PAY AS YOU THROW in CHANIA MUNICIPALITY

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  Municipality of Chania

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The need to change

New legal framework

The Municipality of Chania, according to Law 4819/2021, with a population of more than 100,000 inhabitants has the obligation from January 1, 2023 to change:

- The method of municipal waste pricing with the application of the “Pay as You Throw” (PAYT ) system
- The waste collection method due to mandatory separate collection in multiple streams
- Fair distribution of municipal fees
- Incentives to citizens to achieve circular economy targets
Municipality of Chania

A. Hotels (>100 beds): 53
B. Industrial facilities: 674
C. Mass catering businesses, regardless of capacity: 1300
D. Households, Schools and other commercial buildings: 60,762

- 110,646 inhabitants (2021)
- 180 €/tn waste management cost
4 basic systems PAYT

- Charge with Prepaid bag
- Bin charge based on volume / frequency of bin collection
- Bin charge based on weight / frequency of bin collection
- Billing based on card and "smart bin"
Design of PAYT in Municipality of Chania

- Study of the characteristics of the Municipality
- Examination of the available technological solutions
- Experience from other Municipalities – Best practices
- Social and environmental criteria
- Maximum acceptance by citizens and businesses
- Existing municipal collection equipment
- Incorporation of existing and planning separation at source programs
- Efficiency of the solutions chosen
- To give incentives to citizen but in parallel to guaranty the appropriate income for the municipality
PAYT in Municipality of Chania

Combination of Bin charge based on weight and frequency of bin collection

Separate at Source Actions and Equipment
- Paper/ PMD/Glass
- Organic
- Green Points

Education and raise awareness Action
New Equipment for PAYT in Chania

RFID Tag for bins  Weighing System  Management Platform
New Pricing with PAYT

Municipal fee = fixed fee + variable fee

- **Fixed fee**: Phase A = according to old way of pricing \((\text{m}^2) * 60\%\)
  - Phase B: a fixed amount per producer category

- **Variable Fee**: cost according to frequency of collection of bins/per producer category and according to weight of waste
  - a) mixed weight
  - b) organic
**Economical approach**

- Expenditures of the Municipality (today level)- estimated at 23 million euros
- Need for new equipment with depreciation: 477,000 €/year
- Educational Activities (1 €/inh) : 100,000 €/year

<table>
<thead>
<tr>
<th>Income per year (€)</th>
<th>Fixed</th>
<th>Variable</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6,618,000</td>
<td>17,157,850</td>
<td>23,775,850</td>
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<table>
<thead>
<tr>
<th>Cost per year (€)</th>
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<tbody>
<tr>
<td>cost without payt(2023 forecat)</td>
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<tr>
<td>new equipment - depreciation</td>
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<tr>
<td>education activities</td>
</tr>
<tr>
<td>total</td>
</tr>
<tr>
<td><strong>Difference</strong></td>
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<tr>
<td>22,997,715</td>
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<td>476,611</td>
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<tr>
<td>100,000</td>
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<tr>
<td><strong>23,574,326</strong></td>
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<td><strong>201,524</strong></td>
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Next Steps
Implementation of a pilot

- Selection of a pilot area (Chania or Daratsoy - 9 hotel > 100 beds)
- Supply and installation of equipment to all producer categories
- Education and communication action to all producers and citizens (Door-to-door)
- Optimization of parameters of economic model
- Virtual pricing
- Preparation of economical division for new pricing
ROADMAP
PARMA KERBSIDE COLLECTION & PAYT ROADMAP 2012-2015
2 ½ Years Plan

First part of the city center
7,857 inhabitants

Lubiana-San Lazzaro District
34,473 inhabitants

Oltretorrente & Montanara Districts
22,365 inhabitants

Rest of the city center
7,833 inhabitants

Cittadella District
13,583 inhabitants

Pablo-Golese & San Leonardo Districts
45,065 inhabitants

Molinetto District
17,368 inhabitants

Rural areas (outside ring road)
45,455 inhabitants

PAYT test period

PAYT operative start

2017 KPI: 81% separate collection rate - 106 kg/inh/year of residual waste - 103 kg/inh/year of bio-waste
**Roadmap in Chania – 3 year Plan**

- **Sept-2022**
  - PAYT study assignment to NoWaste21

- **Oct-2022**
  - Proposal for a pilot financing through European Structural and Investment Funds (Kounoupidia and Saint Mathaios area)

- **May-2023**
  - Selection of PAYT system and way of pricing

- **Oct-2023**
  - Implementation of a pilot (Chania or Daratsou area)

- **2023 - 2024**
  - Gradual Extension to Areas / starting with Big Producers

- **2024 - 2025**
  - Gradual Extension Households and other buildings

- **Sept - 2025**
  - Total Implementation of PAYT
Thank you for your attention

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