topic is already being dealt with and that it is not really necessary to take additional actions to resolve the situation.
- ii. *Jurisdiction of the city for addressing the problem.* There may be areas that have been classified as priority which are not the responsibility of local government (a common situation in countries where decentralization is still in progress). If the problem

is critical and the city cannot act directly, there are two ways to address the topic: start direct dialogue with the national or state authority responsible and reach formal agreements that can be included in the action plan, or explain the problem and make recommendations to the city on what steps to take to improve the situation. These recommendations should be recorded in the action plan but without committing the city to a specific outcome.

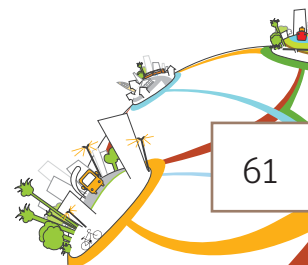
In these cases, ESCI and IDB can be a bridge to channel information and support dialogue between the parties. They can also help identify a third partner with these functions to act as a catalyst in the process.



Phase 4 – Action plan: Towards implementation

7

- 7.1** The main objective of this phase is to formulate the action plan and proceed with its initial implementation. The plan includes programming the actions to be carried out and identifying potential sources of finance. The plan should cover all the strategies identified for overcoming the barriers to the sustainability of the city and detail more thoroughly the priority solutions to be executed in the short and medium term. In this case they will include not only preparatory studies that can be financed by the Bank through ESCI, but also solutions that may have different sources of financing (local, national, private, other multilateral sources, cooperation agencies, etc.). Although the action plan reflects the strategies that the city will implement in the short term, their definition and programming have been guided by a long-term view which will also be reflected in the achievement of long-term goals.
- 7.2** This phase also includes preliminary studies to develop—at the prefeasibility level—the specific actions that were included in the action plan. These studies will provide a deeper analysis on the priority topics than the initial rapid diagnosis, and facilitate the formulation of specific solutions at the prefeasibility level which can be financed from a range of sources.
- 7.3** Experience has shown that for the effort to succeed the key stakeholders—whether IDB, the government, private sector or other sectors—must appropriate both the general implementation plan and individual solutions. For more details on the general guidelines for formulating the action plan and its relationship with the Bank country strategy, see Annex 6.



A. Rigorous financial planning

7.4 The financial planning process of the actions identified by the ESC methodology must focus on estimating the costs of the actions and identifying potential sources of financing.

7.5 The first part of the exercise is to determine the main capital investment required, as well as the critical operating costs. It should also include financing costs (and the type of financing used). The Bank’s sector specialists must participate actively in this process.

Table 11. Example of a cost calculation to determine financial viability: solution of HOT counterflow lanes to ease traffic congestion

Conversion of HOT counterflow lanes Cost per mile (US\$ million)		APPROXIMATE CALCULATIONS	
	Low range	High range	Comments/assumptions
Road works	0.3	0.3	• Includes demolition of paving, removal of debris, asphalt/concrete, drainage modifications, etc
Barriers – Protecting railing	0.1	0.1	• Replace 20%–25% per lane/mile
Roadside	0.1	0.1	• Reconstruction of roadside, including asphalt
New Jersey barriers, stripes, road marking lines	0.1	0.1	• 0.25–0.5 miles per mile
Compliance area	0	0.1	• Standard compliance area and standard compliance lanes & change lines
Modification of structures	0	0.9	• 2.5 bridges per mile of lane; \$500/square foot due to addition of substructure
Intelligent transport system	0.3	0.3	
Contingency	0.3	1.1	• 20%–40% contingency
Traffic and works management	0.3	0.8	• 23%–25% of total
Other	0.3	0.6	• Road marking lines, signals, complements, variable message signing, etc
Total	1.6	4.4	• Beetham Road: ~15 miles • Total cost: US\$25–66

Source: Metropolitan Transportation Commission (Regional HOT Lanes Network Feasibility Study, 2009). Team analysis
 Nota: Low range: Not necessary to widen road; not necessary to replace structures; High Range: necessary to widen road; 2.5 bridges per lane mile to be modified.

- 7.6** Feasibility of implementation depends heavily on the availability of financing. The IDB and counterpart teams can explore a range of sources (or a combination) to obtain the funds needed to implement the action plan. Examples of financing models include:
- a. **Financial commitment of local/national government.** It is highly recommended that each action receive some capital from the government (municipal, regional and/or national level) to ensure that national and/or city authorities are fully in agreement with the strategy and committed to its successful implementation.
 - b. **Possible project financing from the IDB or other multilateral agencies for current portfolio or projects to be prepared.** The ESCI leader and the team will need to meet with the IDB Country Representative and the division heads involved to identify loan and cooperation programs that could back the proposed actions. Table 12 contains an initial mapping of these resources; in many cases the team will need more detailed accounting.
 - c. **Public-private partnerships (PPPs).** Several of the interventions required in the cities of the Initiative will require major rehabilitations, extensions or new infrastructure, both economic (e.g. water supply and sanitation, energy, transport) and social (e.g. education, health and justice). This will involve considerable investments in cases where local government will not necessarily have the required resources, which will create an important opportunity for the private sector to accompany and link up with the city's sustainability process. PPPs make it possible to capture the private sector's capital and experience in providing public services and public infrastructure. PPP plans can and should be explored where possible.
 - d. **Other external sources.** Financing options outside the Bank must also be considered. These could include:
 - *Other development organizations and multilateral lending agencies.* Work with other organizations that have a presence in the country could maximize the Bank's leverage. For example, a pilot city identified a demonstration urban renewal

Table 12. Example of detailed mapping of IDB resources

In project and IDB portfolio (thousands of US dollars)	Potential use	Leader
Secondary education program	105,000 Security	Ryan Burgess
Support program for a coordinated education system	48,750 Security	Ryan Burgess
Neighborhood improvement program	40,000 Security	Gabriel Nagy
Citizen security program	24,500 Security	Benjamin Santa Maria
MIF funds	3,034 All	Vashtie Dookiesingh
Creation of a prototype Caribbean regional fund for GEF wastewater management	2,513 Water	To be decided
Program to promote public-private partnerships for infrastructure en T/T	869 Water, transport	Vashtie Dookiesingh
Action Plan C and D countries	820 All	Iwan Misser
Program preparation of wastewater rehabilitation	750 Water	Fernando Bretas
Support program for transformation of health-strengthening delivery of health services	600 Security	Ian Ho A Shu
Improve integrated disaster management	500 CC	Cassandra Roger
Strengthening government capacity in management by results	450 All	Benjamin Santa Maria
Strengthening delivery of social services	350 Security	Ian Ho A Shu
Incorporating climate change into national development	308 CC	Cassandra Roger
Programmatic PBL climate change (TT-L1022, TT-L1022; 2012A)	35,000 CC	To be decided
Programmatic PBL social sector	30,000 Security	Ian Ho A Shu
Hybrid road transport program (2011)	Transport	Rodrigo Riquelme
Sector program rehabilitation of roads and ports (TT-L1021; 2012)	Transport	Rodrigo Riquelme
Rehabilitation of wastewater infrastructure program residuals (TT-L1018)	Water	To be decided
Preparation for wastewater rehabilitation program (TT-T1019)	Water	To be decided

■ In project

project that has significant synergies with a United Nations Development Programme (UNDP) project to upgrade informal settlements.

- *Private financial sector.* Local and/or national government could use commercial finance from private banks for income-generating initiatives. For example, in a pilot city the water company considered a loan from Citibank for infrastructure improvements, subject to introduction of water meters.
- *Other private sector investments.* The private sector frequently has funds available to invest or donate to initiatives in their areas of operation. This sector is interested in improving public perception, protecting its assets and optimizing the income of residents in neighboring communities.

B. Programming for implementation

7.7 The TL, the Bank Country Representative and the leader of the local counterpart team (mayor, minister of finance) will need implementation plans to plan actions, follow up progress and determine those responsible. The plan should include key actions, sub-actions, milestones, decision points and responsibilities. A suggested format is the Gantt chart, which allows addition of details as the action progresses; if a part of the timetable changes, the entire timetable also changes, in which case the Bank and counterpart teams are immediately capable of considering the consequences of any delay.

7.8 In a pilot city, a team created a consolidated plan containing all relevant common actions belonging to all the specific strategies, as well as more detailed and separate plans for each action included (see Table 13a and Table 13b).

Table 13a. Example of high-level action plan: water measurement (1/2)

Activity	2011		2012		Responsible
	T3	T4	T1	T2	
Coordinate project management <ul style="list-style-type: none"> Determine representation of stakeholders Name the leader for the measuring project 					Public Works Project leader
Develop a pilot project to introduce the measurement and follow the results <ul style="list-style-type: none"> Launch study to determine the pilot area Obtain the engineering requirements for increasing the 24 hour pilot supply service Design a new invoice for customers which is easy to read and clearly shows: <ul style="list-style-type: none"> User consumption compared to their peers and the best in their class Current rates compared to potential future rates Plan to provide 24 hour supply jointly with launch of meters Establish information and control systems Launch, operate and actively monitor results Propose the case of businesses for the national launch 					City, M M Project leader City CSO GM Operations City CEO

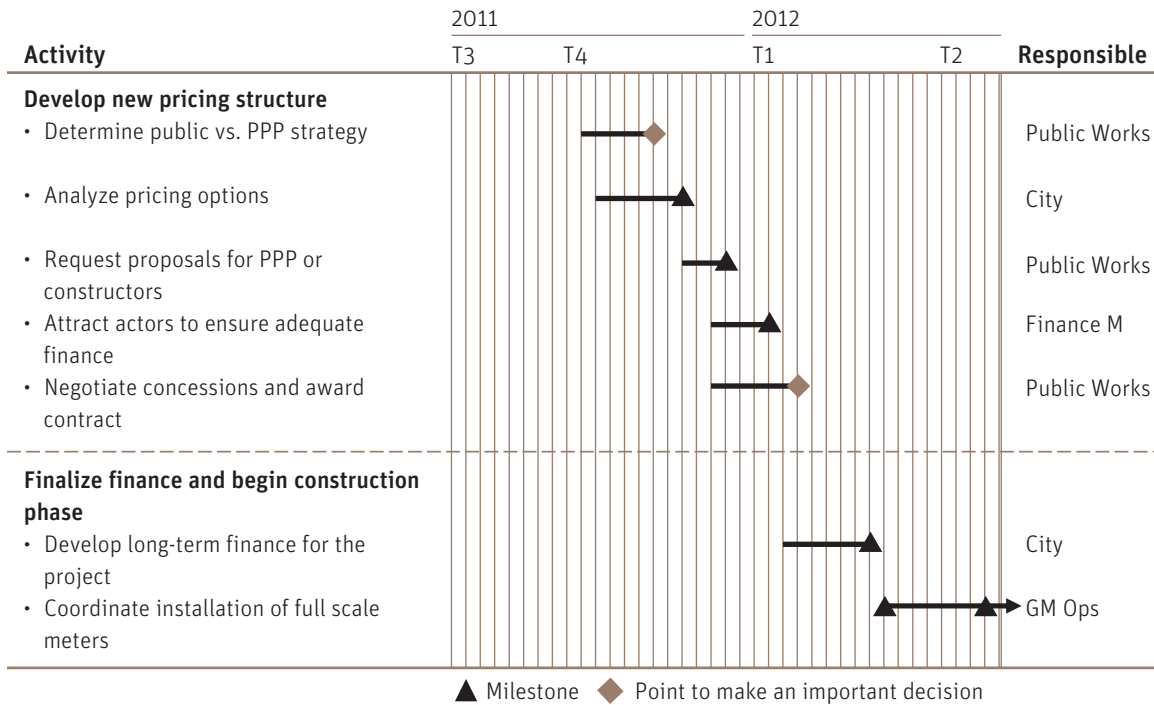
Milestone Point to make an important decision

To see the action plans formulated in the pilot cities, visit the following website: <http://www.iadb.org/es/temas/ciudades/ciudades-emergentes-y-sostenibles,2862.html>.

C. Thinking carefully about a path to longer-term sustainability

7.9 Priority actions represent only the first steps for many cities in their journey toward sustainability, backed by the Bank. Once these strategies are effectively implemented, the city will need to focus on other urgent issues and, ultimately, on actions to help resolve

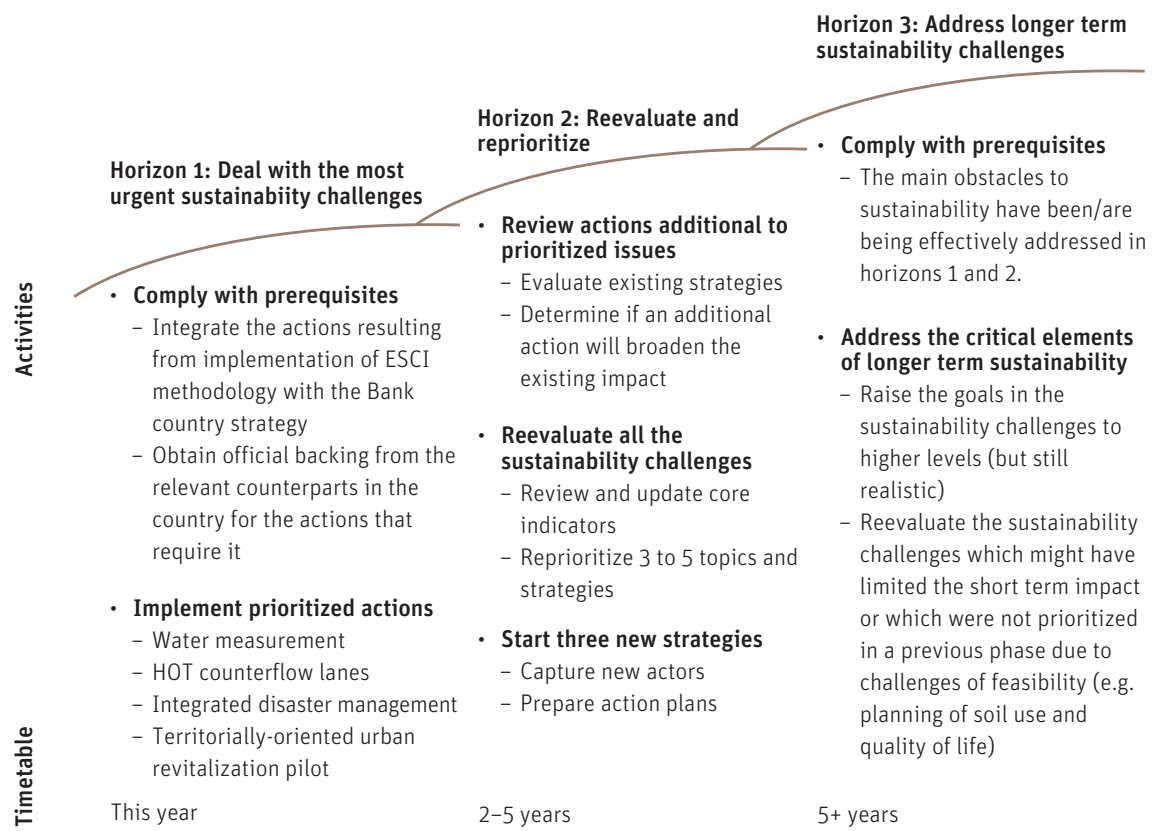
Table 13b. Example of high-level action plan: water measurement (2/2)



longer term problems. Although the Bank team is not directly involved in these deferred actions, it could certainly help the city to think carefully about these topics.

7.10 In a pilot city, the team developed an outline plan with three time horizons: the first tackled the city’s most urgent sustainability challenges; the second re-evaluated, re-prioritized and addressed the next set of challenges; and the third dealt with the longer-term problems that were not initial priorities because the topics were not urgent or because they had low feasibility. Figure 6 gives an example of this approach.

Figure 6. Thinking carefully about a long-term “path to sustainability” for the city

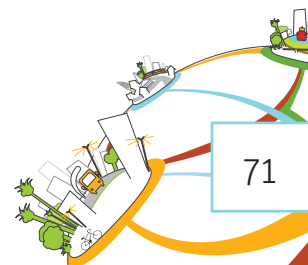




Phase 5 – Follow-up and monitoring system

8

- 8.1** The purpose of the sustainability monitoring system in cities is to generate a minimum of standardized measures to track the progress of a group of topics identified as priority jointly by the municipality and citizens. An additional aim is to strengthen a culture of citizen participation, transparency and accountability which fosters efficiency in the public administration, and creates incentives for directing public resources into areas with priority for the sustainable development of the city.
- 8.2** The conceptual framework of the system is guided by the principles defined in the “Bogotá Como Vamos?” (Bogota How are we doing?) model (See www.bogotacomovamos.org), particularly the interest in the public sphere, and the objectivity, impartiality and autonomy which this system has demonstrated in over 10 years of existence in Colombia. A large number of cities in LAC are implementing similar monitoring systems led by civil society, stimulated by the understanding that active and constant citizen participation over time is essential for overcoming sustainability challenges. This type of monitoring system began as a way of tracking the results of the local government development plans, and controlling and evaluating the way a city was evolving in areas identified by citizens as critical to their quality of life. These systems were also intended to build public credibility and improve transparency in the cities through dissemination of information and the commitment of citizens to the topics of their city.
- 8.3** Consequently, the system to be implemented aims to generate a form of independent monitoring, led by the main stakeholders in the city, represented by civil society, academia and the private sector, among others. The system will be oriented to tracking progress on key problems and needs affecting the sustainability of the city, guaranteeing objectivity and impartiality. Some of these problems will be the topics prioritized by ESCI which are in the action plan. The monitoring system will be managed by an independent organization of civil society or the stakeholders, through a coordinated effort with the municipality.



8.4 Although implementation of the monitoring system is set for Phase 5 of the process, it is designed during the previous phases, starting with Phase 0 with identification of stakeholders.

A. Components and implementation of the system

8.5 The system consists of two elements:

- a. **Measurement and analysis of the indicators.** This technical component is based on the results obtained from measurement of the indicators of the prioritized areas as reflected in the action plan. In addition, topics which are not part of the dimensions of the Initiative and which are of particular interest to the city can be consulted with the local authorities and other stakeholders. The strategy for construction of indicators, their relevance, reliability, comparability, availability, sources of information, measurement, baseline, timing and follow-up are defined with the stakeholders as part of the monitoring system.
- b. **Analysis of public perception.** This information will be obtained through regular surveys, and its scope should be similar to the scope defined for the analysis of technical result indicators. Mechanisms should be used to guarantee the neutrality and credibility of the survey and its results should be widely disseminated so that citizens see it as the main instrument of their participation and contribution to the process of building the city.

8.6 The following steps will be considered for implementation of a monitoring system in the city: i) institutional mapping to identify potential partners and their management system (carried out by civil society and/or academia); ii) baseline of technical result indicators¹ and perception indicators; iii) consultation with management and stakeholders on

¹ Although currently the ESC methodology indicators are results, in the long term it is hoped to include impact indicators of the critical topics for sustainability.

scope of the system; iv) management and formalization of the partnership of contributors; (v) contracting of the coordinating unit of the system; (vi) monitoring report on the action plan; vii) first monitoring report on sustainability in the city; and viii) socialization and dissemination of the results of the monitoring exercise. For more detail on the proposed implementation of the monitoring system in the cities see Annex 7.

- 8.7** The following are considered key factors for a successful independent monitoring system: i) establish a method that guarantees the economic sustainability of the system once the IDB has withdrawn by means of a system of contributions by participants (with a significant role for the private sector); ii) identify the main stakeholders of the city with a high level of credibility and autonomy, and capable of playing an active role in the monitoring process, including universities and the media; iii) indicators that measure performance over time rather than processes, allowing comparison with other cities that use the same model; iv) the information identification system and its publication must be transparent; v) a permanent technical relationship between the public sector and the stakeholders; vi) the system must have the active participation of professionals and technical staff at the local and national levels through support with the analysis.

Phase 5 – Follow-up and monitoring system

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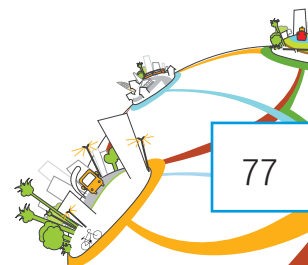
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- 9.1** The ESC methodology is alive and dynamic, as is this guide. It reflects the lessons learned during the pilot phase, both what worked and what did not. It should be recalled that this is a process of evaluation and rapid action, which has the potential to show progress in the short term. Its great value added is integrated and interdisciplinary action, which creates complexity in the process; so the focus must be on actions that will help the city in its efforts to achieve sustainable development. This document is simply a guide and the user is asked to propose any changes considered necessary and inform the CGI-ESC for their official inclusion, along with lessons learned during implementation. With this information the methodology will evolve as more teams implement it. The ESCI has already benefited a number of cities, helping them address their most critical sustainability challenges.

Good luck with the implementation of the methodology!

Please send questions or concerns to [BIDciudades@iadb.org](mailto: BIDciudades@iadb.org)





Dimensions of Sustainability

To respond to the challenges of sustainability requires a concerted effort to move toward better planned and more compact cities. In other words, cities that consume less space, make better use of existing infrastructure, have efficient public transportation systems that offer alternative routes for bicycles and pedestrians, treat and recycle their effluent and solid waste, make efficient use of energy in the productive, commercial and residential sectors, guarantee the safety of their citizens, and have the fiscal/administrative capacity to provide quality public services.

