Circular Economy and Water sector challenges in Greece
Contribution of JASPERS to the development of sustainable investments
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M.A. of “Environment and Climate Change” 2021-2027 Programme

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The environment sector in Greece

• JASPERS have been working with the Greek Authorities, both beneficiaries and Managing Authorities, for many years.
• The majority of Major Projects in previous programming periods were produced and approved by EC services with the support of JASPERS.
• The environment sector in Greece is particularly challenging, the water and circular economy sectors being of greater significance because of considerable investments from Cohesion Policy funds through the years.
• Horizontal and project specific problems are encountered in both sectors
• Policy making, governance, strategic planning and project preparation exhibit weaknesses
• Project promoters and service providers are not always adequate to undertake full responsibility of the projects
Overview of the current situation of the Water and Wastewater sector in Greece

- Water and wastewater services are provided by Water Service Companies (DEYAs) or Municipalities.
- Greece is not yet fully compliant with the 91/271/EC Directive. There exist:
  - 9 noncompliant agglomerations over 15,000 p.e. discharging into normal areas.
  - 232 noncompliant agglomerations over 2,000 p.e. discharging into normal areas.
- A national operational plan for drinking water is being drafted, from which investments 2021-2027 will result.
- Planning and investments in the drinking water sector focus on projects covering distinct needs of a “water supply/transfer/treatment/connection to consumer” linear model.
- Although both water and wastewater services are provided and billed by the same provider with a common tariff, investments are planned independently. A holistic approach is lacking.
- EU financing has contributed significantly through the years to the efforts of the Greek authorities to address the pending wastewater management issues and to develop sufficient drinking water infrastructure, with ca. 1 billion Euros in PP 2014-2020. In addition, 545 MEuros from the Cohesion Fund are scheduled to be invested also in 2021-2027 period.
Identified issues – Need for JASPERS support

1. Key findings of the expertise study, ordered by DG REGIO, on the functionality of 26 wastewater management projects financed in previous programming periods, identified shortcomings in infrastructure and operation, such as:
   • Weak final beneficiaries (water services providers) i.e. water utility companies or municipalities
   • Difficulty to deliver quality projects on time and on budget
   • Weakness in the management of the projects
   • Inadequately equipped to ensure proper maintenance and operation of the wastewater plants.

2. Horizontal (structural) challenges are observed in the water and wastewater sector as well as need for policy and management improvement

What must be done
• Need for improved planning,
• Need for systemic technical, organizational and managerial assistance to the final beneficiaries (water services providers) that fail in assuming their tasks and competences.
• Coordination and supervision by the services of the involved authorities
Water and wastewater sector – Horizontal support and capacity building to develop viable investments in 2021-2027

Wastewater management sector – Peer review of a water service providers study

Peer review of the study launched by DG REGIO of 35 water service providers involved in specific projects in view of their:
- functionality; completeness in terms of planning
- financial and operational sustainability and
- how the recommendations and findings can be utilized in improving the preparation, effectiveness and sustainability of the new projects prepared in the 2021-2027 programming period.

Support to the Managing Authorities in the planning procedure of projects in the water and wastewater sectors in PP 2021-2027:
- Improve the preparation and implementation of water and wastewater projects, according to better outcome indicators;
- Define the parameters that will prioritize urban wastewater management actions in settlements <2,000 inhabitants.
- Develop quality standards and methodologies to group and prioritize investments and size projects and infrastructure.

Develop a pipeline of proposed holistic projects (wastewater and drinking water), according to lessons learned from the Programming Period 2014-2020.
Water and wastewater sector – Project specific support

A. Screening of 12 medium scale wastewater projects to be used as a basis for recommendations and lessons learnt to be exploited by the Managing Authorities and Beneficiaries.
   - Review existing documentation and prepare Guidance Notes.
   - Collaborate with the Beneficiaries in project documentation preparation (i.e. Feasibility Study, CBA, environmental impact assessments, climate proofing, Do No Significant Harm, etc).

B. Wastewater collection in the area of Saronikos and Kropia municipalities (Attica region) and options for wastewater reuse
   - Project preparation support to EYDAP SA in terms of preparing a project application for EU co-financing of the regional wastewater collection and treatment system and options for wastewater reuse.
   - Capacity building support to EYDAP SA, in terms of governance, tariff policies, connection policies, leakage detection programmes, 24-hours service policies, etc.
JASPERS will provide the Greek authorities with on-the-job recommendations on:

- Improvement of the preparation and implementation of wastewater projects (project documentation preparation)
- Capacity building support of water service providers in terms of governance, tariff policies, connection policies, leakage detection programmes, 24-hours service policies
- Strengthening the financial, and administrative, organizational and managerial capacity of the water services providers.
- Addressing related horizontal issues (connection rate, operation and maintenance of the wastewater facilities) and the overall integrated management of water and wastewater; and
- Grouping and prioritizing investments, sizing projects and infrastructure with a holistic approach (wastewater and drinking water) in the 2021-2027 programming period
Overview of the current situation of the Municipal Solid Waste sector in Greece

Greece continues to rely on landfilling and shows a slow progress to increase recycling rates (In 2020, 78% of produced MSW sent to landfills, 16,4% recycled, 4,3% composted, and 1,3% directed to energy recovery)

Greece is considered to be:
• At serious risk of missing the 2025 target of 55% preparation for re-use/recycling of MSW
• At a lower risk of missing the 2025 target of 65% of packaging waste recycling
• At significant risk for not meeting the 2035 target of 10% municipal waste landfilled.

