

Climate & Clean Air Coalition to Reduce Short-Lived Climate Pollutants
Municipal Solid Waste Initiative

Primer for Cities for Accessing Financing for Municipal Solid Waste Projects

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Commissioned by



Preface:

The purpose of this primer is to guide municipal government decision-makers in their efforts to access financing for capital-intensive, revenue-generating, climate-sensitive projects.

As more power over municipal solid waste management is devolved from national to sub-national authorities, cities are enjoying increasing autonomy in selecting the most appropriate mechanism for addressing their sanitation needs; simultaneously, they are also facing the challenge of limited financial resources to meet both operational and long-term investment needs.

The Climate & Clean Air Coalition's Municipal Solid Waste Initiative commissioned this primer, via the International Solid Waste Association, to identify the universal challenges that city leaders face in accessing finance for investment projects and propose implementable solutions that fit within the Coalition's objectives:

- Raising awareness of short-lived climate pollutant impacts and mitigation strategies
- Enhancing and developing new national and regional actions, including by identifying and overcoming barriers, increasing capacity, and mobilizing support
- Promoting best practices and showcasing successful efforts
- Improving scientific understanding of short-lived climate pollutant impacts and mitigation strategies

Because of its brevity, this primer is not intended to provide recommendations on the most appropriate technology for municipal solid waste management as this information is available in other publications from the Coalition and its peers. Similarly, this primer is built upon the assumption that cities are committed to designing projects that will be financed through some form of market-based finance, where the investing entities expect long-term economic project sustainability.

This publication is intended to be a snapshot of the opportunities for financial innovation at the end of 2016 but with regular updates of its appendices on particular funding opportunities on a semi-annual basis.

Identifying Challenges for Municipalities

Based on an analysis of the financing needs for the delivery of solid waste management projects in primary and secondary cities in developing countries, the primary challenges can be lumped into the following broad categories:

- 1) Pinpointing the status of a project's development along a larger project delivery continuum
- 2) Articulating, in outcome-based language, the financial feasibility of a program, regardless of the financing mechanism
- 3) Accessing finance from charitable foundations, donors and other aid agencies to develop projects and demonstrate financial feasibility
- 4) Establishing creditworthiness, financial responsibility, and integrity of municipality as a lead agency (regardless of intended status as borrower or partner in a public-private partnership)
- 5) Understanding instruments and tools available for cities seeking to finance municipal solid waste management initiatives



Understanding the Finance Road Map

The finance road map is intended to be followed sequentially, not simultaneously, as certain elements will naturally follow one another. As an example, feasibility studies are recommended to follow, rather than precede, creditworthiness as it may take time for a city to be viewed as creditworthy and the project's needs and/or available technology may drastically change before full creditworthiness is established.

- **City Assessment** – A systematic process for determining and addressing needs or gaps between existing and desired financial resources for municipal solid waste management, drawing a rough sketch of the financial flows required for project delivery and long-term project maintenance.

A city assessment is traditionally completed by a city, but non-governmental organizations can be approached to provide technical assistance and in-kind financial support. The Coalition has developed a data collection tool for full-scale city assessment (Appendix 1 shows the General tab of the tool¹) that includes several questions about the financial status of the city, including:

- Annual municipal budget
- Annual budget allocated to the solid waste sector
- Annual budget allocated to waste collection and transport
- Solid waste fee collection rate
- Annual revenue from EcoTax
- Annual revenue from carbon credits or other international climate funds
- Total revenue from recycling
- Total revenue from composting
- Total revenue from anaerobic digestion
- Total revenue from landfill operations
- Total revenue from waste-to-energy operations
- Average household income
- Average household income for the city's most vulnerable population
- Preliminary indication of willingness and ability of the city's most vulnerable population to pay for services
- Financial resources for the solid waste sector (solid waste fees, other solid waste revenue, municipal budget allocation, international partners, national government, other sources)
- Municipal surplus/deficit (total revenue – total expenditures) on an annual basis for past 5 years
- Municipal debt service (loans, bonds, etc.) on an annual basis for past 5 years

The city assessment, sometimes known as a pre-feasibility study, will take an average of 8-10 weeks to complete thoroughly from its start date and, without outside financial support, will cost approximately USD 20,000 to 35,000 in direct or in-kind support. Although many of the financial elements can be collected from the city's treasurer or chief financial officer, the city assessment's financial review should also incorporate information on the likely willingness and ability of the city's most vulnerable population to pay for services. As the costs of universal solid waste management should be designed to be spread over the entire population to ensure long-term financial sustainability of a project, large relative percentages in tax increases for low-income households can stifle the political will to execute a project in later stages of the project delivery continuum.

Appendix 2 provides a template for an initial request for financial support from an aid agency interested in supporting cities seeking external assistance for a city assessment, while Appendix 3 identifies potential sources of financial support/in-kind technical assistance to assist cities with the phases of assessment, creditworthiness, feasibility, validation and structuring.

- **City Creditworthiness** – An assessment, often through a standardized methodology conducted by a third-party ratings agency, that transparently demonstrates the likelihood of a city showing both

¹ The complete data collection tool can be downloaded from the Waste Initiative Knowledge Platform (<http://www.waste.ccacoalition.org/document/data-collection-tool-full-version>)

a willingness and ability to meet any obligations, whether financial (in the case of borrowing) or contractual (in the case of a partnership with the private sector).

The length of time for demonstrations of creditworthiness can vary significantly based on the initial starting point for cities. Well-prepared cities can commission ratings immediately following the end of the city assessment (if no ratings already exist) while other cities may take more than six months to feel ready for the financial assessments and quantitative reviews that constitute the majority of the data collected during a third-party credit rating. The cost of a credit rating can vary significantly, from USD 30,000 for a confidential (shadow, or non-published) rating by a domestic rating agency to USD 75,000 for a public rating from an international rating agency; cities can seek financial support to underwrite the costs of either the credit rating itself or technical assistance for rating preparation from charitable foundations/aid agencies. Some cities have found it helpful to participate in the World Bank's Creditworthiness Academies to learn more about how to best prepare for a credit rating.

In addition to the information collected in the assessment, credit ratings will specifically focus on:

- Billing ratio
- Collection ratio
- Debtor days above certain thresholds
- Operating profit
- Operating cost coverage ratio
- Average tariff differential
- Cash reserves
- Liquidity ratio
- Debt service coverage ratio
- Operating expenditure grant dependency
- Bad debt cash provision

Appendix 4 includes a recent credit rating for the City of Dakar (Senegal) conducted by a local ratings agency. A recent credit rating for Mexico City (Mexico) conducted by an international ratings agency can be accessed at http://www.fitchratings.mx/ArchivosHTML/Com_14917.pdf

- **Financial Feasibility Study** – Conducted alongside of the technical feasibility study, an examination of the economic viability and practicality of the proposed project, aiming to objectively and rationally uncover the strengths and weaknesses of the proposed project, external opportunities and threats to the successful execution of the project, the resources required to deliver and maintain the venture (both capital and operating expenditures), the prospects for success, and the environmental/social/governance impacts and trade-offs from a financial perspective.

A financial feasibility study represents the pathway forward for the financial execution of new methodologies of solid waste management in cities. During this phase of the project delivery continuum, advisors will work with city officials to review the information collected during the assessment and creditworthiness phases to select the most appropriate financial structure (see below) to ensure the most efficient and cost-effective strategy for the city. Provided that the information from the earlier phases is comprehensive and transparent, and that the financial feasibility team works closely with the technical feasibility team, the financial feasibility should

take approximately 4-6 months. Depending on the size, scope and complexity of the project, the financial feasibility usually represents 2-4% of the total project cost; cities typically apply for financial assistance to complete feasibility studies from charitable organizations or aid agencies.

Appendix 5 provides a template for cities seeking financing for a feasibility study grant from a charitable foundation.

- **Validation** – An acknowledgement from the municipal council and other key decision-makers that the project is desired as set forward in the feasibility studies and that the city understands the likely form of financing (whether through a direct borrow by the city or one of its city-owned corporations or through a partnership with the private sector).

Appendix 6 suggests a template for a resolution by a city's municipal council of its support for further work on the project.

- **Financial Structure** – The selection and structuring of the transaction, either through the arrangement of financing with the assistance of an originator capable of arranging the financing (in the case of a direct borrow) or through the preparation of financial information and expectations of project cash flows and budget for project delivery in the form of a set of bid documents for review by private sector partners.

The length of time for project structuring is highly variable and depends on the method of financing selected; based on the comprehensiveness of the feasibility studies, it can run on average from 3 to 9 months. Project structuring costs are highly variable as well; a public-private partnership's negotiations can be predominantly executed in-house with a minimal amount of external technical assistance from experienced advisors whose costs are covered through support from donor agencies to fees as high as 5% of the total project costs for the fees associated with the launch of a municipal bond.

During this phase, in instances where financing is through borrowing from either financial institutions in the form of loans or from the capital markets in the form of bonds, cities may choose to engage with public or private entities who can provide guarantees as external credit enhancements. These enhancements, often coupled with sinking and/or reserve funds, can often positively impact the attractiveness of the pending transaction for sources of capital concerned about the risk of repayment.

As there are multiple ways to structure a project, two good resources for cities to further consult in the decision-making process are: The New Cities' Foundation's [Handbook on Urban Infrastructure Finance](#) and The World Bank's [Municipal Finances: A Handbook for Local Governments](#).

- **Financial Close** – The final step on the financing road map before project delivery, marked by either the successful transfer of funds from sources of capital to the city/city-owned corporation or through the conclusion of negotiation with private sector partners in a public-private partnership.

There are many different financial institutions and individual retail investors who are prepared to finance municipal solid waste initiatives. Appendix 7 includes a list of some of the largest investors who have helped cities to reach their capital goals for long-term investment projects.

Placing the City on the Finance Road Map

As it is often difficult for city leaders to identify their location on the finance road map, the attached decision tree (Appendix 8) can be a helpful resource. By answering the questions honestly, cities will be able to clearly determine their positioning and what external technical assistance may be needed. Questions broadly follow the phases of the finance road map, and are intended to help the cities to develop a path forward on the project delivery continuum.

Selecting the Financing Instruments

When municipalities are seeking to finance capital investments that exceed their budgets, they can look to (1) structure loans through institutional lenders, whether developmental (concessionary, or below-market) or private (at-market), (2) issue bonds in the capital markets, or (3) negotiate terms with a private-sector partner.

Loans

Loans are bilateral financial instruments between the borrower (the city) and the lender (the financial institution) that specifies a fixed rate of repayment over a certain period of time. Due to the straightforward nature of a two-party relationship, cities often choose to structure loans with development finance institutions as a mechanism for meeting their financing needs. Some countries have structured municipal development funds to finance projects at the sub-national level – for provinces, states, and cities – and offer funds at concessionary rates.

Bonds

A bond is a financial obligation that represents a promise by the issuer (the city) to pay back the bondholder (institutions or individuals) the principal and interest at specified intervals. Cities can issue either general-obligation (GO) or revenue-generating (RG) bonds; the key difference between these two types of instruments is that GO bonds are not tied to a specific financial source and are backed by the full faith and credit of the municipality whereas RG bonds are linked to the specific revenues of the project funded by the proceeds of the bond issuance.

Public-Private Partnerships

One of the preferred methods of financing capital-intensive projects is through an engagement with the private sector known as a public-private partnership (PPP) as it relies heavily on outsourcing many of the financial constraints of project delivery to private entities, who often have more extensive knowledge of best practices of private funding and/or expertise. PPPs can include a wide range of options from service contracts to concessions to outright sale or divestiture.

The following table summarizes the financial instruments for project capitalization included the time needed to structure, the time and cost to execute, advantages and disadvantages for each financial instrument.

| Summarizing Financial Instruments for Project Capitalization | | | | |
|--|--|--|---|---|
| <i>Instrument Type</i> | <i>Time to Structure</i> | <i>Time to Execute</i> | <i>Cost to Execute</i> | <i>Advantages/ Disadvantages</i> |
| <i>Grant</i> | Long | Short | Nominal (can be accomplished using city internal resources) | + No-cost money + Flexibility - Very difficult to obtain |
| <i>Loan</i> | Medium (can be expedited, particularly in cases where finance is through a municipal development fund) | Medium (can be expedited, particularly in cases where finance is through a municipal development fund) | Medium | + Structured with one other party, which makes it easier to negotiate + Concessionary loans relatively less expensive than bonds + Origination is less expensive than with bonds - Potential mismatch the useful life of the project, which means that debt service may be relatively more expensive |
| <i>Bond</i> | Long | Long | Expensive | + Less expensive than market-rate loans + Most likely debt tool for cities that are not eligible for concessionary-rate finance - More expensive to originate than loans |
| <i>Outsourced (PPP)</i> | Medium | Medium | Medium | + Out-sourced responsibilities for structuring of many aspects of financing - Potential difficulties in execution and ongoing maintenance/operations |

Municipal leaders should be cognizant of the challenges associated with PPPs; some cities have faced ongoing difficulty due to:

- Vague terms in the contracts negotiated prior to project inception, which can lead to additional municipal solid waste operational costs for the city
- Inabilities of cities to generate sufficient waste to meet private sector contract expectations either due to increased citizen awareness on the need to segregate or fluctuations in waste generation

due to changes in city population, which can lead to increased municipal solid waste costs for the city from penalties

To better understand the financing options, municipal leaders should consider a decision tree laid as found in Appendix 9.

Approaching Facilitators

Facilitators play similar roles to the Coalition’s project implementers, acting as resources for cities and guiding them through the project delivery continuum to achieve financial close. Appendix 3 includes a list of potential facilitators and their contact details.

The Asian Development Bank’s Cities Development Initiative for Asia (CDIA) plays the role of facilitator for the preliminary steps of a project. As an example, in 2013-4, CDIA supported a feasibility study in the Chinese city of Yongzhou, aimed at achieving integrated collection, treatment, and disposal of municipal solid waste in Yongzhou; the project was designed to have significant impact on the city’s objectives of recycling, reduction and proper treatment of municipal solid waste and enhancing the sustainable development of the municipality. The feasibility study ran for approximately 7 months and incorporated both financial and technical solutions. At the end of the project, CDIA continued to provide support by linking the city with investors and other agencies engaged in activities further along the project delivery continuum.

A template for an initial request for technical support from facilitators can be found in Appendix 2.

Approaching Donors and Foundations

Donors, aid agencies and charitable foundations provide either direct or in-kind support for specific activities along the project delivery continuum. Most organizations in this category are motivated by their individual mandates, and it is critically important to tailor any requests to match their targeted areas of intervention; some will be motivated by supporting cities to access finance in developing countries, others by increased services to low-income households and the urban poor, and others by responding to environmental concerns.

The United States Environmental Protection Agency (EPA) funded a feasibility study in the Mexican city of Naucalpan which analyzed potential methods for converting municipal solid waste to energy. The targeted feasibility study, which looked at the project’s technical and financial feasibility, ran for approximately 6 months and provided the basis for the city to engage with other partners to look at the most appropriate financial structuring to execute the project.

A template for an initial request for financial support from donors, aid agencies and foundations can be found in Appendix 5.

Approaching International Development Finance Institutions

International development finance institutions (DFIs) are one of the essential providers of capital for cities seeking finance in developing countries. DFIs are often more attractive to cities because they can offer financing at concessionary (below-market) rates.

In 2015, a consortium of DFIs committed to the financing of a solid waste landfill in the Armenian city of Yerevan that meets international environmental and technical standards and will operate as a commercially sustainable unit with modern solid waste management systems, covering the collection and disposal of municipal solid waste. The €24 million project is co-financed by the European Bank for Reconstruction and Development, the European Investment Bank and the European Union Neighbourhood Facility.

DFIs typically will be interested in engage with a city no earlier than during the financial feasibility study in cases where the sole purpose of the city is to arrange financing, although they may provide grant finance for earlier phases of the project delivery continuum.

Approaching Investors

Investors, whether private or public in nature, are motivated by at least two objectives: financial returns and social impact. To meet their mandates and ensure that there is sufficient finance for new investment opportunities, they will conduct detailed due diligence procedures and prefer to see certain core elements, including:

- 1) Projects that demonstrate sufficient financial sustainability on their own merits and not ones that are tied to expectations of additional revenue from other non-directly related activities (i.e., implicit benefits from reductions in electricity expenditure for a city due to a waste-to-energy facility are difficult to quantify for financial projection purposes);
- 2) Ring-fenced (segregated) revenues to insure that debt service payments can be made on a timely basis and as per contractual obligations set forth in the initial loan/bond documents;
- 3) Long-term master plans that clearly incorporate the proposed project for at least the period of debt service to avoid concerns over repudiation of the debt owed to investors for a demolished project;
- 4) Credit enhancements, in the form of guarantees, reserve funds or sinking funds, to calm fears of municipal creditworthiness

Investors typically will be interested in hearing about projects during the latter part of a financial feasibility study although it is worthwhile to gauge potential investor interest in municipal debt obligations as early as the city creditworthiness phase to learn about their preferences.

Approaching Private Sector Partners

Private sector partners will enter into a public-private partnership with cities that have well-conceived plans that show clearly-defined opportunities. Cities without evidence-based financial and technical feasibility studies, particularly in terms of ongoing operations and maintenance, may find it challenging to negotiate a balanced relationship with private partners.

In 2007, the Municipal Corporation of Delhi and the New Delhi Municipal Corporation decided to implement a 16 mega-watt waste-to-energy project in Okhla and Timarpur in New Delhi, stemming predominantly from continued difficulties faced by urban local bodies of Delhi in disposing and treating solid waste. Following a transparent procurement process, 30 private sector bidders initially responded to the opportunity to build a facility that would be able to treat approximately 2,050 tons of waste, or 1/3 of the total municipal waste generated in Delhi. Of the thirty, four were viewed as qualified on technical parameters and eventually one firm, Jindal Urban Infrastructure Limited, was selected (based on the competitive nature of the tariffs on the electricity generated by the facility).

In most instances, potential private partners should not be directly approached; instead, they should respond to well-articulated requests for proposals (RFPs) that are open for responses by any qualified bidder.

Engaging with the Coalition

The Climate and Clean Air Coalition is prepared to assist member cities to better understand the project delivery continuum from a financial perspective and, in some cases, to aid as a facilitator in the entire process. For more information, please the Coalition's Solution Centre² to access available resources or to request expert assistance.

² <http://www.ccacoalition.org/en/solutioncenter>

Appendix 1.

