Waste Meeting 26-06-2024 – First Workshop on Governance

Suggested Structure of each presentation:

1. the structure of the sector in the country
   - Governance arrangements and responsibilities in providing the waste management service
   - Main institutional actors in policy-making
   - Main figures
2. the role of the regulator and other stakeholders
   - Roles and responsibilities of the regulator
   - Main specificities of the regulatory model
   - Intervention on tariff setting/economic incentives
3. the future challenges in the sector
   - Challenges in achieving European Directives targets
   - Challenges in market structure
   - Challenges for regulatory intervention
4. What do you think the national and EU legislation should include to enhance the role of regulators?

Hungary Presentation - Solid Waste Management: Governance in Hungary

1. Transition to a Concession Model

- Prior to July 2023: The waste management system was characterized by fragmentation with municipal responsibilities handled by local service providers and national coordination was implementd by NHKV Zrt, a state-owned company. The responsibilities were spread thin across various smaller entities leading to inefficiencies and to Hungary lagging behind in waste municipal sector.
- From July 2023: The public service obligation for municipal waste management was centralized and transferred from municipalities to the state. The state then granted this obligation to a single private entity, MOHU Mol Ltd., through a tender process and for a period of 35 years. This concessionaire is responsible for various waste management tasks, including collection, pre-treatment, and coordination of Extended Producer Responsibility (EPR) and Deposit Refund Systems (DRS).
  Non concession related activities
  - Waste utilization (recycling and energy recovery), disposal/landfilling
  - Managing non-municipal dangerous and industrial-production related waste categories
  - Public space related cleaning duties

2. Governance and Regulatory Framework

Ministry of Energy, responsible for:

- Policy Direction
- Legislation: Prepares legislation on waste management and the circular economy.
- Fees Determination: Determines the fees to be paid to the concession company, having the contract.
- Investments Plans approval.

Waste Management Authorities, local government authorities. Responsible for:

- Permitting and Supervision: Responsible for overseeing and authorizing waste management operations.

- Data Collection and Analysis: Collects and analyses data on waste generation, including information relevant to Extended Producer Responsibility (EPR) and Deposit Refund Systems (DRS).

Concession Company (MOHU Mol Ltd.)

Determined fees by the Ministry of Energy:

- Public service fee paid by resident people
- Institutional fee to be paid by economic entities
- Institutional fee to be paid by the municipalities
- EPR fee paid by producers and distributors
- Fees related to the DRS system
- Revenue from the sale of waste

Hungarian Energy and Public Utility Regulatory Authority (MEKH)

Preparation of fee proposals for the Ministry of Energy, including determining the amount of justified costs which is the basis of the fees applicable by the concession company.

- Fee determination (not concession related activities)
- Other regulatory tasks
- Operation of waste management assets and property registry (not concession related activities)

Stakeholders Outside the Concession System

- Municipalities: Involved in public cleaning duties.
- Other Market Players: Include facilities and operators dealing with the utilization and disposal of waste, such as incinerators, landfill sites, and other waste management operators.

3. Role and commitments of the concessionaire

MOL Group, an integrated oil and gas company, has been granted the exclusive concession to manage public waste across Hungary. This concession covers the entire country and extends for a 35-year period, starting from July 1, 2023.

MOL Group is committed to significantly improving Hungary's recycling efforts. By 2040, the company aims to increase the national recycling rate of municipal waste from the current 32% to 65%. Additionally, MOL plans to reduce the proportion of municipal waste sent to landfills from 50% to 10% within the same timeframe.

To meet these obligations, MOL Group has established MOHU Mol Ltd., a concession company. This entity is responsible for fulfilling the concession requirements, including the engagement of subcontractors to execute necessary operations.

The concession agreement includes a commitment to invest approximately 475 million EUR in the development of waste management infrastructure, such as waste collection and pre-treatment facilities, within the first 10 years.

The agreement covers the management of an annual total waste stream of approximately 4.5 to 5 million tons.

Furthermore, MOL Group has pledged to construct a new facility capable of converting at least 100,000 tons of municipal solid waste per year into energy within the next five years.

As a key player in Hungary's refining and petrochemicals sector, MOL Group will also gain access to new feedstock, enhancing its operational capabilities.

4. Regulatory Role and Challenges

- Recycling and Landfilling Targets: Hungary faces challenges in meeting the European Union's recycling and landfilling targets. The country struggles to align with the established goals, which aim to reduce environmental impact through effective waste management.
- Market Structure Challenges: The introduction of a completely new concession system, inclusive of the Extended Producer Responsibility (EPR) framework in July 2023, presents substantial challenges. Implementing the EPR principles practically within this new system is particularly demanding, given the complexity and scale of the changes required.
- Transition to a Circular Economy: To successfully transition to a circular economy, it is crucial to foster a change in both societal attitudes and business practices across the economic sector. The focus is on minimizing waste generation and enhancing separate waste collection systems to facilitate recycling and reuse.

