

PROJET:  
**Gestion Intégrée des Déchets de la Région de  
Péloponnèse**

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 **ΤΕΡΝΑ ΕΝΕΡΓΕΙΑΚΗ**  
Ο Μ Ι Λ Ο Σ Γ Ε Κ Τ Ε Ρ Ν Α

PRIVATE PARTNER:  
**PERIVALLONTIKI PELOPONNISSOU  
MAE**



The project “Integrated Waste Management in the Region of Peloponnese” consists of three waste management facilities of a total capacity of 200.000 t/y and two transfer stations. Each waste management facility consists of a waste treatment facility and a landfill in which the treatment residue is disposed of.

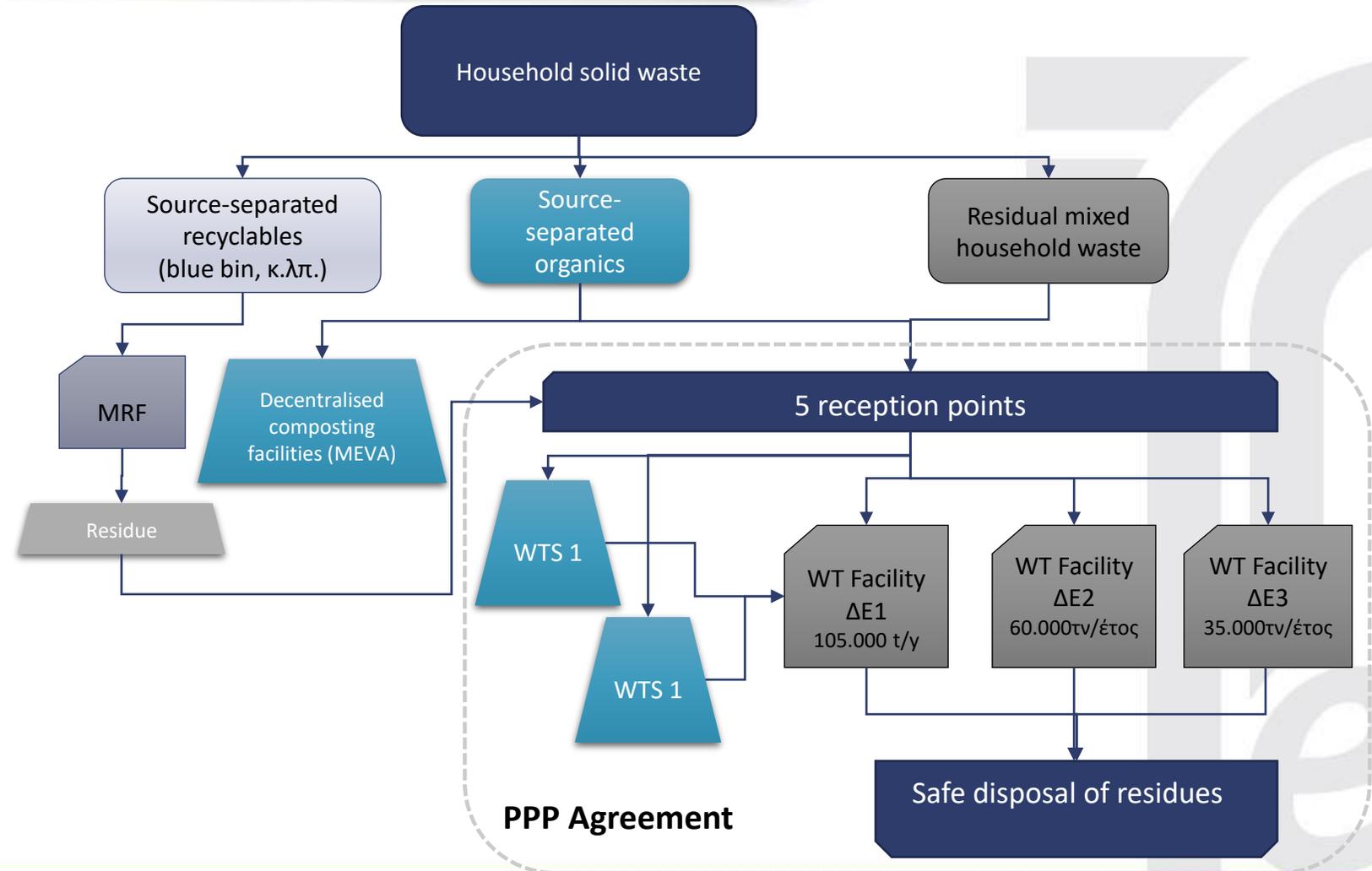
The project is the permanent solution, at least for the next 27 years, for the waste management in the region of Peloponnissos. The stakeholders are:

