



**CLIMATE &  
CLEAN AIR  
COALITION**

TO REDUCE SHORT-LIVED  
CLIMATE POLLUTANTS

# Assessing Financing “Readiness” for Municipalities



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# Outline

- Solid Waste Management Overview
- Financing Solid Waste Management Projects
- Financing Readiness Evaluation



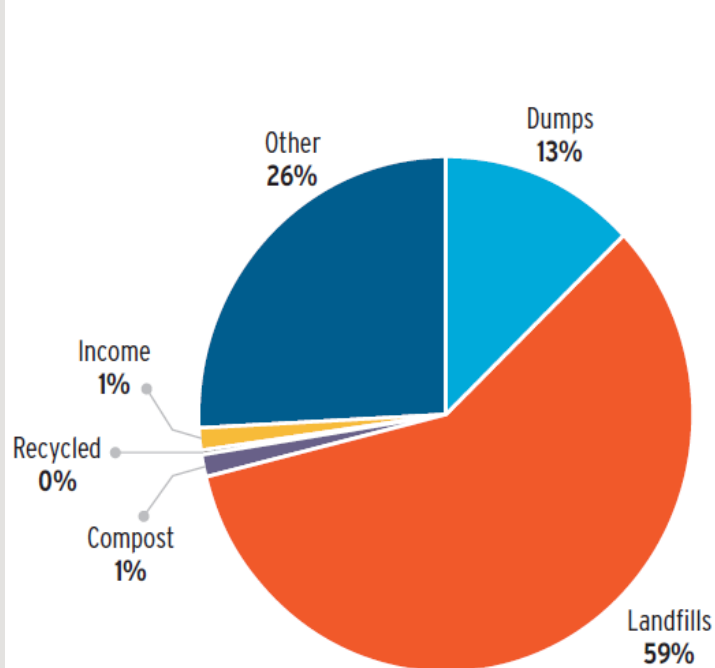
# 1 Solid Waste Management Overview



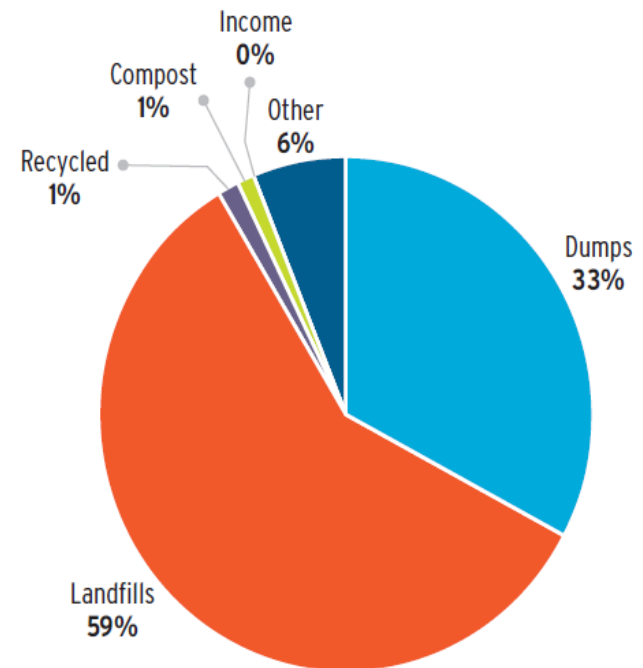
# Overview of Solid Waste

- In 2012, the worlds' cities generated **1.3 billion tons** of solid waste per year, amounting to a footprint of 1.2 kilograms per person per day.
- With rapid population growth and urbanization, municipal waste generation is expected to rise to 2.2 billion tons by 2025.

Low-Income Countries Waste Disposal



Upper Middle-Income Countries Waste Disposal



# SWM Challenges

*In low and middle-income countries, waste is often disposed in unregulated dumps or openly burned.*

## Health, Safety, and Environmental

- Breeding ground for disease vectors
- Contributes to global climate change through methane generation
- Promotes urban violence

## Financial Challenge

- Globally, SWM costs will increase from \$205 Bn (2016) to \$375 Bn (2025). Cost increases will be most severe in low income countries (5x) and lower-middle income countries (4x).
- Effective waste management is expensive (20-50% of municipal budgets).
- Operating this essential municipal service requires integrated systems that are efficient, sustainable, and socially supported.