Data Collection Tool – General Data Tab

DATA FOR RAPID ASSESSMENT

| User and General Information | | | | Provide Information Source |
|---|--|---|--|-----------------------------------|
| Name(s) | | | | |
| Title | | | | |
| Contact information | | | | |
| City Name | | | | |
| Country | | | | |
| National Currency | | | | |
| Date of Data Collection(mm/yyyy) | | | | |
| Relevant City Solid Waste Management Contacts | | | | |
| Current Population of the city | | Inhabitants | | |
| In which year was the population data collected? | | | | |
| Projected population | | Inhabitants | | |
| Projection year | | | | |
| Summary of Facilities | | | | Provide Information Source |
| | Number of facilities owned by the municipality | Number of facilities owned by private firms and located in the city | Number of facilities outside of the city but receiving waste from the city | |
| Transfer Stations | | | | |
| Active landfills | | | | |
| Active dumps | | | | |
| Closed landfills and closed dumps | | | | |
| Waste to Energy Facilities | | | | |
| Centralized Composting Facilities | | | | |
| Material Recovery Facilities (MRF) | | | | |
| Other facilities | | | | |
| Institutional Framework | | | | Provide Information Source |
| Does the national government have an agency mandated to enforce solid waste laws and regulations? | Select from list | <<Additional Comments>> | | |
| Does the city have a department dedicated to solid waste management? | Select from list | <<Additional Comments>> | | |
| Does the city have a unit enforcing solid waste issues in the city such as illegal dumping or littering? | Select from list | <<Additional Comments>> | | |
| Does the city have its own solid waste management rules ? | Select from list | <<Additional Comments>> | | |
| List of international partners and NGOs currently working with the city and briefly describe each project | | | | |

| Governance | | | Provide Information Source |
|--|------------------|-------------------------|----------------------------|
| Provide a list of channels through which the city communicates with its residents on solid waste management issues (eg. website, newsletter, radio, social media, etc ...). Also indicate how often each channel is used | | | |
| What are the key messages or information provided to the public ? (eg. education on littering, source separation or waste reduction etc.) | | | |
| Provide a list of channels through which the city collects feedback from its residents on issues related to solid waste services. (eg. Annual surveys, dedicated telephone line, Mobile phone Applications, social media, etc ...) | | | |
| Provide a summary of key solid waste information made periodically available to the public (eg. Annual budget, waste collection coverage rates, recycling rate, etc..) | | | |
| Legislative and Policy Framework | | | Provide Information Source |
| Is there a national law governing solid waste management in the country? | Select from list | <<Additional Comments>> | |
| Who is mandated to collect, transfer and dispose of municipal solid waste | Select from list | <<Additional Comments>> | |
| Does the city have solid waste management rules and regulations? | Yes | <<Additional Comments>> | |
| Does the city have a solid waste master plan? | Yes | <<Additional Comments>> | |
| When was the master plan refreshed or evaluated | | <<Additional Comments>> | |
| When was the current master plan prepared (Year)? | | <<Additional Comments>> | |
| How long was the master plan for? | | <<Additional Comments>> | |
| Additional legislative and policy framework notes (Optional) | | | |

| Private Sector Participation (PSP) and Public Private partnerships (PPP) | | | Provide Information Source |
|--|------------------|----------------------------------|----------------------------|
| Identify any specific legal texts relevant to PSP/PPP in the MSW sector? | | | |
| Does the city have a contract with one or more private firms for waste management? | Yes | <<Additional Comments>> | |
| Does the contract cover waste collection? | Yes | <<Additional Comments>> | |
| Does the contract cover waste transport? | No | <<Additional Comments>> | |
| Does the contract cover waste disposal? | No | <<Additional Comments>> | |
| Type of PPP arrangement | | <<Additional Comments>> | |
| Is this a Performance-based contract? | Select from list | <<Additional Comments>> | |
| Duration of the contract | | Years <<Additional Comments>> | |
| Value of the contract(s) in local currency | | Currency <<Additional Comments>> | |
| Financial Information (for the most recent year) | | | Provide Information Source |
| Annual Municipal Budget | | <<Provide Currency>> | |
| Annual budget allocated to the solid waste sector | | <<Provide Currency>> | |
| Annual budget allocated to waste collection and transport | | <<Provide Currency>> | |
| Solid Waste Fee collection Rate | | Percent | |
| Annual revenue from EcoTax | | <<Currency>> | |
| Annual revenue from Carbon Credit or other international climate funds. | | <<Currency>> | |
| Total Revenue from Recycling | | <<Currency>> | |
| Total Revenue from Composting | | <<Currency>> | |
| Total revenue from Anaerobic Digestion | | <<Currency>> | |
| Total revenue from landfill operations | | <<Currency>> | |
| Total revenue from waste to energy operations | | <<Currency>> | |
| Other municipal revenues | | <<Currency>> | |
| Average household income | | <<Currency>> | |
| Average household income for the city's most vulnerable populations | | <<Currency>> | |

| | | | |
|---|---------------------------|--|--|
| Financial resources for the solid waste sector | Source | Amount per year in local currency | |
| | Solid Waste Fees | | |
| | Other solid waste revenue | | |
| | Municipal Budget | | |
| | International Partners | | |
| | National Government | | |
| | Other sources | | |
| Municipal surplus/deficit (total revenue - total expenditure) | Year | Amount per year in local currency | |
| | 2013 (actual) | | |
| | 2014 (actual) | | |
| | 2015 (actual) | | |
| | 2016 (estimated) | | |
| | 2017 (projected) | | |
| | 2018 (projected) | | |
| Municipal debt service - bonds and loans (if any) | Year | Amount per year in local currency | |
| | 2013 (actual) | | |
| | 2014 (actual) | | |
| | 2015 (actual) | | |
| | 2016 (estimated) | | |
| | 2017 (projected) | | |
| | 2018 (projected) | | |

| Solid Waste Data | | | Provide Information Source |
|---|------------------|-------------------|----------------------------|
| Quantity of waste generated annually? | | Tonnes/year | |
| Average waste generated per capita at the city level | | Kg/person/day | |
| Average waste generated per capita at the state or national level (If known) | | Kg/person/day | |
| Year of the above data | | | |
| How was this data collected? | Select from list | | |
| Average composition of solid waste generated by % of total weight | Material | Percent | |
| | Organic | | |
| | Paper | | |
| | Plastic | | |
| | Metal | | |
| | Glass | | |
| | Tires | | |
| | Others | | |
| Total | 0% | | |
| Moisture content of the waste | | Percent by weight | |
| Calorific value of the waste | | KJ/ton of waste | |
| Year of collection of the above data | | | |
| How and when was the data obtained? | | | |
| Solid waste collected per year | | Tonnes | |
| Quantity of solid waste recycled | | Tonnes | |
| Organic waste diverted for composting per year | | Tonnes | |
| Organic waste diverted for anaerobic digestion | | Tonnes | |
| Quantity of waste disposed in sanitary landfill | | Tonnes | |
| Quantity of solid waste burned openly | | Tonnes | |
| Quantity of waste disposed in open dumps | | Tonnes | |
| Provide a list of studies related to solid waste management. Provide the name of the organization that undertook the study (ies), year and summary of the findings) | | | |
| Management of Special Waste | | | Provide Information Source |
| Describe how Construction Debris is disposed or recycled | | | |
| Describe how medical waste is collected and disposed | | | |
| Describe how Electronic Waste (eWaste) is collected and disposed or recycled | | | |

| Data needed for Rapid Baseline Assessment of Methane and Black Carbon | | | | Provide Information Source |
|---|---|--|----------------|----------------------------|
| Annual Average Temperature | | | | |
| Relative humidity | | | | |
| Landfill gas collection efficiency | | Percent | | |
| Percentage of landfill gas combusted in flares | | Percent | | |
| Estimated percentage of landfill gas used for energy generation | | Percent | | |
| Solid Waste Fleet (Add rows as necessary) | | | | Provide Information Source |
| Make, model and year | Number of vehicle | Type of fuel used | Type of engine | |
| | | | | |
| | | | | |
| | | | | |
| Fuel consumption rate (gal per km) | Average travel distance per truck and per week (Km) | Percentage of time idling vs. operating in full capacity | | |
| | | | | |
| | | | | |
| | | | | |

| Other solid waste equipment using fuel (e.g.. Generators- Add additional rows as necessary) | | | | |
|---|---------------------------------------|--|----------------|--|
| Type of engine | Number of vehicle | Type of fuel used | Type of engine | |
| | | | | |
| | | | | |
| | | | | |
| Fuel consumption rate (gal per hour) | Average travel usage (hours per week) | Percentage of time idling vs. operating in full capacity | | |
| | | | | |
| | | | | |
| | | | | |

Appendix 2.

Template for Financial Request

CITY LETTERHEAD

Foundation Name
Foundation Address
Foundation Address
Foundation Address

Date

Dear Foundation Contact:

Greetings. My name is Mayor [Mayor Name] and I have the honor of being the Mayor of [City Name]. Since I took office in [First Year of Term], I have pledged myself to improving the quality of life for my constituents as well as committed myself and my fellow politicians to pursuing investment projects that lead towards environmental sustainability and away from degradation.

As an active member city of the Municipal Solid Waste Initiative in the Climate & Clean Air Coalition to Reduce Short-Lived Climate Pollutants (CCAC), we are exploring any possible methods to introduce better practices for dealing with our challenges in the [collection/disposal/treatment] of solid waste. Based on our conversations with the CCAC, we have identified that we need external financial support to engage a team of financial, technical and social experts to assist us in completing a city assessment to help us to (1) quantify the needs and gaps between our existing and desired financial resources, (2) compare between our existing and desired technical practices, and (3) ensure that any practices that we introduce will have no negative impact on our citizens, particularly those amongst the most vulnerable due to income, social status, or other factors. The results of the proposed city assessment will enable us to preliminarily select the most appropriate interventions from both a technical and financial viewpoint, which will inform more in-depth feasibility studies and financial structuring.

We are approaching you because we see strong overlap between our concept and your organizational mission, namely [organization mission and its link to municipal solid waste (i.e., empowerment of cities, environmental mitigation, etc.)]. After conferring with the CCAC and peer cities of similar sizes who have conducted similar assessments, we anticipate that we will need approximately USD 100,000 to complete the financial and technical assessments.

We hope to be in contact in the near future to discuss this further and appreciate your consideration.

Sincerely,

Mayor, [City, Country]
Contact Information

Appendix 3.

Potential Sources of Financial Support or In-kind Technical Assistance

Facilitators

| Program Name, Source | Priorities: Programmatic / Geographic Focus | Type, Amount of Support to Cities | Participating cities/Cities that are also members of CCAC MSW network |
|---|--|---|---|
| <p>100 Resilient Cities (as pioneered by Rockefeller Foundation)</p> <p>www.100resilientcities.org</p> | <p>Enable cities to design or modify projects to become more resilient to the physical, social and economic challenges of the 21st century by funding a “Chief Resilience Officer” for two years</p> <p>Global support; no geographical focus</p> | <p>Up to USD 1 million per year for two years to hire a Chief Resilience Officer.</p> <p>A Chief Resilience Officer is a top-level advisor to the city’s mayor or chief executive. His/her task is to bring in stakeholders from across all silos of government and sectors of society, and to access all available resilience building tools and experts to develop a resilience strategy.</p> | <p>List of participating cities http://www.100resilientcities.org/cities#</p> <p>Overlapping cities (as of August 2016): Accra, Ghana; Addis Ababa, Ethiopia; Amman, Jordan, Bangkok, Thailand; Cali, Colombia; Jakarta, Indonesia; Lagos, Nigeria; New York, United States; Rio de Janeiro, Brazil; San Francisco, United States</p> |
| <p>Asian Cities Climate Change Resilience Network (as pioneered by the Rockefeller Foundation)</p> <p>http://accrn.net/</p> | <p>Fosters exchange of knowledge between institutions committed to creating knowledge, accessing resources, and influencing agendas to build inclusive urban climate change resilience</p> <p>Focused on rapidly urbanizing cities in south/southeast Asia</p> | <p>No direct financial support, but provides platform for learning</p> <p>Multi-year initiative to strengthen the capacity of over 50 rapidly urbanizing cities in Bangladesh, India, Indonesia, the Philippines, Thailand and Vietnam to</p> | <p>Bandar Lampung, Indonesia*; Basirhat, Bangladesh; Can Tho, Vietnam; Chiang Rai, Thailand; Da Nang, Vietnam; Gorakhpur, India; Hat Yai, Thailand; Hue, Vietnam; Indore, India; Semarang, Indonesia; Surat, India</p> <p>No overlapping cities</p> |

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| | | survive, adapt, and transform in the face of climate-related stress and shocks. | *Key activity in Bandar Lampung was to create an integrated solid waste management master plan |
| Bloomberg Philanthropies' Government Innovation http://www.bloomberg.org/ | Promote public sector innovation capacity and spread proven and promising solutions among cities worldwide Increasingly global focus | No direct financial support, but offers advisory services to: Test and refine urban innovations and equip mayors and local leaders with practical tools and approaches to tackle tough issues and enable civic innovation to flourish | Barcelona, Spain; Providence, Rhode Island; Stockholm, Sweden No overlapping cities Expanding initiatives – particularly the Mayors' Challenge – to the global south from 2016 onwards |
| C40 Cities Finance Facility www.c40.org | Supports C40 cities in developing and emerging countries to prepare and deliver sustainable, low-carbon and climate adaptation projects C40 member cities in the global south | No direct financial support, but offers advisory services including: Feasibility studies Project technical advisory Links to financial institutions prepared to provide capital for projects | Has not yet commenced work Overlapping member cities in both networks include: Accra, Ghana; Amman, Jordan; Bangkok, Thailand; Dhaka, Bangladesh; Ho Chi Minh City, Vietnam; Lagos, Nigeria; Rio de Janeiro; San Francisco; Stockholm, Sweden |
| Citi Foundation http://www.citigroup.com/citi/about/citizenship/download/2015/global/2015- | Invests in innovative local ideas and solutions to address complex social and economic challenges around the world | Direct financial support to NGOs and other stakeholders to advance financial inclusion in cities | 376 organizations across 85 countries and territories (in 2015) No overlapping cities |

| | | | |
|---|--|---|---|
| citi-global-citizenship-citi-foundation-en.pdf | | by implementing new investment mechanisms | |
| Cities Development Initiative for Asia (hosted at the Asian Development Bank) www.cdia.asia | Provides assistance to medium-sized Asian cities to bridge the gap between their development plans and the implementation of their infrastructure investments Focused on medium-sized cities (population of 250,000 to 5,000,000) | No direct financial support, but offers advisory services including: Advisory support to urban infrastructure investment programming and prioritization. Consultancy support for the preparation of pre-feasibility studies for high priority infrastructure investment projects. Identification of potential private sector involvement in early stages of project definition and structuring projects for such involvement. Local institutional capacity strengthening related to infrastructure investment planning and programming. Advisory support to market local investment proposals to potential financiers. | 85 cities in Asia, having completed 49 prioritization exercises, 86 pre-feasibility studies (49 of which have been linked to financing from different sources and 25 of which have been completed or are under construction) 12% of CDIA's engagements are in solid waste management Overlapping cities: Battambang, Cambodia; Surabaya, Indonesia; Yangon, Myanmar |

| | | | |
|---|---|--|---|
| <p>Inter American Development Bank: Emerging and Sustainable Cities Initiative</p> <p>http://www.iadb.org/en/topics/emerging-and-sustainable-cities/implementing-the-emerging-and-sustainable-cities-program-approach,7641.html</p> | <p>Support national and sub-national governments in the development and execution of city Action Plans with a sensitivity to (1) environmental and climate change sustainability, (2) urban sustainability and (3) financial sustainability and governance</p> <p>Focused on rapidly-urbanizing secondary cities in Latin America</p> | <p>No direct financial support, but covers the cost of technical support to:</p> <p>Prioritize investment needs that are urgent and financially sustainable</p> <p>Design and implement an action plan that links specific projects with financing opportunities</p> | <p>71 rapidly-urbanizing secondary cities in Latin America</p> <p>Overlapping city: Barranquilla, Colombia</p> |
| <p>World Bank Sub-National Technical Assistance Program: City Creditworthiness Academy</p> | <p>Support cities to improve their financial performance and secure the private investment they need to fund climate-smart infrastructure and services through a 5-day workshop intended to highlight best practices and appropriate steps</p> <p>Global support; no geographical focus</p> | <p>Workshops; no direct financial support</p> <p>The workshops provide hands-on learning programs that teach city leaders the fundamentals of creditworthiness and municipal finance, including issues determined by the enabling environment and options for financing: revenue management and enhancement; expenditure control and asset maintenance; capital investment planning; debt management; and, scoping</p> | <p>82 cities across 23 countries</p> <p>CCAC MSW cities that participated in creditworthiness academies include: Cali, Colombia (February 2015, in Bogota); Barranquilla, Colombia (February 2015, in Bogota); Amman, Jordan (May 2015, in Amman), Dar es Salaam, Tanzania (May 2015, in Amman)</p> |

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| | | <p>out options for financing. Using a preliminary self-assessment tool, participants develop a customized preliminary action plan of specific institutional reforms, capacity building, and other actions that will improve their creditworthiness and their ability to plan, finance and deliver infrastructure services</p> | |
| <p>World Bank Sub-National Technical Assistance Program: City Creditworthiness Implementation Programs</p> | <p>Assist and advise cities, on a long-term basis, to achieve the ultimate goal of sustainable, responsible financing for capital-intensive projects</p> <p>Global support, no geographic focus</p> | <p>In-depth, multi-year, on-the-job, customized technical assistance programs to help them prepare for, structure, and close market-based financing transactions for climate-smart infrastructure projects, using local currency markets whenever possible. The range of interventions is wide, encompassing everything from improving national legal and regulatory frameworks, to increasing the use of data in decision- and policy-</p> | |

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| | | making, improving revenue collection and management systems, and reforming capital improvement planning and budgeting. | |
|--|--|--|--|

Organizations Providing Financial Support for City Assessments, Feasibility Studies, and Financial Structuring

| | | | |
|--|---|--|---|
| <p>Bill & Melinda Gates Foundation: Development Policy and Finance</p> <p>www.gatesfoundation.org</p> | <p>Accelerate progress in advancing human development and alleviating extreme poverty by enabling evidence-based public policymaking at the global and national levels through research, ideas and innovation</p> <p>Global focus</p> | <p>Direct financial support for specific projects for both project technical feasibility and municipal financial soundness</p> | <p>Past projects: Monrovia (Liberia) Solid Waste Program, Dakar (Senegal) Municipal Finance Program</p> <p>Currently no overlapping cities</p> |
| <p>CAF (Development Bank of Latin America)</p> <p>www.caf.com</p> | <p>Promotes sustainable development through credit operations, non-reimbursable resources, and support in the technical and financial structuring of projects</p> <p>Latin America</p> | <p>No direct financial support, but offers advisory services including:</p> <p>Feasibility studies</p> <p>Project technical advisory</p> | <p>Past project: Provided advisory services to Argentine cities looking to implement nationally appropriate mitigation actions (NAMAs) specifically for municipal solid waste</p> |

| | | | |
|---|---|---|--|
| <p>French Development Agency</p> <p>www.afd.org</p> | <p>Finance and support projects that improve living conditions for populations, promote economic growth and protect the planet</p> <p>Global south and French overseas territories; implements French government policy</p> | <p>Direct and indirect financial support for specific projects</p> | <p>Past project: Diagnosis of the existing municipal solid waste management system in Jordan</p> |
| <p>Global Environment Facility</p> <p>https://www.thegef.org</p> | <p>Act as a financial intermediary to provide grants and technical assistance to aid in the protection of the global environment and to promote environmental sustainable development</p> <p>Global focus</p> | <p>Direct financial support for projects for both project technical feasibility and municipal financial soundness</p> | <p>Provided \$14.5 billion in grants and mobilized \$75.4 billion in additional financing for almost 4,000 projects</p> <p>Overlapping cities: Abidjan, Cote d'Ivoire; Accra, Ghana; Amman, Jordan; Battambang, Cambodia; Cotonou, Benin; Dar es Salaam, Tanzania; Dhaka, Bangladesh; Ho Chi Minh City, Vietnam; Jakarta, Indonesia; Lagos, Nigeria; Lome, Togo; Penang, Malaysia; Phitsanulok, Thailand; Quezon City, Philippines; Rio de Janeiro, Brazil; Surabaya, Indonesia; Vientiane, Laos</p> |
| <p>GIZ (German Society for International Cooperation)</p> <p>www.giz.de</p> | <p>Provide diverse portfolio of services in the field of international cooperation for sustainable development</p> | <p>No direct financial support to municipalities but provides significant hands-on technical advisory/assistance; provided critical technical assistance for ADB as it started CDIA</p> | <p>Past project: National Solid Waste Management Programme (Egypt), Development of Manual on Municipal Solid Waste Management (India)</p> <p>Overlapping city: Naucalpan, Mexico</p> |

| | | | |
|---|---|---|---|
| <p>United States Environmental Protection Agency</p> <p>https://www.epa.gov/international-cooperation</p> | <p>Collaborate with global and bilateral partners to promote sustainable development, protect vulnerable populations, facilitate commerce and engage diplomatically around the world</p> | <p>Direct financial support and technical assistance</p> | <p>Past project: Plan for sustainability of a demanufacturing facility that can safely recycle end-of-life used electronics (Ethiopia)</p> <p>Overlapping cities: Jakarta, Indonesia; Naucalpan, Mexico</p> |
| <p>United States Agency for International Development</p> <p>www.usaid.gov</p> | <p>Support cities in accelerating regional economic growth, innovation and prosperity by having more comprehensive master plans and infrastructure</p> <p>Global support; focus on global south</p> | <p>No direct financial support but provides technical support for project feasibility and city creditworthiness</p> | <p>Active in all countries where USAID has a presence, with effectiveness to varying degrees</p> <p>Illustrative example: Cities Development Initiative in the Philippines</p> <p>- https://www.usaid.gov/philippines/partnership-growth-pfg/cdi</p> |

Appendix 4.