• Legislation and Regulatory framework (established 2020-2022) in compliance with EU acquis
• National Waste Management Plan approved in 2020 to comply with Circular Economy Package
• 13 Regional Waste Management Plans in need of revision for compliance to NWMP/CEP

• MSW collection is the responsibility of the Municipalities
• MSW Treatment (recovery and disposal) is the responsibility of Waste Management Agencies (FODSAs) which are companies created by the municipalities of a service area
• EPR schemes operate for many waste streams (packaging, batteries, WEEE, waste oils, etc.)
In the previous programming periods, Cohesion Policy has invested in the development of waste treatment infrastructure mainly to treat residual waste mechanically and biologically (MBTs). The parallel development of separate collection remains insufficient.

Based on separate collection schemes and treatment projects foreseen in the Regional Waste Management Plans of 2016, investments were approved with CF and ERDF 2014-2020 co-financing mainly through the O.P. “Transport Infrastructure, Environment and Sustainable Development” 2014-2020, but also through Regional OPs.

To date the following projects are approved by M.A:
• Investments in separate collection of bio-waste – 84.6 MEuro
• Investments in separate collection of recyclables in Green Points / Recycling Corners – 165.2 MEuro
• Investments in 28 MBTs for residual waste with presorted bio-waste treatment line – 606.5 MEuro
• Investments in 18 dedicated presorted bio-waste treatment plants - 32.0 MEuro
The story behind the numbers

The Greek authorities planned and approved funding with the following general characteristics:

- MBTs serve mainly the treatment of residual waste in compliance with the 2008/98/EC directive (50% of produced MSW) as well as presorted green waste in separate line
- Investments in separate collection of bio-waste in areas with MBTs/composting plants that either exist or are under implementation
- Investments in separate collection of recyclables, mainly through Green Points, not related to subsequent sorting facilities or MBTs
- Separate collection by municipalities
- MSW treatment by FODSAs

Various factors led to considerable delays in approving and initiating the investments

DG Regio raised concerns about:

- the waste management plans approved in 2016, in terms of economic viability and their potential to achieve future compliance with the CEP targets
- the compliance with the CEP of MBTs foreseen in Regional Waste Management Plans and approved by the M.A.
- the timely scheduling of investments in separate collection of bio-waste / recyclables
- the capacity of the responsible authorities, both municipalities and FODSAs, to implement viable investments
- the governance of the sector
A. Horizontal support / Screening of MBTs
   • Horizontal support to screen 12 MBT projects to increase capacity of Greek authorities in assessing waste management projects
   • Development of the “Recycling Recovery Facility (RRF)” concept to support the transition to a circular economy targets. RRFs treat increasing amounts of separately collected waste (recyclables and bio-waste) and, accordingly, reduced quantities of residual waste through time

B. Screening of major projects 2014-2020
   • Integrated Waste Management System in Peloponnese (PPP project)
   • Waste management plant serving the Eastern Sector of Central Macedonia

C. Non-major projects
   • Application of the RRF concept to the existing MBT in Alexandroupolis
Waste management investments in 2021-2027

• **Promote the transition to a circular economy**, Cohesion Policy in 2021-2027 focuses on assistance for waste management systems to help achieve the CEP targets by supporting measures to increase recycling and reduce disposal.

• **Achieve the CEP targets and compliance with the Malagrotta ruling**, the Greek national / regional waste management plans are expected to include the **RRFs**, which treat both residual waste and separately collected recyclables and bio-waste, coupled with commitments for comprehensive programmes for separate collection of waste.

• **RRFs will enable and support the transition to a circular economy**; they must be flexible and/or retrofittable to treat increasing amounts of separately collected waste (and accordingly reduced quantities of residual waste), to avoid lock-in effects for residual waste.
The need for support of JASPERS to develop meaningful investments in 2021-2027

A. Screening of Regional Waste Management Plans
   (Ministry of Environment and Energy)
   • Developing a checklist to facilitate the review of each Regional Waste Management Plan

B. Technical guidelines for the implementation of “Environment Climate Change” 2021-2027 Programme
   (M.A. of “Environment Climate Change” 2021-2027)
   • Guiding principles of the RRF concept including the elaboration of technical and financial aspects
   • Guiding principles of the methodology to calculate the pro rata intervention rate of EU funding
   • Guiding principles for the technical conversion of MBTs to RRFs in line with the CEP targets and EU cohesion policy 2021-2027

C. Governance / Capacity building
   (FODSAs, M.A.)
   • Support of FODSAs to design and operate viable projects
   • Support of M.A. to evaluate technical, economic, and state aid aspects of projects

D. Screening of significant projects 2021-2027
   (Project developers/FODSAs)
   • Waste management plant serving the Western sector of Central Macedonia (PPP project)
   • Waste management plant serving Central Athens regional sector (PPP project)
   • Waste management plant serving Piraeus and Islands regional sector (PPP project)
JASPERS support in the Waste Sector - Conclusions

• In 2018, the EU published the Circular Economy Package (CEP), which establishes ambitious targets for recycling (65% in 2035) and landfill disposal (maximum 10% in 2035).

• Greece remains far away from the CEP targets.

• In the previous programming period, Cohesion Policy has invested heavily in the development of waste management infrastructure to handle mainly residual waste, but the development of separate collection, which is key for increasing recycling and reducing landfill disposal, has been insufficient.

• From our collaboration through the years and tangible results on the ground, JASPERS’ contribution will be extremely beneficial for the Greek Authorities in the preparation of meaningful, value for money, and viable 2021-2027 Cohesion Policy investments and capacity building of project beneficiaries.
Thank you for your attention