- The Regional Association for Waste Management (FODSA) of Peloponnissos. The FODSA of Peloponnissos has assigned its rights and obligations arising from the PPP Agreement to the Region of Peloponnissos through a Framework Agreement.
- Private partner: **PERIVALLONTIKI PELOPONNISSOU MAE**
- The project is implemented through the PPP model (private-public partnership). **It started in 2013, while the PP Agreement came into force in January 2021.**

The PPP contractual model is a well-established model, used worldwide for project implementation.

# The Project

- Realizes the most important part of the Regional Waste Management Plan (RWMP) of Peloponnissos Region.
- Is in line with the provisions of the National Waste Management Plan (NWMP) 2015, in force at the time of design and the European legislation.
- Maintains its compatibility with the new NWMP of 2020.



# Project Size

The project size was defined under the assumption that the total waste management production in the Region is ca. 270.000 t/y

Stream types	Stream quantity	NWMP 2020 target for source separation
Organics	118.800	40%
Recyclables	118.800	65%
Other	32.400	
<b>Total</b>	<b>270.000</b>	

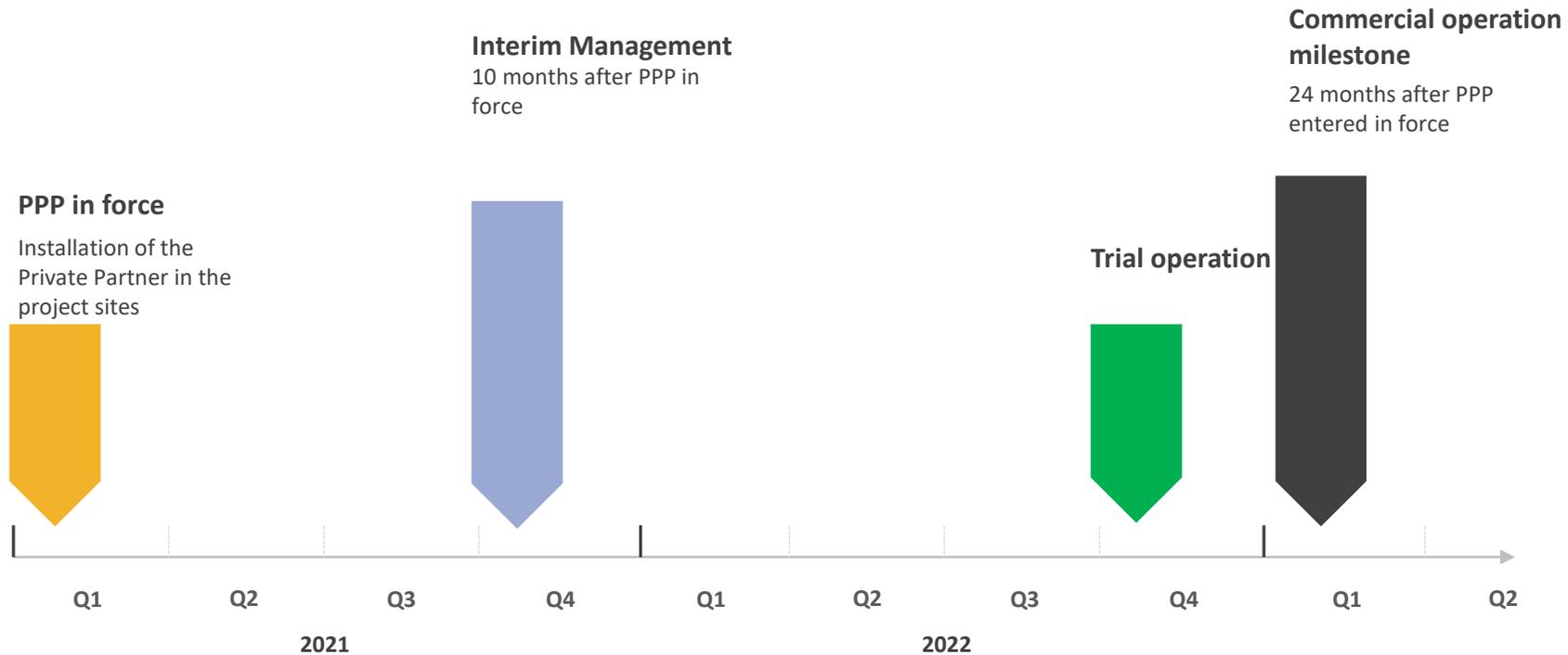


Source-separated waste (t/y)	Still contained in mixed household waste (t/y)
<b>47.520</b>	71.280
77.220	41.580
0	32.400
<b>124.740</b>	<b>145.260</b>

<u>Contractual waste</u>	<u>Tons/y</u>
<b>Mixed waste</b>	145.260
<b>Source-separated organics</b>	47.520
<b>MRF residue</b>	7.720
<b>Total</b>	<b>200.500</b>

# Time schedule

- ✓ **24 months** construction period
- ✓ **10 months** after the PPP Agreement has entered in force, the Private Partner will provide interim waste management services.



# TECHNICAL ASPECTS



# Reception of Contractual Waste

## Reception points:

- 3 Waste Treatment Facilities in Arcadia, Messinia and Lakonia
- 2 Waste Transfer Stations in Korinthia and Argolida

**Contractual Waste** arrive at the reception points, including:

- Mixed household waste
- Source-separated organics
- MRF treatment residue from mixed recyclable waste

All reception points include automated weighing procedures recording incoming waste in real time conditions.

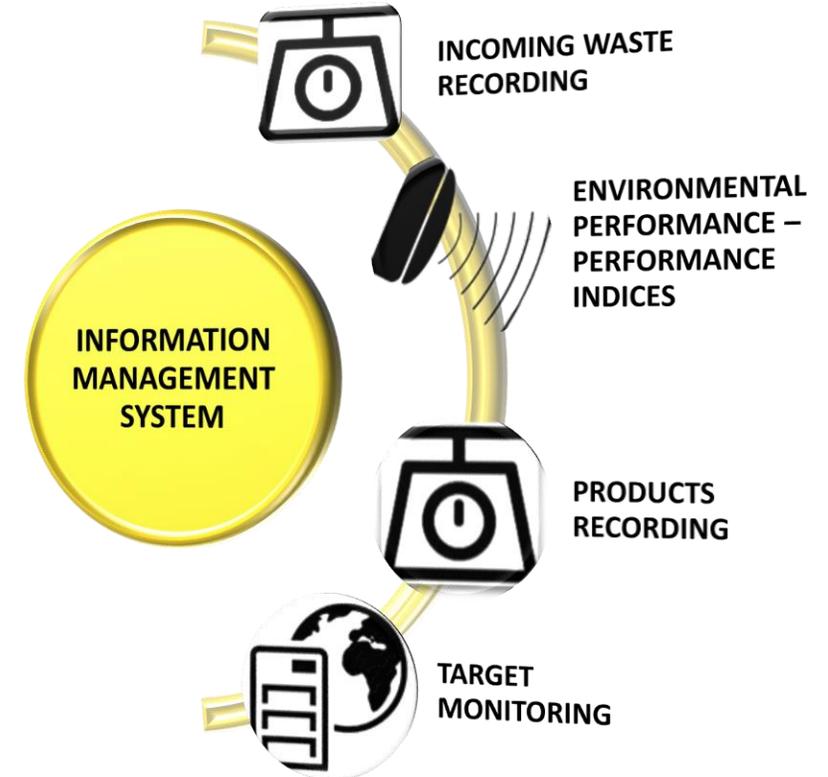


# Information Management System

The **Information Management System** monitors :

