

### **Policy recommendation paper**

Policy recommendations for Spain, Greece, Slovenia, Italy, Turkey and Romania



Circular Organic Management



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### Introduction

Organic waste is an important part of all municipal waste, as it includes biological materials such as food scraps, vegetable and fruit waste, and biodegradable material from gardens and parks. Although organic waste has the potential to be recycled and converted into compost or biogas, the vast majority of this waste still ends up in landfills. There, they cause environmental problems such as greenhouse gas emissions (mainly methane), soil and groundwater pollution and contribute to climate change.

One of the main challenges in the management of organic waste is the low level of separate collection and insufficient recovery infrastructure. With increased awareness, education and improved infrastructure, organic waste can become a valuable resource for a circular economy that supports sustainable practices and reduces the amount of waste ending up in landfills.







### About project COM – Circular Organic Management

The COM project - Circular Organic Management (COM), supported by the Erasmus+ programme, is designed to promote sustainable practices in European schools and wider communities. Its main objective is to reduce organic waste, which is one of the main causes of pollution and climate change, and to promote a circular economy. Through educational programmes and tools, the project helps teachers, students and the wider community to develop competences to manage organic waste more efficiently, raise awareness of the importance of recycling and encourage behavioural changes that will contribute to a more sustainable future.

The project focuses on three main areas:

- Education and training: Develop learning packages to guide teachers and students towards better management of organic waste.
- Promoting a circular economy: Supporting schools to integrate circular practices such as composting, waste reduction and reuse.
- Engaging with local communities: Actively involve students, teachers and local authorities in sustainable projects and practices that contribute to the dissemination of knowledge on organic waste management.





### About the Policy Recommendation Paper

The Policy Recommendation Paper is based on a study on the state of organic waste management, behavioural patterns and environmental education carried out in the framework of the COM project. The aim of this document is to draw on the findings of the survey to formulate concrete policy recommendations that will help to improve organic waste management in the participating countries.

The survey showed that there are significant differences between the participating countries in terms of waste management practices, levels of public awareness and the availability of infrastructure for the collection and treatment of organic waste. It is therefore crucial that country-specific recommendations are developed to address each country's unique challenges and opportunities.

The document aims to:

- To identify the key challenges in each country with regard to organic waste management.
- To provide tailored solutions and policies to help manage waste efficiently and promote a circular economy.
- To link the findings of the research to the design of sustainable policies that will contribute to waste reduction and better education on waste management.

The document will serve as a basis for the development of strategies to help national and local authorities improve infrastructure, education and behavioural patterns of the population with regard to the sustainable management of organic waste.





### **RESEARCH SUMMARY**

The research, carried out as part of the Circular Organic Management (COM) project, analysed current organic waste management practices in six European countries: Spain, Greece, Slovenia, Italy, Turkey and Romania. The aim of the survey was to gain insight into existing systems for the collection and recovery of organic waste, residents' waste separation behaviour, infrastructure challenges and awareness of the importance of the circular economy. The survey revealed varying levels of performance between countries, with some countries making significant progress in organic waste management, while others are still lagging behind due to a lack of infrastructure and awareness.

The main findings of the survey:

- Different levels of infrastructure development: Countries such as Slovenia and the northern parts of Italy already have effective systems in place for the separate collection and treatment of organic waste. In contrast, Greece, Turkey and Romania are still lagging behind in establishing adequate collection and treatment facilities for this waste.
- Lack of behaviour and awareness on segregation: Despite good intentions, in many countries the population is not sufficiently aware of the importance of segregating organic waste. In Greece and Romania in particular, the survey shows a low level of awareness and a lack of trust in waste management systems.
- Environmental education and young people's behaviour: The survey shows that younger generations are more receptive to behavioural change, especially when it comes to recycling and the circular economy. However, education programmes on sustainable waste management in schools are still underdeveloped.

Based on these findings, country-specific recommendations are being developed to address country-specific challenges and offer solutions to improve organic waste management practices.





## COUNTRY SPECIFIC RECOMMENDATIONS Spain

#### State

Spain has already made important steps in separating organic waste, especially in regions such as the Basque Country and Catalonia. However, rural areas and some less developed regions still face a lack of infrastructure and a lower awareness of the population. The rate of separate collection of organic waste is significantly lower in these areas, leading to environmental pollution and lower recycling rates.

