



**LIFE + Environment Policy and Governance**

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# WASTEREUSE

The logo for the Wastereuse project, featuring the word "WASTEREUSE" in a bold, sans-serif font. The "WASTE" part is in grey and has a distressed, textured appearance, while "REUSE" is in a solid green color. To the right of the text is a graphic of three stylized leaves or petals in shades of green and yellow.

**Project:** Best Practices for Agricultural Wastes Treatment and Reuse in the Mediterranean countries

[www.wastereuse.eu](http://www.wastereuse.eu)

Action 8 – Report on the Policy and Legislative Framework for the Reuse of Agricultural Waste

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## Executive Summary

The reuse of agricultural waste is beneficial for the environment and for agricultural productivity and it could offer new business opportunities. However, in order to reduce the risks involved with organic wastes management and to maximize the gains for the environment and for the agricultural sector, one should always keep in mind that these materials were or are wastes. Therefore, it is essential that AW are handled and used according to specific standards and restrictions. Currently EU and national legal frameworks provide for these restrictions and standards, but new technological and scientific developments entail appropriate adjustments and expansion of these frameworks. The adaptation of the regulatory framework is also necessary in order to encourage farmers in a large scale to reuse and recycle the wastes that they produce through their agricultural activities.

The mainstream and scaling of effective practices for the reuse of AW would require harmonization of current national rules – as the big gaps in terms of standards and the differences between the national regulations are sources of vagueness and do not really encourage farmers in all EU countries and regions to try to reuse their wastes. This harmonization could be certainly implemented more efficiently through the adoption of a common legal framework on the reuse of AW at a European level. The current revision of the Fertilizers Regulation (EC 2003/2003) and the announcement of a new circular economy strategy provide a timely opportunity to include the issues of reusing agriculture waste and compost in the EU policy legislative tools and to take the findings of this and other relevant reports into account.

The EU rules regarding Sewage Sludge provide a good example of harmonizing laws regarding waste at EU level. Similar approach could be followed also for compost, which legislation and standards are not yet providing in a unified way for the composition, handling, storage and use in the agricultural sector. Agricultural waste reuse can offer sizeable benefits, but in order to achieve this in a safe and efficient manner, clear rules need to outline what is qualified as usable in different agricultural practices and what must be prohibited due to health and safety risks.

This report presents the regulatory framework, on both national and EU level, for the treatment of Agricultural Waste and formulates legislative and policy proposals for improving the current framework on the basis of the gaps identified by this analysis. The environmental impacts caused from the reuse of processed or unprocessed agricultural waste, the identification of the regulatory gaps and of the main differences between national laws, underline the need of specific EU legislative measures on agricultural waste and in particular of laws regarding the treatment of AW.

At the moment, the rules and standards for the use of compost vary considerably across countries. Some countries have a dense and coherent net of regulations on national and/or on provincial level and other allow for compost to be used without any legal directions. As coherent approaches to policy, standards, quality assurance and market development have produced in many relevant environmental, health and safety and industrial fields positive outcomes, it would be highly beneficial for the agricultural sector and for the environment to create a coherent EU regulatory framework for compost.

This framework should certainly take into account the key aspects related to the use of compost that can pose a risk to the environment or should be further regulated in order for end users to fully exploit all the benefits of compost and to be protected from the risks associated with using and working with organic waste. The most important aspects of waste and compost that need a harmonized EU regulation are:

## **1. By products**

By products, considered as such by the producers, are excluded from the waste regulations so that they can be recycled to land as soil improvers and fertilisers. Although this practice may be convenient for the producer, it is not necessarily compatible with ensuring a high level of environmental protection where these materials are used in agriculture for landspreading (EC-DG, 2001). In developing a practical scheme for operational purposes, a banding of materials into broad groups may be helpful. All these materials should be subject to overall generic controls and there should be further specific controls for each group according to their properties and progressively detailed information should be required according to the class of waste. Therefore, prior spreading on land, the suitability of wastes should be proved and checked by a competent authority. Suitable wastes need to be identified, defined through an appropriate chemical/physical characterization and, if appropriate, grouped into broad categories to make for a workable classification for use across the EU. This classification is considered fundamental for the collection of coherent information and for making sensible comparisons and it should be somehow regulated and harmonized throughout the EU.

## **2. Organic Waste: Soil improvers and organic waste fertilizers**

The application of organic waste on soils can pose certain environmental problems mainly related to (EC, Draft discussion document for the ad hoc meeting on biowastes and sludges 2004): *an excessive and/or unbalanced supply of nutrients, secondly the introduction of pollutants, such as heavy metals and organic compounds, and thirdly the spreading of human, animal or plant pathogens*. The organic fertilisers sector is potentially the most difficult one to regulate and especially at EU level, due to the diversity of potential raw materials, many of which are waste from other processes. Nonetheless, it is important to regulate this sector as the raw materials used for this kind of fertilizer, can carry risks related to the spread of animal and plant diseases that could affect the environment and livestock in all EU countries.

## **3. Compost application and standards**

The application of compost has to respect environmental parameters. For this reason, as well as in order to ensure product specifications for specific end users, the ability of the receiving medium to absorb compost applications must be carefully considered. The efforts to generate quality composts with low PTE concentrations are intended to ensure environmental protection. However, many of the maximum loads of PTEs to the soil defined in European standards and regulations are stemming from traditional sewage sludge regulations or are calculated from quantitative compost limitations multiplied by heavy metal threshold values. In this respect it is considered as highly beneficial for both end users and for the environment if metal loads on soil will be laid down according to specific standards that should be adopted in all Member States.

In addition analytical methods used for the extraction of metals in the substrate also have to be regarded. The restrictive limitation of total amounts of compost to be applied on land again determines the resulting metal load on the basis of maximum PTE concentrations in the product. Even if one looks only at standards for biowaste and green waste composts the variation is enormous.

## **4. Compost and Organic Waste standards**

Other compost related aspects that could benefit from standardization concern:

- The acceptable quantities of foreign matter in compost
- The required hygiene and related worker safety standards
- PTEs specific to compost
- Pesticide and especially herbicide residue content of organic wastes, as surveys have shown considerable variation in pesticide residue contents, dependent on the source, time of year and the fraction collected
- Weed standards in compost
- Classification of salts in composts
- Testing for N-immobilization potential of compost
- Compost phytotoxicity tests, which have been proposed and published for quality monitoring
- Quality levels for the use of compost in plant substrates (e.g. potting mixes)

All the aforementioned parameters should be taken into consideration in a common framework for the chemical composition, testing, certification and use of compost in the EU.

#### **5. Compost areas and facilities**

Lastly, this report highlighted the importance of the right choice for composting areas and facilities. Permits for on-farm composting operations are generally not required for small to medium size facilities that don't sell finished compost products on a wholesale or retail basis. Nevertheless, a well-run facility must operate in compliance with the national and local regulations pertaining to surface water, ground water and odors. Negligence in any or all of these areas will likely result in an order to mitigate the problem(s), as well as ensure the attention of the jurisdictional health district from that time forward.

A site for an agricultural composting facility must furthermore provide the required area and conditions for all weather composting as well as limit the environmental risk associated with odor, noise, dust, leaching, and surface water runoff. Site planning involves finding an acceptable location, adapting the composting method to the site, providing sufficient land area, and implementing surface water runoff and pollution control measures as needed. The materials being composted and system management will also impact these environmental concerns. In order to be able to steer and monitor the choice for composting areas and facilities clear and transparent regulation, on all levels ranging from local to European, would be of high importance in order to control the environmental impacts.