Credit ratings for Dakar, Senegal

SENEGAL, CITY OF DAKAR
CREDIT RATING
September 2013

| Category of value | Rating scale | Currency | Current rating | Previous rating | Outlook |
|-------------------|--------------|----------|----------------|-----------------|----------|
| Long term | Regional | CFA | BBB+ | N/A | Positive |
| Short term | Regional | CFA | A3 | N/A | Positive |

Bloomfield Investment Corporation
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Basic information

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------------|--------|--------|--------|--------|--------|
| Operating revenues | 24 188 | 26 118 | 22 459 | 27 839 | 36 583 |
| Operating expenses | 16 017 | 16 536 | 18 461 | 22 843 | 25 199 |
| Gross savings | 8 171 | 9 582 | 3 998 | 4 996 | 11 383 |
| Loan repayment | 0 | 0 | 0 | 1 232 | 2 359 |
| Net savings | 8 171 | 9 582 | 3 998 | 3 765 | 9 024 |
| Investment income (A) | 0 | 0 | 1 876 | 6 800 | 6 972 |
| Capital expenses(B) | 7 195 | 3 965 | 5 791 | 11 199 | 9 023 |
| Investment requirement (A)-(B) | -7 195 | -3 965 | -3 915 | -4 399 | -2 051 |
| Management result | 976 | 5 617 | 83 | -634 | 6 974 |

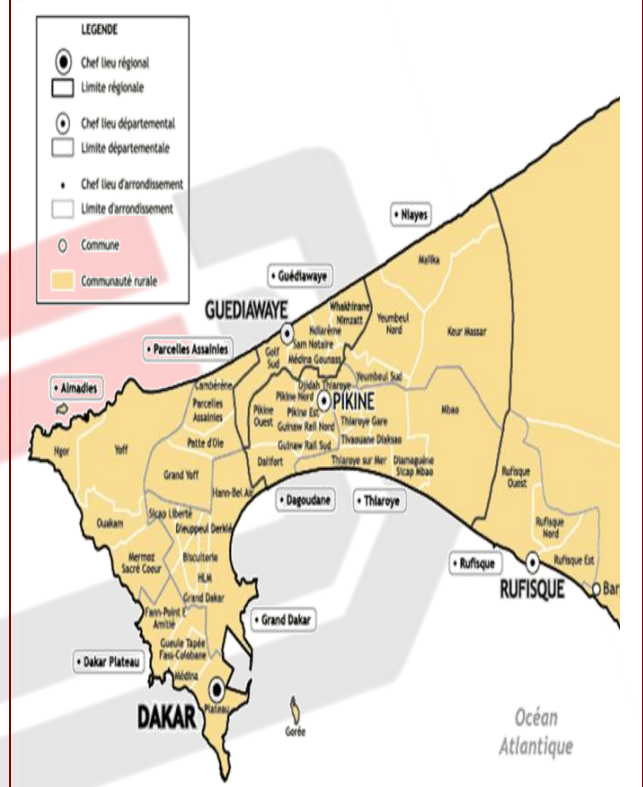
Summarised presentation of the City of Dakar

The City of Dakar is the economic, administrative and political capital city of Senegal. Founded in 1857, it had been the federal capital city of French West Africa between 1902 and 1958.

The City is located in the far west of the African continent and has an important opening towards the Atlantic Ocean. It has a port, a railway station and an airport which testify of its openness to the rest of the world.

The administrative breakdown of Senegal divides the City of Dakar into four (4) main districts and nineteen (19) district communes. These district communes, like the City of Dakar, have the status of local governments.

According to the administrative distribution, the City of Dakar belongs to the region of Dakar (with the communes of Guédiawaye, Pikine and Rufisque) and to the Department of Dakar.

Map 1: Dakar and its region


The City of Dakar centralizes all legislative, executive and judicial powers of the country.

Mayor Khalifa Ababacar SALL plays the role of the executive body of the City since 2009.

Justification of the rating
Country's social and political environment conducive to the City's development

The socio-political stability of Senegal facilitates the development of the City of Dakar, because of its significant contribution to the national economy.

Interest of donors for Senegal and the City of Dakar

The substantial number of donors mobilized for the development of Senegal represents, for the City of Dakar, a high financing potential for

the implementation of its development program.

- **Dakar is a strategic city at the national and international level**

The history of the City of Dakar as well as its geographical location and its central position in political and administrative organization of the country make it an indispensable city.

Moreover, its burden in the national economy and its status of capital city are of great importance for Senegal.

Also, the supranational institutions represented in the country reinforce its prestige within the WAEMU area.

The Autonomous Port of Dakar is unquestionably the most profitable infrastructure of the country.

Its considerable impact on the economy and its strategic nature for certain countries like Mali add to the reputation and the importance of the City of Dakar on the international plan.

- **The State as the supervisory body of the City's financial management**

The level of control exerted by the Prefect (in his capacity as the representative of the State) on financial actions partly integrates and involves the State in the main decisions of the City in terms of credit.

This fact is regarded as reassuring for the investors.

- **A strategy of diversification of financing mechanisms to support the development of the City**

The City of Dakar applies a strategy of diversification of its financing mechanisms as a solution to the insufficiency of its own resources.

It directs its development policy towards certain profitable projects enabling to support the burden of the loans taken for their implementation.

This diversification should lead to a reinforcement of its financial autonomy and should provide the City with alternative resources.

- **A policy of transparency in the City's management and administration supported by the reorganization started since 2009**

The City of Dakar applies a policy of total transparency in its management and organization, as evidenced by the various audits and evaluations commissioned by the City and made public.

This approach helps to correct dysfunctions and introduces the mechanism of reorganization of the City in support of its strategy, with a view to translating its long term vision into concrete achievements.

- **An acceptable debt level but a declining repayment capacity**

At the end of 2012, the exceptional level (CFA 11,383 million) of the City's gross savings makes it possible to repay the amounts not yet due (CFA 7,980 million) of the loans taken.

However, this capacity to repay its debts from the gross savings remains to be confirmed.

Indeed, the current absence of financial forecast tools able to cover periods exceeding one year does enable to anticipate possible cash shortages due to a decline in the gross savings in the short or the long term.

The AFD has been supporting the City of Dakar since 2008 by financing its program for modernization of public lighting with a total amount of 10 M€ and by supporting the reinforcement of financial management.

This support should eventually enable the City of Dakar to build the capacities of its executives and to have tools for monitoring and analysis of the City's finance.

- **A debt level authorised and monitored by the representative of the State**

Loans taken by the City are obligatorily approved by the Prefect of the Department.

Moreover, the latter has the power to require and to force the City to meet its financial commitments.

This authority of the representative of the State can be regarded as a guarantee for lenders.

- **An exploitable tax potential**

Ongoing negotiations between the City and the Tax Administration should optimize the City's tax revenues.

Moreover, the public and commercial investments planned are potential sources of municipal tax revenues.

- **Support and trust of technical and financial partners**

Between 2008 and 2012, the City obtained loans for a total amount of CFA 26 billion including a drawdown of CFA 10.4 billion.

This important mobilization of funds (AFD and BOAD) to finance public and commercial investments translated the trust of donors and private banks in the executive team and the City project.

- **State-transferred competence is not sufficiently covered by the financial allocations**

The competence transferred to the City by the law are a substantial burden on its expenses.

The financial allocations expected to cover the expenses remain limited.

- **Lack of financial planning (forecast) beyond the annual budget forecast**

The lack of expense planning tools prevents the City from assessing its future revenues and expenses in a reliable manner.

The lack of budget planning and forecast in the medium and long term limits the visibility of expenses and revenues as well as the good planning of development project and programmes.

However, the City of Dakar is engaged since 2011 into a process of improvement of its entire planning mechanism, particularly with the creation of the Department for Planning and Sustainable Development.

- **The social and demographic dynamics limits the development of the City**

The City of Dakar is a peninsula whose extension is limited by the cities of Pikine and Guédiawaye.

The City's ability to contain the population growth cause by many uncontrolled migratory flows remains limited.

The City is thus obliged to reconsider the development of its territory (i.e. re-conquest of urban public space...)

- **Rehabilitation, reinforcement and extension of road infrastructures and the sanitation system.**

The degradation of the road network in the City of Dakar restricts its economic potential

and limits the mobility of the citizens and economic operators.

The insufficient density of the urban roadway system has a direct impact on the economy due to congestion of the main roads of the City.

The project of rehabilitation and extension of the roadway system financed by the West African Development Bank (WADB) should improve the quality of the road infrastructure.

The sanitation system serving for waste water discharge and treatment remains limited and ineffective.

In fact, the environmental risk is high.

The City remains exposed to floods and to the pollution of its maritime environment.

- **Operating expenses are increasing while operating revenues are limited for the moment**

The implementation of the City project leads to a gradual increase in operating expenses.

The City undergoes the consequences of the non-transfer of financial resources to local governments.

This situation results in the City not having any control over its main operating revenues (local taxes), which significantly limits the growth of the revenues.

- **A financial balance to be confirmed**

In 2008 and 2010, the City has a financial balance with significant variations.

In 2011, the City recorded a deficit (CFA - 634 million) and, the financial balance (CFA + 6,974 million) achieved in 2012 partly results from an exceptional income of CFA 12,026 million.

The maintenance of financial balance remains to be confirmed.

- **Current self-financing capacity to be confirmed**

Between 2008 and 2012, the City demonstrated its capacity to finance its operating expenses and to repay its financial liabilities from its gross savings.

However, this capacity remains to be confirmed as it is instable.

Socio-economic environment of the country

Senegal is one of the signatory countries of the treaty laying the foundations of the West

African Economic and Monetary Union (WAEMU¹) in Dakar in 1994.

The country is the second economy behind Côte d'Ivoire and accounts for 18% of the Gross Domestic Product of the WAEMU zone.

Table 1: Evolution of the nominal GDP of the WAEMU zone

| Nominal GDP (in billion FCFA) | 2008 | 2009 | 2010 | 2011 | 2012 | % |
|-------------------------------|--------|--------|--------|--------|--------|------|
| Benin | 2 971 | 3 109 | 3 248 | 3 442 | 3 763 | 9% |
| Burkina Faso | 2 958 | 3 938 | 4 369 | 4 760 | 5 546 | 14% |
| Côte d'Ivoire | 10 425 | 10 881 | 11 352 | 11 150 | 12 460 | 31% |
| Guinea-Bissau(*) | 387 | 391 | 423 | 471 | 483 | 1% |
| Mali | 3 913 | 4 233 | 4 656 | 5 012 | 5 140 | 13% |
| Niger | 2 420 | 2 533 | 2 809 | 3 011 | 3 567 | 9% |
| Senegal | 5 995 | 6 029 | 6 369 | 6 817 | 7 225 | 18% |
| Togo | 1 419 | 1 494 | 1 581 | 1 699 | 1 879 | 5% |
| UEMOA | 30 486 | 32 607 | 34 808 | 36 361 | 40 063 | 100% |

Source: Central Bank of West African States

Population of Senegal is 13.7 million inhabitants according to the latest World Bank estimates.

Predominantly Moslem, the population is divided into a multiplicity of ethnic groups such as the Casamançais, Mandingues, Lebous, Peulhs, Sarakolés, Sérères, Toucouleurs and Wolofs.

French is the official language of the country, but Wolof remains the most spoken language.

The Senegalese population is concentrated around the regions of Dakar (20.6%), Thiès (13.2%) and Diourbel (10.9%).

The population is predominantly young (in 2011, 42.6% of the population was below 15 years and 63.4% was below 25 years).

Unemployment rate is estimated at 10.2% in 2011 by the National Institute of Statistics (INS).

Unemployment mostly affects females (13.3% compared to 7.7% for men) and is concentrated in urban areas (14.1% in the City of Dakar and 13.9% in other cities).

Young people between 15 and 24 years remain the most affected by unemployment (12.7%).

On the economic level, the global economic crisis that started since 2008 and the fall of the prices of agricultural raw materials during 2008 and 2009 have had a significant impact on

the Senegalese economy, but did not block the growth of the country.

Senegal has a relatively low level of growth compared to the WAEMU zone but its growth rate has been increasing since 2011.

Indeed, the country's average growth rate was +2.9% between 2008 and 2012, compared to +3.7% for WAEMU zone during the same period.

This rapid growth should be confirmed with the expected rise in the country's growth in 2013 (+4%) and 2014 (+4.6%).

Country risk

Socio-political situation

▪ Remarkable political stability

Senegal is among the most stable countries in Africa on the political plan.

Political transitions between Léopold Sédar Senghor (1960), Abdou Diouf (1981), Abdoulaye Wade (2000), and Macky Sall (2012) took place quite smoothly.

However, the relatively stable presidential system remains faced with internal challenges.

The tense relationship with the opposition is fuelled by ongoing investigations against members of the government of former president WADE.

While the secessionist threat in the Casamance region that persists since 1982 is alleviated since the peace agreements signed between President Abdoulaye Wade and the MFDC² in 2004, it continues to disturb the security environment in southern Senegal.

The instability in the Sahelian zone, following terrorist intrusions in Mali, exposes Senegal to the spread of terrorist movements throughout the region.

However, the country maintains the control over its internal security and has so far shown its resilience to the political upheavals going on in the West African region for many years.

¹ The West African Economic and Monetary Union (WAEMU) includes eight (8) West African countries. The union pursues the objective of economic convergence and monetary integration.

² MFDC: Movement of the Democratic Forces of Casamance. Separatist movement created in 1982 in the Casamance region.

Economic situation

Table 2: Evolution of the actual GDP of the WAEMU zone

| Rate in % | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|------|------|------|------|------|
| Benin | 5 | 2.7 | 2.6 | 3.5 | 5.4 |
| Burkina Faso | 5.3 | 3 | 7.9 | 5 | 9 |
| Côte d'Ivoire | 2.3 | 3.8 | 2.4 | -4.7 | 9.8 |
| Guinea-Buissau | 3.5 | 3.4 | 4.7 | 5.3 | -0.9 |
| Mali | 5.2 | 5 | 5.8 | 2.7 | -1.2 |
| Niger | 9.5 | -0.7 | 8.4 | 2.3 | 10.8 |
| Senegal | 2.5 | 2.1 | 4.1 | 2.6 | 3.5 |
| Togo | 1.6 | 3.4 | 4 | 4.8 | 5.9 |
| WAEMU | 3.7 | 2.8 | 4.5 | 0.9 | 6.5 |

Source: Central Bank of West African States

The Senegalese economy is in a phase of slowdown over the period from 2009 to 2011, mainly due to difficult climatic conditions in the agricultural area, which contribute to the downturn of the primary sector (- 14.5% in 2011).

The country recovered a more constant growth rate in 2012 with a growth rate of 3.5%, led by revival of the primary sector (+9.6%) following measures taken by the State to revive the sector through a subsidy programme for the crop year 2011-2012.

- *Good growth prospects in a difficult global economic context*

Despite the difficult global economic context, Senegal's growth rate has been rising since 2011.

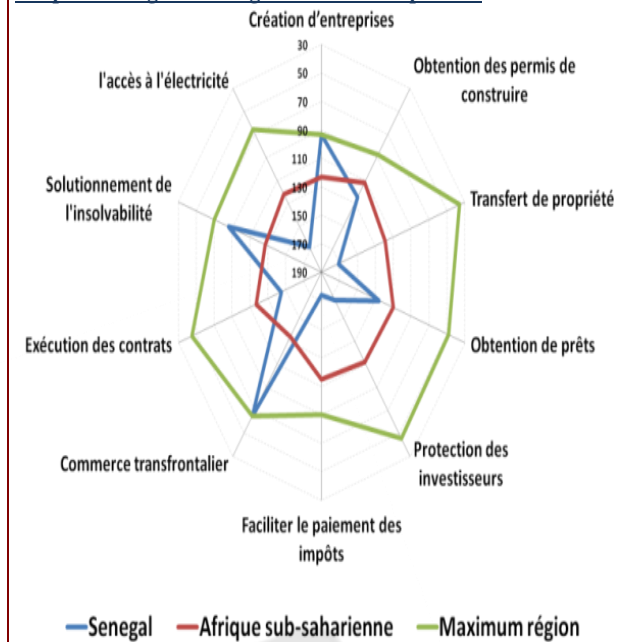
With a GDP growth rate of 3.5% in 2012, vs. 2.6% in 2011, the country confirms its capacity of resilience against exogenous factors.

This trend is confirmed the estimated growth rate of 4% announced by the International Monetary Fund for the year 2013.

Senegal's growth rate remains however below that of the WAEMU zone, with an estimated 6.4% in 2013 (mainly influenced by positive growth prospects in Côte d'Ivoire).

According to the 2013 "Doing Business" classification, Senegal is ranked 166th globally in terms of business environment.

Graph 1: Senegal's "Doing Business" 2013 position



Source: Doing business 2013

Its major areas of improvement include access to electricity, protection of investors and facilitation of tax payment.

The business environment in Senegal is expected to improve in the medium term thanks to the specific three-year program (2013 - 2015) adopted by the Presidential Council of Investment (CPI).

According to the Presidential Council of Investment "the implementation of this reform program should solve constraints related to the development of companies and investments in order to improve the productivity of production factors, the quality of administration service and the development of high social impact investment to generate more growth and employment in the poles of development".

The programme revolves around the following items:

- automation of administrative procedures associated with investment
- reinforcement of the competitiveness of production factors
- assistance to administrations and communication about reforms
- promotion of high social impact investment

Public finance

- *Interest of donors for Senegal*

Because of its political stability and its economic burden in the WAEMU zone, Senegal raises interest among donors, who take

an active part in its development. Thus, the country's major donors include:

- sixteen (16) bilateral donors;
- twenty-seven (27) multilateral donors;
- twenty-three (23) banks and financial institutions.

All potential donors referenced by the Ministry of Economy and Finance primarily intervene in the following areas:

- agriculture (73 donors)
- industry (57 donors)
- health (54 donors)
- education, training and literacy training (51 donors)
- environment (42 donors)
- hydraulics and sanitation (41 donors)

▪ *A relatively high but controlled public deficit*

With growing revenues and control of expenses in 2012, the Senegalese State has reversed the upward trend of the public deficit, from 6.7% in 2011 to 5.8% in 2012.

In 2012, Senegal covered 50% of the deficit through a bond issue.

Between 2010 and 2011, the coverage of the deficit through bond issues has risen from 2% to 40%.

This clearly illustrates the degree of the stakeholders' trust in country's credit quality.

- *the financial health of the entities in the power sector remains a risk that needs to be covered by public finance*

State support for the power sector is a considerable component of the expenses.

Indeed, it accounts for 6% of revenues recovered from the State in 2012 (compared to 8% in 2011) and 2.5% of the GDP as at that date.

Thus the difficult financial situation of the power sector represents a budgetary risk for the State³.

- *The country's rising debt level remains bearable*

The total national debt outstanding in 2012 amounts to CFA 3,076 billion, an increase by 13.8% compared to 2011.

It accounts for 43% of the GDP, in increase compared to 2011 (40%). This level can be regarded as bearable.

The foreign debt outstanding has increased by three points compared to 2011, and accounted for 33% of the GDP in 2012.

The burden of the foreign debt on the next years should continue to increase, in the medium term, due to the use of external financing.

External debt servicing amounted to CFA 136 billion in 2012, accounting for 9.6% of the total revenues.

The burden of the debt servicing has increased compared to its level of 2010 (6.8% of the total revenues).

The interests of the debt have increased considerably between 2010 and 2012 (+80%) and amount to CFA 108 billion (CFA 52 billion interests on the foreign debt; CFA 56 billion on the domestic debt).

Their burden on the total revenues has increased from 4% in 2010 to 6% in 2012.

The budget estimates made by the DPEE⁴ indicate an upward trend of the debt burden on revenues.

Moreover, the structure of financial expenses has changed between 2011 and 2012.

Indeed, the burden of the national domestic debt becomes higher than the external burden.

Institutional framework of the community

Following the independence of Senegal in 1960, the country started a policy of decentralisation defining the status of local governments and governing their operation and their interactions with the various State entities.

Law 96-06 of 22 March 1996 on the Code of Local Governments changed the Commune of Dakar into the City of Dakar, a local government with legal personality and financial autonomy.

Law 96 - 07 of 22 March 1996 on the transfer of competence to regions, communes and rural communities redefines the responsibilities of the City and sets the basis of development at the local level.

³ Source: IMF country report no.13/170 of June 2013 - Senegal

⁴ Department of Economic Forecasts and Studies of Senegal

Law 96 - 09 of 23 March 1996 setting the administrative and financial organisation of the district commune and its relationship with the City.

Legal and regulatory framework

The WAEMU via the additional deed no.02/CCEG/WAEMU/2011 of 30 May 2011 of the Conference of the Heads of States and Governments established the Council of Territorial Communities (CCT).

The CCT is an advisory body whose mission lies in a will to accelerate the process of economic integration of the zone with the participation of all territorial communities in the zone.

On 24 June 2011 the WAEMU set up a management framework for local communities through the Directive no.01/2011/CM/UEMOA setting the financial regime of territorial communities within the WAEMU.

The directive is intended to modernize and to standardize the management framework of communities in the zone and to improve transparency.

The budgetary nomenclatures and the chart of accounts of territorial communities are in line with this directive.

The directive is not implemented by the State of Senegal.

The operation of the City of Dakar is governed by several laws of which the major ones are indicated below.

- *The City of Dakar, an autonomous commune under the posteriori control of the State*

Law 96 - 06 of 22 March 1996 on the Code of Local Governments

This law regulates the operating framework of the Commune and defines its powers, its main bodies and their role, as well as its mode of management and administration.