Given that limited resources require interventions focused on priority areas for urban sustainability, the analysis methodology under development considers ?? the prioritization system of these areas as one of its strategic steps. However, each intervention is based on an integrated analysis which considers the interaction between socio-cultural, economic/financial, environmental and institutional variables.

In this context, the ESC Initiative supports local governments in identifying and defining strategies for sustainable development in three dimensions: i) environmental sustainability/climate change; ii) integrated and sustainable urban development (including economic and social sustainability); and iii) fiscal sustainability and governance. The objectives of each of these dimensions and the methodological orientation adopted are set out below.

Dealing with these three dimensions requires a vision of integrated development based on recognition of the people, culture, and institutions of each country and each city and their context. This objective of this analysis is to meet present needs without compromising the wellbeing of future generations.

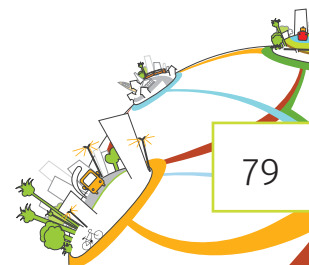


Table A1.1. Dimensions of the Initiative

Quality of life	Environmental sustainability/ climate change	<ul style="list-style-type: none"> • Control air and water pollution (<CO₂) • Reduce, reuse and recycle solid waste • Increase energy efficiency • Prevent/prepare for natural disasters
	Integrated and sustainable urban development	<ul style="list-style-type: none"> • Plan the city / Improve urban habitat • Reduce congestion in the cities • Increase citizen security • Promote the competitiveness of cities
	Tax sustainability and governance	<ul style="list-style-type: none"> • Modernize financial and fiscal management • Organize local public services • Implement management by objectives

Environmental sustainability and climate change

Environmental sustainability in urban areas is achieved through harmonious and equitable planning of occupation of the biophysical space, resource use, waste and effluent management, and a conscious state of prevention and adaptation to events that generate natural disasters, whether or not caused by the effects of climate change, in a framework of broad citizen participation. The ESC Initiative emphasizes the following actions: i) providing water and sanitation;¹ ii) creating recreational and cultural spaces; iii) treating and recycling solid waste; iv) achieving energy efficiency and introducing clean and renewable energy; v) developing disaster risk management; and vi) adapting to and mitigating the impacts of climate change. To implement these actions, the cities need to develop an integrated environmental and urban vision, accompanied by appropriate incentives and regulatory instruments, aimed at coordinating all government interventions, and making investments in the areas of greatest impact.

Solid waste management. Local actions to improve inclusive management of solid waste must be identified with broad participation of the public and informal sectors. It is essential to develop and improve integrated management models which include activities such as: i) increasing

¹ In line with the objectives of the Water Supply and Sanitation Initiative.

levels of household waste collection, especially in informal settlements where it is still deficient, and promoting practices of separation at source; ii) implementing practices to reduce, reuse and recycle; and iii) developing systems for treatment and final disposal not yet implemented in the region. The key to sustainable achievement of the desired objective will be the analysis and implementation of cost recovery schemes. Communications strategies will also have to be defined in an effort to involve people in the challenges of management.

Energy efficiency and clean and renewable energy. Efficient use of energy and natural resources in the urban conglomerates must be encouraged by means of a combination of knowledge, awareness of the population, use of existing and/or new technologies, and promotion of use of clean and renewable energy so as to gradually reduce the impact of energy consumption on the local and global environment.

Climate change adaptation. The following actions are required: i) build institutional capacities and reduce society's vulnerability to the challenges created by climate change; and ii) prepare action plans for climate change adaptation including an analysis of the natural hazards to which the city is exposed and identification of possible solutions (e.g. adequate land use planning, integrated water resource management, disaster risk management, control of vector-borne diseases, building codes appropriate to the potential impacts of climate change; and identification of financing and risk transfer mechanisms).

Integrated and sustainable urban development

To achieve the goal of urban sustainability, the following actions need to be taken: i) plan and improve habitat, ii) reduce congestion, iii) increase security, and iv) promote the competitiveness of the city.

Urban planning. A city must be able to control and guide its physical growth in a way that favors an occupation model that minimizes its impact on the environment, environmental reserves areas and adjacent agriculture areas. It should also promote appropriate population

densities, efficient use of existing infrastructure, and reduction of excessive travel between residential and work areas. To make this possible, local governments need instruments for urban planning and effective land use that are supported by the population, in addition to the use of tax incentives and other regulatory means to promote more compact and efficient urban occupation models.

Improve the urban habitat. This requires reducing the informal urban sector, thus closing the inequality gaps between different areas of cities. Investments need to be made to improve barrios, providing them with minimal urban infrastructure. The design and implementation of social housing policies are also part of the solution to the problem of urban marginality. The ESC Initiative will be coordinated with the Water Supply and Sanitation Initiative, with the aim of achieving sustainable and universal access to these services.

Reduce traffic congestion. Mobility should be increased through public systems that take a multidimensional and integrated approach to urban transport. Investments are needed in public transport and traffic engineering along with actions to reduce intra-urban travel times, reduce energy consumption and emissions of carbon and other pollutants (especially particulate material and ozone precursors). Measures are also needed to encourage non-motorized transport, reduce accidents and increase people's physical activity. For these measures to be viable, it is necessary to plan cities that are more concentrated around transport hubs.

Expand citizen security. A systematic and effective approach to urban citizen security policies must address the following dimensions: i) integrality, where preventive social actions to mitigate the risk factors of violence and recidivism are combined with legitimate control actions; ii) governance, to reinforce their legitimacy and effectiveness; iii) sustainability of policies, which requires empowerment of traditional and nontraditional actors in public policies; iv) responsibility of the institutions based on an inter-institutional commitment and joint action by government and community institutions; and v) cooperation between national and local governments based on the subsidiarity principle. With this approach, citizen security policies go beyond fighting crime to take on a holistic character incorporating action at community and government-institutional level.

Promote competitiveness. Organize a series of activities where private and public sectors work in partnership and complement each other in developing and favoring actions that stimulate sustainable productive activity, with clean technology and efficient use of natural resources. The actions considered include: i) diversify productive activity and innovation to promote employment opportunities compatible with high quality urban life (cultural industries, advanced technology services, and sustainable use of biodiversity); ii) strengthen local business to produce and compete on national and international markets, especially small and medium enterprises; iii) use and strengthen comparative advantages, human capital and natural resources, focused on creating incentives for increased resource efficiency and management of industrial waste; iv) promote business cooperation by creating clusters and value chains; v) reduce business costs (access to finance, paperwork, startup time and costs, logistical developments, connectivity); vi) attract local and international investors; vii) promote business and labor formality; and viii) strengthen public-private dialogue.

Fiscal sustainability and governance

The objective of fiscal sustainability and governance will require actions to i) modernize financial and fiscal management; ii) organize local public services; and iii) implement management by objectives.

Modernize financial and fiscal management. This requires strengthening generation of own resources, implementation of management by objectives, support for formation of public-private initiatives, and concession of public services or improved management of public utilities. It is also crucial to have a clear definition of intergovernmental activities, rules and incentives, as well as exploitation of the limited tax base and finding new sources of revenue. Additional sources of revenue for local governments could include carbon markets, sale of solid waste for recycling, and trading of certified reductions.

Organize local public services. The region is faced by the challenge of implementing innovative institutions and mechanisms adapted to local circumstances. The efficiency rates of providers

need to be improved by adopting clear mechanisms of accountability and performance measurement. Also sectoral decisions—especially in relation to investments, tariffs and company administration—should be guided by technical criteria. Finally, it is necessary to improve the interaction between national and subnational sectoral planning, coordination and assignment of functions of entities, resource allocation and intermediation, and regulation and accountability.

Implement management by objectives, emphasizing results-based budgeting. This action is characterized by supplying information on the link between resource allocation and expected results of government intervention and their direct relation to the targets set in local government development plans. The budget becomes a transparent and useful tool for decision-making based on obtaining the products and services needed and demanded by citizens, incorporating accountability of government action and promoting citizen participation.

ESC Initiative Indicators

The indicators have the following characteristics:

- a. **Relevance/impact:** represent the critical topics and challenges related to problems of sustainability, which are easily translated into specific and quantifiable targets.
- b. **Ease of collection:** generally available through secondary data, sources of public and/or private information, or easily identified by the data collectors.
- c. **Universality:** measure common phenomena that exist in most growing cities in LAC (Latin America and the Caribbean).
- d. **Low potential for manipulation:** difficult to alter and/or interpret differently (for example, between countries or experts).

Under these parameters, a set of indicators was developed specifically for the ESC Initiative. For details of the indicators and their comparators see the ESC Indicator Matrix on page 90.

The indicators are part of the three dimensions of sustainability which are the focus of ESC methodology:

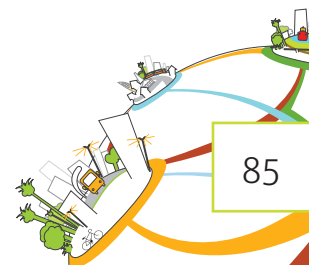


Table A2.1. Environmental sustainability and climate change

Environmental sustainability and climate change	
<p>Environmental management and local pollution control</p> <p>Air quality:</p> <ul style="list-style-type: none"> • Air quality inventories. • GHG emission inventories. • Control of transport emissions. • Control of industrial emissions. <p>Water availability and quality:</p> <ul style="list-style-type: none"> • Water balance (local and external sources). • Water coverage, supply and leakages (urban use). • Water supply (other uses). • Water quality at source. • Consumption reduction policies. • Financing schemes -public, private, external and carbon markets. <p>Conservation of biotic resources (urban and peri-urban areas):</p> <ul style="list-style-type: none"> • Regulated conservation areas. • Stimulus for sustainable agriculture. • Urban parks. • Financing schemes -public, private, external and carbon market. 	<p>GHG mitigation in cities</p> <p>Municipal management of solid waste:</p> <ul style="list-style-type: none"> • Collection coverage. • Separation of garbage and treatment/recycling. • Adequate final disposal (sanitary landfill). • Environmental regulation for final disposal. • Methane gas capture. • Methane gas use (energy). • Financing schemes -public, private, external and carbon market. <p>Liquid waste management liquid waste :</p> <ul style="list-style-type: none"> • Coverage of wastewater network. • Treatment capacity/volume, levels and environmental control of discharge. • Environmental controls in discharge of industrial effluents. • Financing schemes -public, private, external and carbon market. <p>Hazardous waste management (solid and liquid):</p> <ul style="list-style-type: none"> • Regulation. • Financing schemes -public, private, external and carbon market.
<p>Energy efficiency and renewable energy</p> <p>Energy efficiency (EE) and renewable energy (RE) in public services :</p> <ul style="list-style-type: none"> • EE and RE in transport. • EE and RE in water operators. • EE in public buildings. • Financing schemes -public, private, external and carbon markets. <p>Energy efficiency (EE) and renewable energy (RE) in buildings:</p> <ul style="list-style-type: none"> • Regulatory framework for EE and RE • EE and RE in social housing • EE and RE in private housing • EE and RE in industry • Financing schemes -public, private, external and carbon markets 	<p>Reduction of vulnerability and adaptation</p> <p>Diagnoses of vulnerability and risks:</p> <ul style="list-style-type: none"> • Measurement of parameters (Hydrometeorological network). • Hydrometeorological (HM) and climate change (CC) modeling. • Risk mapping. <p>Risk management (RM) and adaptation measures (AM):</p> <ul style="list-style-type: none"> • RM and AM in urban infrastructure. • RM and AM in public buildings. • RM and AM in housing. • Financing schemes -public, private, external and carbon markets. • Mercados de carbono.

It is a city with:

Table A2.2. Sustainable Integrated Urban Development

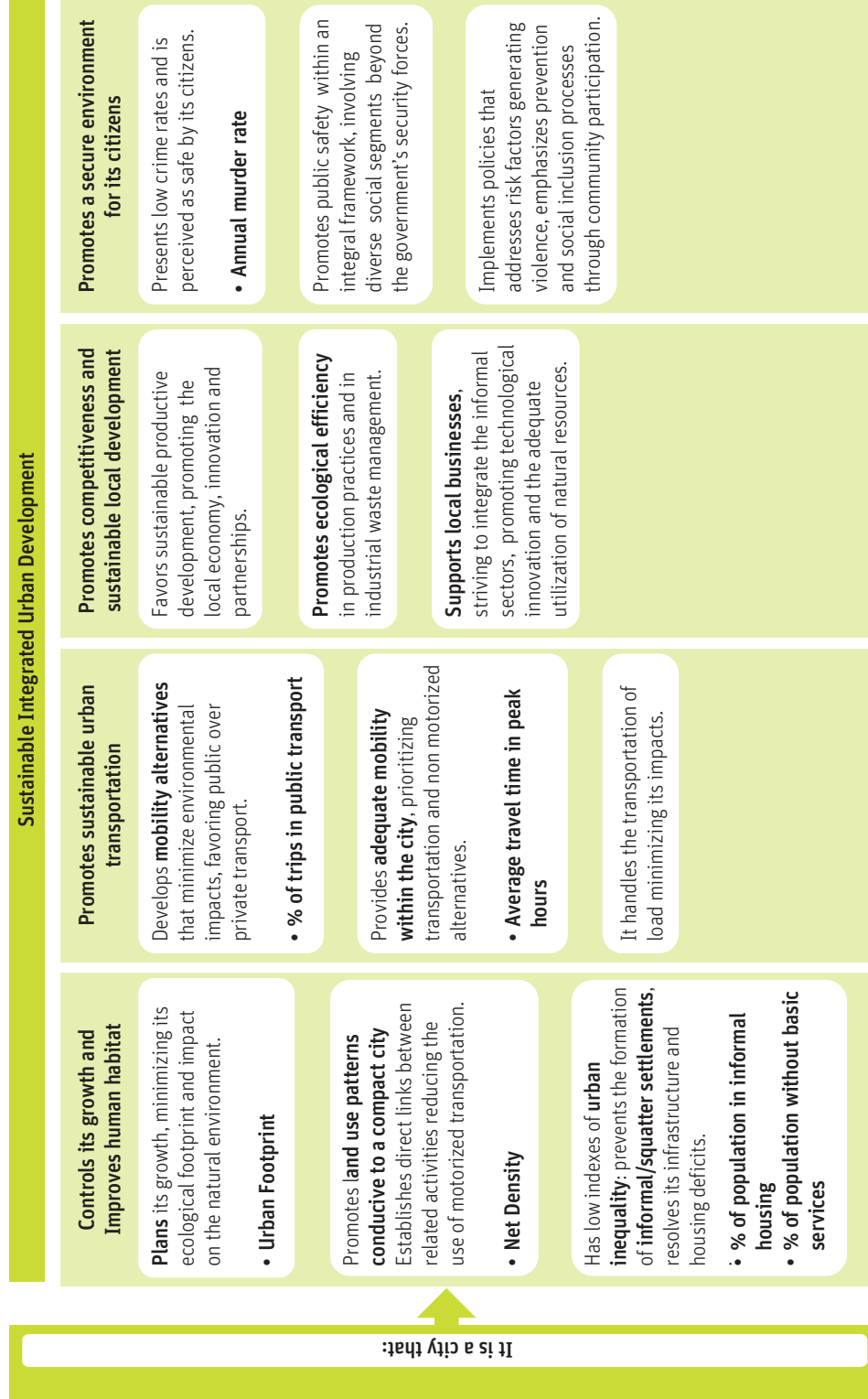


Table A2.3. Fiscal sustainability and governance





Table A2.4. Matrix of Indicators of the Initiative

Dimension	Pillar	#	Topics	#	Subtopics	#	Indicator
Environmental Sustainability and Climate Change	Management of the Environment and Consumption of Natural Resources »Manages its water infrastructure and resources appropriately; »Manages and uses its energy appropriately; »Adequately manages and treats its wastewater; »Manages and disposes of its waste appropriately	1	Water	1	Water coverage	1	Percentage of households with home connections to the city's water network
		2		2	Efficiency in the use of water	2	Annual water consumption per capita
		3		3	Efficiency in the water supply service	3	Continuity of water service
		4		4		4	Water quality
						5	Water unaccounted for
		4		6	Availability of water resources	6	Remaining number of years of a positive water balance
		2	Sanitation and drainage	5	Sanitation coverage	7	Percentage of households with access to sanitation through the sewer system
				6	Wastewater treatment	8	Percentage of wastewater that is treated according to national standards
				7	Effectiveness of drainage	9	Percentage of households affected (evacuated, property damage, or injury) during precipitations with a recurrence equal to 5 years
		3	Solid Waste Management	8	Solid Waste Collection Coverage	10	Percentage of population with regular solid waste collection
				9	Adequate final disposal of solid waste	11	Percentage of the city's solid waste disposed of in sanitary landfills
						12	Remaining life of the site where the landfill is located
						13	Percentage of the city's solid waste that is disposed of in open dumps, controlled landfills and dumps, bodies of water or burnt
				10	Treatment of Solid Waste	14	Percentage of the city's solid waste that is composted
						15	Percentage of the city's solid waste that is separated and classified for recycling
						16	Percentage of the city's disposed solid waste that is used as an energy resource

Stoplight Classification Criteria				
Description	Unit of Measurement	Green	Yellow	Red
Percentage of households with home connections to the city's water network	%	90–100%	75–90%	< 75%
Annual consumption of water per capita of people whose homes have a water connection to the city's network	L/person/day	120–200	80–120 or 200–250	< 80 or > 250
Hours per day of continuous water supply	hrs/day	> 20 hrs/day	12–20 hrs/day	< 12 hrs/day
Percentage of water samples in a year that comply with national potable water quality standards	%	97%	90–97%	< 90%
(water distributed - water billed) / water distributed	%	0–30%	30–45%	> 45%
Number of years remaining with a positive water balance, considering the supply of available water (taking into account hydrological cycles) and the demand for water (projected uses, including population, industrial sector, ecological flows, etc)	years	> 10	5–10	< 5
Percentage of the population with access to wastewater collection	%	> 75%	75 – 60%	< 60%
Percentage of wastewater that is treated according to applicable national standards	%	> 60%	40–60%	< 40%
Percentage of households affected (evacuated, property damage, or injury) during precipitations with a recurrence equal to 5 years	%	< 0.5%	0.5–3	> 3%
Regular collection: at least once a week. See GCIF Methodology	%	90–100%	80–90%	< 80%
Waste sent for recovery (composting, recycling, etc.) is excluded. The landfill should have leachate and landfill gas collection and treatment systems to be considered a sanitary landfill. See GCIF Methodology.	%	90–100%	80–90%	< 80%
Remaining useful life of the site of the sanitary or controlled landfill in terms of the city's solid waste generation projections	years	> 8	5 – 8	< 5
Percentage of the city's solid waste that is disposed of in open dumps, controlled landfills and dumps, bodies of water, or burnt	%	< 10%	10 – 20%	> 20%
Percentage of the city's solid waste that is treated by composting	%	> 20%	5–20%	< 5%
Recycling from formal and informal sources is considered.	%	> 25%	15–25%	< 15%
Percentage of the city's disposed solid waste where the landfill gas is collected and used for energy or heat.	%	> 70%	40–70%	< 40%

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Table A2.4. Matrix of Indicators of the Initiative *(continued)*

Dimension	Pillar	#	Topics	#	Subtopics	#	Indicator
		4	Energy	11	Energy coverage	17	Percentage of the city's population with authorized access to electrical energy
						18	Percentage of the city's population with access to the network of natural gas supply
						19	Percentage of the city's population with access to gas containers
						20	Average number of electrical interruptions per year, per customer
						21	Average length of electrical interruptions
				12	Energy Efficiency	22	Total per capita annual electrical consumption
						23	Energy intensity of the economy
						24	Existence, monitoring and enforcement of energy efficiency regulations
	Mitigation of Greenhouse Gas Emissions and other forms of Pollution - Promotion of Alternative Energy Sources. »Promotion of technological advances, use of alternative energy sources and energy efficiency in industrial production; »Enforcement of air quality standards; »Monitoring and mitigation of greenhouse gases; »Monitoring, regulation and enforcement of noise pollution.			13	Alternative and Renewable Energy	25	Percentage of renewable energy in total electrical consumption
						26	Use of energy from renewable, non-conventional sources
		5	Air Quality	14	Air Quality Control	27	Existence, monitoring, and enforcement of air quality regulations
				15	Concentration of pollutants in air	28	Air quality index
						29	PM 10 concentration
						30	Number of cases of respiratory infections

Stoplight Classification Criteria				
Description	Unit of Measurement	Green	Yellow	Red
Percentage of the city's population with access to legal sources of electrical energy in their household. Data from electrical utility billing. See GCIF methodology.	%	90–100%	70–90%	< 70%
Percentage of the city's population with authorized access to the natural gas supply network	%	> 25%	15–25%	< 15%
Percentage of the city's population with access to gas containers	%	> 75%	50–75%	< 50%
Average number of electrical interruptions per year, per customer	#/yr/customer	< 10	10–13	> 13
Average length of electrical interruptions, in hours	hrs/customer	< 10	10–18	> 18
Annual total electrical consumption divided by city population	kWh/person/yr	< 5,000	5,000–25,000	> 25,000
Total energy consumption divided by GDP	millions of Joules/US\$ of GDP	< 4.2 millions	4.2 to 7.4 millions	> 7.4 millions
Existence of energy efficiency regulations in place, including (i) thermal regulation in buildings; (ii) efficient public lighting regulation; (iii) regulations for municipal energy management; (iv) regulations for efficiency in corporate procurement; (v) regulations for use of non-conventional energy in buildings, such as solar thermal, PV, etc.	Yes/No	Approved regulations, frequent monitoring, adequate enforcement	Approved regulations, inconsistent monitoring, limited enforcement	Regulations not effective, no monitoring or enforcement
Percentage of electrical energy generation coming from renewable energy sources divided by the total electrical consumption (this includes large hydroelectric dams in average hydrological years)	%	> 50%	20–50%	< 20%
Percentage of energy utilization coming from renewable, non conventional sources (including mini-hydros, solar heaters, PV, renewable biomass, etc.)	%	> 15%	5–15%	< 5%
Existence, monitoring, and enforcement of air quality regulations	Yes/No	Approved regulations, frequent monitoring, adequate enforcement	Approved regulations, inconsistent monitoring, limited enforcement	Regulations not effective, no monitoring or enforcement
Presence of harmful pollutants in the air, as measured by the Air Quality Index	#	0–50	51–100	> 100
Particulate matter in suspension, with a diameter lower than 10 µm, 24-hr average.	µg/m ³	< 50	50–150	> 150
Respiratory infections in children younger than 5 yrs old. Annual average of the last 5 years.	#	0–50	50–100	> 100

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Table A2.4. Matrix of Indicators of the Initiative *(continued)*

Dimension	Pillar	#	Topics	#	Subtopics	#	Indicator
		6	Mitigation of Climate Change	16	GHG Emissions Measurement Systems	31	Existence and monitoring of greenhouse gas inventory
				17	Total GHG Emissions	32	Per capita GHG emissions
						33	GHG emissions / GDP
				18	Plans and mitigation goals	34	Existence of mitigation plans, with reduction targets by sector and a monitoring system in place
		7	Noise	19	Noise Control	35	Existence, monitoring, and enforcement of regulations on noise pollution.
	Reduction of Vulnerability to Natural Disasters and Adaptation to Climate Change. »Adequate treatment of vulnerabilities to natural disasters and climate change; »Adequate preparedness and organization to respond to disasters; »Natural Disaster and Climate Change Adaptation Risk Management Plans	8	Vulnerability to Natural Disasters	20	Climate Change Adaptation Capacity and Extreme Natural Events	36	Existence of risk maps at a scale of at least 1:10,000 that include information on geophysical and hydrometeorological threats, and a vulnerability analysis.