5. How could national and EU legislation enhance the role of regulators?

Developing EU-Level Benchmarking Studies on Cost Efficiency: This involves conducting detailed studies to identify, analyse, and compare cost-efficiency metrics within the EU. The goal is to establish standardized benchmarks that help assess and enhance the financial performance of operations in member states, thereby driving more prudent and effective allocation of resources.

Creating an EU-Level KPI List: This task focuses on developing a comprehensive list of Key Performance Indicators (KPIs) used across member states. The purpose is to standardize the measurement of performance and to ensure that all states are aligned with the EU's overarching goals. Familiarization with these KPIs is essential for maintaining consistency in reporting and performance assessment throughout the Union.

Portugal Presentation – Municipal Waste Management: Governance in Portugal

1. Structure of the Waste Sector in Portugal

Governance and Sector Organization:

Municipal waste management services are divided into retail services and bulk services, there are 23 bulk operators and 237 retail operators. Retail operators oversee mixed and sorted collection, while bulk are in charge of sorting, organic recovery, recycling, and incineration. Retail services are a municipal responsibility, while bulk are regional systems, either state or municipal responsibility.

Institutional Framework:

Main Actors in the sector are:

- The Ministry for Environment and Energy
- The Environmental Authority
- ERSAR, the regulator (independent and responding to the Parliament)

There are then 3 different types of concessions:

- Multimunicipal concessions for bulk services
- Direct management for bulk and retail
- Delegated management for bulk and retail.

A private holding, EGF has 51% of the share capital of the multimunicipal concessions. Municipalities are a key actor in the sector, given that they have the majority of the concessions. and important participations in multimunicipal and delegated management concessions.

DATA ABOUT WASTE SECTOR IN PORTUGAL

Bulk	Multi-municipal Concessions	Municipal or Inter-municipal Companies	Inter-municipal Associations
Operators	52.20%	39.10%	8.70%
Municipalities Covered	67.40%	27.70%	4.90%
Surface Covered	59.50%	37.60%	2.90%
Population Covered	67.50%	22.30%	10.20%

Retail	Municipal Services	Municipal or Inter-municipal Companies	Municipalities
Operators	87.30%	8.40%	0.80%
Municipalities Covered	73.70%	14.90%	3.20%
Surface Covered	74.20%	14.30%	7.30%
Population Covered	68.30%	17.50%	10.50%

2. Scope of activities of the bulk and retail services

History and investment needs in the sector have created a situation where the retail operators oversee collection for the mixed waste (in the vast majority of cases) and in a few cases of the collection for the separate waste. Sorting and treatment are instead a competency of the bulk operators in all the cases.

The structure of the sector in Portugal is based on geographical monopolies. Each of the 237 retail operators has to work with the corresponding bulk operator for its geographical area Bulk operators provide global service to reach environmental targets set by national strategic plan (as opposed to operating particular treatment infrastructures).

Regarding the economic schemes in place.

- For the mixed waste, ERSAR's sets the tariffs, then there is a tariff that the retail operators charge to the municipality (from the end user to the collector) and a tariff charged form the bulk operator to the municipality (upstream tariff from the collector to the bulk operator for the sorting and treatment of the collected waste).
- For separate waste, EPR schemes are in place. There is then a fee charged on the producers for the products entering into the market.

As of June 2024, ERSAR's regulation of the sector is more focused on the mixed waste, but starting from this year ERSAR has some responsibility on the financial schemes of the EPR schemes.

3. Tariff setting methodologies for bulk services

There are three different approaches to tariff setting, each corresponding to the management model of the operator:

- **For Public & Municipally Owned Operators:**
  Sunshine Regulation is in place. Tariffs can be defined either annually or for a five-year period. Entities are required to submit their tariff proposals for appraisal. They may choose to follow these appraisals or not; however, they must provide explanations if choosing not to adhere to them.

- **For Public & State Owned Operators:**
  The Cost-Plus model is applied. Tariffs are defined annually. Entities must submit their tariff constructions to ERSAR for appraisal. ERSAR's opinion is binding, and entities are required to follow the set tariffs.

- **For Private State Concessions:**
  Revenue Cap Regulation is implemented. Tariffs are defined for a three- or five-year period. The procedure involves estimating tariffs for the entire period, with the tariffs for the first year being binding. There are annual adjustments, and ERSAR's opinion is binding on these adjustments.