- Incoming waste quantities
- Outgoing products and residues
- Project targets:
  - Residue to be disposed of < 45% of contractual waste
  - Recovery of recyclables > 35% of recyclables contained in the waste stream
  - Diversion of biodegradable waste from landfilling > 65% w/w
- Environmental performance (odors, dust, wastewater)

The Region of Peloponnese can access the **Information Management System** [online](#).



The **Waste Treatment Facilities** are designed to treat contractual waste:

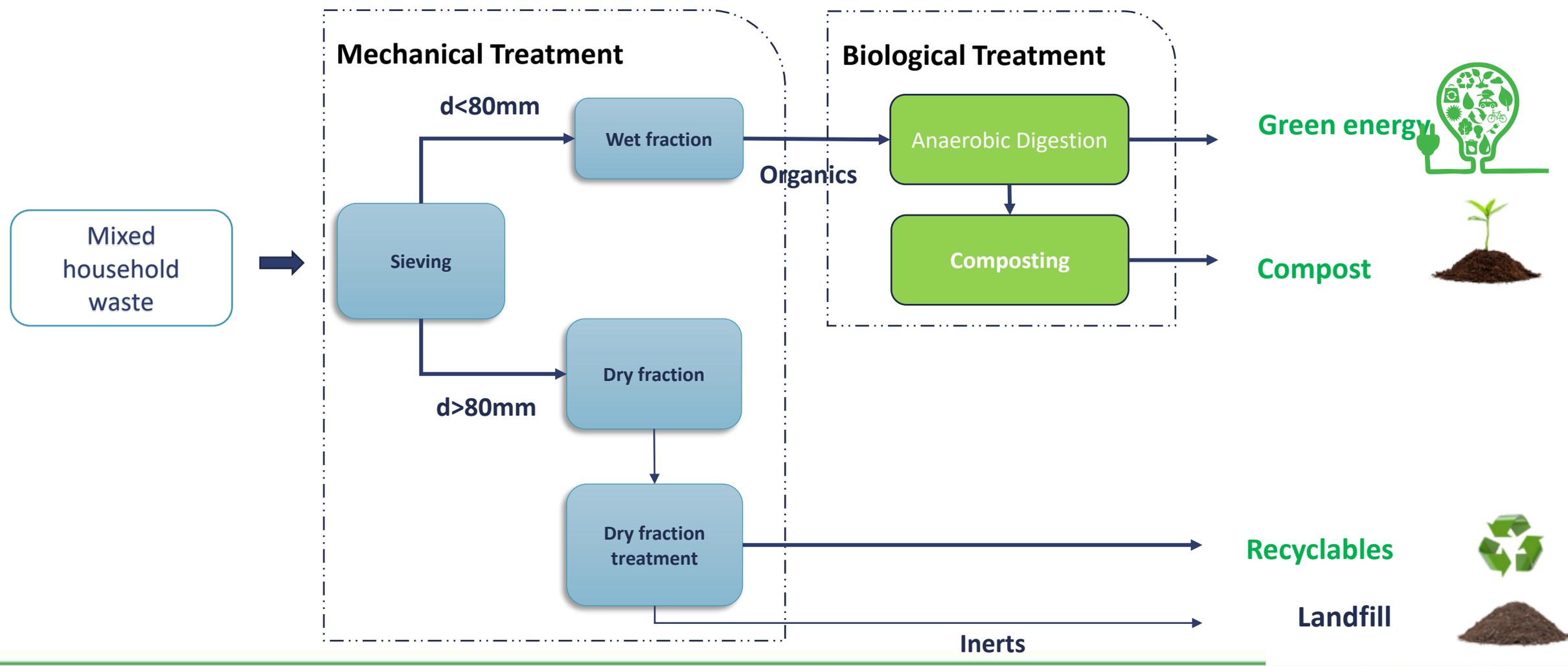
- Mixed household waste
- Source-separated organics.
- MRF residue from recycling operations