		Stoplight Classification Criteria		
Description	Unit of Measurement	Green	Yellow	Red
There is a greenhouse gas emission measurement system in place.	Yes/No	Existence of specific inventory for the city, with frequent monitoring and an updating system	Existence of an inventory de inventario a partir de fuentes nacionales, o inventario local sin sistema de actualización periódica	No hay inventario o monitoreo no existe
GHG emissions of the city divided by city population	annual tons per capita	< 5	5–10	> 10
A measure of the city’s efficiency in carbon emission terms. Greenhouse gas emissions divided by the GDP of the city	kg/US\$ of GDP	< 0.35	0.35–0.8	> 0.8
Capacity of the city to define, regulate and operationalize GHG mitigation measures in different sectors.	Yes/No	There is a formally adopted mitigation plan, with quantitative goals and a monitoring and enforcement system in place	There is a mitigation plan but it has not been adopted, does not have quantitative goals or adequate monitoring or enforcement	There is no mitigation plan
Existence of regulatory mechanisms to reduce noise pollution.	Yes/No	Approved regulations, frequent monitoring, adequate enforcement	Approved regulations, inconsistent monitoring, limited enforcement	Regulations not approved, no monitoring or enforcement
Existence of risk maps at a scale of at least 1:10,000 that include information on geophysical and hydrometeorological threats, and a vulnerability analysis.	Yes/No	Existence of risk maps at a scale 1:10,000 that include the main threats and vulnerability based on historical information and probabilistic calculations	Existence of risk maps at a scale 1:10,000 that include the main threats and vulnerability based on historical information	There are no maps of the main threats at a scale 1:10,000

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Table A2.4. Matrix of Indicators of the Initiative *(continued)*

Dimension	Pillar	# Topics	# Subtopics	# Indicator	Indicator
				37	Existence of hydroclimatic threat maps, including expected effects of climate change for 2050 and 2100
				38	Existence of adequate contingency plans for natural disasters
				39	Existence of effective early warning systems
				40	Existence of an effective plan to manage disaster risk
				41	Existence of an effective, up to date climate change adaptation plan

		Stoplight Classification Criteria		
Description	Unit of Measurement	Green	Yellow	Red
Existence of hydroclimatic threat maps, including expected effects of climate change for 2050 and 2100. Updated in the last 5 years, and consistent with the most recent information reported to the UNFCCC	Yes/No	Maps exist and are complete and up to date	Maps are incomplete or have not been updated recently	There are no risk maps on vulnerability to climate change
The city has prepared an adequate response plan (or contingency plan) for different types of natural disasters.	Yes/No	Plan is complete, up to date, and tested through simulation drills at least once a year	Plan is incomplete, not updated, or there have not been any simulation exercises in the last 12 months	Plan is incomplete, out of date, or not tested in the last 24 months
The city has early warning systems.	Yes/No	Early warning system for main natural threats, tested at least once a year	Early warning system for main natural threats, tested in the last 24 months	There is no early warning system, or it has only a single way of communication and without periodic tests (drills)
The city has prepared Disaster Risk Management Plans (DRMP) to reduce its vulnerability to natural disasters. The DRMP includes reduction of ex-ante vulnerability, a disaster response plan, and defines a strategy for financial risk management.	Yes/No	The city has an updated risk management plan (less than 36 months old) which has been approved by relevant authorities	The city has a risk management plan which has been approved by relevant authorities, but has not been updated recently	The city does not have a risk management plan, or it has an incomplete / outdated / unapproved plan
The city has prepared a climate change adaptation plan, which has been approved by the relevant authorities, and has been incorporated into land use planning instruments.	Yes/No	The city has a climate change adaptation plan (less than 36-month old), which has been approved by relevant authorities and incorporated into the land use plan	The city has a climate change adaptation plan, but it is not incorporated into the land use plan	The city does not have a climate change adaptation plan, it is incomplete / outdated or has not been approved by the relevant authorities

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Table A2.4. Matrix of Indicators of the Initiative *(continued)*

Dimension	Pillar	# Topics	# Subtopics	#	Indicator
				42	Budget allocation for Disaster Risk Management
				43	The main city planning instruments include risk analysis.
				44	Percentage of actions of the Disaster Risk Management and Climate Change Adaptation Plans that have been implemented
		21	Sensitivity to natural disasters	45	Critical infrastructure (e.g., water, energy, etc.) at risk due to inadequate construction or placement in areas of non-mitigable risk
				46	Percentage of households at risk due to inadequate construction
				47	Population living in informal settlements
				48	Percentage of housing located in informal settlements

		Stoplight Classification Criteria		
Description	Unit of Measurement	Green	Yellow	Red
There are financial resources available for emergency response, ex-ante vulnerability reduction and risk-transfer schemes (e.g., insurance)	Yes/No	The city has access to resources for emergency response and ex-ante vulnerability reduction, and has a scheme for risk transfer (e.g., insurance)	The city has access to resources for emergency response and ex-ante vulnerability reduction	The city only has access to resources for emergency response
The Urban Development Plan and the Land Use Plan take into account the natural disaster risk analysis.	Yes/No	Both plans are in place and take into account the results of the natural disaster risk analysis	One of the plans is in place and takes into account the results of the natural disaster risk analysis	None of the plans take into account the results of the natural disaster risk analysis
Percentage of actions of the Disaster Risk Management and Climate Change Adaptation Plans that have been implemented	%	> 50%	20–50%	< 20%
Percentage of public critical infrastructure vulnerable to natural disasters	%	< 10%	10–20%	> 20%
Percentage of households at risk due to inadequate walls, roofs, or floors.	%	< 10%	10–20%	> 20%
Percentage of population that lives in informal settlements	%	< 10%	10–15%	> 15%
% of dwellings located in informal settlements	%	< 10%	10–20%	> 20%

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Table A2.4. Matrix of Indicators of the Initiative *(continued)*

Dimension	Pillar	#	Topics	#	Subtopics	#	Indicator				
Urban Sustainability	Control of Growth and Improvement of the Human Habitat. »Management of growth, minimization of the urban footprint, and their effect on the environment; »Promotion of land uses and densities that lead to complete and compact cities, communities, and neighborhoods; »Low level of inequality.	9	Land Use/ Land Use Planning and Zoning	22	Density	49	Annual growth rate of the (physical) urban footprint, within the city's official limits				
						50	(Net) urban population density				
						23	Housing	51	Substandard housing		
								52	Quantitative housing shortage		
						24	Green and recreational areas	53	Green area per 100,000 residents		
								54	Public recreational areas per 100,000 residents		
						25	Land Use Planning	55	Has an actively implemented land use plan		
								56	Existence of comprehensive or sectoral strategic plans with a long-term vision		
						10	Urban inequality	26	Poverty	57	Percentage of the population below the poverty line
										27	Socio-spatial segregation
28	Income inequality	59	Gini Coefficient								

Stoplight Classification Criteria				
Description	Unit of Measurement	Green	Yellow	Red
Average annual growth rate of the urban footprint (minimum last five years or last time period available)	% annual	Between 0 and 3%	Between 3 and 5%	> 5%
People who live in the urbanized area of the municipality, per km ² of urbanized area of the municipality	residents/km ²	6,000–10,000	3,000–6,000	< 3,000
Percentage of homes that do not meet the habitability standards defined by the country	%	< 10%	10–25%	> 25%
(Number of households - number of homes (housing units))/Number of households	%	< 10%	10–20%	> 20%
Hectares of permanent green space per 100,000 city residents	hectares/100,000 residents	> 50	20–50	< 20
Hectares of publicly accessible, open-air recreational space per 100,000 city residents	hectares/100,000 residents	> 10	7–10	< 7
The plan includes zoning, with environmental protection and preservation zones and it is actively implemented	Yes/No and implementation	Sole master plan with ecological components; city actively implements it	Master plan exists but without ecological components; there are no steps toward implementation	There is no master plan or the plan is over ten years old
Does the city have comprehensive or sectoral strategic plans with a long-term vision?	Yes/No and implementation	The city has a long term socioeconomic–environmental plan in implementation	There is a long term socioeconomic – environmental plan with weak definitions and/or not implemented	The city does not have a long term socioeconomic – environmental plan
Percentage of the population below the national (urban) poverty line	%	< 15%	10–25%	> 25%
% of dwellings located in informal settlements	%	< 20%	20–30%	> 30%
Measure of inequality in which 0 corresponds to perfect equality and 1 corresponds to perfect inequality		< 0.35	0.35 – 0.45	> 0.45

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Table A2.4. Matrix of Indicators of the Initiative *(continued)*

Dimension	Pillar	#	Topics	#	Subtopics	#	Indicator	
	Promotion of Urban Transport Sustainability. »Mobility solutions that minimize environmental impacts, promoting public transportation; »Provision of clean, safe and efficient multimodal movility, prioritizing public transport and alternative non-motorized forms of transportation.	11	Mobility/Transport	29	Public transportation	60	Kilometers of roads reserved for public transportation	
61						Modal split: private motor vehicle		
62						Modal split: Public transportation (including taxi)		
63						Modal split: Bicycle		
64						Modal split: On foot		
30						Clean Transportation	65	Percent of fleet using non-fossil fuels
31						Road Safety	66	Traffic fatalities per 100,000 inhabitants
32						Vehicular Congestion	67	Average speed in main roads Policies and practices for adequate traffic demand management actively implemented
68						Private travel time index		
69						Public travel time index		
70	Per capita number of automobiles							

Stoplight Classification Criteria				
Description	Unit of Measurement	Green	Yellow	Red
Amount of road dedicated to public transportation	km	> 40	10–40	< 10
Breakdown (%) of the usage of different modes of transportation	%	The modal split is appropriate and sustainable for the city	The modal split is not appropriate and presents medium-term sustainability problems	The modal split generates sustainability problems in the short term
	%	> 50%	30–50%	< 30%
	%	The modal split is appropriate and sustainable for the city	The modal split is not appropriate and presents medium-term sustainability problems	The modal split generates sustainability problems in the short term
	%	The modal split is appropriate and sustainable for the city	The modal split is not appropriate and presents medium-term sustainability problems	The modal split generates sustainability problems in the short term
Percentage of vehicles using non-fossil fuels as energy source	%	> 10%	1–10%	< 1%
Number of fatalities in traffic accidents for every 100,000 inhabitants	fatalities every 100,000 people	< 10	10–20	> 20
Average speed in main roads	km/hr	> 30	15–30	< 15
Existence of a plan for traffic demand management; the plan is being actively implemented.	Yes/No	Traffic Demand Management Plan actively implemented	Traffic Demand Management Plan approved but not being implemented	There is no Traffic Demand Management Plan
Average travel time in each direction during rush hour	minutes	< 30 min	30–60 min	> 60 min
	minutes	< 30 min	30–60 min	> 60 min
Number of automobiles per capita	vehicles per capita	< 0.3	0.3–0.4	> 0.4

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Table A2.4. Matrix of Indicators of the Initiative *(continued)*

Dimension	Pillar	#	Topics	#	Subtopics	#	Indicator	
	Promotion of Sustainable, Competitive, Local Economic Development. »Has a diversified and competitive economic base; »Supports local businesses and the integration of informal sectors; »Promotes socially and ecologically responsible industrial production; »Has high levels of connectivity.	12	Competitiveness of the Economy	33	Business and investment regulations	71	Days to obtain a business license	
					34	Strategic management of infrastructure	72	Existence of a logistics platform
		13	Employment		35	Gross product	73	GDP per capita of the city
					36	Unemployment	74	(Average annual) unemployment rate
					37	Informal employment	75	Informal employment as a percentage of total employment
		14	Connectivity	40	Internet	40	76	Fixed Broadband internet subscriptions (per 100 residents)
							77	Mobile Broadband internet subscriptions (per 100 residents)
						41	Telephones	78

		Stoplight Classification Criteria		
Description	Unit of Measurement	Green	Yellow	Red
Time required to obtain an initial business license (NOT total time required to open a business)	# of days	< 12	12–20	> 20
The city has specialized infrastructure projects to provide facilities exclusively to logistics operators in diverse activities, although certain projects may have areas planned for industrial transformation and/or value-added, it will be a mixed project. The services provided and the type of activities present depend on the function of the platform in question. In urban settings, there are two types: (i) urban supply centers, and (ii) loading and unloading centers in central areas.	Yes/No	There is a logistics platform designed and implemented for maritime, air, and land transport	A logistics platform has been designed for at least one type of transport (maritime, air, or land)	No logistics platform has been designed
Economic performance measurement per capita	USD per capita	> 9,000	9,000–3,000	< 3,000
Percentage of the economically active population that actively seeks work without obtaining it	%	< 7%	7–12%	12%
Measure the percentage of people employed in the informal sector as defined by the International Labor Organization	%	< 20%	20–35%	> 35%
Number of fixed-access internet subscriptions (for every 100 residents) with speeds of 256 kbit/s or greater. These include DSL, fiber optic, and cable modem fixed connections, and exclude mobile phone connections.	# of subscriptions per 100 residents	> 15%	7–15%	< 7%
Number of cell phones with a subscription to access Broadband Internet (for every 100 inhabitants). Broadband is considered 265 Kbps or higher speed.	# of subscribed mobile phones per 100 residents	> 20%	10–20%	< 10%
Number of mobile phone subscriptions for every 100 residents. (This includes pre-paid and post-pay subscriptions).	# of subscriptions per 100 residents	> 90%	60–90%	< 60%

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Stoplight Classification Criteria				
Description	Unit of Measurement	Green	Yellow	Red
Percentage of adults in the city who know how to read and write	%	> 95%	90–95%	< 90%
	%	Similar to exemplary cities in the country	Similar to peer cities in the country	Lower in comparison to peer cities
	%	Similar to exemplary cities in the country	Similar to peer cities in the country	Lower in comparison to peer cities
Number of elementary school students/number of elementary school teachers	students/teachers	< 15:1	Between 15:1 y 25:1	> 25:1
Percentage of children that should be in school who are in school	%	> 80%	60%–80%	< 60%
	%	98–100	95–98	< 95
	%	97–100	90–97	< 90
	%	80–100	60–80	< 60
Number of university seats for every 100,000 residents	# per 100,000 residents	> 5,000	2,500–5,000	< 2,500
Number of homicides for every 100,000 residents	# per 100,000 residents	< 10	10–25	> 25
Homicides of 15 to 24 year olds for every 100,000 15 to 24 year olds	# per 100,000 15 to 24 year olds	< 10	10–25	> 25
Annual arrests of people between 15 to 24 years old for homicide/total arrests for homicide	%	< 25%	25–40%	> 40%
Homicides of women due to domestic violence/ total number of homicides of women	%	< 25%	25–50%	> 50%
Number of robberies (theft with violence or threat of violence) for every 100,000 residents	# every 100,000 residents	< 300	300–1,000	> 1,000
Annual arrests of people between 15 to 24 years old for robbery/total arrests for robbery	%	< 25%	25–40%	> 40%
Number of larcenies (non-violent thefts) for every 100,000 residents	# every 100,000 residents	< 3,000	3,000–5,000	> 5,000
Annual arrests of people between 15 to 24 years old for larceny/total arrests for larceny	%	< 25%	25–40%	> 40%

(continued on next page)

Table A2.4. Matrix of Indicators of the Initiative *(continued)*

Dimension	Pillar	#	Topics	#	Subtopics	#	Indicator
				43	Citizens' confidence in safety	96	Citizens who feel safe
						97	Citizens' perception of police's honesty
				44	Citizen participation in safety	98	Citizen participation in determining local security policies
		17	Health	45	Level of health	99	Life expectancy at birth
						100	Male life expectancy
						101	Female life expectancy
						102	Under-5 mortality rate
				46	Provision of health services	103	Doctors per 100,000 residents
						104	Hospital bed per 100,000 residents
Fiscal Sustainability and Government	Adequate Mechanisms of Government. »Participative planning processes; »Transparency; »Use of different types of auditing; »Modern public management	18	Participative Public Management	47	Citizen participation in the planning of government's public management	105	Existence of a participative planning process
						106	Existence of participatory budgeting

		Stoplight Classification Criteria		
Description	Unit of Measurement	Green	Yellow	Red
Percentage of citizens who respond that they feel safe or very safe	%	> 60%	30%–60%	< 30%
Percentage of the citizens who believe in the honesty of the police	%	The citizens that believe in the honesty of their police are in the majority	Citizens with a neutral opinion on the honesty of their police are in the majority	Citizens that do not believe in the honesty of their police are in the majority
Does the city use citizen participation mechanisms when defining local security policies?	#	There is a mechanism and it is working	There is a mechanism but it is not used	There is no mechanism
Average life expectancy at birth of the city's total population	years	> 74	70–74	< 70
Average of years the city's male population lives	years	> 70	64–70	< 64
Average of years the city's female population lives	years	> 76	70–76	< 70
Deaths of children under 5 years old per 1,000 live births	deaths/1,000 live births	< 20	20–30	> 30
Doctors in the city for every 100,000 residents	doctors/ 100,000 residents	> 2	0.75 – 2	< 0.75
Number of hospital beds for every 100,000 residents	beds/100,000 residents	> 100	50–100	< 50
A participative planning process is carried out in cooperation with community organizations and citizen participation.	Yes/ Qualified yes/ No	Planning is participative and: a) is part of the national or subnational legal framework; b) civil society is consulted; c) opinions are collected methodically; d) results are included in the public dissemination of results; e) is incorporated into the objectives and goals of the plan.	Participative planning exists and adheres to at least two of the points listed for green	There is no participative planning
Participation of the civil society in the municipal budget programming	Yes/No and % of the budget	Participation of the civil society in determining at least 10% of the total budget	Participation of the civil society in determining an amount equal to less than 10% of the total budget	Participatory budgeting does not exist

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Table A2.4. Matrix of Indicators of the Initiative *(continued)*

Dimension	Pillar	#	Topics	#	Subtopics	#	Indicator
		48			Public reporting	107	Public reporting sessions per year
		19	Modern Public Management	49	Modern processes of the public management of the municipal budget	108	Existence of a multi-annual budget
						109	Remuneration of personnel based on a system of performance indicators
				50	Modern systems of public management of the municipal government	110	Existence of electronic systems for tracking the municipality's management
						111	Existence of electronic procurement systems

