

# 1. Starting point

- The experience of the last century in Germany teaches that
  - laws,
  - waste management plans,
  - project realisations ...
- collaps, in cases of a missing long-term financing.
- Financing must be secured at all levels. That means
  - at national level,
  - at county or municipal level,
  - at enterprise level.

## 2. Institutional setting

- Prussian community charges act from 14.07.1893
  - Legal basis to charge fees for street-cleaning and garbage removal
  - Starting point of financing securing on municipal service tasks in Germany
- Principles of the German license fee
  - Cost covering principle
  - Polluter-pays principle
  - Equivalence principle
  - Transparency principle

## 3. Approach

- Establishment of a SMW fee system on municipal level
  - Cost and performance accounting
  - Forecast budget planning
  - Charging system
- Establishment on an accounts receivable accounting system
  - Debtor is each property owner
  - The ownership of each property is known by the German cadaster - the whole country is registered
  - Apportionment of the waste fees on each property by owner

## 4. Outputs

- Typical municipal waste fees (exemplary calculation)

Type of waste	Type of collection	Fee	Costs/hab. a.	Objectives
<b>Overhead</b>	administration, information	no individual fee	10,00 €/a	effective and efficient
<b>Glass</b>	central collection point	no individual fee	2,50 €/a	high recycling quote
<b>Paper, cardboard</b>	central collection point	no individual fee	9,45 €/a	high recycling quote
	household bin			
<b>Recycables</b>	household bin	fee paid by shops	27,00 €/a	high recycling quote
<b>Biowaste</b>	household bin	<b>Fee/a</b> <b>52/a</b>	18,00 €/a	economic incentive to separate cost covering equivalence principle standing and variable charges
60 l bin		35,00 €		
80 l bin		45,00 €		
120 l bin		70,00 €		
240 l bin		140,00 €		
<b>Residuals</b>	household bin	<b>Fee/a</b> <b>26/a</b>	46,13 €/a	high recycling quote/less residuals economic incentive to separate cost covering equivalence principle standing and variable charges
60 l bin		50,00 €		
80 l bin		63,00 €		
120 l bin		88,00 €		
240 l bin		167,00 €		
1,100 l bin		800,00 €		
<b>Hazardous</b>	central collection point	no individual fee	2,00 €/a	high capture rate

- In Cologne, all SMW costs are covered by the residual bin:  
2017: 60 l bin 296 €, 120 l bin 470 €, 240 l bin 824 €

## 5. Lessons

- Ensuring of financing by a legal system is obligatory.
- Know how in SMW technologies is important, but only one element in addition to
  - Management and leadership
  - Personal and organization
  - Budget planning and cost control
  - Financing of the SMW system and cost recovery
- All SMW activities must be (re)financed on long terms.
- A financing system must be developed and established.

## 6. Transfer

- Find out good solutions and lessons learned in other countries and municipalities.
- Analyzing of its own situation and possibilities.
- Adapt the best solutions and make it to your own.
- Take make or buy decisions in SMW activities for your own municipality
  - In-house operation
  - Public private partnership (PPP)
  - Outsourcing
  - Mixed system
- Put your thoughts and ideas into practice.