Its article fourteen (14) authorises the City of Dakar to establish cooperation relationships with other local governments and offers them the possibility to join together.

Thus, the decree no. 2004-1093 of 24 August 2004 establishing the Community of Dakar urban centres (CADAK), established a

partnership between the City of Dakar and the cities of Guédiawaye and Pikine.

Law 96 - 06 of 22 March 1996 grants the Commune of Dakar the status of legal personality and some autonomy in its operation and management.

The instrument thus defines the revenues and expenses of the commune and as well as operating expenses known as "obligatory" (including the payment of the debts outstanding).

This regulation provides for a certain level of control by the State over the City of Dakar via its representative.

Indeed, the Prefect of the Department of Dakar, as the representative of the State, has a control of legality on all actions undertaken by the City.

In the same way, he is informed and controls the legality of all deliberations of the city council (cf. will infra in "decision-making process" and "risk management").

- *Competence are transferred but the resources made available by the State cannot cover the needs*

Law 96 - 07 of the 22 March 1996 on the transfer of competence to regions, communes and rural communities

The transfer of competence by the State to Senegalese local communities was governed and regulated by the law 96 - 07 of 22 March 1996.

Thus, the City of Dakar was granted certain responsibilities in the following areas:

- Estate;
- Environment and natural resource management;
- Health, population and social action;
- Youth, sports and leisure;
- Culture;
- Education;
- Planning;
- Regional planning;
- Urban planning and housing;

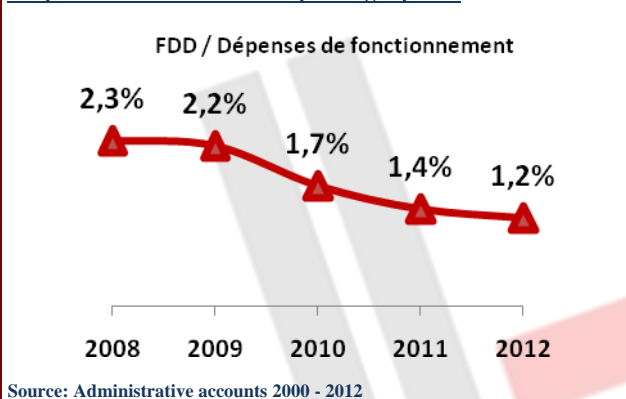
Article five (5) of the law 96 - 06 of 22 March 1996 provides for the provision of resources by the State in return for the transfer of competence.

Thus, title three (3) of the law introduces a mechanism of transfer of competence via the *Fonds de Dotation de la Décentralisation* (FDD) mainly provisioned through a deduction from the Value-Added Tax.

However, the FDD proves unable to cover the entire competence transferred to the City of Dakar.

Thus, over the period from 2008 to 2012, FDD allowances accounted for averagely 1.8% of the City's operating expenses, with a downward trend.

Graph 2: FDD contribution to operating expenses



Presentation of the City of Dakar

- *A strategic City at the national and international level*

The City of Dakar is the economic and administrative capital of Senegal.

It hosts all the institutions of the country and its geographical location at the western end of the African continent makes it a very important territory for the country, but also for the whole sub-region.

With over one million inhabitants, the City of Dakar accounts for 21% of the urban population of Senegal and 10% of the total population.

The City of Dakar is a peninsula covering 82.2km² with an opening towards the Atlantic Ocean in the west and the cities of Guédiawaye and Pikine in the east.

The City of Dakar is a commune belonging to the region of Dakar and is divided in nineteen (19) district communes, gathered into four (4) main districts (Dakar-Plateau, Grand Dakar, Almadies and Parcelles Assainies).

The district communes of the City of Dakar are local governments and therefore enjoy a

relative administrative and financial autonomy as well as a legal personality.

- *A both functional and administrative organization for local development*

The organization and the administrative operation of the City are led by the Mayor and his cabinet, the City Council and the Municipal Secretary, the Municipal Office, the Departments (10 departments attached directly to the cabinet of the Mayor) of the City as well as the Municipal Secretariat.

The Municipal Secretariat is composed by the Municipal Secretary, his/her assistant and the various departments in charge of the implementation of the City's development policy:

- the Department of Administration and Finance (DAF);
- the Department of Planning and Sustainable Development (DPDD);
- the Human Resources Department (HRD);
- the Department of Urban Development (DDU);
- the Department of Engineering Services (DST);
- the Department of Sanitary and Welfare Action (DASS);
- the Department of Education and Employment (DEI);
- the Department of Culture and Tourism (DCT);
- the Department of Sports, Youth and Community Life (DSJA);
- the City Police Department (DPM).

He is also in charge of the management of available resources and means.

The Departments are the purely administrative and political branch of the City.

The various departments of the City Council ensure its good functioning and centralize its communication action, serving as the direct link with the district communes, and then with district organizations.

It can thus be concluded that City's organisational structure enables the departments to report the needs of the citizens to the executive body, the City Council, which responds to those needs through the actions undertaken by the Departments, following deliberations.

Governance

Vision and Strategy

The vision adopted by the City of Dakar since 2009 as set out in the electoral programme "BENNOO SIGGIL SENEGAAL DE DAKAR - PROJET DE VILLE" implemented by the Mayor is a long term vision to be completed by 2025.

This vision breaks up into seven (7) items:

- developing a diversified local economy;
- supporting integration and developing the City's capacity of reception;
- controlling and planning the management of the public space;
- optimizing internal and outward mobility
- preserving the urban environment and biodiversity;
- making effective and responsible use of available natural resources;
- reinforcing the involvement of the citizen in the life of the City of Dakar
- *Major projects and a will to diversify funding sources*

Since 2009, the City of Dakar is involved in major projects intended to rehabilitate its infrastructure, to re-conquest public space and to meet the needs for its citizens in terms of social management.

This strategy has an impact on the City's ability to finance its investments.

Thus, the City of Dakar has set up an increasingly heterogeneous financing policy to diversify its funding sources based on the size and the typology of projects (International and national institutions, supranational organisations, private banks).

Thus, the project for rehabilitation and improvement of the urban roadway system is financed by the West African Development Bank (WADB) for CFA 9.7 billion.

Also, the financing agreement entered with the private bank Ecobank for CFA 3.7 billion enables the City of finance the construction of a shopping mall.

The objective is to reinforce its financial autonomy to support its development strategy.

The City also directs its development strategy towards projects with return on investment, enabling to meet the objectives defined by the

vision of the Mayor and to support the financing mechanism.

This is the case for the LEOPOLD S. SENGHOR commercial space of Dakar, whose costs should be covered by its anticipated returns.

- *A proven will of transparency in the City's management and administration "*

The City applies a policy of transparency in its administrative and financial management that enables donors to be aware of the City's weaknesses and potential.

The report of the assessment of the management of municipal public finance at the City of Dakar, conducted by PPIAF⁵ in 2009, highlights the lack of planning and forecast tools.

The interaction between the City and the Advisory Councils via the Department of Civil Dialog and User Counselling help to escalate the concerns of the Dakar population in a transparent manner.

Accessibility to information for the general public via various channels of communication (website, press conference, Mayor's Letter to Dakar Residents) falls within this strategic line.

- *A reorganization that serves the City's strategy*

As from 2009 the City of Dakar has began a process of reorganization of its services to support its development strategy and its mode of administration.

In this respect, the City extends the responsibilities of the Financial Affairs Inspectorate to all the Directorates and Departments of the City (in addition to the Administrative and Financial Directorate).

In fact, the General Inspectorate of Municipal Services represents an internal control tool for the City.

The Planning and Sustainable Development Directorate was put in place in 2011 to enable to the City to manage its development on a long-time basis contrary to its current mode of administration.

⁵ Public Private Infrastructure Advisory Facility

Decision-making processes

The budget and the administrative accounts and routine management actions are established and submitted to the City Council by the Mayor assisted by his Municipal Secretary.

The liaison between the Mayor and the City Council, as well as the relationship between the State and the Commune of Dakar via the Representative of the State (the Prefect), is maintained by the Municipal Secretary.

The State, via the Prefect of the Department of Dakar, is held informed of all deliberations during City Council meetings.

The Prefect is in charge of monitoring the legality of City Council deliberations in line with the powers and limits of the commune of Dakar.

Indeed, the Prefect has two more or less important levels of control over the decisions taken by the executive body of the commune of Dakar.

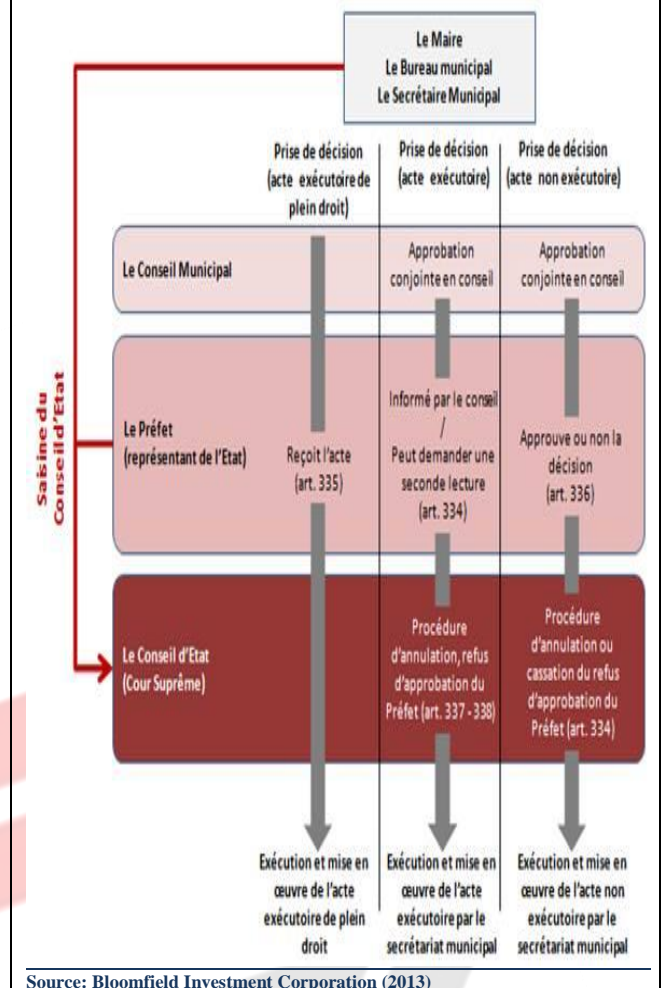
Where he finds that a deed submitted to the commune is illegal, the Prefect seizes the Supreme Court which is the competent jurisdiction for give a ruling.

As regards deeds known as binding⁶ (according to article 334 of the law 96-06), the commune can implement them fifteen (15) days after receiving an acknowledgment of delivery from the Prefect.

Concerning all non-binding deeds⁷, the Prefect exerts his role of approval.

Deeds regarded as non-binding basically correspond to financial, budget and administrative accounts operations.

Illustrative graph of the legal decision-making process of the City of Dakar



When decisions are binding, the procedures governing the internal meetings in the administration of the City make it possible to bring down the different deeds to the level of the relevant Departments and Directorates.

These procedures follow a “top-down” process enabling to bring down the decisions taken by at highest hierarchical levels (the Mayor as the executive body) to the most operational levels (heads of divisions).

Risk Management and Information Quality

The General Inspectorate of Municipal Services (initially the financial inspection) plays a role of internal control to ensure the good performance of the various Directorates and Departments of the City.

The existence of this service, still embryonic, reflects the City's will to control its operations.

Legal and financial risk is mitigated by the role played by the Prefect as the representative of the State.

⁶ Article 334 of the code of local governments (article 334)

⁷ Article 336 of the code of local governments

The prefect makes sure that mandatory expenses prescribed by the law are included in the budget and are appropriately paid by the City.

He has the authority to issue a prefectural order being worth mandate, where necessary, to require the payment of a debt outstanding (compulsory expense prescribed by article 258 of the Code of Local Governments) by the public accountant.

- *City's limited capacity to forecast its revenues and expenses*

The preparation of the City's budget is done by the Mayor, his Municipal Secretary and the various Departments.

This exercise takes into account the national guidelines defined by the country-scale development policy, as well as the projects planned over the year, subject to available resources.

However, the examination of resources and expenses included in the budget and the administrative accounts for the period from 2008 - 2012 shows a deficiency in the forecasting of administrative accounts.

Table 3: Budget implementations – Operating revenues

| Millions de francs CFA | Budget | Exécution | Ecart (%) |
|------------------------|--------|-----------|-----------|
| 2008 | 36 682 | 24 188 | -34,1% |
| 2009 | 38 087 | 26 118 | -31,4% |
| 2010 | 33 360 | 22 459 | -32,7% |
| 2011 | 35 263 | 27 839 | -21,1% |
| 2012 | 49 438 | 36 583 | -26,0% |

Sources: Budget and administrative accounts of the City of Dakar 2008 - 2012

The City of Dakar shows a relatively limited capacity to appropriately forecast its operating revenues.

The main obstacle to the good planning of its resources is the impossibility to determine the tax base and the recovery of its main revenues.

Indeed, the tax base is defined by the General Directorate for Taxes (DGID) and recovery is done by the Treasury.

Conscious of this issue, the City of Dakar is undertaking discussions (with the relevant authorities) which could lead to a performance contract intended to improve the recovery of tax revenues.

In addition, it remains necessary to improve the control over these revenues, the completeness and the quality of taxpayers.

Table 4: Budget implementation – Capital expenditure

| Millions de francs CFA | Budget | Exécution | Ecart (%) |
|------------------------|--------|-----------|-----------|
| 2008 | 18 367 | 7 195 | -60,8% |
| 2009 | 25 981 | 3 965 | -84,7% |
| 2010 | 20 363 | 5 791 | -71,6% |
| 2011 | 22 303 | 12 431 | -44,3% |
| 2012 | 30 343 | 11 382 | -62,5% |

Sources: Budgets and administrative accounts of the City of Dakar 2008 - 2012

As regards capital expenditure, the considerable gap between the budget adopted at the meeting of the City Council and the actual implementation varied between 72% and 239% from 2005 to 2007 (according to PEFA 2009).

The City of Dakar tends to be more effective in the planning of its capital expenditure for the period from 2008 to 2012, even though the gap remains considerable (64% on average) between the achievements and the budget.

These gaps in capital budgets are mainly justified by:

- the inclusion of the projected total capital expenditure in the budget;
- the inclusion of the actual expenditure incurred during the year in the administrative accounts.

Table 5: Budget implementation - Operating expenses

| Millions de francs CFA | Budget | Exécution | Ecart (%) |
|------------------------|--------|-----------|-----------|
| 2008 | 18 358 | 16 017 | -12,8% |
| 2009 | 18 666 | 16 536 | -11,4% |
| 2010 | 19 556 | 18 461 | -5,6% |
| 2011 | 18 461 | 22 843 | 23,7% |
| 2012 | 24 381 | 25 199 | 3,4% |

Sources: Budgets and administrative accounts of the City of Dakar. 2008 - 2012

The City of Dakar seems to better control its operating expenses (between 13% and 19% variation between 2005 and 2007) and tends to improve its planning in this respect.

The efforts made to improve the forecasting of operating expenses have enabled the City to considerably reduce the gap between the budget and its implementation over the year 2012 (the variation was 3.4% in 2012).

Thus, the City has improved its budgetary performance on this expenditure item.

Social and economic profile of the City of Dakar

Economic dynamism

- *The direct and indirect impact of the City of Dakar on the national economy makes it a major strategic space for the country*

The economy of Senegal rests to a significant extent on the City of Dakar.

With 75% of the turnover of companies in the country, the City is the main direct contributor to the country's economy.

The indirect impact of the City's attractiveness on the national economy is well illustrated by the regional importance of its port authority which accounts for approximately 95% of the trade traffic in the country.

The structure of the Senegalese GDP shows the relative importance of the industrial sector in the country's economy.

Thus, the weight of the secondary sector in the national economy reached 21.2% in 2012 and is expected to rise during 2013.

The contribution of the City of Dakar to this sector remains significantly high.

Indeed, the City of Dakar only accounts for 75% of the operators involved in this sector.

The added-value generated by the industrial sector in the region of Dakar accounts for 71% of the national added-value.

Also, trade sub-sector (accounting for 15.7% of the GDP) is an important contributor of the City of Dakar because of concentration of the regional commercial assets in the commune of Dakar.

Indeed, the commune hosts 48% of central markets in the region, 89% of shopping malls and 62% of district markets.

Market-gardening in the City of Dakar accounts for 10% of the production of the region.

Dakar's contribution remains minor compared to the communes of Pikine (20%) and Rufisque (70%), but it accounts for 3% of the national production.

The constant urbanisation of the City is currently a constraint to the development of the agricultural sector.

According to its Planning and Sustainable Development Department, the City of Dakar hosts 47% of tourism infrastructure in the country.

Tourism in Senegal and its economic effects primarily revolve around the City of Dakar.

Social and demographic dynamics

- *The social and demographic dynamics limit urban development*

Table 6: Increase in the population of the City of Dakar

| | 2010 | 2011 | 2012 |
|-----------------------------------|-----------|-----------|-----------|
| Population | 1 033 850 | 1 056 009 | 1 096 338 |
| Densité (hbts / km ²) | 12 577 | 12 847 | 13 337 |

Sources: Monographic Study of the City of Dakar supervised by the DPDD (July 2013)

The population of the City of Dakar is estimated at 1.1 million inhabitants in 2012 across the 82,2km² of the commune. It is a young population concentrated in the district of Parcelles Assainies.

In fact, population density in the City of Dakar is 13,337 inhabitants per km².

The growing population density coupled with the reception capacity limited by the geographical configuration of the City naturally limits the development of the commune of Dakar.

With a relatively high (38 per thousand in 2011) but stable birth rate over the last 10 years, the City of Dakar is primarily affected by the phenomenon of rural exodus exacerbated by a notably higher poverty index in rural areas.

Indeed, the poverty index of the City of Dakar (26.1) in 2011 is lower than the national poverty level (46.7), but is also lower than that of the other urban areas of the country (41.1).

Approximately 50% of the Senegalese urban population lives in the City of Dakar.

Thus urban land and public space management become important issues at the centre of the City's development strategy.

Land-use planning thus remains a major challenge during the years to come.

Infrastructure

- *There is a relatively good coverage of medical infrastructure but disparities remain between medical districts*

The City of Dakar is organized into four (4) medical districts (centre, west, north and south).

The commune of Dakar is responsible for twenty-nine (29) health stations, seventeen (17) health centres (including three (3) centres expected to functional before the end of 2013) and a maternity.

The City's health centres are evenly distributed in each district, with four (4) centres per district.

As regards health stations, the western district composed by the district communes of Yoff, Ngor, Ouakam and Mermoz Sacré-coeur has only (4) health stations contrary to the other districts, which have between six (6) and eleven (11) stations each.

This distribution of health stations follows the demographic structure of the City.

Table 7: Health stations by district in the City of Dakar

| | Population | % | Postes de santé | % |
|-----------------|------------|-----|-----------------|-----|
| District Ouest | 165 853 | 15% | 4 | 14% |
| District Sud | 198 814 | 18% | 6 | 21% |
| District Centre | 334 900 | 31% | 8 | 28% |
| District Nord | 396 821 | 36% | 11 | 38% |

Sources: Monographic Study of the City of Dakar supervised by the DPDD (July 2013)

The City of Dakar has only two maternities located in the Central and Northern districts.

While medical competence exist in the health centres, the number of maternities remains insufficient for the size of the population.

- *A limited and obsolete road network under rehabilitation*

The City of Dakar has 470 km of roadway of which 127km (27%) is regarded as classified and whose management and maintenance remains under the responsibility of the State of Senegal.

The remaining 343 km of communal roadway system are under the responsibility of the commune of Dakar. An urban roadway audit carried out in 2007 highlighted the level of deterioration by up to 64%, which results in traffic jams.

Traffic jams have an economic impact on the City of Dakar.

Indeed, a study conducted by Professor Ernest Agyemang⁸ estimates that the impact is 3.4% of the GDP.

The roadway system rehabilitation programme financed by the West African Development Bank (WADB) is intended for the rehabilitation of 157 km of the roadway system and the construction of 6 km of new roads, which would eventually bring down the level of degradation to 30%.

Lastly, as part of the rehabilitation of the roadway system, the efforts made in terms of public lighting and rehabilitation of traffic lights has partly restored the system and improved the traffic.

- *Waste water disposal and treatment represents a major environmental risk not controlled by the City*

The insufficient density of the sewerage and the drain system of the City of Dakar does not enable to ensure the disposal of waste water.