Stoplight Classification Criteria				
Description	Unit of Measurement	Green	Yellow	Red
Annual number of sessions in which the municipal government publicly shares information about its management	#	More than one public reporting session per year	One annual public reporting session	There is no annual session for public reporting
The city has a multi-annual budget	Yes/No and years	The city has a projected budget for the next three years	The city has a projected budget for the next two years	The budget is for only one year
The personnel's salaries are based in part on a system of performance indicators	Yes/No and % of personnel	The remuneration of at least 40% of the personnel incorporates the results of an evaluation based on a system of performance indicators	The remuneration of between 10 and 40% of the personnel incorporates the results of an evaluation based on a system of performance indicators	The remuneration of the personnel is not related to a system of performance indicators or the remuneration of less than 10% of the personnel incorporates the results of an evaluation based on a system of performance indicators
These electronic systems function to track fulfillment of the municipality's goals and objectives	Yes, electronic/ Yes, manual/ No	There is an electronic system that measure the progress and results of the municipal management	There is a system that measure the progress and results of municipal management but it is manual	There is no system of accountability that measures the progress and results of the municipal management
The municipal government has an electronic system to carry out procurement and contracting	Yes/ Qualified yes/ No	There is an electronic procurement system online and open to the public that, at the least, publicly disseminates requests for proposals and the results of public bids	There is an electronic procurement system but it does not disseminate the results of public bidding	The municipal government does not have an electronic procurement system

(continued on next page)

Table A2.4. Matrix of Indicators of the Initiative

Dimension	Pillar	#	Topics	#	Subtopics	#	Indicator
		20	Transparency	51	Transparency and auditing of the government's public management	112	Transparency Index
						113	Municipal government accounts audited
						114	Accounts of the municipal governments audited by a third party
						115	Existence of electronic systems to track the municipal government's management
	Adequate Management of Revenue. »Financial and administrative autonomy; »Maximization of its fiscal base; »Mobilization of funds from different sources to finance its projects; »Employs management by results.	21	Taxes and financial autonomy	52	Income and municipal taxes	116	Own income as percent of total income
						117	Property taxes as a percentage of total income
						118	Total transfers as a percentage of total income
						119	Ear-marked transfers as a percentage of total transfers
						120	Income from other sources (external donors) as a percentage of total income
				53	Collection management	121	Taxes collected as a percentage of taxes billed

		Stoplight Classification Criteria		
Description	Unit of Measurement	Green	Yellow	Red
Country score from Transparency International	#	> 6	3.0–6.0	< 3.0
Numerator: number of municipal government's accounts that are audited with independence from the internal auditing group; Denominator: total number of municipal government accounts	%	More than 50% of accounts are audited	30–50%	< 30%
Numerator: Municipal companies whose accounts are audited by (private) independent third parties Denominator total number of municipal companies	%	100%	75% or 100% but not audited by an independent private organization	< 75%
These electronic systems divulge information to the public about the goals and objectives of the municipal government	Yes/ No and periodicity	The electronic system generates information that is published online at least every three months	The electronic system produces information that is published approximately every six months (3–9 months)	This information is published once a year
Own income as percent of total income	%	Similar to exemplary (best practice) cities in the country	Similar to peer cities in the country	Lower in comparison to peer cities
Property taxes as a percentage of total income	%	Similar to exemplary (best practice) cities in the country	Similar to peer cities in the country	Lower in comparison to peer cities
Transfers/total income	%	Similar to exemplary (best practice) cities in the country	Similar to peer cities in the country	Higher in comparison to peer cities
Transfers with a specific use assigned as a percentage of total transfers	%	Similar to exemplary (best practice) cities in the country	Similar to peer cities in the country	Higher in comparison to peer cities
Income by source: Others (external donors) / total income	%	Similar to exemplary (best practice) cities in the country	Similar to peer cities in the country	Higher in comparison to peer cities
Effectiveness of the tax collection agency	%	Similar to exemplary (best practice) cities in the country	Similar to peer cities in the country	Lower in comparison to peer cities

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Table A2.4. Matrix of Indicators of the Initiative *(continued)*

Dimension	Pillar	#	Topics	#	Subtopics	#	Indicator
	Adequate Management of Spending. »Evaluation of the quality of public spending; »Implementation of modern management in public agencies.	22	Management of the expenditure	54	Control of spending	122	Existence of performance indicators and goals for tracking the execution of the budget
						123	Gross operating budget
						124	Gross capital budget
						125	Annual growth rate of current expenditure
						126	Annual growth rate of capital expenditure
				55	Municipal public investment	127	Gross fixed investment expenditure as a percentage of the local GDP
						128	The budget is aligned with the planning, its objectives, and indicators.
				56	Public agencies and companies	129	Recovery of the municipal companies' cost of providing services
						130	Municipal agencies whose accounts are audited by this parties

		Stoplight Classification Criteria		
Description	Unit of Measurement	Green	Yellow	Red
Existence of performance indicators and goals for tracking the execution of the budget	Yes/No	There are performance indicators and goals with periodic monitoring and the results are incorporated into the following budget	There are performance indicators and goals but without periodic monitoring or the results are not incorporated in the following budget	There are no performance indicators and goals for monitoring the budget
Percentage of the current expenditure in the total budget	%	Similar to exemplary (best practice) cities in the country	Similar to peer cities in the country	Higher in comparison to peer cities
Percentage of capital spending in the total budget	%	Similar to exemplary (best practice) cities in the country	Similar to peer cities in the country	Lower in comparison to peer cities
Growth rate of operating expenses	% annual	Similar to exemplary (best practice) cities in the country	Similar to peer cities in the country	Higher in comparison to peer cities
Growth rate of capital spending	% annual	Similar to exemplary (best practice) cities in the country	Similar to peer cities in the country	Lower in comparison to peer cities
Gross fixed investment expenditure as a percentage of the local GDP. Average of the last five years.	%	Similar to exemplary (best practice) cities in the country	Similar to peer cities in the country	Lower in comparison to peer cities
Determine if the city's budget includes the objectives of its development plan with indicators of results.	Yes/No	More than 70% of the program's in the city's budget coincide with those in its government or development plan	Between 30% and 70% of the programs in the budget and the development plan coincide	Less than 30% of the programs in the budget coincide with those in the development or there is no plan
Percentage of the cost of the provision of utilities that is covered through rates charged to consumers (for water, sewer, trash collection, electricity)	%	≥ 90%	> 50% y <90%	≤ 50%
Percentage of the municipal agencies who are subjected to external independent auditing	%	100%	75%–100% but the auditing is not by a independent private organization	< 75%

(continued on next page)

Table A2.4. Matrix of Indicators of the Initiative *(continued)*

Dimension	Pillar	#	Topics	#	Subtopics	#	Indicator
	Appropriate Management of Debt and Fiscal Obligations.	23	Contingent liabilities	57	Municipal pensions	131	Accumulated pension assets / obligations corresponding to pensions
	»Contractual debt is under control; »Knowledge of and plans for contingent liabilities	24	Debt	59	Sustainability of municipal debt	132	Debt service ratio
						133	Total debt as a percentage of total income
						134	Annual growth in debt service
						135	Debt growth

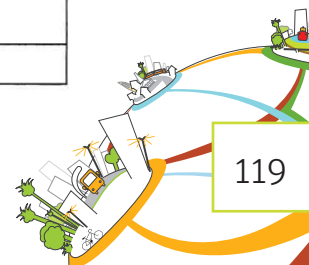
		Stoplight Classification Criteria		
Description	Unit of Measurement	Green	Yellow	Red
Percentage of accumulated assets of the pensions of public employees/ obligations corresponding to the pensions of public employees	%	> 90%	75-90%	< 75%
Value of the principal plus interest paid per year divided by the total debt	%	Similar to exemplary (best practice) cities in the country	Similar to peer cities in the country	Higher in comparison to peer cities
Total debt as a percentage of total income	%	Similar to exemplary (best practice) cities in the country	Similar to peer cities in the country	Higher in comparison to peer cities
Average annual growth rate of debt service in the last three years	%	Similar to exemplary (best practice) cities in the country	Similar to peer cities in the country	Higher in comparison to peer cities
Average annual rate of growth of the debt in the last three years	%	The annual real growth is negative	The annual real growth rate is between 0% and 2%	The annual real growth rate is greater than 2%



Phase 1 – Example Santa Ana Factsheets

Plataforma Ciudades Emergentes Sostenibles
 Banco Interamericano de Desarrollo
 Municipalidad de Santa Ana
 Junio 27 – 30, 2011
 Ficha Síntesis reunión/entrevista

DIMENSION/Actividad Desarrollo Urbano Integral		
TEMA: Agua y Saneamiento		
Indicadores:		
Cobertura Agua Potable: 80% (Población servida: 172,460 habitantes) Fuente de abastecimiento: 100% Agua subterránea Caudal suministrado: 1,931,154 M3 (abril 2011); Déficit urbano: 20% Cobertura Alcantarillado Sanitario: 64% Cobertura Tratamiento: 0%		
Entrevistado/Asistentes		
Nombre	Cargo/Entidad	Correo electrónico
Ing. Angel Gabriel Valdés	Gerente Región Occidental ANDA	avaldes@anda.gob.sv
<p>Como parte de la primera visita de la misión a la ciudad de Santa Ana, se sostuvo reunión con el Gerente de la Región Occidental de la Administración Nacional de Acueductos y Alcantarillados (ANDA). Durante la reunión se recopiló información sobre los indicadores solicitados por el Banco con anterioridad, se conoció sobre los proyectos en ejecución y sobre las proyecciones al corto plazo. Destacándose la futura perforación de pozos para fortalecer el suministro, así como la construcción de un colector primario de aguas residuales domésticas, con apoyo de fondos españoles y como parte de un proyecto a futuro, de construcción de dos plantas de tratamiento de aguas residuales, con los que se pretende solventar en gran parte, los problemas de contaminación del río Suquiapa o Zarco, proveniente de las aguas residuales domésticas, que actualmente descargan en el mismo, sin ningún tratamiento previo.</p> <p>Así mismo, el gerente pudo identificar, como una prioridad de la ciudad, el control de la escorrentía superficial debido a aguas lluvias, lo cual además de repercutir en el tema de inundaciones urbanas, también afecta el funcionamiento de algunos tramos de alcantarillado sanitarios, ya que se tiene el problema de que muchos usuarios, descargan aguas lluvias en el sistema, ocasionando en muchos casos, el colapso de los mismos, por falta de la capacidad adecuada y su avanzada edad.</p> <p>Actualmente desarrollan un programa de reducción de costo de la factura eléctrica, que alcanza para la región occidental \$6.4 millones, que representa el 60 de sus costos operativos, para lo cual han realizado una mejor distribución de las horas de bombeo, de acuerdo a los horarios que presentan menores costos. Tienen un plan de eficiencia energética, que incluye la renovación de equipos por una inversión de \$500 mil, y con un período de recuperación de 14 meses. Manifestó su interés por participar en un programa de eficiencia energética promovido con fondos del Banco y quedamos pendientes de enviar mas información al respecto. Adjunto hoja de datos proporcionada.</p>		
Especialista: Hilén Meirovich y Nelson Estrada	Fecha: Santa Ana, Junio 28 de 2011	



DATOS SOLICITADOS POR BID**SITUACIÓN DE LA DISTRIBUCIÓN DEL AGUA POTABLE EN LA CIUDAD DE SANTA ANA.**

1. **COBERTURA DE AGUA POTABLE EN LA CIUDAD DE SANTA ANA.**
80% DE COBERTURA DEL ÁREA URBANA
2. **POBLACIÓN SERVIDA**
POBLACIÓN SERVIDA EN LA CIUDAD DE SANTA ANA (ABRIL/2011): 172,460 HABITANTES
3. **HORARIOS DE SERVICIO DE AGUA POTABLE**
PENDIENTE.
4. **PRINCIPALES FUENTES DE ABASTECIMIENTO**
POZOS PROFUNDOS: 100%
5. **CAUDAL SUMINISTRADO Y % DE DÉFICIT/SUPERÁVIT A NIVEL URBANO POR FUENTE**
CAUDAL SUMINISTRADO CIUDAD DE SANTA ANA, ABRIL/2011: 1,931,154 M3
DÉFICIT URBANO: 20%
6. **PORCENTAJE DE FUGAS.**
ENTRE EL 15% Y EL 20% DE FUGAS.
7. **COSTOS DEL SUMINISTRO POR M3**
PENDIENTE
8. **COMUNIDADES AUTOABASTECIDAS**
PENDIENTE
9. **PROYECTOS EN EJECUCIÓN EN LA CIUDAD DE SANTA ANA. AÑO 2011.**

No	NOMBRE DEL PROYECTO	MONTO TOTAL DE INVERSIÓN	POBLACIÓN BENEFICIADA
1	PERFORACIÓN Y EQUIPAMIENTO DE POZO PROFUNDO EN INSTALACIONES DE PLANTA DE BOMBEO PROCAVIA Y LÍNEA ADUCTORA Φ 10" HASTA TANQUE EL PALMAR, JURISDICCIÓN DE SANTA ANA	\$903,614.61	30,347
2	SUMINISTRO E INSTALACIÓN DE TUBERÍA PVC DE DIFERENTES DIÁMETROS PARA AMPLIAR LA RED DE DISTRIBUCIÓN EN EL CANTÓN PRIMAVERA E INCORPORACIÓN DE FUENTE CON EL FIN DE AUMENTAR LA COBERTURA EN LA ZONA, SANTA ANA	\$621,741.52	39,796
3	MEJORAMIENTO DEL SISTEMA DE ABASTECIMIENTO DE AGUA POTABLE DEL SECTOR NORTE DE SANTA ANA	\$1129,952.01	40,904
4	CONSTRUCCIÓN DE TANQUE DE ALMACENAMIENTO DE 1000 M3 Y CERCADO PERIMETRAL EN PLANTA DE BOMBEO COLONIAS UNIDAS, MUNICIPIO DE SANTA ANA.	\$237,856.85	13,245
5	INTRODUCCIÓN DEL SISTEMA DE ABASTECIMIENTO DE AGUA POTABLE EN COLONIAS BRISAS DE CANTARRANA Y BARCELONA, UBICADAS EN CANTÓN CANTARRANA MUNICIPIO DE SANTA ANA, DEPARTAMENTO DE SANTA ANA.	\$747,894.06	10,982
TOTAL		\$3641,059.05	135,274

10. PROYECTOS POR EJECUTARSE EN LA CIUDAD DE SANTA ANA. AÑO 2011-2012

No	NOMBRE DEL PROYECTO	MONTO TOTAL DE INVERSIÓN	POBLACIÓN BENEFICIADA
1	INTRODUCCIÓN DEL SISTEMA DE ABASTECIMIENTO DE AGUA POTABLE EN COLONIA BRITANIA Y SANTA MARÍA EL PORTEZUELO I Y II; INTRODUCCIÓN DEL SISTEMA DE ALCANTARILLADO SANITARIO EN COLONIAS BRISAS DE CANTARRANA, BARCELONA, BRITANIA Y SANTA MARÍA EL PORTEZUELO I Y II, UBICADAS EN CANTONES MATAZANO Y CANTARRANA; Y MEJORAMIENTO DEL COLECTOR PONIENTE DEL ALCANTARILLADO SANITARIO DE SANTA ANA, MUNICIPIO Y DEPARTAMENTO DE SANTA ANA	\$7,460,808.22	23,648

SITUACIÓN DE LA DISTRIBUCIÓN DEL AGUA POTABLE EN LA CIUDAD DE SANTA ANA.

1. **COBERTURA DEL SANEAMIENTO EN LA CIUDAD DE SANTA ANA.**
64% DE COBERTURA DEL ÁREA URBANA
2. **CARACTERIZACIÓN DE LAS AGUAS NEGRAS DESCARGADAS A LOS RÍOS.**
NO SE TIENEN CARACTERIZADAS LAS AGUAS NEGRAS EN LAS DESCARGAS DE LOS RÍOS EN LA CIUDAD DE SANTA ANA.
3. **CAMPAÑA PARA PROMOVER EL AHORRO/USO EFICIENTE DEL AGUA.**
NO SE TIENE UNA CAMPAÑA PARA EL AHORRO
4. **ENTRADA DE AGUAS LLUVIAS AL SISTEMA DE ALCANTARILLADO**
SI EXISTE LA ENTRADA DE AGUAS LLUVIAS AL SISTEMA DEL ALCANTARILLADO SANITARIO, PERO NO SE HA ESTIMADO EL VOLUMEN QUE INGRESA.
5. **EXISTEN SISTEMAS DE TRATAMIENTO Y QUE TIPO (CARACTERIZACIÓN DE EFLUENTE) Y COSTOS ASOCIADOS**
EN LA CIUDAD DE SANTA ANA NO EXISTE SISTEMA DE TRATAMIENTO DE LAS AGUAS RESIDUALES.
6. **INVERSIÓN POR AÑO (REALIZADAS Y PROGRAMADAS)**
PENDIENTE.

SUSTAINABLE AND EMERGING CITIES INITIATIVE

Record sheet format – Interviews meeting I

City: _____

Date: _____

Objective: The purpose of these records is to provide an overview of the city’s situation in each topic area. It is important to make an effort to clearly identify the specific difficulties in each pillar and the actions being implemented or to be implemented (with deadlines, persons responsible, etc.).

Dimension:	Pillar:	Topic
Interviewee(s)/attendees		
Name	Position/entity	E-mail
General diagnosis of the topic		
<p>This space is for a summary of the basic information on the topic, highlighting the favorable, unfavorable and strategic conditions. It should include data that can be interpreted and analyzed by the reader to give a general idea of the current state of the topic in the city.</p>		

Problems identified

List the problems identified in the topic, including the basis for its identification as a problem (statistics, studies, diagnoses, etc.)

Critical topics

Of the problems identified in the last section, indicate which are considered critical for the sustainability of the city. Include what actions are being taken to improve that condition and the their state of progress.

Critical topic	Are actions being taken on this?		What actions are being taken to improve and who is responsible?	State of progress and results of actions to date	What actions are planned for improvement and who is responsible?
	Yes	No			

Information available

List information, documents, studies, statistics, plans, etc. and their location so they can be consulted in a deeper analysis of the situation.

Document	Location
----------	----------

Analysis of the state of the topic, pillar and dimension

Conclusions and analysis of the current state of each diagnostic level (topic, pillar and dimension).

Prepared by

INDICATORS

Indicator	Result	Year and source

Phase 1 – Examples of Indicator Analysis

The three tables below show examples of partial Excel spreadsheets with data from an analysis of indicators in one of the pilot cities. The tables contain basic and reference data which were available, and the rationale of each classification.

In the environment example, the three indicators have referential information, while the urban and fiscal example only has one, which is why the creativity, flexibility and information of the proxy are so important.

Alternatively, the next table shows how a team synthesized part of their findings in the environment pillar on one of their pages (of a total of two) for this area. There were similar exercises for the other pillars. The page highlights the points on which the team wants to concentrate and the points of most concern.

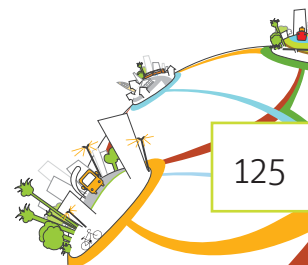


Table A4.1. Example of indicator analysis – Environmental sustainability and climate change dimension

Dimension	Pillar or general objective	Approximation action area	Indicator	Description
Environmental sustainability and climate change	Manage its environment and consumption of natural resources	Manage its water resources and infrastructure adequately	% of population with access to drinking water	% of households with access to drinking water
Environmental sustainability and climate change	Manage its environment and consumption of natural resources	Manage its water resources and infrastructure adequately	Reliability of service	Times of day with continuous service
Environmental sustainability and climate change	Manage its environment and consumption of natural resources	Manage its water resources and infrastructure adequately	% of population with electricity service	Total proportion of city population with access to legal sources of energy in their residence

Table A4.2 Example of indicator analysis: Urban Development Dimension

Dimension	Pillar or general objective	Approximation action area	Indicator	Description
Urban sustainability	Control its growth and improve its human habitat	Manage growth, minimize urban footprint and its impact on the natural environment	Range of urbanization (growth of urban footprint)	Annual record (last 5 years) or projection of urban growth
Urban sustainability	Control its growth and improve its human habitat	Manage growth, minimize urban footprint and its impact on the natural environment	Has an active applied land use plan	Exists with ecological zoning and other provisions

Source: Analysis by the team.

Units	Frequency	Green	Yellow	Red	Color rationale	Reference point	Source of reference point
%	Annual	80–100%	60–80%	< 60%	Based on regional standards in LAC	LAC average 86%	UNICEF Report on safe drinking water
hrs/day	Annual	< 8 hrs per day	> 18 hrs per day	8–18 hrs per day	Based on LAC regional standards	24 hours for most LAC cities	World Bank “Drinking Water Supply and Sanitation Service”
%	Annual	90–100%	70–90%	< 70%	Based on LAC standards	% in LAC: 87%	OECD “World Energy”

Units	Frequency	Green	Yellow	Red	Color rationale	Reference point	Source of reference point
%/ annual	Annual	> 5% or < -1%	between 3 and 5%	between -1 and 3%	Range of negative growth is red because of potential deflation, 80% of the cities grow less than 5%/year (UN World Population Division). Various urban planners noted rapid growth in cities threatening sustainable development	Average in Caribbean 1.4%	Urbanization rate in LAC (Earth Encyclopedia)
See description	In regular intervals – not more than 10 years	No plan, or is older than 10 years or does not meet the requirements of green or yellow	An ecological master plan. The city is implementing it actively	Plan without complementary ecological plans, some with ecological plans but not in execution	Master plan must be integrated and useful to be effective. Plans older than 10 years must be obsolete because is it prior to last census which is usually every ten year	No classification of standard reference point based on expert opinion	IDB and external experts

Table A4.3. Example of indicator analysis: governance and fiscal sustainability dimension

Dimension	Pillar or general objective	Approximation action area	Indicator	Description
Fiscal sustainability and governance	Has adequate governance mechanism	Uses participative planning processes	There are participative planning processes	It is important to know if the city has a participative budgetary process. Measurable in itself or not, citizens may or may not participate through a clearly established channel
Fiscal sustainability and governance	Has adequate governance mechanism	Acts with transparency	Corruption /transparency index	The transparency index was created at country level by recognized independent organization and is updated annually

Source: Analysis by the team.

