

# SOLID WASTE COLLECTION FEE GUIDELINES

## Experiences from Essen & Fortaleza

*Implementation of a fee for the recollection of solid waste in cities*

*Essen and Fortaleza ("Fortalessen") are exchanging knowledge and best practices on circular economy and waste management in the framework of the International, Urban and Regional Cooperation programme (IURC Latin America), linked to the recycling and collection of special waste, legal frameworks, and waste fee structures, that promote zero-waste policies. They seek this transformation through the design of communication and educational campaigns to increase recycling and reduce waste by fostering citizens' engagement. In this context, Essen shared relevant policies and experiences about their waste fee structures with Fortaleza who have incorporated them in their new legal framework for the creation of a waste collection tax. These guidelines share the main learnings from this exchange and provide a roadmap for other cities that wish to implement a solid waste recollection fee while integrating complementary interventions.*

1. Legal framework
2. Data Collection & Monitoring
3. Infrastructure & Innovation
4. Fee Calculation
5. Fee Application
6. Service Concessions & Management
7. Education & Citizen's Engagement
8. Mechanisms to Reduce Waste
9. Illegal Waste Disposal



### With the collaboration from

**Kirsten Helle** (Head of Emission Control Authority – Environmental Department, Municipality of Essen)

**Annika Lücking** (Monitoring of Waste Disposal Plants – Environmental Department, Municipality of Essen)

**Jonathan Walgenbach** (Environmental Inspector, Emission Control Authority – Municipality of Essen)

**Felix Schaffland** (Monitoring of Waste Disposal Plants – Environmental Department, Municipality of Essen)

**Angelika Siepmann** (Former Leader of the Environmental Office, Municipality of Essen)

**Sandra Jungmayer** (Director of Operations - Entsorgungsbetriebe Essen GmbH (EBE))

**Luiz Saboia** (President, Foundation for Science, Technology and Innovation of Fortaleza - CITINOVA)

**Victor Macedo** (Vice-President, Foundation for Science, Technology and Innovation of Fortaleza - CITINOVA)

**Aurélie Knecht** (Project Officer & Brazil Country Manager – IURC Latin America)

# 1 Legal framework



- **Federal or National legal frameworks** facilitates the creation of local frameworks in municipalities.
- **Legal Requirements and frameworks** are necessary to guide municipal actions and to encourage the implementation of public policies.

# 2 Data collection & Monitoring



- **Collecting data** allows to evaluate the performance of waste management actions and recycling programmes.
- **Monitoring data:** improve strategies over time.
- **Transparently share data** with citizens, about amount of waste produced and recycled, and details about waste fee calculation.

# 3 Infrastructure & Innovation



- **Innovative programmes:** implement actions and public policies encouraging recycling.
- **Technology & digitalisation:** improve efficiency of waste collection (i.e. smart sensors in bins and containers to define frequency of recollection).
- **Programmes to repair electronic devices:** limit waste and promote reuse through workshops and special educational opportunities.

# 4 Fee calculation



- **Exemptions** for vulnerable communities.
- **Incentives:** encourage citizens in recycling and to reduce household waste production (fee depends on size of container and frequency of collection; discount in fee when recycling waste, etc.).
- **Special taxes** linked to CO2 emissions resulting from incineration can be included in the fee.
- **Laws** that specify fee calculation, which must reflect the performance of the contractor and the quality of the service. Citizens can do judicial reviews and municipalities have to prove that fees are justified.

# 5 Fee application



- **Cover operational costs** partially with the fee, including the implementation of new technologies and workers' salaries.
- **Promote good management of operations and budget control** to keep the fee low in the face of inflation and rising costs. Laws to calculate fees oblige management to keep costs stable.
- **Wider waste management and environmental programmes** can be created with the fee collection to provide infrastructure and policies to increase recycling and reduce waste.

# 6 Service concessions & Management



- **Diversify management and operations** with different companies collecting solid waste to increase competitiveness (quality and cost of service).
- **Establish rules** regarding how operations works: on-street bins placement, collection frequencies, cleaning of streets, etc.
- **Ensure social inclusion of vulnerable groups** by providing them with job opportunities in waste management and cleaning duties.

# 7 Education & citizen's engagement



- **Informative flyers & campaigns** in different languages to explain to citizens how to sort waste.
- **Events & activities** to raise awareness of citizens and provide education on recycling.
- **Special programmes for children** to promote behaviour change from a young age.

# 8 Mechanisms to reduce waste



- **Provide alternatives to encourage recycling:** different household containers for recyclable materials.
- **Financial incentives:** recycling waste and decreasing the amount of household waste results in a reduction of the fee.
- **Special waste collection points** close to residential areas to collect special waste, recyclable materials and hazardous substances. Contributes to reduce household residual waste.

# 9 Illegal waste disposal



- **Mechanisms to ensure adequate waste disposal** in households including fines.
- **Integrate costs linked to illegal waste disposal into waste recollection fee** enabling citizens to measure the impact of individual behaviour on the community.
- **Report illegal waste disposal** through an app available to citizens and/or special staff monitoring streets.