In fact, the City is confronted with recurring floods in periods of bad weather.

As sanitation is not part of the competences transferred to the City, its capacity to cover this risk is limited.

Indeed, sanitation is under the responsibility of the State.

It is thus the role of State institutions to cover the environmental risk associated to the disposal and the effective treatment of waste water".

The City of Dakar undergoes the effects of its limited sanitation network.

An emergency program was set up in 2013 and provides for the rehabilitation of the sewage disposal system in the district commune of Grand Yoff.

In addition to water discharge drains, the treatment rate of waste water collected in the region of Dakar (40%) adds to the environmental risk.

Indeed, as the southern part of the City of Dakar does not have any sewage treatment plant (the only station in the City being that of the district commune of Cambérène), all waste

^{8 8} Agyemang, E. (2009). Traffic Congestion: The bane of a Bus Rapid Transit System in Accra, Ghana?
<http://www.diva-portal.org/smash/get/diva2:219162/FULLTEXT01.pdf>

water is directly discharged into the Atlantic Ocean.



▪ The port infrastructure of the City of Dakar reinforces its weight in the national economy

The City of Dakar, by its geographical location and its opening towards the Atlantic Ocean, is an important trade hub in the WAEMU zone.

Indeed, with 12 million tons, the traffic at the Autonomous Port of Dakar makes it the 2nd port in the WAEMU zone, behind the Autonomous Port of Abidjan (Côte d'Ivoire).

The Autonomous Port of Dakar contributes by 30% to the budget revenue of Senegal.

Financial profile of the community

Revenues of the City of Dakar

The City's revenues are of two types: Operating revenues and investment revenues.

| In million CFA | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------------|--------|--------|--------|--------|--------|
| Operating revenues | 24 188 | 26 118 | 22 459 | 27 839 | 36 583 |
| Variation rate | 0% | 8% | -14% | 24% | 31% |
| Investment revenues | 0 | 0 | 1 876 | 6 800 | 6 972 |
| Incl. carried forward* | | | 0 | 1 876 | 3 992 |
| Variation rate | - | - | - | 262% | 3% |
| Total revenues | 24 188 | 26 118 | 24 335 | 34 639 | 43 535 |

* revenues not used during the relevant year and deferred to the next year
Source: administrative accounts

Operating revenues

Operating revenues include tax and/or non-tax revenues used to finance the current activities of the City.

The operating revenues of the City include:

- local taxes (patent contribution, tax on built

land...),

- operating income (household waste collection taxes, alignment right and demarcation fees...),
- municipal taxes (advertisement tax),
- land property income (daily taxes, souk rental proceeds ...),
- various income (cash advances),
- operating and equipment allowances allocated annually by the State,
- refunding of funds.

The break-up and evolution of the operating revenues of the City are presented as follows:

| | Million CFA | 2008 | 2009 | 2010 | 2011 | 2012 |
|---------------------|---------------------------|--------|--------|--------|--------|--------|
| Endogenous revenues | Operating income | 156 | 152 | 148 | 274 | 375 |
| | Domanial income | 137 | 159 | 159 | 160 | 164 |
| | Municipal taxes | 1 293 | 1 373 | 1 480 | 1 619 | 1 652 |
| | Sub-total | 1 587 | 1 684 | 1 787 | 2 053 | 2 191 |
| | % total revenues | 7% | 6% | 8% | 7% | 6% |
| Exogenous revenues | Local taxes | 13 086 | 21 532 | 18 553 | 20 858 | 20 339 |
| | TEOM* | 1 128 | 2 320 | 1 524 | 1 727 | 1 553 |
| | Various income | 57 | 271 | 285 | 13 | 183 |
| | Allowances from the State | 409 | 310 | 310 | 290 | 290 |
| | Fund repayment | 0 | 0 | 0 | 1 | 12 026 |
| | Interest and dividend | 7 | 0 | 0 | 0 | 0 |
| | Cash advances | 7 913 | 0 | 0 | 2 898 | 0 |
| | Sub-total | 22 601 | 24 434 | 20 672 | 25 786 | 34 392 |
| | % of total revenues | 93% | 94% | 92% | 93% | 94% |
| | Total revenues | 24 188 | 26 118 | 22 459 | 27 839 | 36 583 |
| Reprocessed total** | 16 275 | 26 118 | 22 459 | 24 941 | 24 556 | |

* Household waste collection tax
** Reprocessed cash advances and exception fund repayment
Source: Administrative accounts

Operating revenues have overall increased over the period by 51%, from CFA 24,188 million to CFA 36,583 million.

However, in 2008, 2011 and 2012, the level of the City's revenues is impacted by cash advances from the public accountant and an exceptional refunding of funds.

In 2008 and 2011, the City received cash advances of CFA 7,913 million and CFA 2,898 million respectively.

These advances met the cash shortages encountered by the City to cover its obligatory operating expenses.

The cash advances were made on the initiative of the State because of the delay in the recovery of taxes.

In 2012, this exceptional level of operating revenues is explained by the fact that the State refunded a total amount of CFA 12,026 million.

This refunding corresponds to expenses incurred by the City in 2008 as part of the organization of the 11th summit of the Islamic Conference Organization.

The reprocessing of operating revenues, cash advances and the refunding provides the actual level of the operating revenues received by the City. These revenues follow a regular trend over the period and stabilized to CFA 24 billion as from 2011.

- *Operating revenues mainly made up of local taxes*

During the period, local taxes accounted averagely 70% of the City's operating revenues.

Table 10: Evolution of local taxes 2008-2012

| Million CFA | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|--------|--------|--------|--------|--------|
| Minimum tax | 1 777 | 2 389 | 2 601 | 2 598 | 1 896 |
| Patent contribution | 8 580 | 14 399 | 12 902 | 14 950 | 14 815 |
| % of patent in local taxes | 66% | 67% | 70% | 72% | 73% |
| Licences | 0 | 0 | 6 | 0 | 0 |
| Tax on built property | 1 962 | 3 958 | 2 344 | 2 558 | 2 782 |
| General Single Contribution | 151 | 170 | 11 | 0 | 2 |
| Tax on motor vehicles | 355 | 411 | 515 | 558 | 572 |
| Tax on real estate capital gain | 261 | 205 | 175 | 192 | 252 |
| Total local taxes(A) | 13 086 | 21 532 | 18 553 | 20 858 | 20 339 |
| Total revenues (B) | 24 188 | 26 118 | 22 459 | 27 839 | 36 583 |
| Net weight of local taxes in the total revenues (A)/(B) | 54% | 82% | 83% | 75% | 56% |

Source: administrative accounts

The patent contribution accounts for more than 65% of local taxes between 2008 and 2012.

This situation shows the financial dependence of the City on local taxes, particularly the patent contribution.

- *Main operating revenues uncontrollable by the City*

The main operating revenues of the City come from local taxes from whose management has not been transferred to the City.

Table 11: Main operating revenues of the City

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------------------------|--------|--------|--------|--------|--------|
| Contribution des patentes | 8 580 | 14 399 | 12 902 | 14 950 | 14 815 |
| Minimum fiscal | 1 777 | 2 389 | 2 601 | 2 598 | 1 896 |
| Impôt foncier bâti | 1 962 | 3 958 | 2 344 | 2 558 | 2 782 |
| TEOM* | 1 128 | 2 320 | 1 524 | 1 727 | 1 553 |
| Taxe sur les véhicules automobiles | 355 | 411 | 515 | 558 | 572 |
| Sous-total (A) | 13 803 | 23 476 | 19 885 | 22 392 | 21 617 |
| C**= (A)/(B) | 57% | 90% | 89% | 80% | 59% |
| Autres recettes | 10 385 | 2 642 | 2 574 | 5 447 | 14 965 |
| Dont avances de trésorerie | 7 913 | 0 | 0 | 2 898 | 0 |
| dont remboursement de fonds | 0 | 0 | 0 | 0 | 12 026 |
| Total des recettes (B) | 24 188 | 26 118 | 22 459 | 27 839 | 36 583 |

* Household waste collection tax

** weight of main operating revenues in the total revenues

Source: administrative accounts

In 2008 and 2012, the patent contribution, the minimum tax, the tax on built land, the household waste collection tax and the motor vehicle tax account for averagely 75% of the total operating revenues.

The management (determination of the tax base, issuance of taxation notices and recovery) of these revenues is done by the services of the General Directorate for Taxes (DGID) and the Treasury.

Thus, the evolution of these revenues is depended on the performance of DGID and the Treasury in the management of these local taxes.

The fact that the control over these operating revenues has not been transferred is likely to limit the evolution margin of the City's operating revenues.

- *Low share of the City's own revenues in the operating revenues*

Own revenues are revenues managed by the City and for which:

- the tax base is set by the City,
- the recovery is done by the City.

The City's own revenues include:

- Operating income exclusive of TEOM,
- Land income,
- Municipal taxes.

Table 12: Evolution of the City's own revenues 2008-2012

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|--|--------------|--------------|--------------|--------------|--------------|
| Produits d'exploitation (hors TEOM) | 156 | 152 | 148 | 274 | 375 |
| Produits domaniaux | 137 | 159 | 159 | 160 | 164 |
| Taxes municipales | 1 293 | 1 373 | 1 480 | 1 619 | 1 652 |
| <i>Dont taxe sur la publicité</i> | <i>1 292</i> | <i>1 370</i> | <i>1 479</i> | <i>1 617</i> | <i>1 652</i> |
| Total recettes propres (A) | 1 587 | 1 684 | 1 787 | 2 053 | 2 191 |
| Taux de variation 2008-2012 | 38% | | | | |
| Total des recettes de fonctionnement (B) | 24 188 | 26 118 | 22 459 | 24 941 | 36 583 |
| C=(A)/(B)* | 7% | 6% | 8% | 8% | 6% |

Source: administrative accounts

* Share of own revenues in the total operating revenues

The City's own revenues have increased by 38% between 2008 and 2012 and represent less than 10% of the operating revenues.

The increase in the own revenues results from the performance (gradual extension of the tax base and improved recovery) achieved by the City with regard to the advertisement tax.

The proceeds from this municipal tax have increased from CFA 1,292 million in 2008 to CFA 1,652 million in 2012 (+27%).

Despite their increase, these own revenues represent a small proportion of operating revenues.

- *Insufficiency of allowances received from the State*

Allowances received from the State account for averagely 1% of the City's operating revenues between 2008 and 2012.

These funds paid by the State to finance the transferred competence have dropped from CFA 409 million in 2008 to CFA 290 million in 2012; or -29% in 5 years.

Investment revenues

Table 13: Investment revenues

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|-----------------------|----------|----------|--------------|--------------|--------------|
| BIS* | 0 | 0 | 1 876 | 0 | 0 |
| AFD** | 0 | 0 | 0 | 1 968 | 0 |
| BIS | 0 | 0 | 0 | 2 956 | 0 |
| Ecobank | 0 | 0 | 0 | 0 | 3 600 |
| TOTAL | 0 | 0 | 1 876 | 6 800 | 6 972 |
| Report | 0 | 0 | 0 | 1 876 | 3 372 |
| Recette de l'exercice | 0 | 0 | 1 876 | 4 924 | 3 600 |

*Islamic Development Bank

** French Development Agency

Source: administrative accounts

Investment revenues are in rise.

Between 2010 and 2012, the City obtained CFA 10.4 billion from loans granted by financial partners.

This mobilization of resources translates the support of financial partners for the financing of the City's socio-economic projects.

The expenditure of the City of Dakar

The operating expenses

- *Increasing operating expenses*

Table 14: Operating expenses of the City

| Million CFA | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------------------------|--------|--------|--------|--------|--------|
| Debt/ Royalty/ Insurance | 735 | 44 | 41 | 36 | 406 |
| Contingent & participation | 2 113 | 2 848 | 3 412 | 3 845 | 4 442 |
| Cabinet of the Mayor | 1 687 | 1 333 | 1 298 | 1 515 | 1 558 |
| Secretariat and offices | 1 506 | 1 597 | 1 755 | 1 989 | 2 233 |
| District council | 609 | 631 | 635 | 614 | 596 |
| Municipal revenues | 210 | 214 | 194 | 181 | 211 |
| Recovery service | 464 | 477 | 551 | 579 | 611 |
| Slaughterhouses/ Halls/ Markets | 210 | 307 | 555 | 766 | 925 |
| Communal property | 130 | 58 | 181 | 116 | 158 |
| Pop protection in case of accident | 119 | 221 | 432 | 762 | 852 |
| Roads/ square and gardens | 598 | 652 | 882 | 1 243 | 1 268 |
| Cleaning | 75 | 336 | 438 | 694 | 984 |
| Workshops and garages | 829 | 951 | 1 284 | 1 615 | 1 900 |
| Water services | 80 | 132 | 199 | 167 | 132 |
| Public lighting | 707 | 211 | 223 | 632 | 502 |
| Youth education and culture | 1 304 | 1 485 | 1 602 | 2 635 | 2 337 |
| health, hygiene & welfare actions | 2 930 | 3 235 | 2 885 | 2 826 | 3 119 |
| Cimetries and funeral services | 5 | 4 | 5 | 4 | 4 |
| Religious feasts and ceremonies | 458 | 640 | 816 | 1 324 | 1 542 |
| Various expenses | 1 248 | 1 160 | 1 072 | 1 299 | 1 419 |
| Total operating expenses | 16 017 | 16 536 | 18 461 | 22 843 | 25 199 |
| Variation rate | - | 3% | 12% | 24% | 10% |
| Variation rate | | | | | 57% |

Source: Administrative accounts

Operating expenses have overall increased by 57% between 2008 and 2012; however, the variation rate dropped between 2011 and 2012.

The increase in operating expenses is justified by moderate and high rises of certain expenses.

The following table shows us the variation rate of the main operating expenses between 2008 and 2012:

Table 15: Main operating expenses

| Million CFA | 2008 | 2009 | 2010 | 2011 | 2012 | Var |
|---|---------------|---------------|---------------|---------------|---------------|------------|
| Moderate increase | | | | | | |
| Various expenses | 1 248 | 1 160 | 1 072 | 1 299 | 1 419 | 14% |
| Health, hygiene & welfare actions | 2 930 | 3 235 | 2 885 | 2 826 | 3 119 | 6% |
| High increase | | | | | | |
| Contingent & participation | 2 113 | 2 848 | 3 412 | 3 845 | 4 442 | 110% |
| Secretariat and offices | 1 506 | 1 597 | 1 755 | 1 989 | 2 233 | 48% |
| Slaughterhouses/ Halls/ Markets | 210 | 307 | 555 | 766 | 925 | 341% |
| Pop protection in case of accident | 119 | 221 | 432 | 762 | 852 | 617% |
| Roads/ square and gardens | 598 | 652 | 882 | 1 243 | 1 268 | 112% |
| Cleaning | 75 | 336 | 438 | 694 | 984 | 1217% |
| Workshops and garages | 829 | 951 | 1 284 | 1 615 | 1 900 | 129% |
| Religious feasts and ceremonies (social solidarity) | 458 | 640 | 816 | 1 324 | 1 542 | 237% |
| Youth education and culture | 1 304 | 1 485 | 1 602 | 2 635 | 2 337 | 79% |
| Other expenses | 2 422 | 1 377 | 1 338 | 1 551 | 1 964 | |
| TOTAL | 16 017 | 16 536 | 18 461 | 22 843 | 25 199 | 57% |

Source: administrative accounts

The increase in operating expenses is explained by the implementation of the City Project in certain areas including:

- remuneration of young people recruited during the implementation of the project of young volunteers for the City (support for the urban public service). This expense item mainly contributes to the increase in various expenses;
- improvement of access to healthcare through a policy of assistance offered to the citizens;
- urban development and improvement of the populations' living environment by re-conquering public space (roadway, square and garden), relocation of tradesmen and creation of commercial spaces (slaughterhouses, halls and markets), cleansing (cleaning, machine hiring and fuel costs);
- social solidarity (financial assistance for the disadvantaged populations during religious feasts),
- facilitation of access to education by the rehabilitation of schools (rehabilitation of 88 schools out of 147) and distribution of scholarships, improvement of pupils' welfare (free distribution of uniforms and milk to each pupil, free medical consultations);

The increase in contingent and participation expenses is linked to the increase in operating revenues.

In 2012, the increase in the expenses partly derives from the contribution of the City (CFA 1 billion) in the organization of the 6th Africités summit held in Dakar in December.

The table below shows the evolution of the ratio of operating expenses/operating revenues:

| Million CFA | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------|--------|--------|--------|--------|--------|
| Operating expenses | 16 017 | 16 536 | 18 461 | 22 843 | 25 199 |
| Operating revenues | 24 188 | 26 118 | 22 459 | 27 839 | 36 583 |
| (A)/(B) | 66% | 63% | 82% | 82% | 69% |

Source: administrative accounts

As from 2010, the weight of operating expenses on operating revenues has increased.

The decline in 2012 remains exceptional, because of the exceptional refunding of expenses in relation to the OCI⁹.

According to information obtained, all non-compulsory expenses in the administrative account can be modulated (they could even be reduced or cancelled if the commune is faced with a cash shortage).

▪ *Important compulsory expenses*

During the period, the wage bill and "contingent and participations" represent more than half of the City's operating expenses.

The increase in these two expense items and their share in the operating expenses are presented below:

| Million CFA | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|--------|--------|--------|--------|--------|
| Wage bill (A) | 7 670 | 7 677 | 7 963 | 8 562 | 9 163 |
| Variation rate | - | 0% | 4% | 8% | 7% |
| Participations and contingent (B) | 2 113 | 2 848 | 3 412 | 3 845 | 4 442 |
| Variation rate | | 35% | 20% | 13% | 16% |
| TOTAL C= (A)+(B) | 9 783 | 10 525 | 11 375 | 12 407 | 13 605 |
| Operating expenses (D) | 16 017 | 16 536 | 18 461 | 22 843 | 25 199 |
| Share in operating expenses E= (C) /(D) | 61.1% | 63.6% | 61.6% | 54.3% | 54.0% |

Source: administrative accounts

Participation and contingent expenses refer to the financial assistance granted by the City to the district communes.

Participations constitute the largest part of the assistance and are compulsory payments made by the City to the 19 district communes.

The total amount is determined by a prefectural order on the basis of 10% of the triennial average operating revenues.

The distribution is done according to the number of inhabitants in the district communes.

These charges, not easily compressible, have increased over the period despite the reduction of their weight in operating expenses in rise.

The upwards trend of operating expenses should continue in the years to come, because of the current investments and the continuation of the implementation of the City Project.

⁹ The Organisation of Islamic Cooperation (OIC) (previously known as the Organization of the Islamic Conference) was established on 9/25/1969 in Rabat, Morocco. It includes 57 Member States and is the voice of the Muslim world, whose interest it protects. - Source: OCI website.

Capital expenditure

Table 18: Presentation of capital expenses

| Million CFA | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|-------|-------|-------|--------|-------|
| Administrative equipment | 71 | 208 | 125 | 315 | 136 |
| Roads | 6 109 | 3 333 | 4 965 | 8 044 | 7 442 |
| % of road expenses in the total development expenses | 85% | 84% | 87% | 82% | 86% |
| Protection against accidents and disasters | 0 | 0 | 4 | 0 | 0 |
| Infrastructures of industrial, commercial and artistic nature | 0 | 0 | 9 | 27 | 66 |
| Health/ hygiene and welfare actions | 434 | 133 | 178 | 156 | 207 |
| Education, youth, culture and sport | 561 | 289 | 425 | 1 279 | 778 |
| Information | 6 | 3 | 1 | 39 | 0 |
| Total development, equipment | 7 182 | 3 965 | 5 706 | 9 861 | 8 628 |
| Acquisition of large equipment | 0 | 0 | 0 | 1 257 | 1 |
| General studies | 12 | 0 | 85 | 81 | 393 |
| Sub-total not including repayment | 7 195 | 3 965 | 5 791 | 11 199 | 9 023 |
| Financial transactions / loan repayment | 0 | 0 | 0 | 1 232 | 2 359 |

Source: administrative accounts

Capital expenditure (exclusive of loan repayment) follows an erratic trend between 2008 and 2012 because of the absence of a long-term investment plan.

The City's capital expenditure is focused on the roadway system (averagely 81% of the capital expenditure between 2008 and 2012) within the competence of the City.

These investments in the roadway system relate to the improvement and extension of the City road system, as well as paid parking.

They are intended to improve urban mobility and to diversify the financial resources of the City.

Tax potential

The largest part (70%) of operating revenues comes from the local taxes whose management does not depend on the City.

Indeed, the City does not determine the tax base (amount used as the basis for the calculation of a tax), does not issue taxation notices and does not manage the recovery process.