Units	Frequency	Green	Yellow	Red	Color rationale	Reference point	Source of reference point
Yes = 1, No = 0	Annual	Partnership with community organizations with delegated power and citizen control	Precursors of participation (e.g. listen to the citizens and/or advise the traditional agents of power)	Non-participative	Arnstein, Sherry R., “Una escalera de participación ciudadana,” JAIP, Vol. 35, No. 4, July 1969, pp. 216–224	Non-standard contact point. Classification based on expert opinion	IDB and external experts
Country score from 1 to 10 (numbers)	Annual	> 6,0	3,0–6,0	< 3,0	Codified color scale defined by Transparency International	LAC average 3.0	Transparency International.

Table A4.4. Example of indicator summary: Environmental sustainability and climate change dimension

Pillars	Topic	Indicator	Description/notes
Pollution and renewable sources	Noise	<ul style="list-style-type: none"> Regulations on noise, monitoring and application Average level of maximum noise in key areas 	<ul style="list-style-type: none"> Existing noise pollution levels are monitored and applied Average limits of noise pressure vary by zone between 60 and 75 db
	Renewable energy	<ul style="list-style-type: none"> Production/use of sources of renewable energy as total % 	<ul style="list-style-type: none"> % of production of renewable energy Cheap energy subsidized by the government eliminates demand for renewable energy
Vulnerability to natural disasters and climate change	Risk	<ul style="list-style-type: none"> Evaluation of natural phenomena, city's level of susceptibility and vulnerability to the risk % of critical infrastructure at risk % of housing at risk 	<ul style="list-style-type: none"> There are detailed maps of common risks (e.g. Flooding, landslides) Inventories have not been completed for earthquakes, hurricanes, and tsunamis 25% = working to improve 70% = West is more vulnerable because of poor construction and zoning
	Response	<ul style="list-style-type: none"> Adequate contingency plans Effective early warning systems and procedures 	<ul style="list-style-type: none"> Evacuation plans in place, but evidence was poor Multi-modal alert system, but lacks complete coverage and testing
	Preparation	<ul style="list-style-type: none"> Existence of effective disaster risk management (DRM) and plans for climate change adaptation (CCA) 	<ul style="list-style-type: none"> There are no effective DRM/CCA plans; they are beginning to be developed 5% of the measures in the DRM and CCA plans have been implemented

Sources: WHO, EPA, EMA, ODPM, T&Tec, WASA.

- Sustainable
- Gaps in sustainability, need improving
- Under minimum sustainability

NOT EXHAUSTIVE

Phase 2 – Examples of Application of Filters

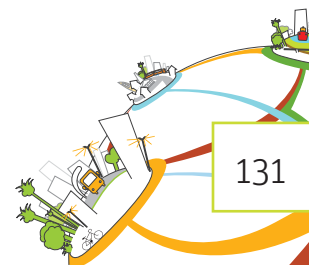
Public opinion filter

Example of public opinion survey. In the Montevideo experience, the Montevideo Emerging and Sustainable Cities (ESC-MVD) team decided to conduct a specific survey of public opinion. Accordingly, bids were invited and a consulting firm hired to take a survey of 1,002 cases in the city. The fieldwork took place between October 4 and 19, 2011. With the number of cases, it was possible to obtain information for the entire city with a maximum margin of error of 3.09% and a 95% confidence interval.

The objective of the survey was to determine how the citizens of Montevideo prioritize the action areas covered by the ESC Initiative. This information was used to establish the scores for each topic area according to the preferences given by public opinion. The survey also investigated the problems existing in each action area to confirm or supplement the information obtained in the diagnostic stage and determine the public perception of the current state of the topic areas.

To achieve this inter- and intra-sectoral aspect of the exercise, a questionnaire of 89 questions was developed with a 30 minute interview, by means of an interdisciplinary process of discussion and analysis involving various specialists from the ESC-MVD team, IDB headquarters in Washington, and the consulting firm hired to conduct the survey.

Prior to taking the public opinion survey, a pre-test was conducted as support for implementation of corrective measures on the final form and the organization and coordination of the fieldwork phase. To conduct the pilot test two types of techniques were used: traditional quantitative



pre-testing applying the questionnaire in the field,¹ and qualitative testing of the questionnaire through a process known as cognitive interviewing.²

The overall results of the exercise are presented below. The results are highly satisfactory and mark a way forward as good practice for application in other cities.

With the depth of the survey in Montevideo, it was possible to:

- Confirm the value of a series of indicators developed in the diagnosis stage, such as coverage of sewerage, domestic gas network and mobile Internet network, travel times on public and private transport, and confidence in the police.
- Supplement the information obtained in the first stage with a large quantity of additional data, such as quality and continuity of services of water supply, sanitation, energy and public transport, frequency and size of floods, etc.
- Find out the degree of public satisfaction with provision of services (water, sanitation, garbage collection, public transport, fixed and mobile telephony and Internet; primary, secondary and tertiary education; health care; and emergency mobile care), housing and travel times on public and private transport.
- Find out public perception of pollution of waterways; dirtiness of barrios, areas around waste containers and their causes; air quality; existing noise level, causes and frequency; climate change and its effects on Montevideo; response capacity of key actors to natural disasters; etc.

¹ With the preliminary version of the form, 20 interviews were held on September 22, 2011 in four blocks in different areas of Montevideo.

² The main objective of this approach is to evaluate the response process in dimensions such as understanding, difficulty in responding and memory-related problems, and analyzing validity and reliability (i.e. to what extent do the answers relate to what was being measured). Using the preliminary version 10 cases were interviewed on September 22 and 23, 2011 in the group rooms of Equipos MORI.

To view the terms of reference used for contracting the public opinion survey in Montevideo, and the questionnaire used, see Annex 5(a) and Annex 5(b) .

Example of focus groups. In Santa Ana, one of the pilot cities, no public opinion surveys were available. In this case, the team developed a survey adapted and applied to a representative sample of people from various sectors, income levels and ages. Although the sample was not statistically significant, the results were useful. Based on the responses, the team ranked the indicators in descending order, assigning 5 points to the main topics, 4 points to the second group and so on.

After collecting the public opinion data from the sources described, the team used the information to assign scores under the following guidelines: i) score 4 to 5: the problem is one of the three topics of greatest public concern or over 70% of respondents expressed concern about the topic; ii) score 3: the topic is one of the 10 topics of main concern to citizens or a significant minority (40–49%) expressed concern about it; iii) score of 1 to 2: the problem is not a major concern for citizens (for example, it is not one of the 10 most important concerns or is only a concern for a small minority – 30% of respondents). This assignment of scores depends on the information system used and should be adapted specifically to each case. See the form and the results of Santa Ana public opinion survey in Annex 5(c) and Annex 5(d) .

Economic cost filter

Example of estimated calculation in Montevideo. Three examples of the work done in Montevideo (transport, sanitation and citizen security) are given below, with a summary of the methodology used in each case, the data obtained, assumptions and results achieved.

- To calculate the cost of transport problems for the city, the team quantified the savings that would be achieved by reducing average public and private travel time, including both operating costs and maintenance of buses and private vehicles, and the cost in time for people. Data was collected on the average monthly wage of the population, the number trips by bus and private vehicle per working day, monthly bus operation and maintenance costs,

the number of buses and fuel costs. According to studies carried out in the framework of the preparation of the Urban Mobility Plan, a saving of 12 minutes travel time for buses and 5 minutes for private vehicles was assumed, an optimization of 15% in the number of buses needed to provide the service with the same frequency and an average consumption for each private vehicle stopped of two liters of fuel per hour. The calculations of the estimated savings in the cost of people's time and in operation and maintenance of private vehicles and buses produced an annual amount which, projected into the future and discounted at 12%, found that the adjusted economic and social cost of doing nothing about transport problems, would total 6.53% of Montevideo GDP; these results received a score of 3.

- On the economic cost to society of not doing anything about the problems of sanitation, the results of a recent World Bank study were applied to the situation identified in the diagnostic phase. The study, which used the contingent valuation methodology, found the willingness to pay (WTP) of the affected population for a connection to the sewerage network, restoration of water bodies and the bay, and improvement of the drainage service. The analysis was supplemented by a study of land revaluation in the floodplain by hedonic pricing. In estimating the drainage problem, a WTP of US\$31.8/month was used in 12 floodable barrios, assuming between 13% and 30% of homes affected. A hedonic pricing econometric model was used based on surveys in other floodable areas of the city. To estimate the problems of restoration of water bodies and the bay, a WTP of US\$4.57/month was used, assuming 453,616 affected users. For the connection to the sewerage system, a WTP of US\$50.6/month was used with an estimated need to connect 73,054 new users to achieve universal coverage. Based on these calculations it was concluded that the adjusted economic social cost of doing nothing about the sanitation problems would be 8.21% of Montevideo GDP, for which it received a score of 4.
- As an example, in determining the economic impact of the problem of citizen security, a study taken in Argentina in 2009 was adapted to the situation in Montevideo. The methodology was based on the following elements: i) the WTP of individuals to prevent harm to physical or mental health and the sense of insecurity; ii) the value of objects stolen and lost production due to murders; and iii) the cost of preventive measures (private security,

insurance, alarms, bars, dogs, etc.). The estimate was based on official data on murders and sense of security, and unofficial data on violent robbery and theft (which based on the study were assumed to be 3.08 times the official data). The exercise concluded that the adjusted social and economic cost of doing nothing about problems of citizen security in Montevideo represented 13.6% of the city's GDP, for which it received a score of 5.

Annex 5a

MONTEVIDEO

Ciudades Emergentes y Sostenibles (CES)

Contratación de servicios para la realización de Encuestas de Opinión Pública

Especificaciones Técnicas

A. Antecedentes

- 1.1 El rápido proceso de urbanización observado en América Latina y el Caribe (ALC) durante las últimas décadas ha traído numerosos retos para el desarrollo de la región: a) crecimiento desordenado y patrones de uso de suelo inadecuados; b) proporción creciente de la población viviendo en condiciones de pobreza; c) limitación de recursos y capacidades institucionales; y d) crecientes problemas ambientales y sociales, aumento de la vulnerabilidad de la población. Los desafíos de la urbanización acelerada adquieren mayor relevancia en ciudades de tamaño intermedio, donde la población urbana tiende a asentarse cada vez más.
- 1.2 Aproximadamente el 27% de la población urbana latinoamericana vive en asentamientos irregulares. Esta situación genera grandes contrastes en la calidad de vida dentro de las ciudades, con áreas desarrolladas y bien equipadas conviviendo con zonas de extrema pobreza, carentes de servicios e infraestructura urbana, deficientes en servicios sociales y viviendo en condiciones habitacionales y ambientales precarias. Los eventos climáticos extremos, cada vez más comunes, acrecientan la situación de vulnerabilidad de esta población, especialmente en las ciudades costeras o situadas en llanuras que pudieran ser afectadas por inundaciones. Al mismo tiempo, la vida urbana acelera el proceso de cambio climático: las ciudades son responsables del consumo de más del 75% de la energía distribuida y de la producción de un 75-80% de los gases de efecto invernadero¹. Por otra parte, el proceso de descentralización que se ha desarrollado en la región durante las dos últimas décadas ha provocado que una gran parte de los gobiernos locales deba asumir responsabilidades mayores en la provisión de servicios, aunque no explote de forma adecuada sus fuentes propias de ingreso y dependa de transferencias nacionales para su financiamiento.
- 1.3 El tratamiento de estos retos exigió el lanzamiento de una nueva iniciativa del BID, Ciudades Emergentes y Sostenibles (CES), destinada

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¹ Los países de nuestra región, en términos de generación per cápita, realizan más emisiones GEI que la mayoría de los otros países del mundo en desarrollo, incluyendo a China e India.

a contribuir al logro de la sostenibilidad urbana, ambiental y fiscal de ciudades con una población intermedia en rápido crecimiento. La iniciativa CES procura un desarrollo integral de las ciudades, donde se ofrezca un alto nivel de calidad de vida de los habitantes, se generen menores impactos ambientales, y se tenga la capacidad fiscal y administrativa para hacer frente a las responsabilidades de la gestión urbana.

- 1.4 La iniciativa permite identificar restricciones o cuellos de botella que se encuentren obstaculizando el camino a la sostenibilidad y priorizar los problemas identificados para guiar decisiones de inversión en los sectores que tienen el potencial de generar mayores impactos positivos, elaborando un plan de acción y financiamiento. La priorización de los problemas se sustenta en: a) el análisis de la situación relativa de la ciudad respecto a un *benchmark* teórico elaborado por expertos internacionales y otro compuesto por ciudades comparables; b) el impacto económico y ambiental de los mismos, incluyendo su relación con el proceso de cambio climático; c) el grado de priorización actual que poseen para el Gobierno, manifestado a través de las iniciativas institucionales vigentes; y d) la opinión pública.
- 1.5 Consecuentemente y con el objeto de poder recoger el enunciado en d) del párrafo anterior, es necesario la contratación de una encuesta de opinión pública coadyuvante a priorizar las iniciativas que surjan del análisis de la data.

B. Objetivos de la consultoría

- 1.6 Diseñar, recolectar información y procesar una encuesta de opinión pública en la ciudad de Montevideo que permita revelar la opinión de sus habitantes en la identificación de los temas más problemáticos para el desarrollo sostenible de la ciudad.

C. Actividades requeridas

- 1.7 Con base en el cuestionario modelo preliminar que la empresa entregara oportunamente en su propuesta y teniendo en consideración las recomendaciones emitidas por el Banco luego de su revisión, la empresa perfeccionará dicho cuestionario con el objetivo de utilizarlo en una experiencia piloto que permitirá testear la eficacia de su diseño y de la metodología escogida. El diseño del cuestionario (preguntas tipo, escalas o rankings para hacer comparaciones y análisis de resultados, etc.) deberá incluir el registro de variables de control socioeconómicas-demográficas que permitan el procesamiento posterior de cruces específicos de información. La encuesta deberá además cubrir la siguientes características:

- i. Intersectorial, que es el principal objetivo de la encuesta, para conocer la jerarquización y comparación relativa que realizan los habitantes de Montevideo entre las distintas temáticas. Los 25 temas a tomar en cuenta en el diseño intersectorial de la encuesta se presentan como **Anexo** a este documento². Las preguntas intersectoriales del cuestionario deberán permitir la distinción entre la jerarquización de los temas a nivel ciudad y a nivel del recientemente creado nivel municipal.
 - ii. Intrasectorial, lo que permitirá saber cuáles son las principales preocupaciones que poseen los montevideanos con relación específica a cada tema. En el **Anexo** también se presentan los 62 subtemas identificados de manera preliminar y la lista de los 133 indicadores principales y secundarios que se relevarán en Montevideo y las ciudades benchmark. La empresa deberá utilizar y complementar esta información para el diseño intrasectorial de la encuesta con datos provenientes de grupos focales que haya realizado en el pasado o la disponibilidad de otras fuentes, a fin de determinar los principales problemas dentro de cada tema que se someterán a opinión³.
- 1.8 La empresa elaborará el cuestionario piloto en estrecha colaboración con el equipo BID a cargo de la implementación de la Iniciativa en Montevideo (CESMVD).
 - 1.9 Con la utilización del cuestionario piloto elaborado en el punto anterior la empresa contratada desarrollará una experiencia piloto con la recolección y el procesamiento de 30 encuestas válidas al público en general. Al finalizar el proceso piloto, la empresa entregará un reporte con el análisis de los resultados obtenidos, a fin de ajustar un cuestionario final.
 - 1.10 Luego del análisis conjunto de los resultados del proceso piloto con el equipo CESMVD, la empresa procederá al desarrollo del cuestionario final, que será acordado con el Banco antes de proceder al trabajo de campo final.
 - 1.11 Con la utilización del cuestionario final preparado en el punto anterior, la empresa llevará a cabo la recolección y el procesamiento de 1000 encuestas validas de opinión pública a la población en general. En la realización de las encuestas se deberá aplicar la metodología validada por el Banco en cuanto a la técnica de levantamiento de información (telefónica o presencial), la determinación de la muestra y selección de casos, y la utilización de procesos de control y verificación de los datos

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² los temas finales a considerar, especialmente los relacionados con la sostenibilidad fiscal, serán definidos en detalle con anterioridad a la firma del contrato.

³ Puede no se necesario en caso de utilizar método de pregunta con respuesta abierta.

- recopilados. La encuesta estará dirigida a los habitantes del Departamento de Montevideo mayores a 18 años
- 1.12 El mismo cuestionario se utilizará para el relevamiento de información a 50 líderes de opinión (periodistas, artistas, políticos y empresarios) que residan o desarrollen la mayoría de sus tareas laborales en la ciudad de Montevideo, en caso de que el BID haya decidido su inclusión en el alcance de las actividades de la consultoría una vez analizada la propuesta de la empresa.
 - 1.13 La información obtenida deberá ser procesada electrónicamente, con la digitación y edición de los datos en archivo SPSS V. 10.0 o similar. Con su empleo, la empresa deberá elaborar y enviar al Banco un informe de presentación de los datos obtenidos, de acuerdo a los cruces de información a ser propuestos por la empresa mediante el uso de las variables de control y validados por el Banco. Los cruces de datos realizados también deberán presentarse electrónicamente.
 - 1.14 La empresa mantendrá una interacción permanente con los miembros del equipo CES Montevideo del BID, de modo tal que el diseño final de la encuesta sea coherente con los objetivos planteados.
 - 1.15 La empresa tendrá plena autonomía para la recopilación de la información requerida y deberá ser autosuficiente en términos de transporte y equipamiento. La empresa utilizará personal debidamente entrenado para llevar a cabo y supervisar el proceso de encuestas y entrevistas.

D. Productos a entregar

- 1.16 La empresa deberá entregar los siguientes productos:
 - i. Cuestionario a usar en el proceso piloto, de acuerdo a lo expuesto en el punto 1.7 de este documento y en un plazo no mayor a 7 días corridos desde la firma del contrato.
 - ii. Reporte de la experiencia piloto, donde se realice un análisis sintético de los resultados obtenidos durante su realización y se elaboren recomendaciones a seguir para el desarrollo del cuestionario final, en un plazo no mayor a 14 días corridos desde la firma del contrato.
 - iii. Cuestionario final para aprobación del BID, en un plazo no mayor a 21 días desde la firma del contrato.
 - iv. Versión borrador del informe final de presentación de los datos obtenidos en las encuestas, con tablas, gráficos, el detalle de la metodología empleada y principales conclusiones, a los 40 días de firmado el contrato. El informe deberá contener una sección de lecciones aprendidas que pueda servir para mejorar el proceso de conocimiento de la opinión pública en una futura aplicación de la metodología CES en otra ciudad. El borrador del reporte final deberá

incluir el archivo de datos obtenidos en las encuestas, con un breve informe de las actividades preparatorias y de terreno.

- v. Informe final y base de datos, a los 47 días de firmado el contrato. El reporte final incorporará el contenido de todos los productos elaborados bajo este contrato. Esta versión final también deberá tener en consideración todas las observaciones, modificaciones o comentarios realizados por el BID. El reporte incorporará toda la información requerida explícitamente e implícitamente en estas especificaciones técnicas.

E. Cronograma de actividades

- 1.17 Se prevé que el contrato entre la empresa y el BID estará firmado durante la primera quincena de agosto de 2011, por lo que el trabajo debería estar finalizado durante la última semana de septiembre del mismo año. Por la vigencia de disponibilidad de fondos, el cronograma de ejecución del contrato es sensible a cambios.

F. Forma de Pago:

- 1.18 Los pagos se efectuarán de acuerdo al siguiente esquema:
 - i. 20% a la firma del contrato.
 - ii. 40% a la entrega del cuestionario final.
 - iii. 40% a la entrega del informe final.

G. Supervisión y Coordinación

- 1.19 La consultoría estará bajo la supervisión del equipo a cargo de la implementación de la metodología de Ciudades Emergentes y Sostenibles en Montevideo, bajo la coordinación de Horacio Terraza (Lead Water and Sanitation Specialist).
- 1.20 Verónica Adler (Housing and Urban Development Senior Specialist) y Carlos Pauletti (Consultant) serán los enlaces con sede en Montevideo para llevar adelante la coordinación de las actividades.

H. Confidencialidad

- 1.21 La empresa se compromete a mantener absoluta reserva de toda la información a la cual tenga acceso, siendo pasiva, en caso contrario, de las sanciones que el Banco pudiera establecer. La información confidencial a la que tenga acceso no podrá ser utilizada en otros trabajos, documentos o presentaciones a menos que el Banco le otorgue su consentimiento previo.