- Improving and extending separate collection systems: Spain needs to provide additional resources to extend existing separate collection systems, especially in rural and less developed areas. The launch of national programmes to facilitate municipalities' access to equipment and training is crucial for better management of organic waste.
- Investing in local composting and biogas plants: The development of local composting and biogas plants should be promoted, allowing decentralised treatment of organic waste and reducing dependency on centralised plants.
- Public awareness and education campaigns: It is important for the government to carry out comprehensive awareness campaigns on the separation and recovery of organic waste. These campaigns should be targeted mainly at rural areas and smaller towns where awareness levels are lower. It is particularly important to encourage engagement with young people through school programmes.





### COUNTRY SPECIFIC RECOMMENDATIONS Greece

#### State

Greece faces major problems with organic waste management. Separate collection is limited and the infrastructure to treat this waste is poorly developed. Most waste is landfilled, leading to environmental problems such as greenhouse gas emissions, Residents report low confidence in waste management systems, which also reduces their willingness to participate in segregation.

- Establish a comprehensive waste separation system: Greece should develop a national plan to establish separate containers for organic waste and ensure that all households are adequately equipped. Local authorities should work with the private sector to build organic waste treatment plants such as composting and biogas plants.
- Improving public trust and transparency: To increase public willingness to participate, the transparency of local municipal companies needs to be improved. Residents need to be shown how waste separation contributes to reducing waste to landfill and to the production of renewable energy.
- Environmental education and youth programmes: Greece needs to include more environmental content on sustainable waste management in school curricula. The younger generations are more receptive to change and should be given the opportunity to be involved in composting and recycling projects.





### COUNTRY SPECIFIC RECOMMENDATIONS Slovenia

#### State

Slovenia has a high rate of separation and recycling, especially in urban areas such as Ljubljana, which already follows a zero-waste policy. However, rural areas are lagging behind in establishing adequate infrastructure for the collection and treatment of organic waste. Local residents often do not have access to composting facilities, which hinders efficient recovery.

- Extend separate collection in rural areas: existing systems for separate collection of organic waste should be extended to rural areas. The establishment of smaller, locally managed composting plants could reduce transport costs and improve the efficiency of waste management.
- Promote community composting programmes: Rural communities should be involved in composting programmes that integrate agricultural practices and inter-household cooperation. This would enable compost to be processed locally and used for agricultural purposes, reducing the need for synthetic fertilisers.
- Improving environmental education: Slovenia needs to increase support for environmental education in schools, with a particular emphasis on younger generations. Projects involving young people in local composting and recycling initiatives should also be encouraged.





# COUNTRY SPECIFIC RECOMMENDATIONS Italy

#### State

In Italy, there are large differences between the northern and southern parts of the country in terms of organic waste management. Northern regions such as Trentino-Alto Adige and Lombardy already have effective waste separation and treatment systems in place, while southern regions lag behind due to a lack of infrastructure and financial resources

- Standards for the separation of organic waste that would apply throughout the country. This approach would reduce the wide disparities between the northern and southern regions and ensure greater uniformity in the collection and treatment of organic waste.
- Increasing investment in the southern regions: In order to improve the separation systems in the southern regions, it is necessary to increase investment in organic waste treatment infrastructure, in particular in composting and biogas plants. These investments should be supported by public-private partnerships to accelerate the construction of plants.
- Incentives for households: The government should introduce financial incentives for households that actively participate in the separation of organic waste. This could include reductions in utility bills or tax breaks for those who separate and recover waste efficiently.
- Public awareness campaigns: Italy should carry out comprehensive awareness campaigns on the importance of separating organic waste and on the benefits of recycling and composting. These campaigns should be particularly intensive in the southern regions where awareness levels are lower.





## COUNTRY SPECIFIC RECOMMENDATIONS Turkey

#### State

Turkey faces a lack of an efficient organic waste management system. Most organic waste is still landfilled, leading to negative environmental consequences such as greenhouse gas emissions and groundwater pollution. There is a lack of infrastructure for separate collection and treatment of organic waste, especially in rural areas.