This lack of control by the City over its main financing sources does not allow for the optimization of tax revenues.

In addition, the management of the local tax system of the City is confronted with difficulties which impact the level of the revenues:

- slowness in the issuance of taxation notices,
- the taxpayer file needs to be made reliable,
- decisions (tax cut, reductions, tax incentives) likely to reduce the City's tax revenues.

These difficulties result in a limitation of the City's operating revenues.

With nearly 70% of operating revenues originating from the local taxes managed and recovered on behalf of the City by the State, the difficulties presented above result in a limitation of the City's operating revenues.

However, measures (performance contract between the City and the DGID, identification of taxpayers) are planned to ensure better collaboration between the City and the Tax Administration in order to develop the City's tax potential whose outlines are yet to be determined and evaluated.

The City is considering, together with the PPIAF, the optimization of its revenues through:

- a diagnosis of its tax policy (which City estimates does not exist) and its potential of revenues (which is unknown)
- a decision to conduct an analysis of the evolution in the City's revenues and of the variations between the estimated and the actual recovery of revenues;
- a decision to therefore set up an action plan as part of an overall strategy of improvement of its revenues and based on the following objectives:
 - enable the City to have better control over its revenues by re-mineralizing the collection functionality;
 - enable the City, through a gradual approach, to control the taxable base of its various taxes and to have an accurate idea picture of its potential in order to found its claims to the central tax services;
 - develop for this purpose an internal short-medium-long term strategy through the establishment of an internal mechanism to watch, control and monitor the City's resources by the reinforcement of the Division of municipal taxes and local taxation;
 - offer technical and financial partners better legibility on the resources of the City.

Projected commercial investments are likely to improve tax revenues.

Financial balance

Table 19: Global presentation of the financial balance

| Million CFA | 2008 | 2009 | 2010 | 2011 | 2012 |
|-----------------------|--------|--------|--------|--------|--------|
| Total revenues | 24 188 | 26 118 | 24 335 | 34 639 | 43 555 |
| Operating revenues | 24 188 | 26 118 | 22 459 | 27 839 | 36 583 |
| Investment revenues | 0 | 0 | 1 876 | 6 800 | 6 972 |
| Incl. carried forward | 0 | 0 | 0 | 1 876 | 3 372 |
| Total expenses | 23 212 | 20 501 | 24 252 | 35 273 | 36 581 |
| Operating expenses | 16 017 | 16 536 | 18 461 | 22 843 | 25 199 |
| Capital expenditure | 7 195 | 3 965 | 5 791 | 12 431 | 11 382 |
| Incl. Repayment | 0 | 0 | 0 | 1 232 | 2 359 |
| Management result | 976 | 5 617 | 83 | -634 | 6 974 |

Source: administrative accounts

The total revenues cover the total expenditure over the period except in 2011 because of a very high increase in capital expenditures. However, this positive result is marked by extensive variations.

▪ Analysis of intermediate management balances

The analysis of the intermediate management balances helps to appreciate the formation of the income of the City.

Moreover, this analysis makes it possible to comprehend the capacity of the City to finance its operation, to refund its financial debts and to self-finance its development.

The formation of the financial balance of the City is as follows:

Table * 20: Presentation of intermediary management balances

| Million CFA | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------------|--------|--------|--------|--------|--------|
| Operating revenues | 24 188 | 26 118 | 22 459 | 27 839 | 36 583 |
| Operating expenses | 16 017 | 16 536 | 18 461 | 22 843 | 25 199 |
| Gross savings | 8 171 | 9 582 | 3 998 | 4 996 | 11 383 |
| Loan repayment | 0 | 0 | 0 | 1 232 | 2 359 |
| Net savings | 8 171 | 9 582 | 3 998 | 3 765 | 9 024 |
| Investment revenues | 0 | 0 | 1 876 | 6 800 | 6 972 |
| Capital expenditure (B) | 7 195 | 3 965 | 5 791 | 11 199 | 9 023 |
| Investment requirement (A)-(B) | -7 195 | -3 965 | -3 915 | -4 399 | -2 051 |
| Management result | 976 | 5 617 | 83 | -634 | 6 974 |

Source: administrative accounts and Bloomfield Investment Corporation

Gross savings

Gross savings represent the surplus of the revenues of operation over the operating expenses.

It makes it possible to determine the ability of the City to refund its financial debts.

Table 21: Gross savings

| Million CFA | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------|--------|--------|--------|--------|--------|
| Operating revenues | 24 188 | 26 118 | 22 459 | 27 839 | 36 583 |
| Operating expenses | 16 017 | 16 536 | 18 461 | 22 843 | 25 199 |
| Gross savings | 8 171 | 9 582 | 3 998 | 4 996 | 11 383 |
| Variation rate | - | 17% | -58% | 25% | 128% |
| Gross savings rate | 34% | 37% | 18% | 8% | 31% |

Source: administrative accounts and Bloomfield Investment Corporation

Between 2008 and 2012, the City shows its capacity to self-finance its operating expenses.

However, the gross savings present an irregular variation over the period mainly because of the irregularity of the main operating revenues of the City.

Between 2008 and 2009, the occasional increase in the operating revenues, coupled with a weak rise in the operating costs (+3%) allowed an improvement of the gross savings which moved from CFA 8.1 billion to CFA 9.5 billion.

In 2010, the fall of the operating revenues by 14% and the increase in operating costs caused a 58% decline in the operating surplus, which amounted to CFA 3.9 billion.

In 2011, the gross savings increased by 24%.

This evolution is explained by the increase in operating revenues which absorbed the continual growth of operating costs.

In 2012, the City reached an exceptional level of gross savings of CFA 11.3 billion, following the exceptional refunding of CFA 12,026 million by the State of Senegal.

In the absence of such refunding the financial situation would have deteriorated and the City would have experienced a deficit of CFA 5,053 million by the end of 2012.

Lack of control on the main operating revenues and the foreseeable increase in operating costs will have an impact on the City's ability to generate sufficient gross savings in the medium term.

Net savings

The net savings are the surplus of resources available to finance investments after the repayment of the annual loan instalments:

Table 22: Net Savings

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------------------|--------|--------|--------|--------|--------|
| Recettes de fonctionnement | 24 188 | 26 118 | 22 459 | 27 839 | 36 583 |
| Dépenses de fonctionnement | 16 017 | 16 536 | 18 461 | 22 843 | 25 199 |
| Epargne brute | 8 171 | 9 582 | 3 998 | 4 996 | 11 383 |
| Remboursement emprunt | 0 | 0 | 0 | 1 232 | 2 359 |
| Epargne nette | 8 171 | 9 582 | 3 998 | 3 765 | 9 024 |
| Taux d'épargne nette | 33,8% | 36,7% | 17,8% | 13,5% | 24,7% |

Source: administrative accounts and Bloomfield Investment Corporation

The City has a positive net savings and thus shows during the period its capacity to cover payment of the annual loan instalments and to entirely or partly finance its investments.

However, in the absence of alternative resources, the repayment capacity could be

reduced because of the foreseeable increase in operating costs and the absence of control over the City's main operating revenues.

Investment requirement

The investment requirement and its evolution are presented as follows:

Table 23: Evolution of the investment requirement 2008-2012

| Million FA | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------------|--------|--------|--------|--------|--------|
| Investment revenues (A) | 0 | 0 | 1 876 | 6 800 | 6 972 |
| Capital expenditure (B) | 7 195 | 3 965 | 5 791 | 11 199 | 9 023 |
| Investment requirement (A)-(B) | -7 195 | -3 965 | -3 915 | -4 399 | -2 051 |

Source: administrative accounts and Bloomfield Investment Corporation

The City's investment requirement is chronic but is declining.

Loans taken from donors and private banks enable the City to partly cover its important and necessary investments particularly for the renovation and the maintaining of the roadway system which represent 80% of the expenditure over the period of 2008 to 2012

The result

The result is presented as follows:

Table 24: Formation of the management result

| Million CFA | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------------|--------|--------|--------|--------|--------|
| Gross savings | 8 171 | 9 582 | 3 998 | 4 996 | 11 033 |
| Net savings | 8 171 | 9 582 | 3 998 | 3 765 | 9 024 |
| Investment revenues (A) | 0 | 0 | 1 876 | 6 800 | 6 972 |
| Capital expenditure (B) | 7 195 | 3 965 | 5 791 | 11 199 | 9 023 |
| Investment requirement (A)-(B) | -7 195 | -3 965 | -3 915 | -4 399 | -2 051 |
| Management result | 976 | 5 617 | 83 | -634 | 6 974 |
| Variation rate | | 475% | -99% | -867% | 1169% |

Source: administrative accounts and Bloomfield Investment Corporation

The result of the City has followed an erratic trend because of the uncontrolled main revenues, the increasing operating costs, and a chronic investment requirement.

Between 2008 and 2009, the result has increased by 475%, from CFA 976 million to CFA 5,617 million.

This result is explained by the one-off improvement of the recovery of the main operating revenues, the quasi-stability of operating costs and the decrease in capital expenditures.

In 2010, the decrease in gross savings due to the decline in operating revenues and the continued increase in operating costs mainly justify the low result of CFA 83 million; i.e. a decrease of 98% compared to 2009.

In 2011, the repayment of the debt burdened the improving gross savings.

Despite the improvement of gross savings and investment revenues, the repayment of the annual loan instalment and the high increase in capital expenditures (+93% compared to 2010) have affected the financial balance of the City.

This results in a deficit of CFA 634 million.

In 2012, the exceptional refunding enabled the City to balance its accounts with a result of CFA 6,974 million.

Without this refunding of funds, the City would have ended the year with a deficit of CFA 5,053 million.

Finance structure

The analysis of the finance structure involves a review of the financing tools used by the City to finance its operation and its investments.

Financing

Financing of the operations

The analysis of the gross savings shows that the City manages to finance its operation.

However, this self-financing tends to weaken because of a continuous progression of the operating costs combined with irregular variations of operating revenues.

This self-financing was supported by advances (2008 and 2011) and was made possible thanks to exceptional revenues (2012).

The foreseeable increase in the operating costs imposes an exploitation of the tax potential, an improvement of the local tax collection of taxes and a diversification of the operating revenues of the City.

Investment financing

The City's investment financing method is as follows:

Table 25: Investment financing

| Million CFA | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------------------------|-------|-------|-------|--------|--------|
| Net savings (A) | 8 171 | 9 582 | 3 998 | 3 765 | 9 024 |
| Loan (B) | 0 | 0 | 1 876 | 6 800 | 6 972 |
| Investment capacity C = (A)+ (B) | 8 171 | 9 582 | 5 874 | 10 564 | 15 996 |
| Capital expenditure (D) | 7 195 | 3 965 | 5 791 | 11 199 | 9 023 |
| (A)/ (D) | 114% | 242% | 69% | 34% | 100% |

Source: administrative accounts and Bloomfield Investment Corporation

The City's investment capacity is increasing.

In 2008 and 2009, the City managed to finance its capital expenditures by making deductions from its operating revenues.

In 2010 and 2011, self-financing accounted for 69% and 34% of investment expenditure respectively.

The quasi-stability of operating revenues, the increase in operating costs, and the repayment of the loan have reduced the surplus available for investment financing.

The insufficiency of internal resources is compensated by the loans taken.

In 2012, the exceptional refunding of funds (CFA 12,026 million) enabled the City to be self-finance its investments and to improve its investment capacity.

With the foreseeable quasi-stability of operating revenues, the increase in operating costs, the City's margin of manoeuvre in terms of investment self-financing is likely to decline.

Current self-financing ratio

The current self-financing ratio enables to determine the City's ability to cover its operating costs and its debt servicing through its operating cost.

Table 26: Current self-financing ratio

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------------|------------|------------|------------|------------|------------|
| Dépenses de fonctionnement (A) | 16 017 | 16 536 | 18 461 | 22 843 | 25 199 |
| Remboursement emprunt (B) | 0 | 0 | 0 | 1 232 | 2 359 |
| Sous-total C = A+B | 16 017 | 16 536 | 18 461 | 24 075 | 27 558 |
| Recettes de fonctionnement (D) | 24 188 | 26 118 | 22 459 | 27 839 | 36 583 |
| E= C/D | 66% | 63% | 82% | 86% | 75% |

Source: administrative accounts and Bloomfield Investment Corporation

Between 2008 and 2011, the City's current self-financing capacity has declined.

This situation was mainly due to a gradual increase in operating costs.

The ratio remained lower than 1 over the period from 2008 to 2011, thus showing the City's ability to finance its operations and to meet its financial commitments.

In 2012, the slight improvement of the self-financing ratio results from the debt servicing (CFA 12,026 million), which explains the exceptional rise in operating costs.

In the absence of this exceptional income, the City would not have been able to cover the operating costs and the debt servicing.

Debt of the City of Dakar

▪ Presentation of the debt

The City's debt is as follows (in million CFA):

Table 27: Ongoing loan agreements

| Lender | Purpose | Amount | Signing date | Duration |
|----------------|--|--------|--------------|---|
| AFD* | Lighting in the City of Dakar | 6 500 | 2011 | 20 years with 7 year period of grace |
| PRECOL 1 (AFD) | Local government reinforcement and equipping programmes | 441 | 2007 | 12 years |
| PRECOL 2 (AFD) | Local government reinforcement and equipping programmes | 827 | 2009 | 12 years |
| WADB*** | Improvement and extension of the road system and modernisation of the paid parking space | 9 700 | 2012 | 13 years (3 year period of grace) |
| BIS** | Modernisation of traffic lights | 2 065 | 2010 | 2 years |
| BIS | Acquisition of a land parcel | 3 000 | 2010 | 2 years |
| ECOBANK | Construction of a shopping mall downtown | 3 600 | 2012 | 5 years renewable with 2 year period of grace |
| TOTAL | | 26 133 | | |

* French Development Agency **Islamic Bank of Senegal

*** West African Development Bank

Source: City of Dakar

Between 2007 and 2012, the City secured loans for a total amount of CFA 26.1 billion.

Loans from the international donors account for 65% (CFA 17 billion) of the total amount granted.

These loans cover periods from 12 to 20 years, with periods of grace.

The purpose of the loans is to finance public investments (road networks, public lighting, traffic lights).

This important resource mobilization shows the support of donors for the financing of the structuring investments necessary to urban development and to the improvement of the living environment of the populations.

Loans from commercial banks (CFA 9 billion) account for 35% of the total amount borrowed by the City of Dakar.

The largest part (CFA 6 billion) of these last loans is intended to finance commercial investment projects.

The City is in a dynamic of mobilization of resources to finance:

- renovation and acquisition of public equipment,
- rehabilitation of urban space and facilitation of mobility in the City,

- commercial projects intended to improve the level of operating revenues.

Commercial projects must be able to generate additional revenues to cover the associate operating costs and to repay loans.

Indeed, article 254 of the code of local governments stipulates that: *“local governments operating commercial facilities may apply taxes on the use of such facilities.*

A decree defines the maximum rates and the methods of collection of the taxes set out under this article”.

- *Burden of the debt and refunding capacity*

The level of debt is evaluated from the outstanding debt at the end of the year.

The evolution of the outstanding debt is as follows (in million CFA):

Table 28: Evolution of the outstanding debt 2008-2012

| Loan | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------|------|------|-------|-------|-------|-------|
| PRECOL 1 | 441 | 385 | 332 | 279 | 228 | 179 |
| PRECOL 2 | - | - | 827 | 723 | 622 | 524 |
| BIS - FEUX | - | - | - | 2 065 | 1 232 | 0 |
| BIS - SUDINVEST | - | - | - | - | 3 000 | 1 709 |
| AFD - ECLAIRAGE | - | - | - | - | 1 968 | 1 968 |
| BOAD - VOIRIE | - | - | - | - | - | 0 |
| ECOBANK - KERMEL | - | - | - | - | - | 3 600 |
| Outstanding | 441 | 385 | 1 158 | 3 067 | 7 050 | 7 980 |

Source: City of Dakar

The level of the outstanding debt increases gradually over the period as disbursements are received from lenders.

The ratio of outstanding debts over the gross savings is evaluated as the number of years necessary to refund outstanding debts if the total gross savings were assigned to that.

The ratio of outstanding debts thus enables to determine the repayment capacity of the City. This ratio is presented in the table below:

Table 29: Presentation of the level of the outstanding debt

| | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------------|-------|-------|-------|-------|--------|
| Outstanding debt (A) | 385 | 1 158 | 3 067 | 7 050 | 7 980 |
| Gross savings (B) | 8 171 | 9 582 | 3 998 | 2 098 | 11 383 |
| (A)/(B) | 5% | 12% | 77% | 336% | 70% |

Source: Bloomfield Investment Corporation

The City's debt repayment capacity has declined between 2008 and 2011.

The debt repayment capacity exceptionally improved in 2012.

The table below shows the debt burden:

Table 30: Presentation of the level of outstanding debt

| Million CFA | 2008 | 2009 | 2010 | 2011 | 2012 |
|---------------------------|--------|--------|--------|--------|--------|
| Repayment instalments (A) | 0 | 0 | 0 | 1 232 | 2 359 |
| Operating income (B) | 24 188 | 26 118 | 22 459 | 27 839 | 36 583 |
| (A)/(B) | 0% | 0% | 0% | 4% | 6% |

Source: Bloomfield Investment Corporation

The annual loan repayment instalments relate to the loans taken from the Islamic Bank of Senegal.

The debt burden is increasing and accounts for 4% and 6% respectively for the years 2011 and 2012.

- *Control and monitoring of the debt by the representative of the State*

The code of local governments has provisions allowing the Prefect to correct the budget, by requiring the inclusion or the adjustment of compulsory expenses.

Moreover, the Prefect has the power to make his decision binding.

This prerogative (the power compel the City to meet its financial commitments) of the representative of the State allows to regularly monitor the City's debt and its compliance with its financial commitments.

Development plans of the City of Dakar

A long term development plan under preparation

The vision contemplated in the political program “BENNOO SIGGIL SENEGAAL DE DAKAR – PROJET DE VILLE” is reflected in the preparation of the development programme that is the foundation of the City's long-term projections known as “Dakar by 2025”.

This development plan under preparation at the Directorate for of Planning and Sustainable Development should be articulated around the issues of environment, regional planning and Infrastructure rehabilitation.

At the current stage, the first action plan designed and evaluated by the competent services of the City relates to the environment.

It is formalized in the PACTE (Environmental action plan) whose cost is estimated at CFA 54.6 billion for the period from 2013 to 2025.

This plan divided into 5 strategic components and 81 key action is only a part of the City's development plan.

APPENDIX (In CFA francs)

| Administrative accounts | 2008 | 2009 | 2010 | 2011 | 2012 |
|---------------------------------------|----------------|----------------|----------------|----------------|----------------|
| Operating revenues | 24 187 694 117 | 26 118 000 347 | 22 459 242 357 | 27 839 188 479 | 36 582 684 112 |
| Operating expenses | 16 016 832 153 | 16 536 346 448 | 18 461 487 788 | 22 842 832 339 | 25 199 398 247 |
| Various financial costs | 5 471 256 | 16 642 224 | 16 855 698 | 21 185 306 | 387 485 345 |
| Gross savings | 8 170 861 964 | 9 581 653 899 | 3 997 754 569 | 4 996 356 140 | 11 383 285 865 |
| Loan repayment | 0 | 0 | 0 | 1 231 738 170 | 2 359 048 515 |
| Net savings | 8 170 861 964 | 9 581 653 899 | 3 997 754 569 | 3 764 617 970 | 9 024 237 350 |
| Investment revenues (loan) | 0 | 0 | 1 875 877 946 | 6 799 873 946 | 6 972 252 284 |
| Investment expenses including: | 7 194 696 962 | 3 965 128 513 | 5 790 935 567 | 11 198 809 470 | 9 022 940 681 |
| <i>Investment in equipment</i> | 7 182 488 562 | 3 965 128 513 | 5 705 963 367 | 9 861 033 058 | 8 628 477 146 |
| <i>Acquisition of large equipment</i> | 0 | 0 | 0 | 1 257 053 765 | 1 351 100 |
| <i>General studies</i> | 12 208 400 | 0 | 84 972 200 | 80 722 647 | 393 112 435 |
| Investment requirement | -7 194 696 962 | -3 965 128 513 | -3 915 057 621 | -4 398 935 524 | -2 050 688 397 |
| Result of the year | 976 165 002 | 5 616 525 386 | 82 696 948 | -634 317 554 | 6 973 548 953 |
| Debt | | | | | |
| Debt outstanding | 385 420 083 | 1 158 356 087 | 3 066 953 367 | 7 049 778 780 | 7 980 059 094 |
| Ratios | | | | | |
| Net savings/ operating expenses | 51% | 58% | 22% | 16% | 36% |
| Net savings / Operating revenues | 34% | 37% | 18% | 14% | 25% |
| Gross savings rate | 33.8% | 36.7% | 17.8% | 17.9% | 31.1% |
| Net savings rate | 33.8% | 36.7% | 17.8% | 13.5% | 24.7% |
| Investment capacity | 8 170 861 964 | 9 581 653 899 | 2 121 876 623 | -3 035 255 976 | 2 051 985 066 |
| Self-financing | 114% | 242% | 69% | 34% | 100% |
| Outstanding/Gross savings | 4.7% | 12.1% | 76.7% | 141.1% | 70.1% |
| Annuity/Gross savings | 0.0% | 0.0% | 0.0% | 24.7% | 20.7% |
| Gross savings/Repayment annuities | | #DIV/0! | #DIV/0! | 4.06 | 4.83 |

Appendix 5.