Each one consists of:

- Mechanical Treatment
- Biological Treatment
- Landfill for the residues



*Ipiros PPP Waste Treatment Facility*





The project complements the source separation programs which are currently effective and contributes significantly to the achievement of the national target for recycling.

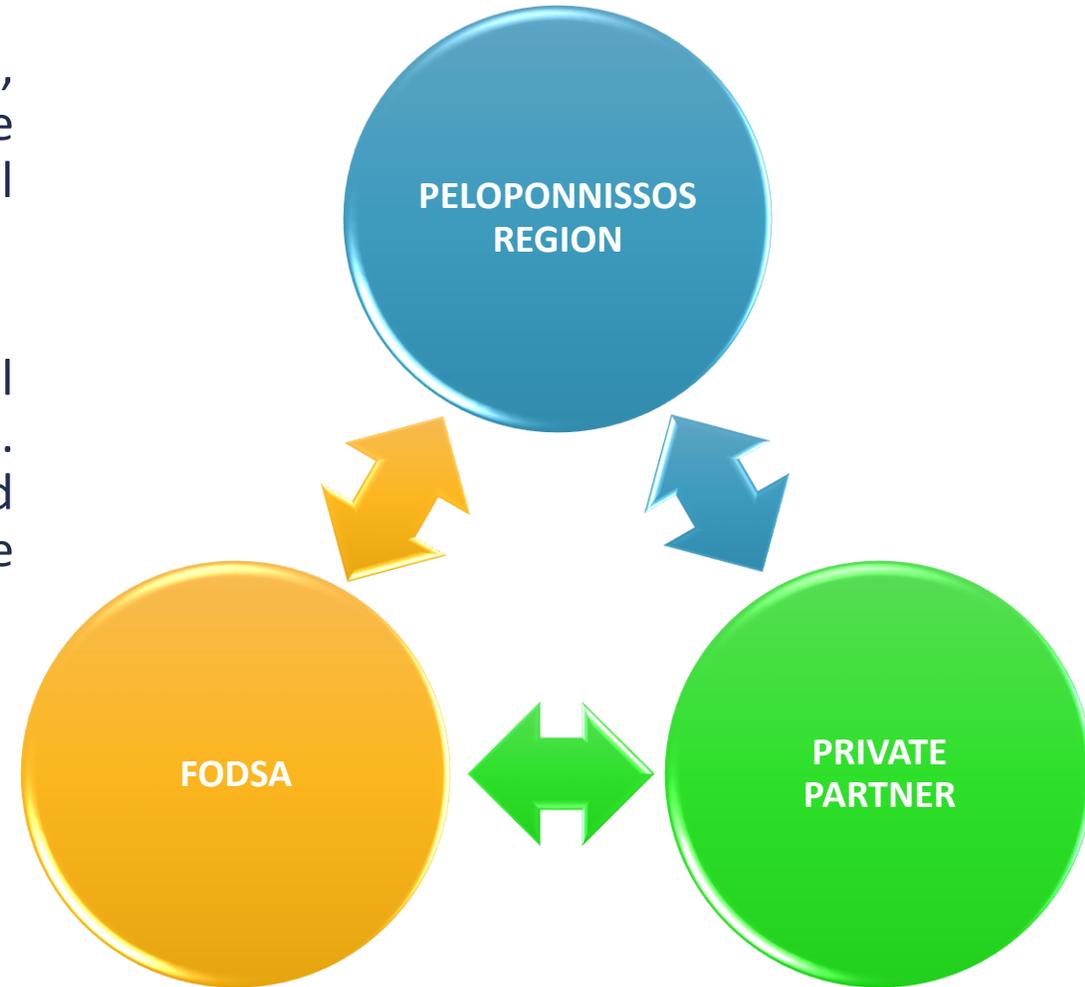
**65% of biodegradable waste are diverted from ground disposal**, achieving a reduction of 50.000 t/y of wastewater (mostly leachate) which currently impact adversely the natural ecosystems of Peloponnissos.