Focusing on the revenue cap regulation, implemented for Private State Concessions. The formula for tariff setting is the result of the sum of the points below, divided then for the Mixed waste quantities for each year of regulatory period. To easily visualise it:

Tariff of the year = (1+2-3-4+5 -/+ 6)/ Mixed waste quantities

1. Cost of Capital (Added). Formed by
   a) depreciation of regulated asset base (RAB)
   b) Operator return as a measure of Cost of Capital x average RAB
2. Operating Costs (Added)
   Formed by allowed operating expenditures
3. Revenues (subtracted).
   Formed by
   a) EPR Scheme fees for packaging materials recovered
   b) sale of other material & other fees
   c) sale of electricity
   d) Sale of compost
4. Income from Complementary Activities (subtracted).
   Formed by % of overall income from complementary activities shared with regulated service users
5. Incentives (added).
   Formed by Regulatory benefits from extra efficiency (both acquisition of RAB assets, operating cost structure and attainment of environmental targets
6. Adjustments & regulatory asset/liability (summed or subtracted)
   a) Annual adjustments to revenue cap
   b)Accounting mechanism to reduce overall tariff volatility across regulatory period

2. Role of the Regulator and Other Stakeholders

The role of ERSAR in tariff setting is to:

- Efficiency of Costs Through:
  . Regulation and Economic Incentives: Implementing policies that foster cost efficiency and encourage prudent economic behaviour among operators.
  . Comparison Between Operators: Evaluating and benchmarking performance metrics across different service providers to promote competitive practices.
  . Technical Support and Capacity Building: Offering technical assistance and training to enhance the capabilities of operators.

Public Policies:

- Policy Modification and Incentivization: ERSAR actively works to refine and enhance public policies, supporting the consolidation of operators across municipalities by highlighting the benefits and facilitating discussions among interested parties.
- Monitoring of Policy Evolution: Keeping track of changes and developments within public policies to ensure they remain effective and aligned with sector goals.
- Proposing Improvements: Suggesting modifications or enhancements to existing policies based on observed outcomes and industry feedback.

Transparency and Information to Guarantee Cost Efficiency:

- Data Collection and Publication: Gathering relevant industry data and ensuring its accessibility to the public to maintain transparency.
- Knowledge Sharing: Facilitating the exchange of information and best practices among stakeholders to improve service quality and efficiency. For example, they give awards to the most effective operators every year, signalling their best practices.
- Consumer Awareness: Enhancing consumer understanding of tariff structures and the importance of cost efficiency in service provision.

3. Future Challenges in the Sector

GOVERNANCE

- Demanding Environmental Targets: ERSAR faces the challenge of meeting stringent environmental goals, with responsibilities distributed between bulk and retail operators. This requires careful coordination and adherence to high standards of environmental protection.
- Diversity of Operators and Management Models: The landscape includes a variety of operators, each with distinct management approaches. ERSAR must navigate these differences to implement effective regulations that cater to diverse operational frameworks.
- Technical Support and Capacitation: ERSAR provides essential technical support and training to ensure that all operators are equipped with the necessary skills and knowledge to comply with regulatory standards. This support is crucial for maintaining the effectiveness and reliability of waste management services.

EFFICIENCY

- Investment in Infrastructure and Equipment: There are substantial investments need in infrastructure and equipment for selective collection, sorting, and organic recovery (according to some estimations 4 billions for Portugal in the coming years). These investments are aimed at enhancing the efficiency and effectiveness of waste management processes.
- Biowaste Selective Collection: This task, typically managed by retail operators, comes with high operational costs. Efficient management and supportive tariff regulations are essential to sustain these operations without compromising service quality.
- Tariff Regulation: ERSAR implements tariff regulations designed to ensure that waste services can recover their costs in an efficient manner. This includes balancing operational costs with consumer pricing to maintain financial stability and service quality. Considering the reducing quantities of waste forecasted for the future, the strive to reduce tariffs, will not be possible in the foreseeable future.

NEW OPPORTUNITIES

- Implementation of Pay As You Throw (PAYT) Systems: ERSAR supports the adoption and implementation of PAYT systems. There are tough doubts about its economic sustainability in municipalities where not all the operational costs are covered.
- Extended Producer Responsibility (EPR) for Packaging: ERSAR has taken on new responsibilities under the EPR scheme, a new challenge to make them work in a financially sound way.

RAISE AWARENESS

- Influencing Consumer Behaviour: Consumers play a crucial role in the success of waste management systems. ERSAR is committed to educating consumers about the impact of their waste habits and the significance of their participation in recycling and waste reduction programs. By raising awareness, ERSAR aims to foster a culture of environmental responsibility and active participation in sustainable waste management practices.