Dimensión	Pilar	#	Temas	#	Subtemas	#	Indicadores	
Sostenibilidad Medioambiental y Cambio Climático	Manejo del medio ambiente y consumo de recursos naturales	1	Agua	1	Cobertura de agua potable	1	Población con acceso a agua potable	
				2	Eficiencia en el uso del agua	2	Consumo de agua per cápita	
				3	Eficiencia en la prestación de servicios de agua potable	3	Continuidad del servicio de agua potable	
				4	Eficiencia de drenaje	4	Agua no contabilizada	
				5	Disponibilidad recursos hídricos	5	Área inundada durante precipitaciones con frecuencia de ocurrencia igual a 5 años / área urbana total	
				6	Cobertura de saneamiento	6	Balance neto de agua (recursos internos y externos)	
				7	Tratamiento aguas residuales	7	Población con acceso a saneamiento	
				8	Reutilización aguas residuales	8	Tratamiento secundario de aguas residuales	
				9	Cobertura de recolección de residuos sólidos	9	Aguas residuales reutilizadas	
				10	Disposición final adecuada de residuos sólidos	10	Población con acceso regular a recolección de residuos sólidos	
				3	Residuos Sólidos	10		11
	12	Disposición final: Vertederos a cielo abierto, vertederos controlados, cuerpos de agua y quemados	12					
			11			Tratamiento de	13	Tratamiento: Compostaje

Dimensión	Pilar	#	Temas	#	Subtemas	#	Indicadores
					residuos sólidos	14	Tratamiento: Reciclados
						15	Tratamiento: Usado como recurso energético
						16	Población con acceso formal a energía eléctrica
						17	Población con acceso formal a gas por red domiciliaria
		4	Energía	13	Eficiencia en el uso de la energía	18	Continuidad del servicio de energía eléctrica
						19	Consumo anual de energía eléctrica per cápita
						20	Uso de energía por sector
						21	Intensidad energética de la economía
						22	PIB por unidad de uso de energía
						23	Gasto en energía por sector / presupuesto del sector
						24	Existencia, monitoreo y cumplimiento de regulaciones de eficiencia energética
						25	Existencia, monitoreo y cumplimiento de regulaciones sobre calidad de aire
						26	Air quality index
						27	Concentración de PM 2.5
5	Calidad de Aire	14	Control de la calidad del aire	28	Número de casos de infecciones respiratorias		
				29	Existencia y monitoreo de inventario GEI		
6	Gases Efecto Invernadero (GEI)	17	Cantidad de emisiones GEI	30	Emisiones GEI per cápita		
				31	Emisiones GEI / PIB		
				32	Emisiones de CO ₂ por sector		
				33	Emisiones anuales de CO ₂ debidas al consumo eléctrico de la ciudad / habitantes ciudad		
7	Ruido	18	Control del ruido	34	Existencia, monitoreo y cumplimiento de regulaciones sobre polución acústica		

Dimensión	Pilar	#	Temas	#	Subtemas	#	Indicadores
Reducción de vulnerabilidades y adaptación al cambio climático		8	Energías Alternativas y Renovables	19	Presión sonora	35	Niveles medios de presión acústica en horas críticas de áreas clave (decibel)
				20	Consumo de energías alternativas y renovables	36	Producción/uso de energías renovables como porcentaje del total
						37	Energía generada anualmente por la captura de gas metano
		9	Vulnerabilidad ante desastres naturales	21	Capacidad adaptativa al cambio climático y eventos naturales extremos	38	Existencia de mapas de riesgo de la ciudad que incluyen amenazas naturales (geofísicas e hidrometeorológicas) y análisis de vulnerabilidad
						39	Mapa de riesgo: Nivel de susceptibilidad al riesgo
						40	Mapa de riesgo: Análisis de vulnerabilidad a estos riesgos
						41	Existencia de planes de contingencia adecuados para desastres naturales y cambio climático
						42	Existencia de sistemas de alerta temprana efectivos
						43	Existencia de planes efectivos de gestión del riesgo de desastres y de adaptación al cambio climático
						44	Porcentaje de medidas implementadas de los planes de gestión del riesgo de desastres y de adaptación al cambio climático
						45	Pruebas anuales de planes de contingencia y sistemas de alerta
						46	Planes de desarrollo urbano tienen en cuenta riesgos y vulnerabilidades
						47	Inversión pública promedio en infraestructura crítica en los últimos 10 años
						48	Infraestructura crítica (ej. agua, energía, etc.) en riesgo debido a construcción inadecuada y/o
		22	Sensibilidad a desastres naturales				

Dimensión	Pilar	#	Temas	#	Subtemas	#	Indicadores																																									
Sostenibilidad Urbana	Control del crecimiento y hábitat humano adecuado	10	Uso del suelo	26	Planificación de uso de suelo	56	Posee un plan de utilización del suelo activamente implementado																																									
							11	Inequidad Urbana	27	Pobreza	59	Población en situación de pobreza																																				
												12	Transporte	31	Transporte público	64	Cantidad de vías preferenciales para el transporte público																															
																	23	Exposición a desastres naturales	51	Cantidad de desastres naturales registrados en la ciudad en los últimos 10 años																												
																					24	Densidad urbana	53	Tasa de urbanización (crecimiento de footprint)																								
																								25	Áreas verdes	54	Densidad de población																					
																											29	Desigualdad de ingreso	61	Porcentaje del PIB en manos del 10% más rico de la población																		
																														30	Densidad de empleo	62	Densidad de empleo															
																																	31	Transporte público	63	Ratio Empleos / Vivienda												
																																				49	Viviendas en riesgo debido a construcción inadecuada y/o ubicación en áreas inmitigables	50	Área ocupada por asentamientos informales / área urbana total									
																																							57	Existencia de un plan de desarrollo urbano de largo plazo (al menos 20 años) que se encuentre vigente	58	Existencia de un plan de desarrollo territorial urbano						
																																										60	Déficits de vivienda cuantitativos y cualitativos	60	Déficits de vivienda cuantitativos y cualitativos			
																																													63	Ratio Empleos / Vivienda	63	Ratio Empleos / Vivienda

Dimensión	Pilar	#	Temas	#	Subtemas	#	Indicadores				
transporte urbano sustentable						65	Viajes utilizando transporte público				
						66	Modal split				
						32	Transporte limpio	67	Flota utilizando combustibles alternativos		
						33	Seguridad vial	68	Victimias mortales por accidentes de tráfico cada 100.000 habitantes		
						34	Congestión vehicular	69	Velocidad media en vías principales		
								70	Políticas y prácticas para la gestión adecuada de la demanda activamente implementadas		
								71	Travel time index		
								72	Cantidad de vehículos privados per cápita		
						13	Economía	35	Producto bruto	73	PIB per cápita
								74	Índice de diversificación		
						14	Conectividad	36	Empleo	75	Tasa de desempleo
										76	Empleo informal como % del empleo total
								37	Internet	77	Conexiones a internet por banda ancha cada 100 personas
78	Conexiones a internet móvil por banda ancha cada 100 personas										
15	Ambiente de Negocios e Inversión	38	Telefonía	79	Teléfonos cada 100.000 personas						
		39	Regulación de negocios e inversión	80	Días para obtener licencias de explotación						
				81	Existencia de plataforma logística						
		40	Fomento de negocios e inversión	82	Industrias locales con certificado ISO 14.000						
				83	Existencia de un plan de desarrollo de industrias verdes						
16	Educación	41	Calidad educativa	84	Ratio estudiantes /docentes						
		42	Asistencia escolar	85	Población en edad escolar registrada en escuela						

Dimensión	Pilar	#	Temas	#	Subtemas	#	Indicadores	
Sostenibilidad Fiscal y Gobierno	sociales y cohesión social	17	Seguridad Ciudadana	43	Educación superior	86	Vacantes universitarias cada 100.000 personas	
				44	Violencia	87	Población víctima de crímenes perpetrados por población de entre 14 y 24 años	
						88		
						89		Homicidios cada 100.000 habitantes
						90		Incidentes de violencia doméstica cada 100.000 habitantes
				45	Confianza ciudadana	91	Ciudadanos que se sienten seguros	
						92	Confianza de la ciudadanía en su policía	
				46	Participación ciudadana en la seguridad	93	Tienen lugar procesos de participación para el diseño y el monitoreo de políticas locales de seguridad (GCI9 target)	
							94	Policía comunitaria activa
				18	Salud	47	Nivel de salud	95
	96	Tasa de mortalidad de niños menores de 5 años						
	48	Provisión de servicios de salud	97			Médicos cada 1.000 personas		
			98			Camas de hospital cada 100.000 personas		
	19	Participación Ciudadana en la Gestión Pública	49	Participación ciudadana en la planeación de la gestión pública de gobierno	99	Existencia de proceso de planificación participativa		
					100	Existencia de presupuesto participativo		
			50	Participación ciudadana en la auditoría de la gestión pública de gobierno	101	Sesiones de rendición pública de cuentas por año		
	20	Gestión Moderna	51	Procesos modernos de gestión pública de	102	Existencia de proceso de up-budgeting pluriannual		
103					Evaluación "metric-based" de la actuación			

Dimensión	Pilar	#	Temas	#	Subtemas	#	Indicadores
					gobierno		profesional del personal
				52	Sistemas modernos de gestión pública de gobierno	104	Existencia de sistemas electrónicos de rendición de cuentas
						105	Existencia de sistemas electrónicos de adquisiciones
						106	Transparency Index
		21	Transparencia	53	Transparencia y auditoría de la gestión pública de gobierno	107	Cuentas auditadas por un tercero
						108	Cuentas auditadas interna y/o externamente
						109	Cuentas auditadas por un tercero con renombre
						110	Ingresos propios como porcentaje de ingresos totales
				54	Ingresos e impuestos municipales	111	Impuestos a la propiedad como porcentaje de ingresos totales
						112	Ingresos fiscales per cápita
						113	Ingresos por fuente: impuestos totales
		22	Autonomía financiera y administrativa	55	Fuentes de ingresos	114	Ingresos por fuente: transferencias nacionales
						115	Transferencias con uso específico asignado como porcentaje del total de transferencias
						116	Ingresos por fuente: donantes externos
						117	Ingresos por fuente: otros
				56	Gestión de cobranza	118	Impuestos recaudados como porcentaje de los impuestos facturados
						119	Existencia de indicadores clave del desempeño y metas para seguimiento de ejecución del presupuesto
		23	Eficiencia y Oportunidad del Gasto	57	Control del gasto	120	Presupuesto bruto operativo y de capital
						121	Tasa de crecimiento de gastos por tipo

Dimensión	Pilar	#	Temas	#	Subtemas	#	Indicadores	
				58	Inversión pública municipal	122	Gasto de la inversión fija bruta como porcentaje del PIB	
				59	Agencias y empresas públicas	123	El presupuesto está alineado con la planificación, los objetivos y los indicadores	
						124	Recuperación de costos de empresas públicas de provisión de servicios	
				60	Pensiones municipales	125	Agencias públicas cuyas cuentas son auditadas por un tercero	
						126	Agencias públicas que realizan responsabilidad pública	
				24	Manejo adecuado de la deuda y obligaciones fiscales	60	Pasivos Contingentes	127
	128	Activos del fondo de pensión / Prestaciones totales pagadas						
	25	Deuda	62	Sostenibilidad de la deuda municipal	61	Control de pasivos contingentes	129	Principales pasivos contingentes como porcentaje de pasivos totales
					130	Coficiente del servicio de la deuda		
					131	Deuda total como porcentaje del margen de deuda legal		
					132	Deuda total como porcentaje de ingresos totales		
					133	Crecimiento de la deuda		

Annex 5b



E N C U E S T A
OPINION PUBLICA

[D_NumCue] No.Cuestionario _____

[D_IdC] Identificación censal _____

[D_Fecha] Anotar día: _____

Buenos días / tardes mi nombre es... y estoy realizando un relevamiento para la consultora **EQUIPOS/MORI** y en esta oportunidad estamos realizando una encuesta de Opinión Pública sobre varios temas. Necesito hablar con alguien de 18 años o más, que viva en esta casa.

AGUA

P1. En términos generales, ¿cómo calificaría el servicio de agua potable que recibe en su hogar?

1. Muy bueno _____
2. Bueno _____
3. Ni bueno ni malo _____
4. Malo _____
5. Muy malo _____
8. NS/NC _____

P2. ¿Y cómo calificaría los siguientes aspectos del servicio de agua potable? (UTILICE EL MISMO CODIGO QUE EN P1)

1. Color del agua _____
2. Sabor del agua _____
3. Olor del agua _____
4. Presión del agua _____
5. Continuidad con la que recibe el servicio _____

P3. (PARA TODOS) El barrio donde Ud. vive, ¿se ha inundado como consecuencia de las lluvias?
(ENCUESTADOR: ACLARAR QUE "BARRIO" SE REFIERE A UN ENTORNO DE APROXIMADAMENTE 10 A 15 CUADRAS DE SU DOMICILIO)

1. Sí _____
2. No (**SIGUE P7**) _____
8. NS/NC (**SIGUE P7**) _____

P4. (PARA SI EN P3) ¿Con qué frecuencia se inunda su barrio?

1. Cada vez que llueve _____
2. Sólo cuando llueve muy fuerte _____
3. Casi nunca o nunca _____
8. NS/NC _____

P9. En los últimos 12 meses, ¿ha tenido Ud. alguno de los siguientes problemas con el saneamiento de su hogar?

Código: 1. Sí 2.No 8.Ns/Nc

1. Desbordes del sistema cloacal _____
2. Aguas cloacales corriendo en la calle _____

P9B. En Montevideo existen arroyos que atraviesan zonas urbanas, como el Pantanos y el Miguelete, que desembocan en la Bahía, y el arroyo Carrasco. En general, diría que la contaminación de estos arroyos y de la bahía le afecta mucho, bastante, poco, o nada su calidad de vida?

1. Mucho _____
2. Bastante _____
3. Poco _____
4. Nada _____
8. Ns/Nc _____

GESTION DE RESIDUOS SOLIDOS

P10. En términos generales, ¿diría que el barrio donde Ud. vive es un lugar muy limpio, limpio, ni limpio ni sucio, sucio, o muy sucio?

1. Muy limpio _____
2. Limpio _____
3. Ni limpio ni sucio _____
4. Sucio _____
5. Muy sucio _____
6. NS/NC _____

P11. ¿Dónde deposita Ud. la basura?

1. En un contenedor a menos de una cuadra de su casa _____
2. En un contenedor a más de una cuadra de su casa _____
3. En la puerta de su casa (hay recolección puerta a puerta) _____
4. En un basural, una volqueta, etc. _____
5. Otros (especificar) _____
8. NS/NC _____

P12. ¿Con qué frecuencia pasan a recoger la basura por el lugar en que Ud. la deposita?

1. Diariamente _____
2. Varios días por semana (4 a 6) _____
3. Algunos días por semana (2 a 3) _____
4. Una vez por semana _____
5. Menos que eso _____
6. Casi nunca o nunca _____
8. NS/NC _____

P13. ¿Diría que Ud. está satisfecho o insatisfecho con la frecuencia con que pasan a recoger la basura?

1. Muy satisfecho _____
2. Satisfecho _____
3. Ni satisfecho ni insatisfecho _____
4. Insatisfecho _____
5. Muy insatisfecho _____
8. NS/NC _____

- P5.** ¿La última vez que hubo una inundación, ¿cuánto duró?
1. Unas pocas horas
 2. Un día
 3. Varios días
 4. Una semana o más
 8. NS/NC

- P6.** ¿Y cuál fue la altura alcanzada por el agua?
1. Inundó la calle, pero no llegó a las veredas
 2. Inundó las calles y las veredas
 3. Ingresó a las viviendas
 8. NS/NC

SANEAMIENTO

- P7. (PARA TODOS)** ¿De qué tipo de saneamiento disponen en su hogar?
1. Conexión a la red cloacal de saneamiento de la IMM
 2. Pozo negro o cámara séptica
 3. Otros (especificar) _____
 4. Ninguno
 8. NS/NC

- P8.** ¿Cómo califica el servicio de saneamiento del que disponen en su hogar?
1. Muy bueno
 2. Bueno
 3. Ni bueno ni malo
 4. Malo
 5. Muy malo
 8. NS/NC

- P17.** ¿Y con qué frecuencia se producen bajas o altas de tensión en la red eléctrica?
1. Todas las semanas
 2. Todos los meses
 3. Cada dos o tres meses
 4. Alguna vez al año
 5. Casi nunca o nunca
 8. NS/NC

- P18.** ¿En su hogar tienen conexión a gas por cañería? (PARA SI)
¿Con qué frecuencia se producen cortes en el suministro de gas?
1. Todas las semanas
 2. Todos los meses
 3. Cada dos o tres meses
 4. Alguna vez al año
 5. Casi nunca o nunca
 6. No tiene gas por cañería
 8. NS/NC

CALIDAD DEL AIRE

- P19.** ¿Cómo califica en general la calidad del aire que Ud. respira cuando circula por su barrio?
1. Muy buena
 2. Buena
 3. Ni buena ni mala
 4. Mala
 5. Muy mala
 8. NS/NC

- P20.** En los últimos 12 meses, la calidad del aire que respira ¿se ha deteriorado por alguna de las siguientes situaciones?

- P14.** ¿Y diría que el entorno del contenedor o del lugar donde se deposita la basura generalmente está limpio o sucio?
1. Muy limpio (SIGUE P16)
 2. Limpio (SIGUE P16)
 3. Más o menos
 4. Sucio
 5. Muy sucio
 8. NS/NC

- P15. (PARA 3 A 5)** ¿Quién diría que es el principal responsable de que el entorno esté sucio? ¿Y en segundo lugar?
1. La Intendencia, que no vacía el contenedor antes que se llene
 2. Los hurgadores y clasificadores, que desparraman los residuos
 3. Los vecinos, que no son cuidadosos al depositar los residuos
 4. Perros u otros animales que desparraman la basura
 5. Otros (especificar) _____
 8. Ns/Nc
 - A. Primera mención
 - B. Segunda mención

ENERGIA

- P16. (PARA TODOS)** En su hogar, ¿con qué frecuencia se producen cortes de la energía eléctrica?
1. Todas las semanas
 2. Todos los meses
 3. Cada dos o tres meses
 4. Alguna vez al año
 5. Casi nunca o nunca
 8. NS/NC

VULNERABILIDAD ANTE DESASTRES NATURALES

- P26. (PARA TODOS)** En los últimos tiempos se habla de cambio climático. ¿Ud. cree que en Montevideo los eventos climáticos extremos (inundaciones, olas de frío, olas de calor, temporales) ocurren con más frecuencia que antes, o más o menos con la misma frecuencia que antes?
1. Con más frecuencia que antes
 2. Más o menos con la misma frecuencia que antes
 8. NS/NC

- P27.** ¿Cuánto cree Ud. que el cambio climático global afecta al clima en Montevideo?
1. Mucho
 2. Bastante
 3. Poco
 4. Nada
 8. NS/NC

- P28.** ¿Y cuánto lo afecta a Ud. y a su familia?
1. Mucho
 2. Bastante
 3. Poco
 4. Nada
 8. NS/NC

- P29.** ¿Diría usted que cada uno de las siguientes personas o grupos que le voy a mencionar está preparado o no está preparado para hacer frente a un desastre natural, por ejemplo un temporal de lluvia muy fuerte que pudiera ocurrir en la ciudad o en el área donde usted vive?

Código: 1. Sí 2.No 8.Ns/Nc

A. Quema de basura o materiales	_____
B. Humo de vehículos	_____
C. Emisiones de fábricas	_____
D. Olor a basura	_____

P21. En su hogar, en los últimos 12 meses, ¿ha habido casos de enfermedades respiratorias?

1. Sí
2. No (**SIGUE P23**)
8. NS/NC (**SIGUE P23**) _____

P22. (PARA SI) ¿Piensa que las enfermedades respiratorias tuvieron que ver con la calidad del aire que se respira en Montevideo, o con otras causas?

1. Tuvieron que ver con la calidad del aire
2. Tuvieron que ver con otras causas
8. NS/NC _____

RUIDO

P23. (PARA TODOS) ¿Cómo califica, en general, el nivel de ruido existente en su barrio?

1. Muy alto
2. Alto
3. Ni alto ni bajo
4. Bajo
5. Muy bajo
8. NS/NC _____

P24. En su hogar, en los últimos 12 meses, ¿han tenido alguno de los siguientes problemas vinculados a ruidos molestos (no ruidos leves sino ruidos que hayan afectado su calidad de vida y la de su familia)?

Código: 1. Sí 2.No 8.Ns/Nc

A. Ruidos molestos de vecinos	_____
B. Ruidos provenientes del tránsito y la circulación	_____
C. Ruidos de la construcción o refacción de viviendas	_____
D. Ruidos de la refacción de calles y veredas	_____
E. Ruidos de bares, boliches y vida nocturna	_____
F. Ruido de animales (perros, gatos)	_____

P25. (PARA SI EN ALGUNO DE LOS ANTERIORES) ¿Con qué frecuencia tienen problemas de ruidos molestos?