Template for cities seeking financing for a feasibility study grant from a charitable foundation.

CITY LETTERHEAD

Foundation Name
Foundation Address
Foundation Address
Foundation Address

Date

Dear Foundation Contact:

Greetings. My name is Mayor [Mayor Name] and I have the honor of being the Mayor of [City Name]. Since I took office in [First Year of Term], I have pledged myself to improving the quality of life for my constituents as well as committed myself and my fellow politicians to pursuing investment projects that lead towards environmental sustainability and away from degradation.

As an active member city of the Municipal Solid Waste Initiative in the Climate & Clean Air Coalition to Reduce Short-Lived Climate Pollutants (CCAC), we are exploring any possible methods to introduce better practices for dealing with our challenges in the [collection/disposal/treatment] of solid waste. Based on our conversations with the CCAC, we have identified that we need external financial support to engage a team of financial, technical and social experts to assist us in completing a comprehensive technical and financial feasibility that also reviews the potential social and environmental impacts of our proposed project. This feasibility study will assist us to uncover the strengths and weaknesses of the project, external opportunities and threats to the successful execution of the project, the resources required to deliver and maintain the venture (both capital and operating expenditures), the prospects for success, and the environmental/social/governance impacts and trade-offs from a financial perspective. The feasibility study will enable us to design a financial structure that will attract investments at competitive rates for the project, and will be based off of the results of the city assessment previously completed (attached as Appendix 1 to this letter).

We are approaching you because we see strong overlap between our concept and your organizational mission, namely [organization mission and its link to municipal solid waste (i.e., empowerment of cities, environmental mitigation, etc.)]. After conferring with the CCAC and peer cities of similar sizes who have conducted similar assessments, we are asking for financial support of USD 1,000,000 from your foundation to underwrite the execution of this feasibility study.

We hope to be in contact in the near future to discuss this further and appreciate your consideration.

Sincerely,

Mayor, [City, Country]
Contact Information

Encl: Appendix 1 – City Assessment

Appendix 6.

Template for a resolution by a city's municipal council of its support for further work on the project.

RESOLUTION

Date of Formal Adoption of Resolution:

Whereas the City of [City Name] is a member city of the Climate & Clean Air Coalition to Reduce Short-Lived Climate Pollutants; and

Whereas the City of [City Name] is committed to improving its solid waste management activities; and

Whereas the officials of the City of [City Name] have reviewed the findings from the City Assessment, dated [date of report], and the Feasibility Study, dated [dated of report], for the proposed [Project Name]; and

Whereas the officials of the City of [City Name] understand that, through this Resolution, they are validating and accepting the findings from the City Assessment and the Feasibility Study; then

Therefore, the officials of the City of [City Name] endorse the [Name of City Department], accompanied by [Name of Facilitator], to continue with financial structuring of the project in the hopes of speedy recommendations for how to most efficiently and cost-effectively arrange the resources required for the delivery of the proposed [Project Name]; and

Therefore, indicate the full intention and political will of the City of [City Name] to support this endeavor as is necessary and required.

Head of Municipal Council

Appendix 7.

Financial Institutions - Programs and Funding

| Financial Institution | Priority Region | Total Direct Financing; Link to Annual Report | Sample Projects |
|---|--|---|--|
| Multilateral | | | |
| African Development Bank (AfDB) | Africa | Total Financing: USD 6.33 billion (2015) Infrastructure Finance: 3.08 billion (2015) http://afdb- org/wp/file/2016/05/Annual_Report_2 015_EN_Full.pdf | Integrated Urban Sustainable Development and Environmentally Sound Management of Solid Waste in Cameroon (USD 168 million) |
| Asian Development Bank (ADB) | Asia and Pacific | Total financing: USD 12.22 billion (2015) Urban Development: USD 2 billion (2015) http://www.adb.org/sites/default/files/in stitutional-document/182852/adb- annual-report-2015.pdf | Nuku'alofa (Tonga) Urban Development Sector Project to Provide Sustainable Solid Waste Services (USD 6.06 million, with additional support from the Government of Australia for USD 6.44 million) |
| Central American Bank for Economic Integration (BCIE) | Central America | Total financing: USD 1.562 billion (2014) Social Development: USD 363.9 million, or 23.3% (2014) http://arc- www.bcie.org/uploaded/content/categor y/370966280.pdf | None specific, but top priority in 2015-2019 agenda is human development and social infrastructure, which lists “initiatives to support water and sanitation projects” and “waste elimination and treatment and related activities” as its first two goals |
| Development Bank of Latin America (CAF) | South America plus Barbados, Panama, Jamaica, Dominican Republic | Total financing: USD 12.255 billion (2015) Infrastructure: USD 3.272 billion, or 26.7% of total (2015) https://www.caf.com/html/ia_2015/en/ | Performance-based mechanism (Ecuador) developed by which payments are granted for reduced emissions based on project performance in municipal solid waste management (USD 5 million) |
| European Bank of Reconstruction and | Eastern Europe, Middle East, and | Total financing: EUR 9.4 billion (2015) Municipal and Environmental Infrastructure: EUR 713 million (2015) | Kyzylorda (Kazakhstan) Waste Management to Finance the Development of a Modern Integrated Mechanical-Biological Treatment Facility based on Waste-to-Energy Technology (EUR 12 million) |

| | | | |
|---|--|---|--|
| Development (EBRD) | Central Asia | http://2015.ar-ebrd.com/ | |
| European Investment Bank (EIB) | Global (but heavily focused on EU) | Total financing: EUR 94 million (2015) Infrastructure financing: EUR 19.1 billion (2015) http://www.eib.org/about/key_figures/data.htm | Omnicanne (Mauritius) Carbon Burn-Out to Finance Installation and Operation of a Carbon Burn-Out Facility for Coal Ashes to Convert Coal Fly and Bottom Ashes into Additives for Portland Cement (EUR 8 million) |
| Inter-American Development Bank (IaDB) | North and South America | Total financing: USD 10.404 billion (2015) Urban Development/Housing: 727 million (2015) Water and Sanitation: 936 million (2015) https://publications.iadb.org/bitstream/handle/11319/7554/IDB-Annual-Report-2015-The-Year-in-Review.pdf?sequence=5 | Georgetown Solid Waste Management (Guyana) to Improve Solid Waste Management Services in Guyana (USD 20.75 million) |
| International Finance Corporation (IFC) | Developing countries | Total financing: USD 18 billion (2015) http://www.ifc.org/wps/wcm/connect/CRP_EXT_Content/IFC_External_Corporate_Site/Annual+Report | Financing to Hexagon Solid Waste (Turkey) to Help Build and Operate Solid Waste Management and Organomineral Fertilizer Production Facilities (USD 196 million) |
| Islamic Development Bank (IsDB) | North Africa, West Africa, Middle East, Southeast Asia | Total financing: USD 12.1 billion (2015) Infrastructure: USD 9.486 billion (2015) http://www.isdb.org/irj/go/km/docs/documents/IDBDevelopments/Internet/English/IDB/CM/Publications/Annual_Reports/40th/IDB_Annual_Report_1435H_English.pdf | Urban Development, Focused on Water Supply, Sanitation, Solid Waste Management and Social Housing (Bahrain, Iran, Cote d'Ivoire, Lebanon, Mali, Senegal and Nigeria) (USD 479 million) |

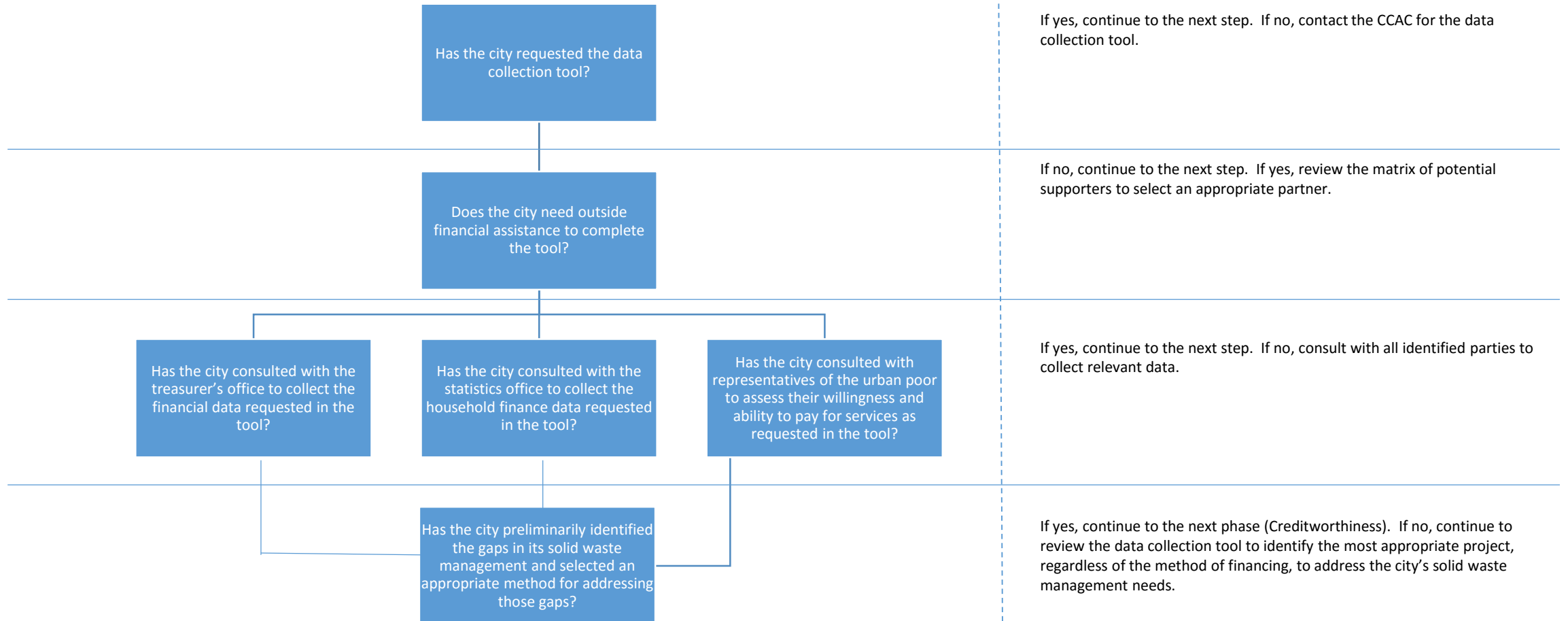
| | | | |
|--|------------------------------------|--|---|
| West African Development Bank (BOAD) | Francophone, Lusophone West Africa | Total financing: EUR 451 million (2015) Infrastructure: 123.5 million (2015) http://www.boad.org/sites/default/files/annualreport_angl-interactive_2015.pdf | Sanitation for Senegal in 10 Senegalese Municipalities (USD 10 million) |
| World Bank (WB), specifically International Bank for Reconstruction and Development (IBRD) and International Development Association (IDA) | Developing countries | Total financing: USD 42.5 billion (2015) Urban development: USD 4.865 billion (2015) http://www.worldbank.org/en/about/annual-report | Ningbo (China) Municipal Solid Waste Minimization and Recycling Project (USD 80 million) |
| | | | |
| Bilateral | | | |
| | | | |
| Development Bank of South Africa (DBSA) | Sub-Saharan Africa | Financing: USD 13 billion (2015) http://www.dbsa.org/EN/About-Us/Publications/Pages/DBSA-Annual-Reports.aspx | Infrastructure Investment Programme for South Africa (EUR 100 million) |
| Proparco (private sector financing arm of French Development Agency) | Global south | Financing: EUR 290 million (2015) http://www.proparco.fr/Accueil_PROPARCO/Publications-Proparco/Rapports-annuels_2 | Waste to Energy Facility for private-sector operator in Turkey (EUR 18.4 million) |
| KfW Bankengruppe (KfW) | Global | Financing: EUR 79.3 billion (2015) https://www.kfw.de/KfW-Group/About-KfW/Zahlen-und-Fakten/ | Ensuring environmentally sound wastewater and solid waste disposal in selected locations (470 million, from 2010 annual report) |

| | | | |
|--|--------------------------------|--|--|
| Overseas Private Investment Corporation (OPIC) | Global, with required US nexus | Financing: USD 4.4 billion (2015) https://www.opic.gov/sites/default/files/files/2015annualreport.pdf | Either direct investment or through fund intermediary – example: Mekong Renewable Resources (USD 50 million), an investor in renewable resource opportunities like waste-to-energy, recycling and solid waste management in Vietnam, Cambodia and Laos |
|--|--------------------------------|--|--|

Appendix 8.

Decision Tree - Location on MSW Finance Road Map

City Assessment



City Creditworthiness

Does the city already have a credit rating?

If yes, skip to the next phase (Financial Feasibility). If no, continue to the next step.

Does an external auditor regularly audit the city's financial statements?

If yes, continue to the next step. If no, work with your implementer to identify external auditors to conduct the city's annual financial review. Select an auditor based on your procurement process and investigate the possibility of reviewing past years to create a financial profile.

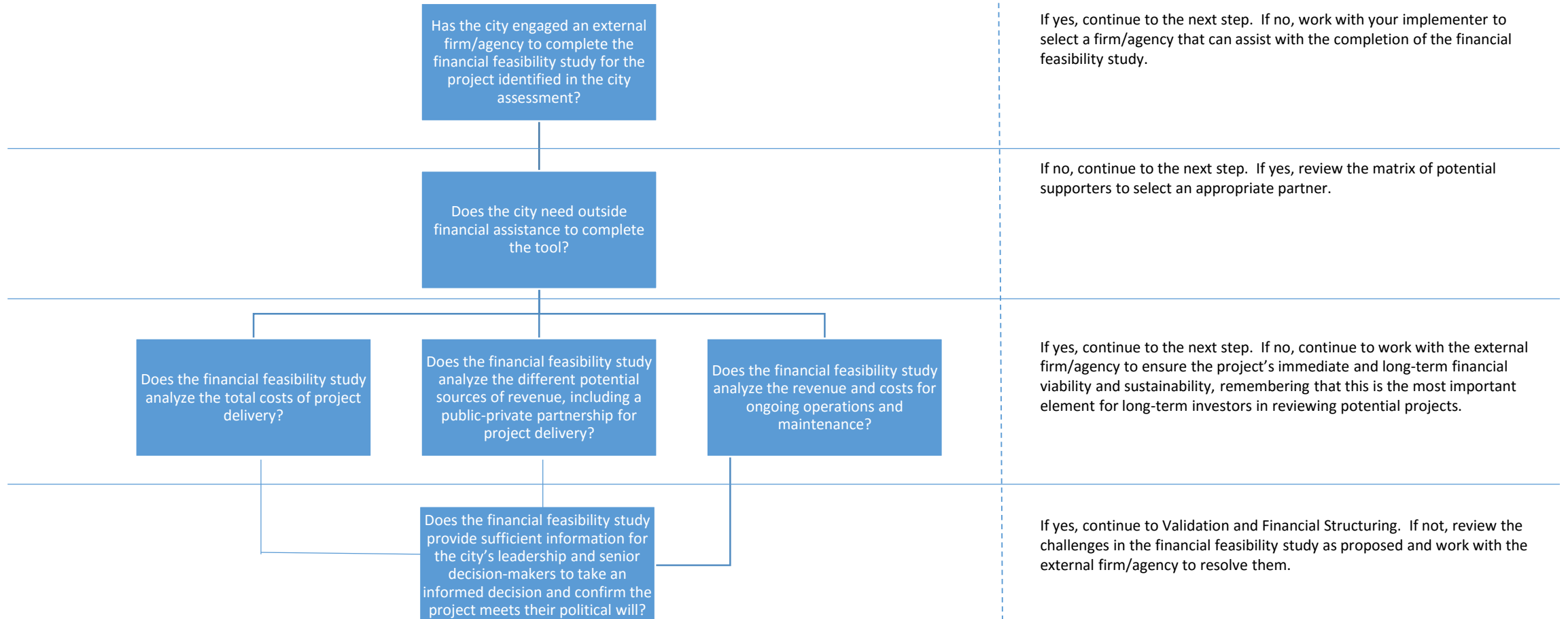
Has the external auditor discovered that the city has a clean financial statement, with no adverse findings for the past three years?

If no, work with the auditor to resolve the problems identified in the annual financial review.

If yes, work with your implementer to identify external credit rating agencies to conduct the city's credit rating, opting for a shadow credit rating at first to understand the city's strengths and weaknesses.

Once the credit rating is complete, continue to the next phase (Financial Feasibility).