Waste management in Romania

1. Governance arrangements and responsibilities in providing the waste management service

Main legal framework applicable for waste management (primary and secondary legislation) is :

- Emergency Ordinance no.92/2021 regarding the waste regime, which transposes the amendments made by Directive 2018/851/EU to Waste Framework Directive 2008/98/EC
- Government Ordinance no.2/2021 on the landfilling of waste, which transposes the amendments made by Directive 2018/850/EU to Directive 1999/31/EC on the landfilling of waste
- The Law of public utilities services no.51/2006, republished, with subsequent amendments
- Sanitation Law no 101/2006, republished, with subsequent amendments
- The national waste management plan (PNGD), approved by Government Decision no. 942/2017, establishes measures related to separate collection, recycling, composting, mechano-biological treatment, biogas production and/or material recycling and energy recovery/

2. Main institutional actors in policy-making

Government – General Secretariat of the Government and from there the Sustainable development Department

- Circular Economy Strategy + Action Plan for Implementation

Minister of Development, Public Works and Administration

- Initiate, promotes projects of law (primary and tertiary laws)
- Elaborates sectorial strategies in public utilities field
- Support the local administration/IDA in law implementation

Minister of Environment, Water and Forests

- Policy at the national level in the fields of environmental protection, green economy, biodiversity, natural protected areas, climate change with regard to all sectors and sub-sectors that it administers, elaborates the strategy and specific regulations for the development and harmonization of these activities within the general policy of the Government

Environmental Fund Agency

- Financial support for environmental protection projects

National Environmental Protection Agency

- Issuing environmental agreements for projects and environmental authorizations for the design, execution and operation of infrastructure specific to the waste services service

National Environmental Guard

- Inspect and control of the applying of waste management law and give sanctions

Minister of European Investments and Projects

- Financing European Programs – LIOP (2014 until 2021) and SDP (2021 until 2027)
- Financing the Waste Management Integrated Systems

National Statistic Institute

- EUROSTAT – official data

National Agency for Public Procurement

- Elaboration, promotion and implementation of policy in the field of public procurement in accordance with European legislation
- Monitoring the efficient operation of the public procurement system

Local Public Administrations (Municipalities) TAU – IDA (inter-community development associations)

- Have exclusive competencies regarding the organization, assignment, coordination and control of waste services activities carried out in their territorial area of competence.

3. Some major figures on municipal waste

Indicator	Tonnes	%
Quantity of municipal waste generated (to)	5777045.00	100%
Household waste from the population and similar waste plus waste from municipal services collected by waste services operators (to)	5383774.00	93%
Waste generated and not colected (to)	109962.00	1.90%
Recyclable waste from the population, collected by authorized economic operators, other than waste services operators (to)	283309.00	4.90%

Annual Waste Generation (kg per capita)

Year	EU-27 kg/capita	Romania kg/capita
2017	499	272
2018	500	272
2019	504	280
2020	521	290
2021	530	302

Waste Management Methods (Percentage)

Waste Management Method	Percentage
Other forms of recovery and disposal	13.25%
Recycling	13.08%
Disposal by landfilling	73.77%

Operators Structure

Type of operator	Number	%
Companies	447	64.50%
Public services	246	35.50%

4. The role of the Regulator

What does ANRSC do:

Tertiary Sector Regulations: The regulator is responsible for creating detailed guidelines and regulations that govern the tertiary sector of waste management. This includes:

- Methodology for Tariffs: Developing methodologies for establishing, adjusting, and modifying the tariffs associated with waste management services. This ensures that pricing structures are fair and align with both economic and environmental objectives.
- Provision Framework Regulation: Setting out the framework for the provision of waste management services, which defines the standards and expectations for service delivery.
- Contractual Framework for Delegation: Drafting framework contracts that delegate the management of waste services activities to suitable operators, ensuring that these activities are conducted efficiently and sustainably on the municipal waste stream.
- Specification Framework: Establishing detailed specifications for projects and operations within the sector to guide operators and ensure compliance with regulatory standards.

Licensing and Regulatory Oversight:

- License Management: The authority to grant, modify, suspend, or revoke licenses of operators within the waste management sector. This control ensures that only compliant and capable operators are allowed to manage waste services.
- Monitoring and Evaluation: Conducting regular inspections and evaluations to monitor the implementation of specific regulations, assessing the performance of operators, and ensuring that operations adhere to the established guidelines.
- Activity Oversight: Identifying and keeping track of the activities carried out by service operators, facilitating transparency and accountability in waste management practices.

The functioning of the market in Romania

Licensing and Contractual Arrangements:

- Obtaining Licenses: Operators must secure a license from the ANRSC to provide waste services services.
- Service Contracts: Once licensed, operators enter into service contracts with TAU/IDA, formalizing the terms and conditions under which services will be rendered.

Delegation and Administration:

- Delegation Contract/Administration Decision: A delegation contract or administration decision, is established between the TAU/IDA and the operator. This contract delegates the responsibility for providing waste services to the operator, specifying the scope and expectations of service delivery.

Regulatory Compliance:

- Regulations and Specifications: The operation and management of waste services are governed by regulations and specifications set forth in the ANRSC framework. These regulations outline the standards and procedures that operators must adhere to, ensuring consistent and quality service across regions.

Tariffs payment:

- Payment of Services: Users of the waste services are required to pay tariffs directly to the operators. These tariffs are predetermined fees for the waste services received.
- Municipal Taxes: In addition to paying tariffs, users also contribute to the local municipalities through taxes.