1. Todos los días
2. Algunas veces por semana
3. Todas las semanas
4. Todos los meses
5. Algunas veces al año
6. Casi nunca o nunca
8. NS/NC _____

P35. ¿Ud. cree que existe o no existe algún tipo de conflicto en su barrio entre los vecinos y las empresas, industrias, ferias, talleres o depósitos instalados?

1. Mucho conflicto
2. Bastante conflicto
3. Poco conflicto
4. Ningún conflicto
8. Ns/Nc

Código: 1. Preparado 2.No preparado 8.Ns/Nc

A. La policía	_____
B. Los bomberos	_____
C. Los hospitales	_____
D. Usted y su familia	_____
E. El gobierno nacional	_____
F. El gobierno departamental	_____
G. Los militares	_____

USO DEL SUELO

P30. ¿Con qué frecuencia Ud. o algún miembro del hogar concurre a algún espacio público del barrio donde Ud. vive con fines recreativos o de esparcimiento?

1. Todos los días
2. Algunas veces por semana
3. Todas las semanas
4. Todos los meses
5. Algunas veces al año
6. Casi nunca o nunca
8. NS/NC _____

P31. ¿Y diría que los espacios públicos en su barrio son agradables o desagradables?

1. Muy agradables
2. Agradables
3. Ni agradables ni desagradables
4. Desagradables
5. Muy desagradables
8. NS/NC _____

P32. ¿Y diría que los espacios públicos en su barrio están bien mantenidos o mal mantenidos?

1. Muy bien mantenidos
2. Bien mantenidos
3. Ni bien ni mal
4. Mal mantenidos
5. Muy mal mantenidos
8. NS/NC _____

P33. ¿Y diría que los espacios públicos que hay en su barrio son suficientes o insuficientes?

1. Suficientes
2. Insuficientes
8. NS/NC _____

P34. ¿Y diría que en su barrio los espacios públicos son seguros o inseguros?

1. Muy seguros
2. Seguros
3. Ni seguros ni inseguros
4. Inseguros
5. Muy inseguros
8. NS/NC _____

P44. ¿Y cómo calificaría los siguientes aspectos del servicio de transporte colectivo en Montevideo? (UTILICE EL MISMO CODIGO)

1. Frecuencia de los ómnibus durante el día _____
2. Frecuencia de los ómnibus durante la noche _____
3. Precio del boleto _____
4. Comodidad durante el viaje _____
5. Limpieza de los ómnibus _____

INEQUIDAD URBANA

P36. El salario o sueldo que Ud. percibe y el total del ingreso familiar, ¿le permite cubrir satisfactoriamente sus necesidades? ¿En cuál de estas situaciones se encuentra Ud.?

(LEER OPCIONES)

1. Le alcanza bien, pueden ahorrar
2. Le alcanza justo, sin grandes dificultades
3. No les alcanza, tienen dificultades
4. No les alcanza, tienen grandes dificultades
8. NS/NC

P37. ¿Ha tenido Ud. y su familia dificultades en los últimos 12 meses para pagar las cuentas de agua o luz/ electricidad?

1. Sí
2. No
8. NS/NC

P38. ¿Y se ha quedado sin dinero para comprar la comida?

1. Sí
2. No
8. NS/NC

P39. ¿Cuán satisfecho se encuentra Ud. con la calidad de la vivienda en que vive?

1. Muy satisfecho
2. Satisfecho
3. Ni satisfecho ni insatisfecho
4. Insatisfecho
5. Muy insatisfecho
8. NS/NC

P40. La vivienda y el terreno en el que residen, ¿son propios, alquilados, prestados, ocupados, u otra situación?

1. Propia en terreno propio (**Sigue P42**)
2. Propia en terreno propio, la está pagando (incluye BHU)
3. Propia en terreno no propio (**Sigue P42**)
4. Vivienda alquilada
5. Vivienda prestada (**Sigue P43**)
6. Vivienda ocupada (**Sigue P43**)
7. Otras situaciones (**Sigue P43**)
8. NS/NC (**Sigue P43**)

P41. (PARA 2 Y 4) El costo que Ud. paga por su vivienda, ¿le parece caro, adecuado o barato con relación a sus ingresos?

1. Caro
2. Adecuado
3. Barato
8. NS/NC

P45. Con qué frecuencia utiliza Ud. el sistema de transporte colectivo en Montevideo?

1. Todos los días
2. Varios días por semana (4 a 6)
3. Algunos días por semana (1 a 3)
4. Alguna vez por mes
5. Alguna vez al año
6. Nunca o casi nunca
8. NS/NC

P46 Piense en el desplazamiento que realiza más habitualmente, por ejemplo para trabajar o estudiar ¿en qué medio lo realiza?

1. Auto
2. Ómnibus
3. Moto
4. Bicicleta
5. Taxis
6. Caminando
7. Otros (especificar)
8. NS/NC

P47. ¿Cuánto tiempo demora en llegar desde su casa a ese lugar? (REGISTRAR TEXTUAL EN MINUTOS)

P48. ¿Y Ud. considera que el tiempo que le toma llegar a su trabajo o lugar de estudio es adecuado o es demasiado?

1. Es adecuado
2. Es demasiado
8. NS/NC

P49. En su hogar, ¿ha habido alguien víctima de un accidente de tránsito en los últimos 5 años?

1. Sí
2. No (**Sigue P51**)
8. NS/NC (**Sigue P51**)

P50. (PARA SI) La persona de su hogar que fue víctima de accidente de tránsito, ¿resultó lesionada?

1. Sí
2. No
8. NS/NC

EMPLEO

P51. (PARA TODOS) ¿Cuán preocupado diría Ud. que está de quedar sin trabajo o de estar desempleado durante los próximos doce meses, o no tiene Ud. trabajo?

1. Muy preocupado
2. Preocupado
3. Poco preocupado
4. No está preocupado
5. No tiene trabajo
8. NS/NC

P42. (PARA 1, 2 y 3 EN P40) La vivienda en la que reside ¿fue construida por Ud. mismo y su familia con sus propias manos, fue construida contratando obreros, o fue comprada cuando la vivienda ya estaba hecha?

1. Fue construida por Ud. mismo y su familia con sus propias manos
2. Fue construida contratando obreros
3. Fue comprada ya construida
8. Ns/NC

TRANSPORTE

P43. (PARA TODOS) ¿Cómo califica, en términos generales, el sistema de transporte colectivo en Montevideo?

1. Muy bueno
2. Bueno
3. Ni bueno ni malo
4. Malo
5. Muy malo
8. NS/NC

P55. (PARA TODOS) ¿Tiene teléfono celular?

1. Sí
2. No (SIGUE P58)
8. NS/NC (SIGUE P58)

P56. (PARA SI) ¿Cómo evalúa la calidad de las llamadas que Ud. realiza desde su celular?

1. Muy buena
2. Buena
3. Ni buena ni mala
4. Mala
5. Muy mala
8. NS/NC

P57. ¿Y cómo calificaría el costo del servicio?

1. Muy caro
2. Caro
3. Ni caro ni barato
4. Barato
5. Muy barato
8. NS/NC

P58. (PARA TODOS) ¿En su hogar, tienen conexión a internet? (Si) ¿De qué tipo?

1. Banda ancha (ADSL)
2. Banda ancha móvil o inalámbrica
3. No tiene (SIGUE P62)
8. NS/NC (SIGUE P62)

P59. (PARA SI) ¿Cómo evalúa la velocidad de la conexión?

1. Muy buena
2. Buena
3. Ni buena ni mala
4. Mala
5. Muy mala
8. NS/NC

P60. ¿Y con qué frecuencia tiene cortes del servicio?

1. Todos los días
2. Algunas veces por semana
3. Todas las semanas
4. Todos los meses
5. Algunas veces al año
6. Casi nunca o nunca
8. NS/NC

CONECTIVIDAD

P52. ¿Tiene telefonía fija en el hogar?

1. Sí
2. No (SIGUE p55)
8. NS/NC (SIGUE p55)

P53. (PARA SI) ¿Cómo evalúa la calidad de las llamadas que Ud. realiza desde su teléfono fijo?

1. Muy buena
2. Buena
3. Ni buena ni mala
4. Mala
5. Muy mala
8. NS/NC

P54. ¿Y cómo calificaría el costo del servicio?

1. Muy caro
2. Caro
3. Ni caro ni barato
4. Barato
5. Muy barato
8. NS/NC

64. (SI HAY PERSONAS QUE ESTEN CURSANDO PRIMARIA, NO IMPORTA SI PUBLICO O PRIVADO) En el último año, ¿ha tenido alguno de los siguientes problemas con la educación primaria?

Código: 1. Sí 2.No 3.Ns/NC

A. Problemas con la calidad de la educación	___
B. Problemas con la infraestructura del local de estudio	___
C. Faltas de docentes que hayan afectado el dictado de cursos	___
D. Malos docentes	___

P65. (SI HAY PERSONAS QUE ESTEN CURSANDO SECUNDARIA PRIMER CICLO, NO IMPORTA SI PUBLICO O PRIVADO) En el último año, ¿ha tenido alguno de los siguientes problemas con la educación secundaria de primer ciclo?

Código: 1. Sí 2.No 8.Ns/NC

A. Problemas con la calidad de la educación	___
B. Problemas con la infraestructura del local de estudio	___
C. Faltas de docentes que hayan afectado el dictado de cursos	___
D. Malos docentes	___

P66. (SI HAY PERSONAS QUE ESTEN CURSANDO SECUNDARIA SEGUNDO CICLO, NO IMPORTA SI PUBLICO O PRIVADO) En el último año, ¿ha tenido alguno de los siguientes problemas con la educación secundaria de segundo ciclo?

Código: 1. Sí 2.No 8.Ns/NC

A. Problemas con la calidad de la educación	___
B. Problemas con la infraestructura del local de estudio	___
C. Faltas de docentes que hayan afectado el dictado de cursos	___
D. Malos docentes	___

P67. (SI HAY PERSONAS QUE ESTEN CURSANDO TERCIARIA, NO IMPORTA SI PUBLICO O PRIVADO) En el último año, ¿ha tenido alguno de los siguientes problemas con la educación terciaria?

P61. ¿Y cómo calificaría el costo del servicio? _____

1. Muy caro
2. Caro
3. Ni caro ni barato
4. Barato
5. Muy barato
8. NS/NC

P62. (PARA TODOS) ¿Ud. o alguien de su hogar tiene conexión a internet a través de su teléfono celular? _____

1. Sí
2. No
8. NS/NC

EDUCACION

P63. ¿Hay personas en este hogar que estén cursando actualmente los siguientes niveles educativos (MARQUE TODAS LAS QUE CORRESPONDA)?

CODIGO: 1. Sí 2. No

	PUBLICA	PRIVADA
Primaria	_____	_____
Secundaria primer ciclo	_____	_____
Secundaria segundo ciclo	_____	_____
Terciaria	_____	_____

(ENCUESTADOR: SI EN ALGUN HOGAR SE ENCUENTRAN INTEGRANTES QUE ESTEN HACIENDO EL MISMO NIVEL EDUCATIVO, ALGUNO EN INSTITUCION PUBLICA Y OTRO EN PRIVADA, APLIQUE LAS PREGUNTAS REFERIDAS AL QUE SEA MAYOR EN EDAD)

BLOQUE SOLO PARA MUJERES

P Filtro ¿Cuál es su situación de pareja actual? (LEER TODAS LAS ALTERNATIVAS)

1. Soltera (SIGUE P76)
2. Separada (SIGUE P76)
3. Divorciada (SIGUE P76)
4. Viuda (SIGUE P76)
5. Casada
6. Conviviendo
8. NS/NC

P72. (SOLO PARA 5 O 6) No importa que tan buena sea una relación de pareja, siempre hay momentos en que no se está de acuerdo, se enojan, desean diferentes cosas o simplemente tienen peleas porque están de mal humor o cansados. Las parejas tienen muchas formas de sobrellevar estas diferencias, a continuación le presentamos una lista de cosas que pueden pasar cuando se discute y le voy a pedir que me diga si alguna le ocurrió con su pareja en el último año y con qué frecuencia. (MOSTRAR TARJETA 3)

Código:

1. Una vez
2. De dos a cuatro
3. De cinco a diez
4. Más de diez veces
5. No en el último año, pero si antes
6. Esto nunca le ha pasado
8. No sabe/No contesta

Código: 1. Sí 2.No 8.Ns/Nc

A. Problemas con la calidad de la educación	_____
B. Problemas con la infraestructura del local de estudio	_____
C. Faltas de docentes que hayan afectado el dictado de cursos	_____
D. Malos docentes	_____

SEGURIDAD CIUDADANA

P68. (PARA TODOS) ¿Se siente usted seguro(a) caminando solo(a) por la noche en Montevideo? _____

1. Sí
2. No
8. NS/NC

P69. ¿Y en el barrio donde vive? _____

1. Sí
2. No
8. NS/NC

P70. ¿Cuánta confianza tiene Ud. en la policía? _____

1. Mucha
2. Algo
3. Poca
4. Ninguna
8. NS/NC

P71. Ha sido Ud. o algún pariente asaltado, agredido, o víctima de un delito en los últimos 12 meses? _____

1. Sí, Ud.
2. Sí, un pariente
3. Sí, ambos
4. No
8. NS/NC

SALUD

P76. (PARA TODOS) En general, ¿cómo describiría su estado de salud hoy en día? ¿Muy bueno, bueno, ni bueno ni malo, malo o muy malo? _____

1. Muy bueno
2. Bueno
3. Ni bueno ni malo
4. Malo
5. Muy malo
8. NS/NC

P77. ¿Qué tipo de cobertura de salud Ud. tiene? _____

1. Salud Pública
2. Mutualista
3. Medicina privada y seguros pre-pagos
4. Otros (especificar)
8. NS/NC

P78. ¿Cuán satisfecho está Ud. con los servicios de salud que recibe? _____

1. Muy satisfecho
2. Satisfecho
3. Ni satisfecho ni insatisfecho
4. Insatisfecho
5. Muy insatisfecho
8. NS/NC

P79. ¿Y cuán satisfecho está Ud. con las siguientes dimensiones (UTILIZAR EL MISMO CODIGO)

A. Le demostró que Ud. es importante para él, a pesar de estar en desacuerdo.	___
B. Discutió tranquilamente	___
C. Estuvo de acuerdo en probar una solución que usted propuso	___
D. Se fue de la habitación mientras discutían	___
E. Tiró, rompió, pateó algo o golpeó la pared	___
F. Rompió algo suyo	___
G. Se río de su físico para insultarla	___
H. Le gritó	___
I. La insultó	___
J. La amenazó con ser infiel por negarse a tener relaciones con él	___
K. Insistió en tener relaciones sexuales, a pesar que Ud. no quería, sin utilizar la fuerza	___
L. La amenazó para que tuviera relaciones sexuales y utilizó la fuerza para obligarla a tenerlas	___
M. La agarró con fuerza, empujó o tironeó	___
N. Le dobló el brazo, le tiró el pelo o le pegó una cachetada	___
O. La pateó o le pegó	___
P. Le tiró con algo que pudo haberle hecho daño	___
Q. La quemó a propósito	___
R. Intentó estrangularla	___
S. Utilizó un arma contra Ud. (cuchillo o pistola)	___

P73. Pensando en el último año de relación de pareja en que han habido agresiones ¿cuántas veces llamó usted o fue a la policía para resolver situaciones de agresión?

1. 1 vez
2. A veces
3. Frecuentemente
4. Muy frecuentemente
5. Nunca (**SIGUE P76**)
8. NS/NC (**SIGUE P76**)

P74. (SOLO PARA 1 A 4) ¿Dónde realizó la denuncia policial?

1. Comisaría de la Mujer
2. Comisaría del barrio
3. Llamó al 911
8. Otras especificar _____

P75. ¿Recordando la o las veces en que usted ha recurrido a la policía para resolver las situaciones de violencia que vivió. ¿En general, usted podría indicarme cuán útil le resultó solicitar esta ayuda?

1. Muy útil
2. Útil
3. Poco útil
4. Inútil
5. Fue peor
8. NS/NC

TRANSPARENCIA

P86. ¿Y cómo califica la transparencia de la Intendencia de Montevideo (ACLARAR QUE **TRANSPARENCIA** SE REFIERE AL GRADO EN QUE EL PÚBLICO PUEDE ACCEDER A LA INFORMACION DE LA INTENDENCIA)

1. Muy buena
2. Buena
3. Ni buena ni mala
4. Mala
5. Muy mala
8. NS/NC

1. Infraestructura del centro médico donde se atiende _____
2. Calidad de la atención médica _____
3. Disponibilidad de médicos _____
4. Costo del servicio de atención _____

P80. ¿Ud. dispone de algún servicio de emergencia médico-móvil privado?

1. Tiene servicio de emergencia
2. No tiene servicio de emergencia (**SIGUE P82**)
8. NS/NC (**SIGUE P82**)

P81. (PARA SI) ¿Cuán satisfecho está Ud. con los servicios de su servicio de emergencia?

1. Muy satisfecho
2. Satisfecho
3. Ni satisfecho ni insatisfecho
4. Insatisfecho
5. Muy insatisfecho
8. NS/NC

GESTION PÚBLICA PARTICIPATIVA

P82. (PARA TODOS) ¿Ud. siente que tiene muchas, algunas, o que no tiene posibilidades de participar de las decisiones de la Intendencia Departamental de Montevideo?

1. Muchas posibilidades
2. Algunas posibilidades
3. No tiene posibilidades
8. NS/NC

P83. ¿Ha escuchado Ud. hablar del Presupuesto Participativo?

1. Sí
2. No (**SIGUE P86**)
8. NS/NC (**SIGUE P86**)

P84. (PARA SÍ EN P83) ¿Ha participado alguna vez?

1. Sí (**SIGUE P86**)
2. No
8. NS/NC

P85. (PARA NO EN P84) ¿Y por qué motivos Ud. no participó? (NO LEER OPCIONES) **RM**

1. Falta de tiempo	___
2. No te escuchan	___
3. No le interesa	___
4. No tiene propuestas	___
5. No es útil	___
6. No sabe cómo hacerlo	___
7. No tiene costumbre de participar	___
8. No se enteró cuando lo hicieron	___
9. Otras (especificar) _____	___
98. NS/NC	___

VARIABLES BÁSICAS

EDAD. Para finalizar, le haré unas preguntas a efectos de clasificar a los encuestados:

EDAD [*VB_Edad*] Anotar ___ años

SEXO. Anotar SEXO [*VB_Sexo*]

1. Hombre
2. Mujer

EDUCA. Nivel educativo del entrevistado.

¿Cuál es el máximo nivel educativo alcanzado por Ud.?

GESTION PÚBLICA MODERNA

P87. ¿Cómo califica Ud. los servicios e información que la Intendencia presta en su página web?

1. Muy buenos
2. Buenos
3. Ni buenos ni malos
4. Malos
5. Muy malos
6. No conoce la Web
8. NS/NC

PESO INTERSECTORIAL

P88. Pensando en los problemas que Ud. tiene hoy en día en términos de su calidad de vida, ¿en qué grado le afectan actualmente los siguientes problemas? Utilizando para ello una escala de 0 a 10, donde 0 es "actualmente no es un problema para mí" y 10 es "actualmente es un problema muy grave para mí". puede utilizar además las escalas intermedias.

(LEER TARJETA 1 (ROTANDO TARJETAS A, B C, D Y E) Y MOSTRAR TARJETA 2)

A. Problemas con el servicio de agua potable	___
B. Problemas con el servicio de saneamiento	___
C. Problemas con el servicio de recolección de residuos	___
D. Problemas de disponibilidad de energía eléctrica y gas	___
E. Problemas de calidad del aire	___
F. Problemas relacionados con el cambio climático	___
G. Problemas por ruidos molestos	___
H. Problemas ante temporales o lluvias muy fuertes	___
I. Escasez de espacios públicos disponibles	___
J. Ingresos insuficientes para cubrir gastos de alimentos, vivienda y transporte	___
K. Problemas de calidad de su vivienda	___
L. Problemas con el transporte público	___
M. Problemas derivados del tránsito	___
N. Problemas con el empleo	___
O. Problemas con el servicio telefónico y de internet	___
P. Problemas con los servicios educativos	___
Q. Problemas de seguridad ciudadana	___
R. Problemas con los servicios de salud	___
S. Falta de participación en las decisiones del gobierno departamental	___
T. Dificultades para hacer trámites con la Intendencia por Internet	___
U. Falta de transparencia del gobierno departamental	___

P89. Y de estas cosas que le mencioné (ENTREGAR TARJETA 1 ROTADAS A, B, C, D, E) ¿cuáles diría que son las que más afectan su calidad de vida actualmente? ¿En segundo lugar? ¿En tercer lugar? ¿En cuarto lugar? (ENCUESTADOR: INSISTIR HASTA CUATRO)

1. _____
2. _____
3. _____
4. _____

JUEGO DE TARJETA UTILIZADO _____

ENCUESTADOR: SOLO TOMAR EN CUENTA AÑOS APROBADOS. Ejemplo: Si cursó 1° de liceo pero no lo termino, codificar 2.Primaria completa

1. Primaria incompleta o menos
2. Primaria completa (6° año aprobado)
3. Hasta 3 años de Secundaria (1°, 2° o 3° aprobados)
4. Segundo ciclo de Secundaria incompleta (4° o 5° aprobado)
5. Secundaria Completa (6° año aprobado)
6. UTU nivel secundario incompleto
7. UTU nivel secundario completo
8. UTU nivel terciario incompleto
9. UTU nivel terciario completo
10. Magisterio-Profesorado / Terciaria incompleta
11. Magisterio-Profesorado / Terciaria completa
12. Universidad incompleta
13. Universidad completa
14. Post grado

EDU1. Total de años de instrucción aprobados del entrevistado ¿Contando desde 1° de escuela en adelante, cuántos años de educación formal aprobados tiene?