- Establish a national waste separation system: Turkey needs to establish a comprehensive organic waste separation system involving households, industry and public institutions. This system should be based on the construction of appropriate infrastructure, such as composting and biogas plants, to reduce dependency on landfills.
- Cooperation with the private sector: Turkey should encourage cooperation with private companies that could invest in organic waste treatment infrastructure. This would reduce the financial burden on local authorities and increase the efficiency of waste collection systems.
- Education campaigns for the population: The State should carry out extensive public awareness campaigns on the importance of separating and recovering organic waste. These campaigns should highlight the environmental and economic benefits of separation and involve schools and local communities as key stakeholders.
- Promote the use of biogas: Turkey needs to increase investment in biogas plants that will allow the conversion of organic waste into energy. This would reduce the burden on landfills and contribute to sustainable energy production, in line with the Sustainable Development Goals.





### COUNTRY SPECIFIC RECOMMENDATIONS Romania

#### State

Romania faces low recycling and separation rates of organic waste. Most organic waste still ends up in landfills, causing significant environmental burdens. The infrastructure for organic waste treatment is insufficient, especially in rural parts of the country where the population does not have access to adequate waste separation systems.

- Establish an effective system for the separation of organic waste: Romania needs to establish a more structured system for the separation of organic waste, including the creation of separate containers for households and the introduction of local collection centres for organic waste. A coordinated strategy between national and local authorities is needed.
- Increase investment in recycling infrastructure: There is a need to increase investment in composting and biogas plants in order to improve the treatment options for organic waste and reduce the amount of waste going to landfill.
- Local composting initiatives: Romania should encourage local composting initiatives, especially in rural communities where farms can use compost as a natural fertiliser. Community composting plants would also help to reduce waste transport costs.
- Educational campaigns to raise awareness: Romania needs to carry out extensive awareness-raising campaigns on the importance of separating and recovering organic waste. These campaigns should be targeted at less developed regions where the population does not have access to adequate information and systems.





### Conclusion

Based on the research and analysis carried out on the state of organic waste management in the participating countries of the Circular Organic Management (COM) project, it is clear that comprehensive and coordinated action is needed at several levels. The findings of the survey show that there are significant differences between countries, both in terms of the availability of infrastructure and the level of awareness of the population about the importance of separating and recovering organic waste. Despite progress in some countries, such as Slovenia and Northern Italy, many countries still face structural challenges, lack of financial resources and insufficient educational programmes.

The recommendations made in this document are tailored to the specific needs of each country, focusing on:

- Improving infrastructure for separate collection and recovery of organic waste, especially in rural and less developed regions.
- Promoting environmental education, especially among young people, to foster sustainable habits and a greater willingness to participate in waste separation.
- Increase trust in local authorities and waste management systems through greater transparency and better involvement of citizens in decision-making processes.

A number of initiatives are being coordinated at European level, such as the European Green Deal, which aims to move towards a circular economy and reduce greenhouse gas emissions by at least 55% by 2030. This policy is geared towards sustainable development, with the circular economy playing a key role in reducing the environmental footprint. Measures such as the Waste Directive and the Circular Economy Action Plan require Member States to improve their waste management systems, including reducing the amount of waste going to landfill and increasing the recycling rate of organic and other waste





The European Union (EU) is already supporting the development of projects, such as COM, which focus on raising awareness and educating the public and on developing infrastructure for more efficient waste management. At EU level, key actions include:

- Financial support for projects under programmes such as Erasmus+ and Horizon Europe that contribute to education and improve environmental practices.
- Sharing best practices between EU Member States to ensure that effective solutions are disseminated across the Union, especially in countries lagging behind in implementing separation and recycling systems.
- Strengthening legislative frameworks including mandatory targets to reduce waste to landfill, increase recycling rates and improve the quality of organic waste recovery.

At national level, greater cooperation between governments, local authorities and the private sector is needed, as the successful management of organic waste is key to achieving the objectives of the circular economy. Key success factors include:

- Strengthening public-private partnerships to invest in waste treatment infrastructure, including the construction of composting and biogas plants.
- Improving education programmes at local and national level, including school projects, raising awareness and engaging young people in sustainable practices.
- Introduce financial incentives for households and businesses that actively participate in the separation and recycling of organic waste, which may include tax reductions, subsidies or discounts on utility bills.

A comprehensive approach to the sustainable management of organic waste will enable the exploitation of this valuable resource, reduce pressure on natural resources and the environment, and create new jobs and opportunities in the circular economy sector. By setting up efficient systems for the collection, recovery and re-use of organic waste, EU Member States will contribute to achieving the objectives of the European Green Deal and creating a sustainable future for all.





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