ANRSC's powers on tariff setting/economic incentives:

- The municipalities have exclusive competences to approve the establishment, adjustment, or modification of the tariffs related to waste services activities, as well as the waste services fees for users in accordance with the methodological norms developed and approved by A.N.R.S.C. through Order 640/2022.
- These competences can also be exercised by the inter-community development associations, based on the special mandates received from the member municipalities.
- The role of A.N.R.S.C. in the implementation of the tariff policy in the field of waste management:
- A.N.R.S.C., according to the new regulations of 2022, has the competence to approve the tariffs for the activities carried out by operators on the municipal waste stream, including the distinct tariffs for waste management, only if the local public administration authorities or, as the case may be, the inter-community development associations have not resolved, within the legal term, the requests for approval of the tariffs submitted by the operators.

5. Challenges in Romania's Sector

1. The European regulations and deadlines are considered too close in time and stringent. For instance:
    . By 2025, a minimum of 55%, and by 2030, at least 60% of municipal waste by weight must be recycled, goals that are achievable only through the aerobic and anaerobic processing of biowaste collected separately, utilizing composting and anaerobic digestion facilities, respectively;
    . By 2035, the proportion of municipal waste dispatched to landfills must be reduced to no more than 10% of the total volume, which must also be 'treated';
    . The mandated separate collection of textiles beginning in 2025 faces challenges due to the absence of valorisation facilities.
2. Romania lacks sufficient biowaste processing facilities (both composting and anaerobic digestion);
3. The availability of recovery facilities is inconsistent across regions (with no facilities present in every county);
4. There are no national standards for classifying types of compost for effective use;
5. The process for tariff approval is complicated by limited engagement from local authorities (TAU/IDA) and potential legislative changes, which could lead to difficulties in covering operational costs (opex) in a timely manner.

Regulation Of Waste Services In Latvia

1. Governance Structure

1. Ministry of Environmental Protection and Regional Development Republic of Latvia:
    - This ministry originally oversaw the main activities related to waste management.
    - Supervises several institutions including the State Environmental Service and the Environment State Bureau.
    - Additionally, oversees the Latvian Environment, Geology, and Meteorology Centre, which is a state limited liability company.
2. Ministry of Climate and Energy (MoCE):
    - has taken over the main responsibilities of the waste management sector from the Ministry of Environmental Protection and Regional Development, effective from the 1st of January 2023.
3. Ministry of Economics Republic of Latvia
4. Public Utilities Commission of Latvia:
    - The PUC is an independent institution. It regulates public utilities, including waste management, ensuring that services meet legal and safety standards.

2. Main Stakeholders

Institutions

- Ministry of Environmental Protection
- Municipalities organize municipal waste management in their administrative territory.
- Public Utilities Commission of Latvia: Independent institution that oversees and regulates utilities including waste management, ensuring compliance with national standards.

Operators

- Waste Management Operators, Waste Traders, and Waste Management Intermediaries: These are the entities directly involved in the operational aspects of waste management, including the collection, processing, and disposal of waste.
- The Owner or Manager of a Landfill, Other Waste Disposal or Recovery Facilities: This stakeholder is responsible for the management and operation of landfill sites and other facilities that handle waste disposal and recovery.
- Operators of Waste Management Regional Centers (previously landfill operator): These are the operators that manage regional waste management facilities, which may include landfill operations and other waste treatment facilities.
- Deposit System Operator: This entity manages the deposit system, likely involving the collection and refund of deposits on recyclable packaging like bottles and cans.

Other Stakeholders:

- NGOs, etc.: Non-governmental organizations that might be involved in advocacy, research, or community-based projects related to waste management.
- End-Users: The consumers or citizens who generate waste and are ultimately serviced by the waste management systems.
- Manufactories: industrial producers whose activities generate waste

3. Regulated Waste Management Services

In Latvia, the waste management sector is separated for co-mingled and sorted municipal waste.

Co-mingled Municipal Waste Management

Co-mingled municipal waste refers to mixed, unsorted waste typically generated by households. This waste is collected by municipal waste management operators who transport it to regional waste management centres. At these centres, the waste undergoes Mechanical Biological Treatment (MBT), where it is first mechanically sorted to extract recyclable materials. Subsequently, the waste is biologically treated to reduce its volume and improve manageability, preparing it for either further disposal or recovery operations (dry fermentation/composting or transportation to other recycling recovery facility).

Sorted Municipal Waste Management

Sorted municipal waste, follows a slightly different path. After collection, this sorted waste is also transported to regional waste management centres. Here, the recyclable materials are further processed for recovery, while organic components undergo either composting or dry fermentation. Composting converts biodegradable waste into valuable compost used in agriculture, whereas dry fermentation produces biogas, a renewable energy source. Recyclable materials are instead transported to the recycling facilities.