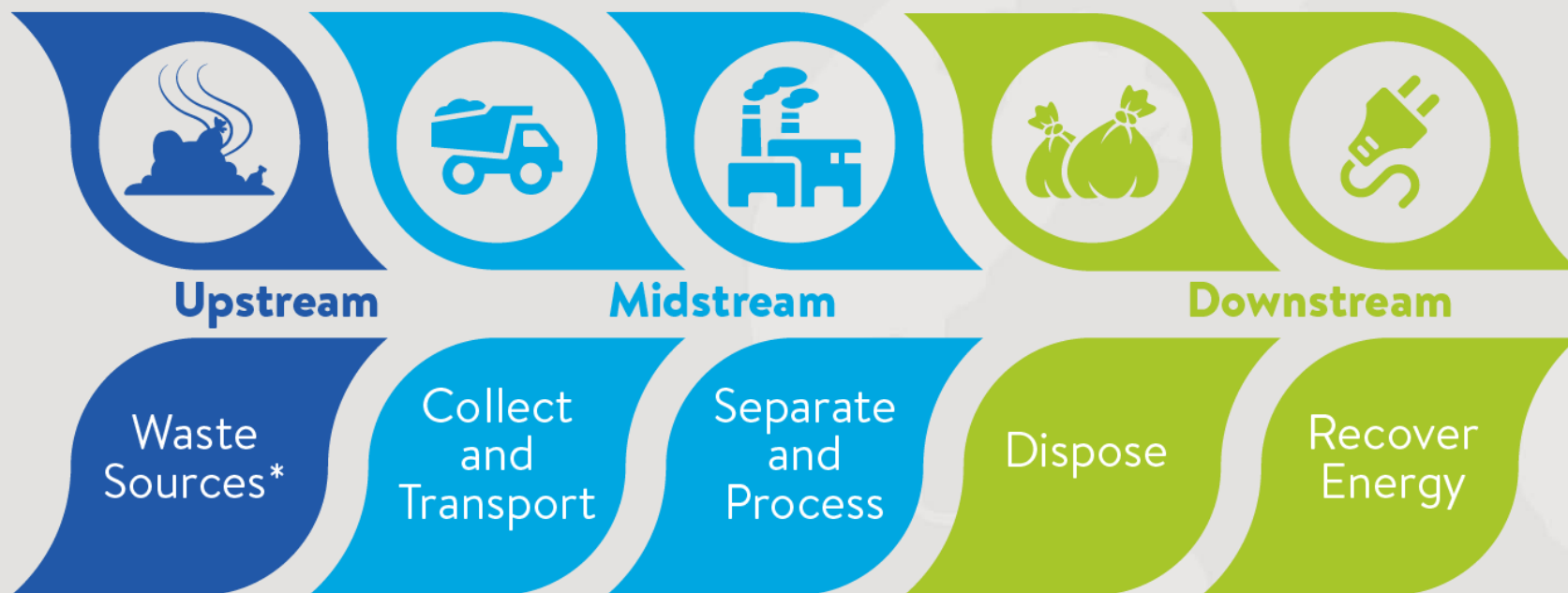


# 2 Financing Solid Waste Management projects



# Financing the Waste Management Value Chain

Projects can be financed from value chain for upstream industry/populations to downstream disposal and energy utilization



- Planning & capacity building
- Reduce, reuse, recycling
- Sustainable, efficient process optimization