The green energy produced is enough to cover the needs of **6.000 families**, at the same time preventing **24.000 t/y CO<sub>2</sub>** emissions

# THE PPP AGREEMENT

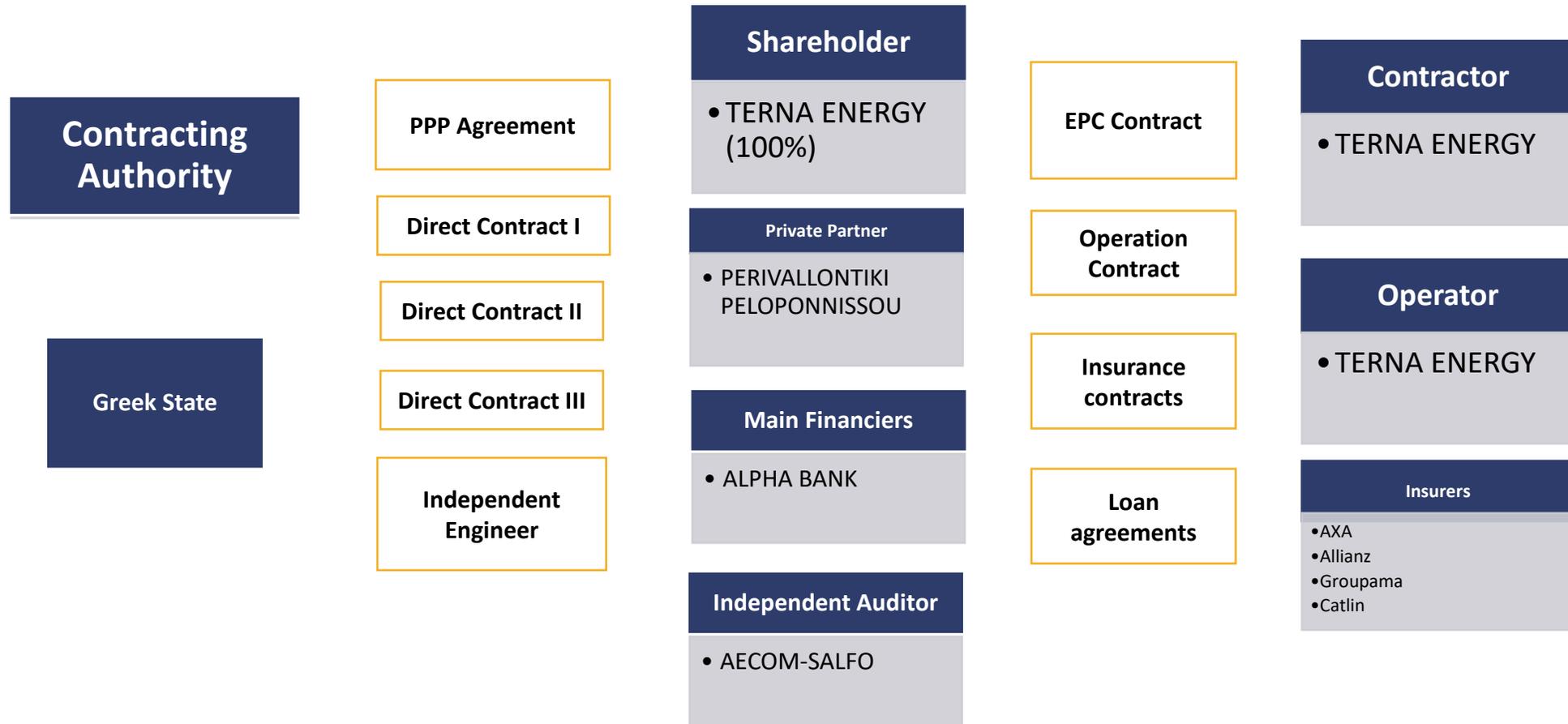


- ✓ Provides for the design, permitting, financing, construction, insurance, operation and maintenance of the project for the next 28 years (2 years construction and 26 years of commercial operation).
- ✓ Defines the rights and obligations of all stakeholders, as well as the basic technical and economic parameters of the project. In addition, it provides the necessary flexibility to change and adjust to future developments and challenges regarding waste management legislation and technical advances.