Regulation and Tariffs

The regulatory oversight in Latvia's waste management sector begins at the stage of waste collection and extends through the entire process. From July 1, 2024, the sector will see the implementation of specific tariffs. The Municipal Waste Treatment Tariff will cover the costs associated with the MBT and subsequent processing services. Concurrently, the Municipal Waste Disposal Tariff will be introduced to account for the costs related to the final disposal of municipal waste in landfills or other disposal facilities.

Latvia, with a geographical size of 64,586 km² and a population of 1,883,008 as of 2023, has Riga as its capital, hosting 660,187 residents. The country is divided administratively into 36 municipalities and seven state cities.

Regarding waste management infrastructure, Latvia is organized into five Waste Management Regions (WMR), containing nine Waste Management Regional Centers, where the municipalities of each WMR act as shareholders. Presently, there are ten operational landfill sites and six biowaste dry fermentation plants, three of which are still under development.

Municipal Solid Waste Management Performance (2016-2022)

Year	Generated Municipal Waste (kg/capita)	Amount of MSW Accepted for Disposal (thousand tonnes)	Amount of MSW Disposed at the Landfill (thousand tonnes)	Amount of Separately Collected MW Disposed at the Landfill (thousand tonnes)	Waste Disposal Target (%)
2016	400	350	15	2	30%
2017	450	350	16	3	23%
2018	400	320	12	4	22%
2019	350	300	8	0	24%
2020	420	360	14	2	23%
2021	430	370	15	2	26%
2022	430	370	16	2	33%

Natural Resources Tax for Solid Waste Disposal in Landfills (2016-2026)

Year	NRT(EUR/t)
2016	12
2017	25
2018	35
2019	43
2020	50
2021	65
2022	80
2023	95
2024	110
2025	120
2026	130

5. Tariff and costs

Unsorted municipal solid waste (MSW) management costs, the tariff is composed of

- MSW collecting, incl. separately collected waste streams, sorting costs, preparing for reuse, recycling, infrastructure costs etc. (approved by municipality)
- Tariff for provision of MSW disposal in the solid waste landfill (incl. NRT) (approved by Regulator)
- Component of difference on bio-waste management, 40% from MSW management costs (approved by municipality)

MSW costs 19,40 - 41,84 (avg. 29,34 EUR/m3) EUR/m3

6. Flow of the deposit packaging system in Latvia:

Regulatory Approval:

The process begins with the regulator approving the Deposit System Participation Fee. This is a mandatory fee that a deposit packer must pay to the deposit system operator to participate in the system. This fee supports the infrastructure and operational costs of running the deposit system.

Deposit Packer:

A deposit packer can be a service provider, a product manufacturer, or a distributor that places beverages in the market using deposit packaging. This stakeholder is responsible for ensuring that the beverages sold are in packaging that qualifies for the deposit system.

Deposit System Operator:

It's an economic operator formed by deposit packers and related associations. The operator manages the overall functioning of the deposit system, including collection, sorting, and recycling of the deposit packaging.

Deposit Packaging Management Fee:

This fee covers all eligible expenses related to the acceptance, sorting, storage, and accounting of the deposited packaging. It ensures that the deposit packaging acceptance points are well-maintained and efficiently managed.

Deposit Packaging Seller:

This role is played by retailers or vendors who sell the beverages in deposit packaging to end users. They are the touchpoint for consumers and play a critical role in the physical flow of packaged goods.

End Users:

Consumers purchase beverages in deposit packaging. After use, they return the empty packaging to designated return points. This act of returning completes the loop of the deposit system, allowing for the packaging to be recycled.

Return Flow:

The returned packaging is collected and sent back through the system to the deposit system operator. Here, it undergoes sorting and is either sent to recycling facilities for processing or disposed of if not recyclable.

7 Intervention on tariff/economic incentives

Methodology for the Calculation of Solid Waste Disposal Service Tariff determines:

- The operator shall include only such technologically and economically substantiated costs in the draft tariff which are necessary for efficient provision of the solid waste disposal service.
- The operator shall reduce the costs included in the draft tariff by the part of the revenue obtained thereby from trade in recoverable material separated, reducing the revenue by costs for the preparation of recoverable material separated for trade.

8 Future challenges

COOPERATION

Enhancing collaboration across regional waste management centers, whether within a single region or nationally, to better utilize treatment technologies and meet waste management objectives, including converting municipal waste (MW) into energy (Waste-to-Energy, WtE).

EFFICIENCY

The deployment of technologies that surpass the waste volumes produced by Waste Management Regions (WMR) raises the costs of regulated services. Often, the engagement of external service providers for these technological services has been rationalized through public procurement, rather than through economically justified costs.

CIRCULAR ECONOMY

Generation of energy from biowaste plants and landfills, including electricity, heat, and fuel. This involves calculating the costs of energy and recyclable materials and integrating these into tariffs based on self-consumption rates.