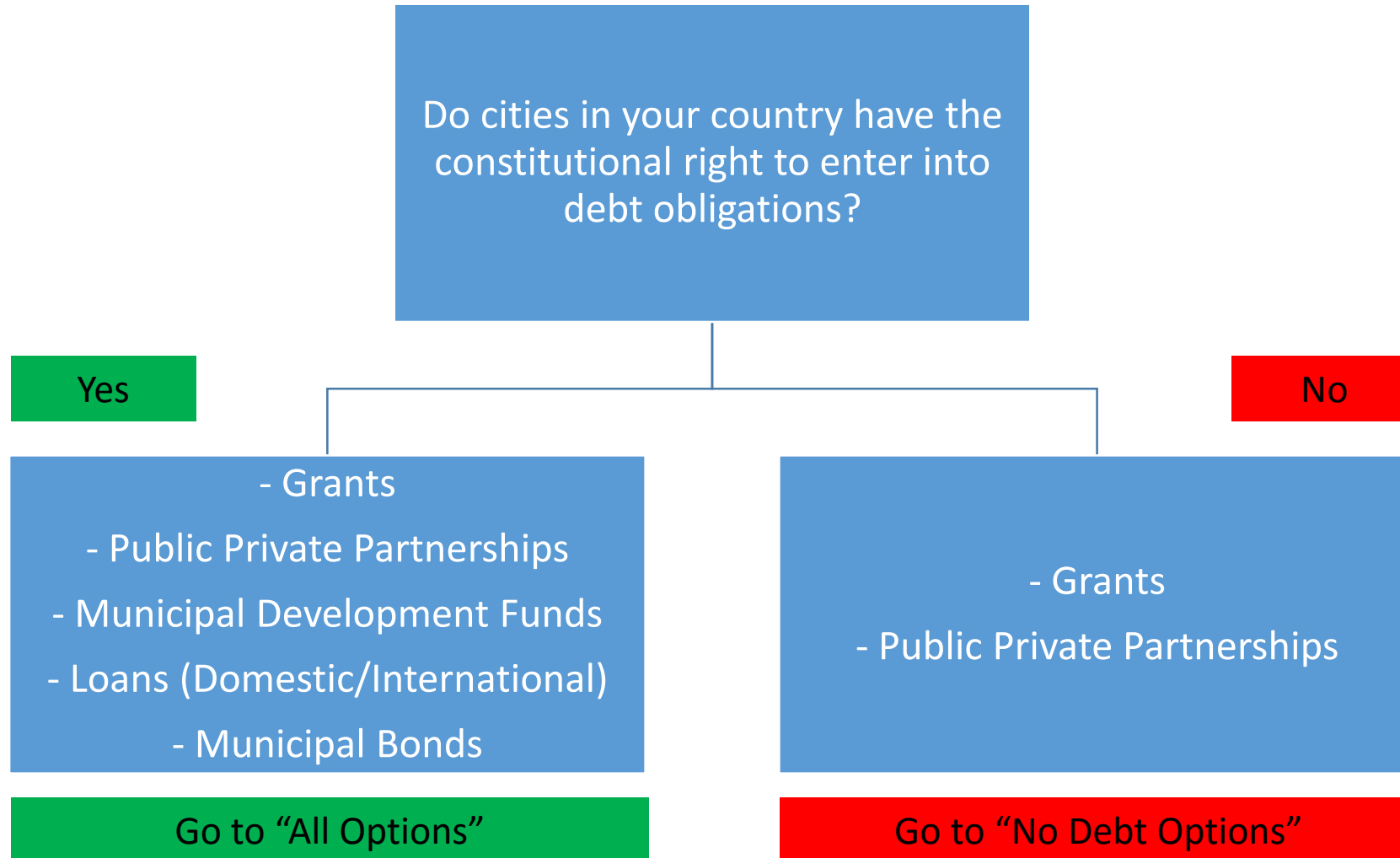
Financial Feasibility



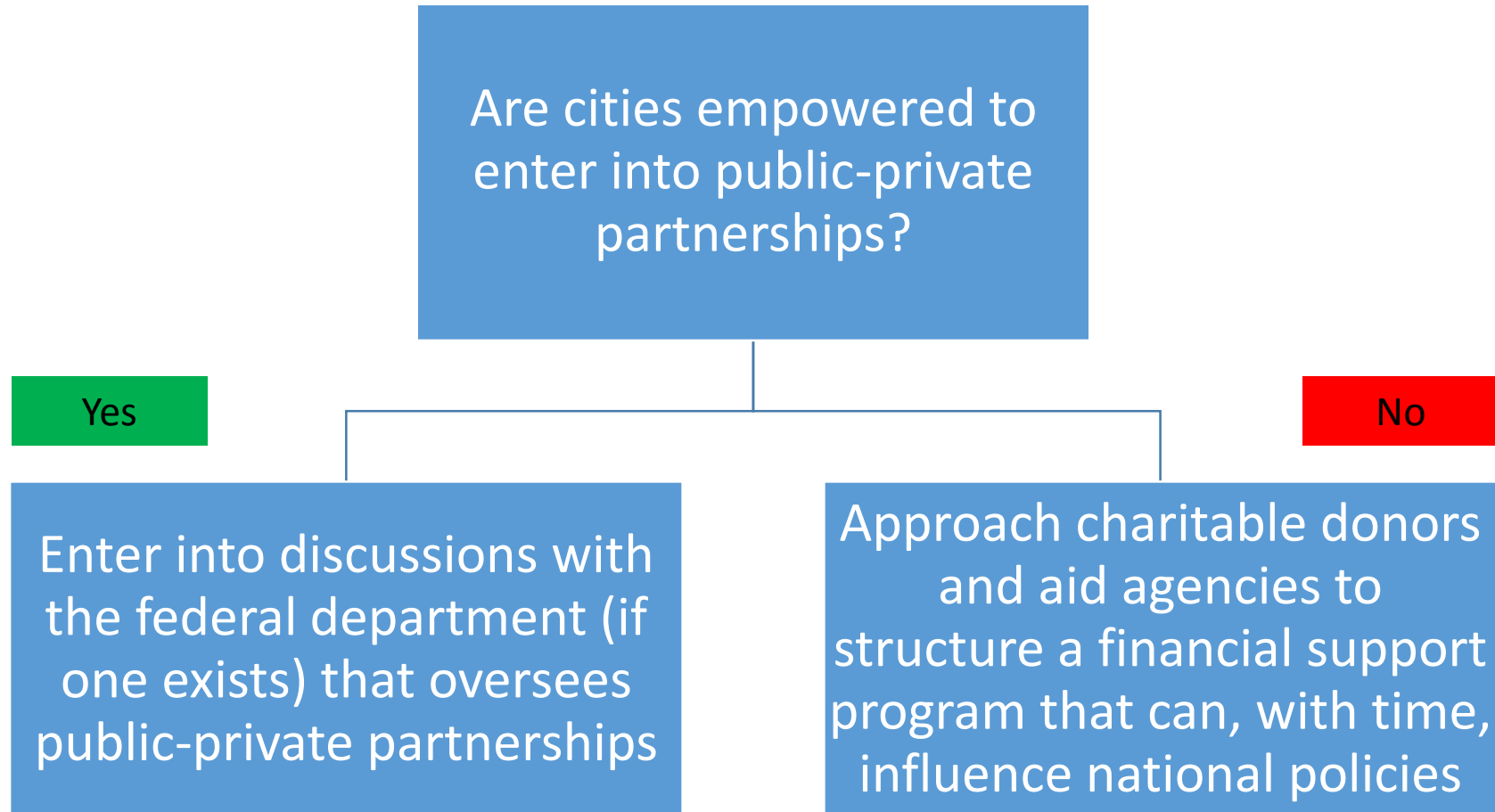
Appendix 9.

Financial Instruments Decision Tree

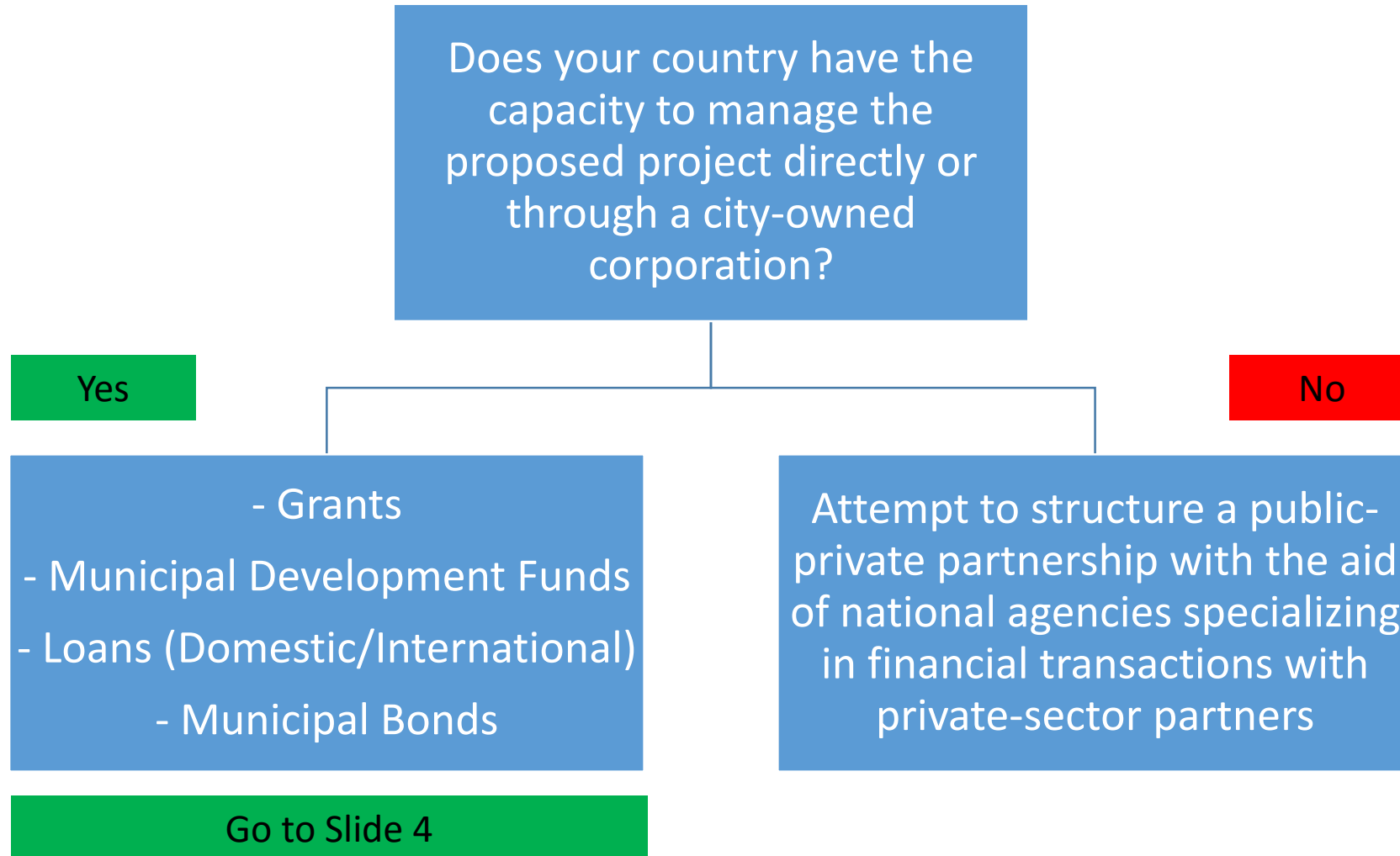
Financial Instrument Decision Tree - Overview



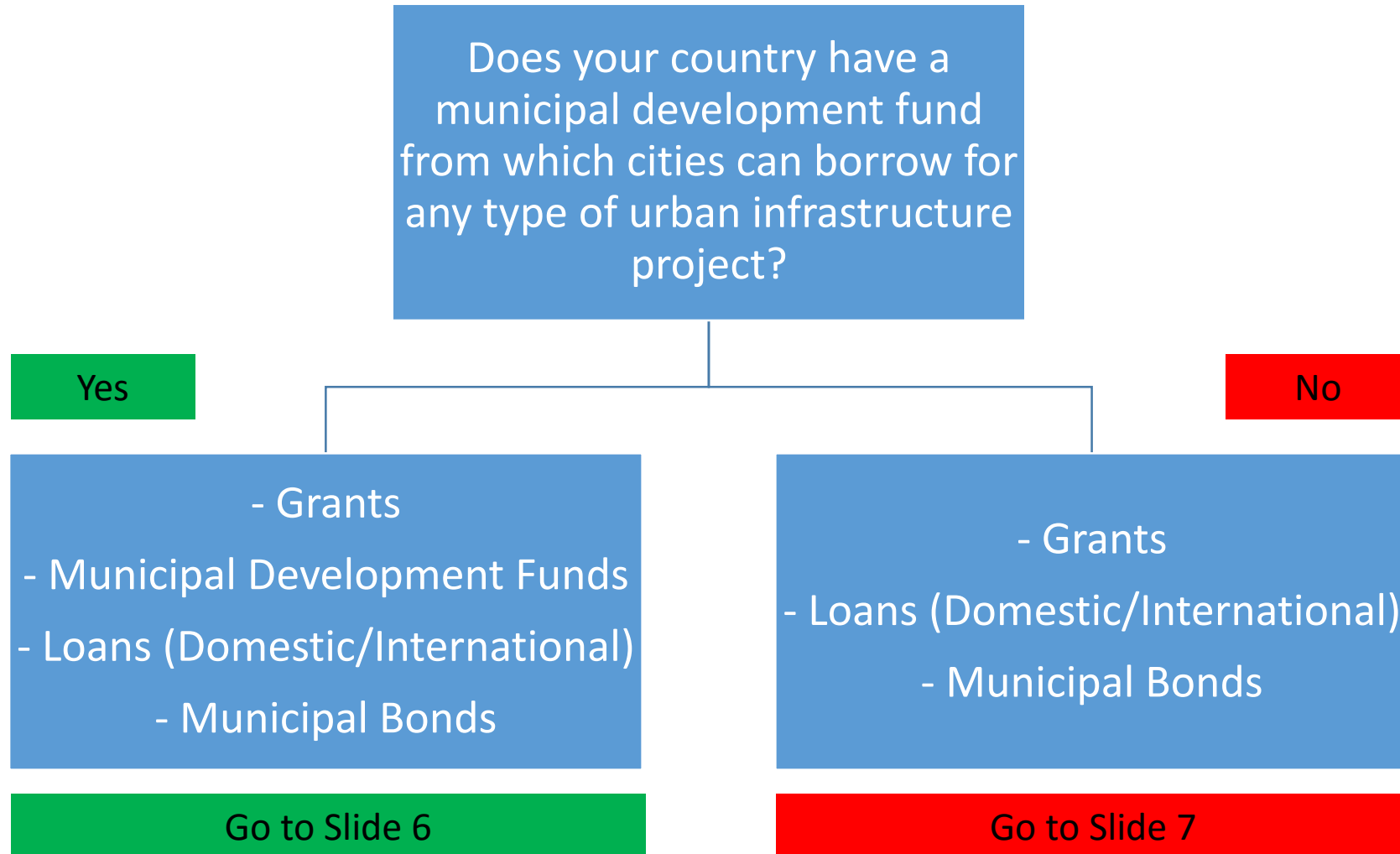
Financial Instrument Decision Tree – No Debt



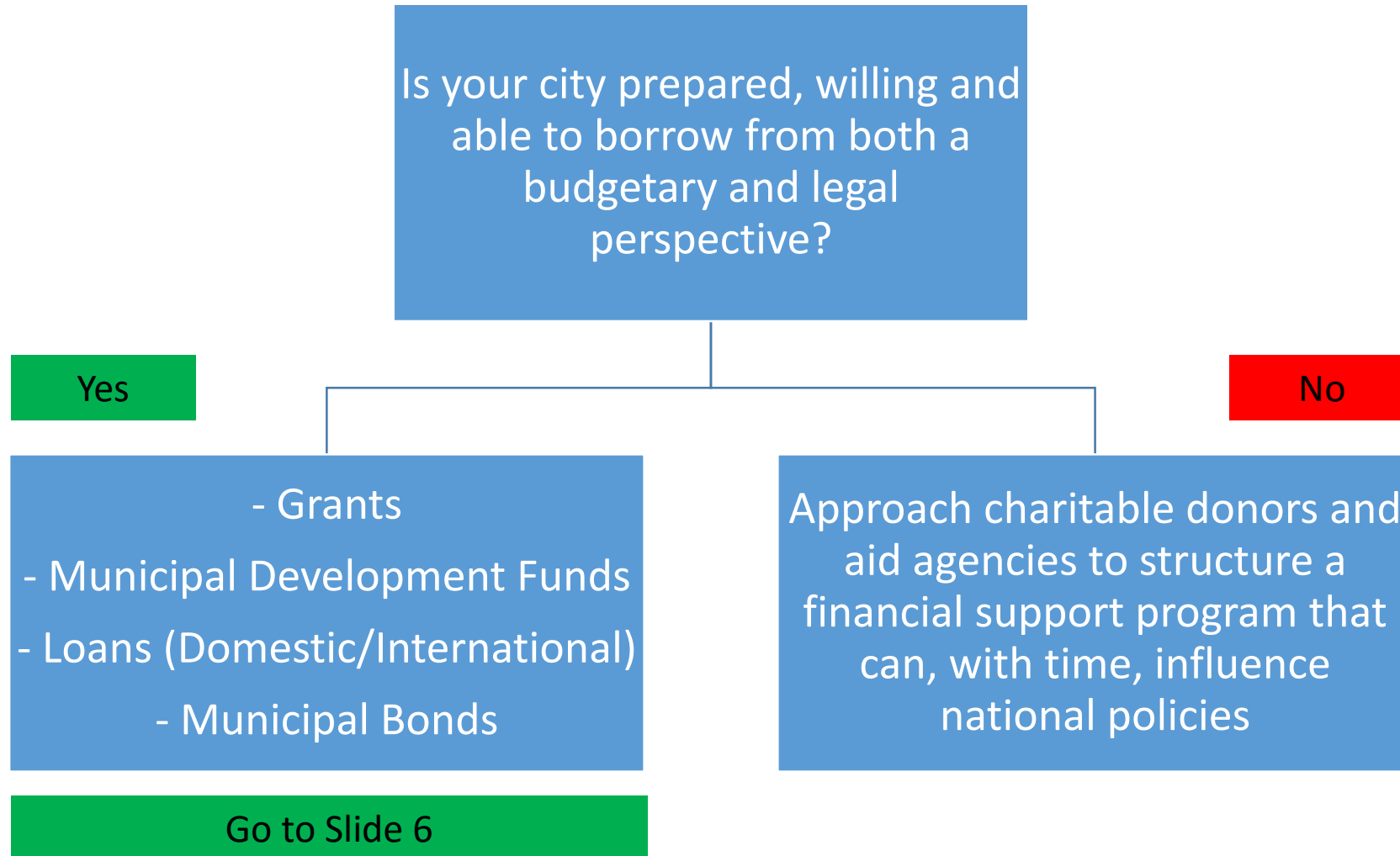
Financial Instrument Decision Tree – All



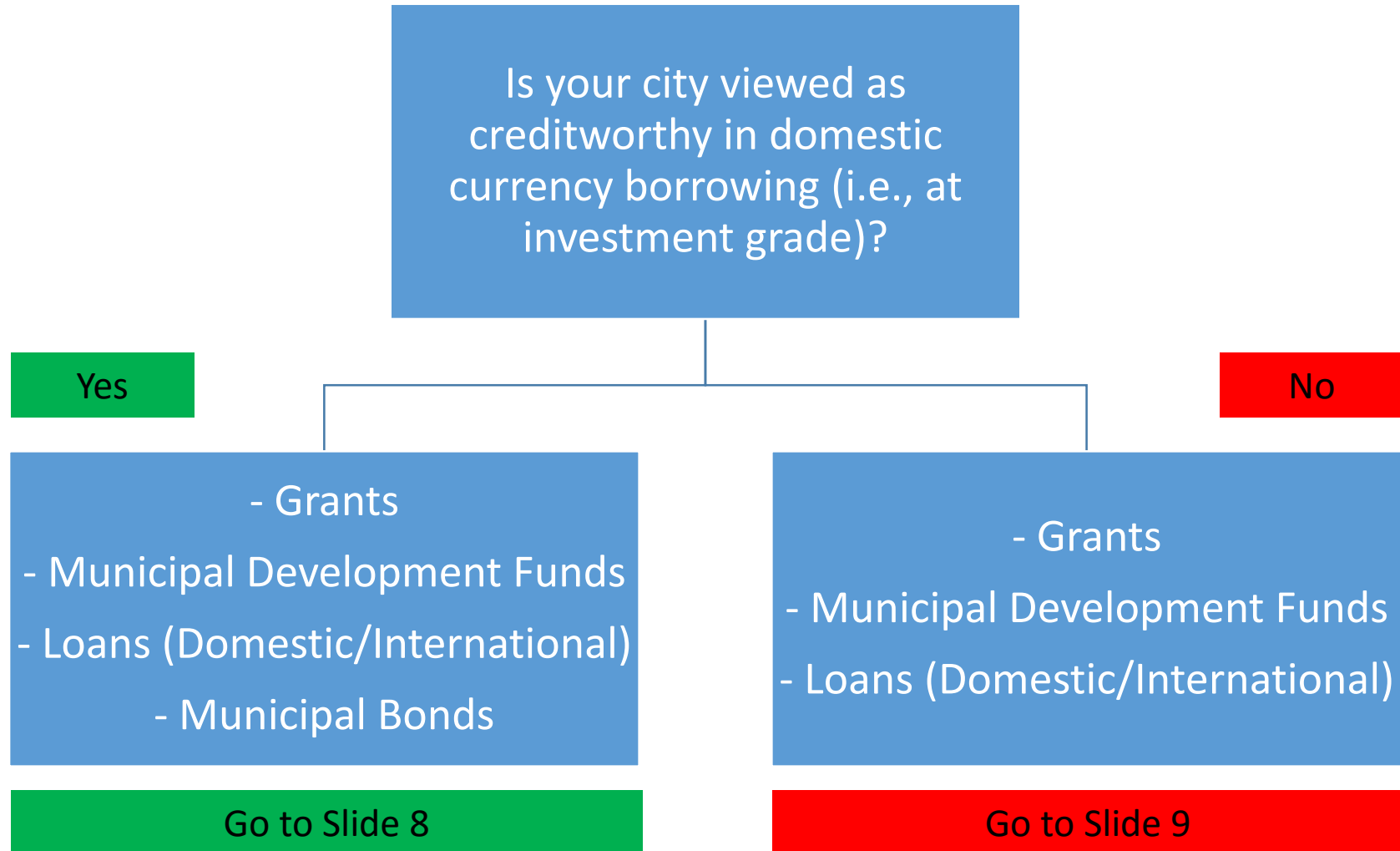
Financial Instrument Decision Tree – All



Financial Instrument Decision Tree – All



Financial Instrument Decision Tree – All



Options from Slide 4 – No

- Approach charitable donors and aid agencies to structure a financial support program that can, with time, influence national policies
- Approach regional development banks, bilateral aid agencies and domestic private banks to compare rates and terms for borrowing
- Approach a financial advisory firm to compare rates, terms and origination fees for a bond issuance

Options from Slide 6 – Yes

- Approach charitable donors and aid agencies to structure a financial support program that can, with time, influence national policies
- Approach the country's municipal development fund to borrow funds for the capital-intensive project
- Approach regional development banks, bilateral aid agencies and domestic private banks to compare rates and terms for borrowing
- Approach a financial advisory firm to compare rates, terms and origination fees for a bond issuance

Options from Slide 6 – No

- Approach charitable donors and aid agencies to structure a financial support program that can, with time, influence national policies
- Approach the country's municipal development fund to borrow funds for the capital-intensive project
- Approach regional development banks, bilateral aid agencies and domestic private banks to compare rates and terms for borrowing