- The Contracting Authority and the Private Partner have entered in a comprehensive framework of Agreements, in order to secure the proper and viable operation of this highly important project for the natural environment of Peloponnissos and its citizens.
- The Private Partner, throughout the term of the PPP Agreement is subject to verification of the proper operation, the cost, the quality of services and the project performance by:
  - **The Independent Auditor**
  - **The Contracting Authority**
  - **The local population**
- The appendices of the PPP Agreement include among else:
  - The specifications of the Contracting Authority regarding the works and the services to be rendered by the Private Partner.
  - The individual contracts for EPC, Operation, Independent Auditor and Insurance.
  - The Direct Contracts I, II and III, which secure the guarantees for the project.

# Contractual Structure of the Project



# FINANCIAL DATA



The total amount of capital required is **152 M€**, originating from the National Strategic Reference Framework (NSRF – ΕΣΠΑ), private equity and bank loans. The financing contribution of the Contracting Authority amounts to more than **63 M€**.

## Project cash flows:

- Gate fee
- Third-party income (recyclables, green energy)
- Other sources

## 1. Gate fee

Is calculated by:

- The Basic Fee per ton,
- Potential penalties imposed to the Private Partner for non-conformance,
- Inflation index (affecting the gate fee by 60%).

Basic Fee per ton	Level €/t
BT1 (range 0-150.000 t annually)	79,98
BT2 (range 150.001-200.000 t annually)	34,89

**68,71 €/t average weighted cost  
for the 1<sup>st</sup> year of operation**

## 2. Third-party income

- Potential income from sales of secondary products (recyclables, green energy).
- 60% of excess third-party income beyond a certain level, specified in the financial model of the Private Partner, will be returned to the Contracting Authority for the development of environmentally friendly activities.

## 3. Other income

- **Income from non-contractual waste**, (e.g. waste received from other regions in agreement with the Contracting Authority).
- Receiving waste from the Peloponnissos Region in quantities exceeding 200.000 t/y.

# Investments During the Lifetime of the Project

- **27 M€** are reinvested by the Private Partner during the term of the PPP Agreement , mostly regarding:
  - ✓ Equipment replacement, refurbishment or overhaul
  - ✓ Repairs in buildings and infrastructure
  - ✓ Potential future investments to adjust to changes in the relevant legislation
  - ✓ Landfill future expansions
- At the time of the expiration of the PPP Agreement the project facilities will be capable to operate for **5 more years**.

- ✓ Effective waste management practice in the Peloponnese Region during the next 28 years.
- ✓ Environmental protection and compliance with the national and European legislation:
  - Development of source-separation programs for waste
  - Achievement of recycling targets at the highest level
  - Maximization of recovery through composting
  - Green energy generation
  - Establishment and increase of environmental awareness of the citizens re. waste management
  - Payback to the local communities, through income of the local population by the economic activity of the project and other sources

- ✓ Improvement of life quality and health conditions of the local population.
- ✓ Direct and indirect benefits for Tourism, Education and modern agricultural practices, all of which are sectors of strategic importance for Greece's economy.
- ✓ High local added value (70% of the investment is directed within Greece). **600** new jobs during construction, **200** new direct jobs during operation and a large number of indirect jobs related to the project's operation (transportation, sales and administration of recyclables, etc.).

# Peloponnissos leaves behind bad practices of the past and moves ahead with state-of-the-art environmentally friendly infrastructure





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