ACHIEVING WASTE DISPOSAL TARGETS

Strategies to reduce or eliminate the landfill disposal of separately collected waste types such as packaging, textiles, bio waste, and bulky waste, by bolstering recycling, repair services, and options for reuse.

ENVIRONMENTAL CHALLENGES

Meeting environmental standards is increasingly challenging and costly as landfills accumulate diverse pollutants, including leachate, greenhouse gases, odors, dust, and visual blight.

DATA QUALITY

Collecting data across various dimensions—economic, technical, gate fees, and waste management costs—in Latvia and other EU nations to inform regulatory decisions.

Development of performance indicators to assess service efficiency.

Regulation Of Waste Services In Italy

2. Institutional Set-up

The most important actors in the sector are:

National Level

- Environment Ministry: establishes macro objectives.
- ARERA (National Independent Regulator): power to establish has the power to establish homogeneous rules valid for the whole national territory in terms of tariff criteria, quality of services and transparency, consumer protection.

Local Level

- Regions define the optimal territorial areas (also called ATO, usually at regional or subregional scale) in which waste services constitute a local Authority for each optimal area (called EGATO).
- EGATO (which usually has a regional or provincial size) is responsible for organizing waste services in its relative ATO, provides for the assignment of the service to the management companies (choosing the appropriated form), defines, on the basis of the criteria set by ARERA the financial economic plans to set the operator tariff revenues.
- Municipalities must take part of EGATO; in some cases, contribute to organization activities.

Great fragmentation at local regulatory level, with the existence of local Municipalities, in the “non-compliant” Regions, acting as EGATOs (so called ETCs).

Data on ETCs in Italy

Size Category	Number of ETCs	Population Served	Percentage of Total Population Served
Up to 50,000 inhabitants	2457	12,003,703	23%
50,000-250,000 inhabitants	60	7,383,069	14%
250,000-500,000 inhabitants	15	4,920,795	10%
Over 500,000 inhabitants	22	27853559	53%
Total	2554	52161126	100%

3. The operators

Integrated Waste Management Service: includes all activities aimed at optimising urban waste management, namely:

- collection and transport activities;
- treatment and disposal activities;
- treatment and recovery activities;
- street sweeping and washing;
- tariff management and user relations

Operators in Italy are by far operating in one area (in particular tax collection activity). As of today Italian operators are divided as follows:

- 66,6% provide one activity
- 1,9% provide integrated services
- 31,6% provide 2 or more activities

In the table below you have instead a division of the operators by the type of activity.

Activity Type	Percentage of Waste Management Providers
Collection &transport/sweeping &cleaning streets/recovery	1.60%
Other	12.50%
Collection &transport/recovery &disposal	2.70%
Collection &transport/tax (tariff) collection	2.50%
Recovery &disposal	3.20%
Collection &transport/sweeping &cleaning services (c.s.)	12.00%
Collection &transport/sweeping &cleaning streets/tax collection	17.50%
Sweeping &cleaning streets/tax (tariff) collection	48.10%

The national legislator has requested a reorganization of local public services, also by promoting forms of aggregation (Legislative Decree 201/2022).

4. Multilevel regulation: the process for approving tariff proposals

The process for approving tariff proposals in the multilevel regulatory Italian framework is the following.

1. In the first phase, the authority sets tariff rules aimed at efficient operation and investment cost reimbursement, adopting an asymmetric approach based on operators' starting conditions.
2. The second phase involves EGATO/ETC validating the operators' information and adopting the tariff proposals, with activities such as identifying investment needs, determining additional operational costs, selecting specific tariff calculation rules, updating economic and financial plans, and adapting management contracts to regulatory requirements.
3. The third phase sees the authority collecting all tariff proposals and relevant information.
4. In the fourth phase, the authority analyzes and verifies each proposal, requesting further details if necessary.
5. The fifth phase is where the authority approves the proposals, which may include modifications or prescriptions.
6. The final phase involves the authority carrying out enforcement activities to ensure adherence to the established tariffs. The process is designed to empower local decision-makers.

5. Annual Growth Limit and tariff revenues after MTR-2 Update 2024-2025

The annual growth limit of tariff revenues after the MTR-2 update for 2024-2025 is established through a method that takes into account various factors to ensure tariffs grow at a rate that's both reasonable and sustainable. Essentially, the limit is determined by considering how much tariffs can increase each year

based on performance, quality improvements, and efficiency gains. The goal is to strike a balance where service providers are incentivized to improve their operations without causing undue financial strain on consumers.