- Waste collection
- Transfer station
- Transport - truck & rail

- Waste separation
- Recycling
- Composting
- Refuse-derived fuel

- Landfills
- Incineration
- Sell/utilize recyclables
- Compost

- Anaerobic Digestion, Biogas to Energy
- Biomass to energy



# Financing Readiness Considerations

## Key considerations to prepare for financial readiness of a waste management project:

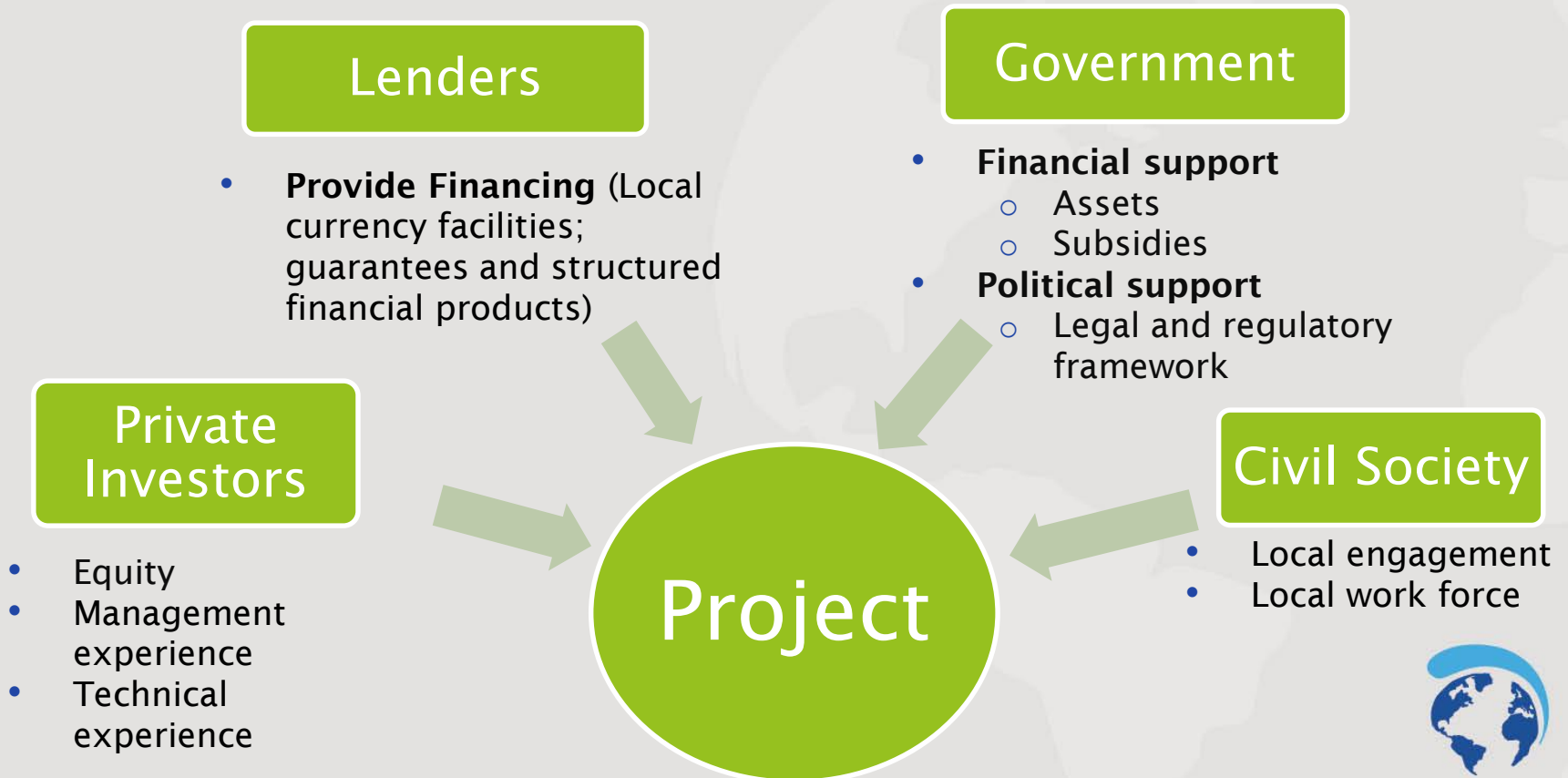
- *Infrastructure*: Build or upgrade waste sorting and treatment facilities, close dumps, construct or refurbish landfills, and provide bins, dumpsters, trucks, and transfer stations
- *Legal structures and institutions*:
  - National and/or local policies
  - Regulations on proper disposal
    - MSW is often mixed with medical and/or hazardous waste
    - Lack of local capacity to develop proper disposal regulations
  - Regulation enforcement
  - Local capacity or education
  - Funds to enforce regulations
  - Public awareness
  - Behavior change and public participation
- *Social inclusion*: Employment for informal workers (safety, social safety nets, child labor restrictions, and education)
- *Financial sustainability*: Taxes and fee structures
- *Health and safety*: Improve public health and livelihoods by reducing open burning, mitigating pest and disease vector spread.





# Public-Private Partnerships – Shared Responsibility

Projects need to engage public and private sectors and civil society for risk sharing, transparency, and economically and financially successful structures



# Financing Alternatives

## **Public Financing – Four ways of financing local public goods**

- Local taxes
- User charges which are levied on various urban services
- Grants from higher levels of government (central, state governments)
- Raising funds through capital markets, from government/financial institutions or international agencies

## **Traditional Loans**

- Bilateral and multilateral development banks
- Export credit agencies
- International and local government and commercial banks



# Financing Alternatives

## Results-based Financing

- Payments are tied to results
- Fee collection and behavior change toward recycling and source separation of organic waste;
- Access to basic services for the poor and reducing the adverse impact of uncollected or inappropriately disposed waste among low income residents;
- Transparency and accountability in the use of public funds through an independent verification process