ENCUESTADOR: POR EJEMPLO, SI LA PERSONA APROBÓ 3° DE LICEO, ANOTAR 9 AÑOS DE INSTRUCCIÓN APROBADOS.

(ANOTAR en años) _____

NSE2. ¿En su hogar hay alguna persona que haya realizado o realice estudios universitarios?

1. Sí
2. No
3. NS/NC

NSE1A. Ocupación del jefe de familia (en caso de duda, de la persona que es el que aporta el mayor ingreso al hogar)

¿Me podría describir con máximo detalle cual es la ocupación del jefe de familia? Por favor dígame ¿cuál es su tarea y su cargo? ¿Tiene personal a cargo? ¿Cuántos?

SI ES DESOCUPADO O JUBILADO PREGUNTAR POR OCUPACION ANTERIOR Y MARCARLA. ESPONTANEO ANOTAR TODO CON MÁXIMO DETALLE

ENCUESTADOR CODIFIQUE LA OCUPACION

NSE1B. OCUPACIÓN DEL JEFE DE FAMILIA ¿Cuál es la ocupación del Jefe de Familia? (en caso de duda, de la persona que es el que aporta el mayor ingreso al hogar)

SI ES DESOCUPADO O JUBILADO PREGUNTAR POR OCUPACION ANTERIOR Y MARCARLA. SOLO DEBE MARCARSE LA OPCION DESOCUPADO SI LA PERSONA NUNCA TRABAJÓ

1. No trabaja, rentas de otras personas
2. Pensionista
3. Desocupado, nunca trabajó (SOLO DEBE MARCARSE ESTA OPCION SI LA PERSONA NUNCA TRABAJÓ)
4. Changas/ cuenta propia sin inversión/ empleada doméstica / trabajador manual no especializado del sector privado / no trabaja renta de sus negocios
5. Cuenta propia con inversión / trabajador manual especializado / trabajador manual no especializado público
6. Cuenta propia técnico profesional no universitario (trabajadores independientes con empresa propia que hayan estudiado, maestros o profesores) / administrativo (o vendedor)
7. Patrón con personal a cargo
8. Profesional universitario / gerente / directivo
98. Ns/Nc

NSE3. ¿Cuántas personas perciben (tienen) ingresos en su hogar?

1. Un perceptor
2. Dos perceptores
3. Tres perceptores
4. Más de tres perceptores
8. No sabe (no leer)
9. No contesta (no leer) _____

NSE4. ¿Tiene servicio doméstico en su hogar (con o sin cama)?

1. Sí
2. No
8. NS/NC _____

NSE5A. ¿El hogar tiene heladera con freezer?

1. No tiene
2. Tiene
8. No sabe
9. No contesta _____

NSE5B. ¿El hogar tiene TV Color?

1. No tiene
2. Una
3. Dos
4. Mas de dos
8. No sabe
9. No contesta _____

NSE5C. ¿El hogar tiene Automóvil?

1. No tiene
2. Uno
3. Más de uno
8. No sabe
9. No contesta _____

NSE6. ¿Son usuarios de alguna tarjeta de crédito internacional?

1. No tiene
2. Tiene una
3. Tiene más de una
8. No sabe
9. No contesta _____

NSE7. ¿Qué cantidad de baños hay en su vivienda?

1. Uno o ninguno
2. Dos
3. Más de dos
8. No sabe
9. No contesta _____

<p>SOLO A EFECTOS DE QUE PUEDAN SUPERVISAR MI TRABAJO, ME PODRIA DAR SU: NOMBRE PILA ENTREVISTADO: _____ DIRECCION: _____ APTO: _____ TELÉFONO: _____ Nº ENCUESTADOR: _____ Firma: _____ CODIFICADOR: _____ OBSERVACIONES: _____ Declaro que esta entrevista se realizó siguiendo todas las instrucciones impartidas por la empresa contratante.</p>

REGISTRAR EL REGIÓN EN QUE VIVE (No se pregunta, se codifica utilizando la información del mapa)

1. Casavalle
2. Costa
3. Intermedia
4. Pantanoso
5. Periferia
6. Punta Rieles _____

Annex 5c

Economic Evaluation of Santa Ana

Name: Date:

Position:

Organization:

Part 1

In order of importance, what are the most important sectors in the city's economy at this time and which have a high potential for promoting local development? What are the main barriers to growth in these sectors?

1) Sector:

Barriers:

2) Sector:

Barriers:

3) Sector:.....

Barriers:

4) Sector:

Barriers:

5) Sector:.....

Barriers:

Comments:

Part 2

Instructions: please assign a number between 1 and 5 to each of the following areas based on its importance in the economic development of Santa Ana city, with 5 as the score for areas which most limit economic growth at present (or which, if they do not improve, will be the main barriers to future growth); and 1, the score for areas that have no impact on the city's economic growth. Take into account the economic sectors that are most important or have most potential for the city.

	Number	Comments
A. Water and its infrastructure (management)		
B. Energy (management and use)		
C. Energy efficiency (especially in industrial production), alternative sources of energy, and related technological improvements		
D. Wastewater (management and treatment)		
E. Solid waste (its management, maximization of potential)		
F. Air quality		
G. Greenhouse gas effect (monitoring and mitigation)		
H. Noise pollution		
I. Natural disasters (preparation, reduction of vulnerability and climate change adaptation plans)		
J. Management of urban growth, urban footprint and impact on the environment		
K. Centrality, land use and density promoted by cities, communities, and compact and complete barrios		
L. Urban inequality		

	Number	Comments
M. Transport (especially cleanliness, safety, and efficiency of modes that minimize impact on the environment)		
N. Diversification and competitiveness of the economic base		
O. Support for local businesses and integration of informal sectors		
P. Social and ecological responsibility in industrial production		
Q. Connectivity (for example, Internet, cell phones)		
R. Education		
S. Security		
T. Health		
U. Transparency and audit of the local government		
V. Financial and administrative autonomy of the local government (from the national and/or departmental governments)		
W. Management of local public expenditure		
X. Efficient management of local government debt		

Anexo 5d

The most outstanding sectors (in order of importance) were retail trade, tourism, industry and the coffee sector. The main barriers mentioned for retail trade were: insecurity, disorderly growth, low investment and scarcity of finance, high taxes, high cost of energy, deficient infrastructure and weak purchasing power of the population. The barriers mentioned in the case of tourism were: lack of support and promotion of the sector (and absence of strategic plans for its development), insecurity, lack of investment and noise. The main barriers mentioned for industry were: high cost of energy, absence of tax incentives/high taxes, lack of coordination and cooperation, and absence of credit/sources of investment. Barriers to growth in the coffee sector were lack of support from government bodies in terms of tax incentives and logistical support, lack of investment, and delinquency.

Overall, according to the survey, the main barriers to the economic development of the city of Santa Ana are (in order of importance): (1) insecurity; (2) management of growth; (3) support for local businesses and integration of informal sectors; (4) land use; (5) diversification and competitiveness of the economic base; (6) energy (especially the cost) ; (7 & 8) transport; (9) quality of public spending; (10 & 11) vulnerability to natural disasters; (13) health; (14) education; and (15) generation of funds to finance local government projects.

PART I	Rank		PART II	Rank		Composite Index	Rank	
	Index	P.I		Index	P.II			Parts I & II
A. Water supply and infrastructure management	175.7	12	A. Water and its infrastructure (its management)	77.85%	27.4	17	34.9	16
B. Management and use of energy	501.1	6	B. Energy (its management and use)	78.54%	29.4	15	50.8	6
C. Energy efficiency (especially in industrial production), alternative sources of energy, related technological improvements	366.7	7	C. Energy efficiency (especially in industrial production), alternative energy sources, and related technological improvements	73.62%	15.2	29	30.9	20
D. Wastewater management and treatment	33.0	1.4	D. Waste water (its management and treatment)	78.62%	29.6	12	31.0	19
E. Solid waste management and maximization of its potential	19.8	0.8	E. Solid waste management, maximization of its potential)	77.46%	26.3	22	27.1	25
F. Air quality	19.8	0.8	F. Air quality	71.45%	9.0	30	9.8	32
G. Monitoring and mitigation of greenhouse gases	0.0	0.0	G. Greenhouse gas effect (monitoring and mitigation)	70.42%	6.0	34	6.0	34
H. Monitoring, regulation and effective control of noise pollution	108.5	4.6	H. Noise pollution	70.63%	6.6	33	11.2	31
I. Reduction of vulnerability to natural disasters	19.8	0.8	I. Reduction of vulnerability to natural disasters	81.18%	37.0	5	37.8	10
J. Preparation to respond to natural disasters	0.0	0.0	J. Preparation to respond to natural disasters	81.18%	37.0	5	37.0	11
K. Plans for climate change adaptation and disaster risk management	0.0	0.0	K. Plans for climate change adaptation and disaster risk management	81.18%	37.0	5	37.0	11
L. Growth management, urban footprint and environmental impact	652.3	27.9	L. Management of urban growth, urban footprint and environmental impact	85.69%	50.0	1	77.9	2

(continued on next page)

(continued)

PART I	Index	Rank P.I	PART II		Index	Rank P.II	Composite Index		
			Index	Rank			Parts I & II	Rank	
M. Land use and density promoted by a city , communities, and compact and complete barrios	652.2	4	27.9	4	82.46%	40.7	4	68.6	4
N. Reduction of urban inequality	100.0	16	4.3	16	76.04%	22.2	28	26.5	26
O. Public transport (solutions for mobility which minimize environmental impact)	241.6	10	10.3	10	79.93%	33.4	8	43.7	8
P. Mobility (cleanliness, safety and efficiency of transport, especially non-motorized)	265.0	9	11.3	9	79.93%	33.4	8	44.7	7
Q. Diversification and competitiveness of the economic base	1053.1	2	45.0	2	71.11%	8.0	32	53.0	5
R. Support for local businesses and integration of informal sectors	638.7	5	27.3	5	84.65%	47.0	3	74.3	3
S. Social and ecological responsibility in industrial production	46.5	20	2.0	20	78.33%	28.8	16	30.8	21
T. Connectivity (Internet, cell phones)	100.0	16	4.3	16	68.33%	0.0	35	4.3	35
U. Education	133.4	14	5.7	14	78.68%	29.8	11	35.5	14
V. Security	1169.3	1	50.0	1	84.86%	47.6	2	97.6	1
W. Health	59.3	19	2.5	19	79.86%	33.2	10	35.7	13
X. Use of participative planning processes	163.3	13	7.0	13	77.01%	25.0	23	32.0	17

(continued on next page)

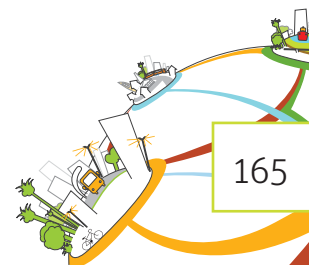
(continued)

PART I	Index	Rank P.I	PART II		Index	Rank P.II	Composite Index Parts I & II	Rank
			Index	Rank				
Y. Transparency (of local government)	10.4	0.4	27	U. Transparency and audit of local government	25.0	23	25.4	28
Z. Audit of local government	10.4	0.4	27	U. Transparency and audit of local government	25.0	23	25.4	28
AA. Modern public management practices	14.6	0.6	26	U. Transparency and audit of local government	25.0	23	25.6	27
AB. Financial and administrative autonomy of the local government (from national and/or departmental government)	10.4	0.4	27	V. Financial and administrative autonomy of local government (from national and/or departmental government)	8.2	31	8.6	33
AC. Tax base of local government	20.7	0.9	22	W. Management of local public expenditure	27.4	17	28.3	24
AD. Generation of funds (from various sources) for financing local government projects	187.8	8.0	11	W. Management of local public expenditure	27.4	17	35.4	15
AE. Management by results (of local government)	100.0	4.3	16	W. Management of local public expenditure	27.4	17	31.7	18
AF. Quality of public expenditure	349.9	15.0	8	W. Management of local public expenditure	27.4	17	42.4	9
AG. Implementation of modern management practices in public agencies	0.0	0.0	30	U. Transparency and audit of local government	25.0	23	25.0	30
AH. Efficient management of debt contracted by local government	0.0	0.0	30	X. Efficient management of local government debt	29.6	12	29.6	22
AI. Preparation and identification, by local government, of its contingent liabilities	0.0	0.0	30	X. Efficient management of local government debt	29.6	12	29.6	22

Phase 4 – General Guidelines Development of The Action Plan

The plan as such has to be easy to follow, a clear roadmap that can be explained and shared with the general public. A good action plan must contain the following requirements:

- Define its aims: how will one know if the action plan has been successful? How will things be different?
- Assign leadership, management and responsibilities: who should deliver each activity and/or activities day to day? Who will be responsible for implementing the plan?
- Identify relevant activities and the delivery chain; what activities will be improved, eliminated or introduced? What actions will be taken in each part of the activities chain?
- Set a trajectory for implementation: what are the key milestones? What is the general timetable?
- Detail how to track performance: what indicators or sub-indicators need to be monitored to determine if the action plan is being implemented as planned? How?
- Include comparison with established standards: what standards relevant to the plan already exist? What means will be used to share its best practices on a regular basis?
- Describe the resources and support required: what resources are necessary for the success of the plan? If they are not currently available, how will they be obtained?
- Prepare to manage stakeholders and users: who are the important stakeholders? How will the team interact with them and how will these relations be managed effectively?
- Anticipate and prepare for the risks: what risks and limitations could divert the course of the work, and how will they be managed?



The next table highlights some of the difficulties commonly found in implementation planning along with some actions the teams can take to prevent problems.

Table A6.1. Common difficulties in planning actions –and how to avoid them

Action	Common difficulties	How to avoid them
Convert the recommended strategy into an action plan with specific periods for each step.	<ul style="list-style-type: none"> • Not involving all the relevant actors in the planning • Setting deadlines that are too aggressive and unrealistic 	<ul style="list-style-type: none"> • Involve all relevant agencies in the decision process, update them regularly • Evaluate the capabilities for ensuring setting of realistic deadlines.
Define the success for the project in general and for the individual steps, and identify a clear unit for its measurement.	<ul style="list-style-type: none"> • Lack of agreement on a key metric. 	<ul style="list-style-type: none"> • Investigate the most relevant metric for measuring the success of the project: private sector or academia must have developed an approximation
Assign clearly defined responsibilities to government agencies for components.	<ul style="list-style-type: none"> • Roles/functions not adequately defined. • Assign multiple agencies to the same task, without clearly defining division of responsibilities. 	<ul style="list-style-type: none"> • Involve the relevant actors (leaders and experts) in defining roles/ functions and responsibilities (e.g. through workshops).
How to avoid them. Ensure that there is defined accountability for the individual agencies.	<ul style="list-style-type: none"> • Not aligning employees' incentives with the new tasks • Not communicating management's commitment to the success of the effort. 	<ul style="list-style-type: none"> • Investigate the most appropriate incentive schemes • Ensure that management communicates the importance of the project
Establish a continuous evaluation mechanism/ corrective actions.	<ul style="list-style-type: none"> • Establishing a monitoring agency/ mechanism with insufficient authority to ensure compliance by the agencies 	<ul style="list-style-type: none"> • Establish a monitoring agency with well defined authority and inform all actors

Establish the possibility of integrating the proposed initiatives with the Bank country strategy, and align with local counterparties

The success of the process results from the viability of each strategy or proposed action. It is necessary to investigate possible sources of financing in the country, multiple donors, bilateral sources, the private sector, etc.

One possible source of finance is IDB. To find out if this is feasible, the selected initiatives have to be integrated into the Bank country strategy in order to find the opportunities that already exist, or program future financing actions in line with the strategy. This integration results from

talks between the country and the Bank, which must cover identification of the human and financial resources required (e.g., who is the IDB leader for each solution prioritized and what IDB resources can be assigned?). The proposed actions will need official approval from the counterparties in the countries or executing agencies (e.g. ministry of Finance, waterworks), in the case of ongoing operations.

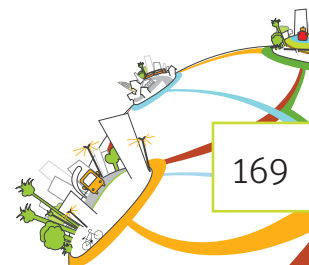
This exercise must be extended to other possible sources of financing for which it is essential to use the coordination mechanisms existing between each country's donors.



Proposal for Implementation of Monitoring Systems

Implementation (step by step)

- a. *Institutional mapping to identify potential partners.* This mapping begins with the mission of starting up and identifying the interested parties who plan to use the ESC methodology, and will work in parallel with the process of preparing the system.
- b. *Construct baseline of technical outcome indicators and perception indicators.* This is done as part of the application of ESC methodology, which establishes indicators as part of the system, collects the information needed for their measurement, and obtains the respective baseline.
- c. *Consultation with management and stakeholders on the scope of the monitoring system.* Action is taken to coordinate the spaces needed to establish the importance and/or need to include topics in addition to the ESC Initiative topics in the system, and to construct the indicators and baseline for the additional topics.
- d. *Actions of the contributors partnership.* The partnership acts in parallel with the technical preparation of the system, following the criteria defined for formation of the group.
- e. *Formalization of the partnership.* An agreement is signed between the contributor partners which defines the technical and financial obligations of each, and how to guarantee functionality and compliance with the objectives.
- f. *Contracting the coordinating unit.* After the partnership is formalized and the management and technical committees set up, interested parties are invited to present proposals for contracting the coordinating unit team and purchasing the equipment needed to implement the monitoring system. The selection is made by the technical committee and approved by the steering committee.



- g. *Monitoring report on the action plan.* Management generates a report on the progress made in implementing the actions defined in the action plan, which the system processes. The changes in the city's sustainability generated by that progress are analyzed and identified.
- h. *First report on monitoring sustainability in the city.* The information collected from the monitoring report on the action plan for sustainability, and from the technical indicators of outcome, those associated with climate change mitigation and adaptation, and the perception indicators, will be the basis for analyzing the case, with the support of the group of experts, resulting in the issue of the first monitoring report. These reports are expected to be issued at least semiannually.¹
- i. *Socialization and dissemination of results of the monitoring exercise.* The work of socialization and dissemination is the responsibility of the coordinating unit, and part of the communications strategy defined by the technical and executive committees.

Budget

According to the reference values used in the “Bogota, Como Vamos” program, the average annual cost of a program of this type ranges from US\$150,000 to US\$250,000, according to the size of the city and the depth of tasks undertaken. These are the funds needed to guarantee the functioning of the coordinating unit, implementation and analysis of the perception survey, communications, distribution and administration. (See Table A7.1.)

Figure A7. 1 shows the proposed operating structure for the system.

¹ Although the monitoring reports will be semiannual, the perception survey will be applied annually.

Table A7.1. Budget for implementing a program similar to “Bogotá, How are we doing?”

Item	Estimated budget (US\$)
Coordinating unit	84,000
Analysis (survey, forums, working group)	36,000
Publicity/dissemination	20,000
Management and logistics	60,000
Estimated total – average budget	207,000

- Internal monitoring of management of the action plan.** The action plan for the city’s sustainability is monitored by the person appointed by the mayor, who will issue regular reports on the progress of the actions defined in the action plan so the information can be included in the analysis and monitoring reports on the entire system.

Figure A7.1. Operating structure



- Steering Committee.** This consists of a manager from each member entity. Its main function is planning and taking decisions on the operation of the system. The committee, which meets at least four times a year, also reviews the results of monitoring by the system.
- Technical Committee.** This consists of high-level technical representatives of the member entities, whose role is to accompany the technical processes and dissemination of monitoring results. They meet every two months.
- Coordinating unit.** Formed by a coordinator, a technical assistant and operational assistant. Its main responsibilities are to design and implement action plans approved by the committees, analyze the information obtained to prepare the monitoring reports, lead the working groups and technical discussions, and disseminate to the system.

- **Expert group.** This panel is composed of specialists in the dimensions of the platform who analyze the data and the changes identified over time, as well as holding discussions on topics of interest.

It is also important for the system to identify and liaise with national and regional monitoring networks to continue efforts to achieve the required standardization and comparability.

Partner profiles

Contributor partners to the system must meet the following criteria:

- The group of partners should be complementary in their activities and interests; the group should include the participation of at least one media outlet, a sectoral association and/or company, a representative of academia and/or nonprofit nongovernmental organizations (NGOs). The group must have at least three representatives from the sectors described.
- Representatives of civil society from the city evaluated.
- Socially and politically recognized for their contributions to the development of the city, preferably in relation to sustainability topics, and have credibility in the sector they represent and among citizens.
- Have capacity for dialogue and influence in local government.
- Have the technical and financial capacity to ensure the sustainability of the system in the short and medium term.
- Politically neutral.
- Economically independent of the public administration and not suppliers or contractors to the State.



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