Key Factors in Determining the Annual Growth Limit:

1. **Efficiency Improvements**: Encourages service providers to find ways to operate more efficiently. By reducing waste or improving processes, they can manage their costs better, which in turn can keep tariff increases in check.
2. **Quality and Performance Enhancements**: Takes into account improvements in the quality of service and overall performance. This ensures that any tariff increases are justified by tangible improvements in service delivery, which can include more reliable services or higher customer satisfaction.
3. **Economic Conditions**: Reflects broader economic indicators, such as inflation rates, which affect the cost of materials and operations. By aligning tariff increases with these economic realities, tariffs remain fair and reflective of actual costs.
4. **Regulatory Compliance**: Ensures that any proposed tariff adjustments comply with the latest regulatory standards and policies. This compliance is crucial for maintaining a fair and legally sound operational framework for service providers.

6. The reorganization of local public services: impacts for regulators

This section delineates the "Principles for the Establishment, Regulation, and Management of Public Services," underscoring several vital components:

- **Incentive Mechanisms**: Set up for groupings with routine assessments by ARERA of ATO definitions and EGA formations, accompanied by an annual report for 2023 (Report 609/23).
- **Role of the Authority**: The authority is responsible for pinpointing reference costs for services, standardizing Financial and Economic Plan (FEP) schemes, indicators, and the minimum levels of service quality. Additionally, it develops standard frameworks for management contracts and tender procedures (specifically, Resolution 385/23, which is currently under review for management contracts with tender drafts).
- **Regulatory Frameworks and Guidelines**: This encompasses methodologies such as MTR-2 (tariff method), FEP, and TQRIF (standards for quality, and technical specifications for recovery and waste treatment activities).
- **Performance Indicators and Management Oversight**: The Authority formulates indicators and protocols to monitor the administration of public services, establish management practices, and validate internal assignments.
- **Consultative and Economic Guidance**: Local authorities and the EGA have the privilege of seeking guidance from the Authority regarding economic and competitive aspects associated with segmenting contracts into different lots.

7. Definition of standard framework for Entrustment contract (Resolution 385/2023)

The standard framework for Entrustment Contracts as specified in Resolution 385/2023 includes key elements and related financial actions to regulate and standardize public service contracts. The main components of the framework are:

- **Definition of Minimum Content**: Set by legislative decrees, granting parties flexibility beyond the minimum requirements while considering local assets.

- **Deadline for Completion**: Requires submission of an updated tariff proposal for 2024-2025 by mid-2024.
- **Scope**: Covers contracts for integrated waste management services, available through public tender, public-private partnerships, or in-house provisions.
- **Perimeter and Duration**: Focuses on urban waste management with specific attention to contract variations and duration tied to investment recovery periods, extendable as needed.

The **Related Acts** include:

- **Economic and Financial Entrustment Plan**: Projects annual operating and investment costs, and expected tariff revenues, aligning with broader infrastructural and financial plans.
- **Resource Allocation**: Ensures necessary resources and services are available for running the integrated service.
- **Financial Resources**: Details the financial requisites for service operation.
- **Updates**: Establishes a collaborative process between ETC and the operator to ensure ongoing compliance and financial stability.

8. Maintaining of economic and financial balance

The guidelines detail how to maintain economic and financial balance within regulatory frameworks, particularly focusing on adjustments for unforeseen circumstances:

- **Request for Economic and Financial Rebalancing**: Operators initiate this if unexpected conditions that were not anticipated during the tariff proposal phase arise, potentially disrupting economic stability. This request to the competent ETC must include detailed reasons for the imbalance, a precise quantification of the financial impact, proposed rebalancing measures, explanations for the unpredicted nature of these circumstances, and any preventative actions previously taken.
- **Rebalance Measures**: Post-evaluation of the circumstances relative to the annual growth limit of tariff revenues, potential measures might include revising the objectives for the operator, modifying the scope or duration of the contract, or other agreed-upon adjustments to ensure service levels and demands are met.
- **Procedure for Approval**: The ETC must review and decide on the rebalancing request within 60 days and then forward their decision to the Authority, which will verify the regulatory consistency of the rebalancing measures.

9. Standard framework for awarding contracts: main elements (under consultation)

The standard framework for awarding contracts is currently under consultation and focuses on aligning the contract awarding process with regulatory requirements and evaluation criteria. Here's a brief overview of its main elements:

1. **Coherence with Regulatory Framework**:
    - The contract definition process is aligned with legislative frameworks that support market competition through rationalization and aggregation.
2. **Tender Base (Amount)**:
    - The maximum value for tariff revenues, as determined by the tariff method from the financial plan of the outgoing operator, sets the tender base.
3. **Participation Requirements**:

- Participants must demonstrate sufficient economic and financial capacity, compliance with regulations, efficiency, cost-effectiveness, and the necessary technical capabilities to match the service value.

4. **Bid Evaluation Criteria**:
   - **Technical**: Evaluates potential technical improvements such as enhanced waste collection systems and waste quantification measures, requiring these improvements to be cost-effective and consistent with predefined technical standards.
   - **Economical**: Focuses on maximizing efficiency improvements and ensuring these are quantified and aligned with the annual tariff growth limit, as per the technical bid requirements.