## Development Policy Financing

- Technical assistance and loan through public-private partnership mechanisms



# 3

## Financing Readiness



# Why Assess Financing Readiness?

- Raises awareness of financing challenges and potential pitfalls
- Identifies financial weaknesses or potential risks that need to be addressed
- Places cities in a position to obtain the most appropriate combination of financing
- Improves the transparency of a city's financial state, which reduces risk for investors
- Reduces risk for cities (e.g., lowers risk of defaulting on payments)



# How the Waste Initiative Works with Participating Cities



WASTE

## Stage 0 *Letter of Intent*

- The city is ready to mitigate SLCPs from the waste sector
- City joins CCAC Waste Initiative

## Stage 1 *City Assessment*

- City collects waste-related data and develops baseline of emissions SLCPs of current MSW management in the city.

**Financing  
Barriers  
Identified**

## Stage 2 *Action Plan*

- City develops course of action for mitigating SLCPs from the waste sector.

**Financing  
Barriers  
Elaborated**

## Stage 3 *Work Plan Design*

- City identifies activities and projects that will lead to reduced SLCP emissions from the MSW sector.
- City assesses its financial readiness.

**Financing  
Needs  
Identified**

## Stage 4 *Ready to Launch*

- City prioritizes and plans a MSW project that will lead to the reduction of SLCPs emissions.
- City prepares and submits proposals to financial institutions and other funding sources.

**Financing  
Barriers  
Addressed**

# Financial Readiness Evaluation

Category	Example Evaluation Question
Political Environment	<ul style="list-style-type: none"><li>• How long is the current government's term? Does the project need to be completed within that timeframe?</li></ul>
Regulatory Environment	<ul style="list-style-type: none"><li>• How does this project align or conflict with existing regulations (e.g., public health regulations)?</li></ul>
Legal Framework	<ul style="list-style-type: none"><li>• Are there laws that determine how a project must be structured?</li></ul>
Revenue Streams	<ul style="list-style-type: none"><li>• Will anticipated revenue streams go to the general fund, or can they be used for other waste projects?</li></ul>
Financial and Technical Expertise	<ul style="list-style-type: none"><li>• Does the city have the in-house capacity it needs (e.g., for modeling project economics)?</li></ul>
Bidding	<ul style="list-style-type: none"><li>• What are the local procurement policies and procedure? How do they apply to this project?</li></ul>

# Financial Readiness Evaluation



## Financing Readiness

Identifying and securing sources of financing for projects in the municipal solid waste sector is the most critical aspect of bringing those projects to fruition. In many instances, it is also the most challenging. Before seeking financing, proponents of municipal solid waste projects should ensure the city itself, not just the project, is "finance ready." The Climate and Clean Air Coalition Municipal Solid Waste Initiative (Waste Initiative) developed a Financing Readiness Questionnaire for cities. By completing this questionnaire, cities can enhance their readiness for financing, and will be better positioned to identify and secure financing for their municipal solid waste projects.

### Why Assess Financing Readiness?

- Raises awareness of financing challenges and potential pitfalls
- Identifies financial weaknesses or potential risks that need to be addressed
- Places cities in a position to obtain the most appropriate combination of financing
- Improves the transparency of a city's financial state, which reduces risk for investors, thereby leading to better deals for cities (e.g., lower interest rates)
- Reduces risk for cities (e.g., lowers risk of defaulting on payments)

### Information and Resources

The following resources contain information relevant for cities financing waste management projects:

- **Primer for Cities for Accessing Financing for Municipal Solid Waste Projects** – The Waste Initiative developed this primer to help cities make decisions about financing.
- **Municipal Solid Waste Financing Webinar** – This Waste Initiative webinar provides an overview of the financial readiness toolkit, with a focus on policy and regulation, and gives an overview of the different funding and financing mechanisms available to cities to deliver municipal solid waste infrastructure.
- **C40 Cities Finance Facility (CFF)** – The CFF provides technical assistance to mobilise financing for city-level sustainability projects. The CFF offers assistance with project preparation, capacity development, knowledge sharing, and partnerships between cities and investors; the accompanying Knowledge Library provides a variety of resources related to these topics.

### Accessing the Financing Readiness Questionnaire

The Financing Readiness Questionnaire is among the many tools and resources available on the Waste Initiative's Municipal Solid Waste Knowledge Platform.

**THE CLIMATE AND CLEAN AIR COALITION MUNICIPAL SOLID WASTE INITIATIVE** unites national and local governments, international organizations, and other partners to reduce emissions of short-lived climate pollutants, such as methane and black carbon, from the municipal solid waste sector.



## Financing Readiness Questionnaire

### Political Environment

1. Who is/are the governmental entity/entities authorising the proposed project (and providing financing, if publicly financed)? If there is only one entity responsible for authorising the proposed project (and potential financing), could the decision be overturned by other government bodies? If there are multiple entities involved, what is the approval process?
2. When is the next municipal or state election and how might these elections impact the project?
3. What is the credit rating of the country and local government?
4. Can the city borrow money directly without permission from other government agencies? If the city cannot directly borrow money without permission, please explain how the city's financing works.
5. If the city can directly borrow money without permission, is the city creditworthy? Can it offer credit enhancements?
6. Is there a track record of success for concessions or public works projects? If so, please list some examples.
7. Are there any other factors related to the political environment that might influence this project?

### Regulatory Environment

1. What laws and regulations exist that might support the development of this project? Examples include regulations on waste management, public health, environmental standards, etc.
2. What are other relevant regulations that would impact this project, such as those relating to land acquisition and use, environmental impact assessments, noise management, energy, electricity, public-private partnerships, etc.?
3. Is there a specific department within the municipality that seeks to issue public and/or private works?
4. What is the review process for proposed projects? What is the typical timeline?
5. Are there regulations to protect project investors?
6. Are there regulations limiting foreign investments?
7. How are laws and regulations monitored and enforced?
8. How are projects monitored during construction to avoid cost overruns, time delays, etc.?
9. How will this project's performance be monitored?
10. Will project revenues be received in the local currency or will there be a law for foreign exchange adjustment? Is there a track record of previous projects?
11. Are there any other factors related to the regulatory environment that might influence this project?

### Legal Frameworks

1. What are the primary sources of law that might influence this project (e.g., codes, statutes, judicial decisions, treaties)? What is their relative weighting of importance?
2. How does the legal structure protect project investors? Are there bankruptcy clauses and, if so, what are they?
3. Are there any limitations on freedom of contract? If so, what are they?
4. Does the contracting authority have rights that override those of the contract?
5. What dispute resolution systems are available? Judicial, non-judicial?
6. What are the relevant engineering and environmental standards?
7. Are there specific, standard concession agreements? If so, what are they?
8. What are the relevant labour laws?
9. Are there specific, standard concession agreements? If so, what are they?
10. Are there any national public-private partnership laws? If so, what are they?
11. Are there any other factors related to legal frameworks that might influence this project?

### Revenue Streams

1. Have the city's revenues been stable over the last three to five years?
2. Are any of these revenue streams segregated? If so, which ones?
3. What are the anticipated revenue streams for this project?
4. Does the city have fiscal flexibility to change fees and taxes? If so, can they be done in a politically acceptable way?
5. How has the city financed public works projects in the past?
6. Are there any other factors related to revenue streams that might influence this project?

### Financial Modelling and Technical Expertise

1. Has the city conducted any financial modelling analyses for the proposed project? If so, how were the analyses conducted and what were the results?
2. Does the city have its own financial modelling tools in-house and the technical/ engineering expertise to run them?
3. What other technical expertise does the city have that might be necessary to implement this project?
4. Are there any other factors related to financial modelling and technical expertise that might influence this project?

### Bidding Process

1. Does the city have specific bidding and procurement policies? If so, what are they?
2. Do local procurement policies conflict with state and national policies? If so, which policies will be followed for this project?
3. How do investors/developers bid on projects?
4. Are there any other factors related to the bidding process that might influence this project?

MORE INFORMATION  
[www.waste.ccacoalition.org](http://www.waste.ccacoalition.org)

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@CCACoalition

[facebook.com/ccacoalition](https://www.facebook.com/ccacoalition)

<http://www.waste.ccacoalition.org/>





# Public Private Partnerships

## Poland Poznań WTE PPP and SUEZ

- WTE facility opened in March, 2017
- The facility reduces landfilled and dumped waste into electricity and district heating
  - 30% of the domestic energy is supplied by this facility
- The parties involved included the company SUEZ, the Marguerite Fund, the European Fund for Energy, Climate Change and Infrastructure, and the City of Poznań
  - 84 million Euros was financed from a European subsidy and 96 million euros from a non-recourse loan
  - SUEZ signed a 25 year contract with the City of Poznań



Source: Marguerite Fund



# Thank you! Questions?

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