

Backfilling means a recovery operation where suitable waste is used for reclamation purposes in excavated areas or for engineering purposes in landscaping and where the waste is a substitute for non-waste materials.

Guidance on the interpretation of the term backfilling

From reference year 2010 onwards statistics on waste treatment according to the Regulation on waste statistics 2150/2002/EC covers the treatment category backfilling. For the interpretation of the term backfilling and the proper classification of waste treatment to this category in waste statistics it is helpful to consult both the Waste Framework Directive (WFD) 2008/98/EC and the Commission Decision 2011/753/EU:

The term *backfilling* is newly introduced into the WFD and it is explicitly accepted by Article 11(2) lit. b as a recovery operation. However, the WFD itself does not provide a definition for backfilling.

Recovery is divided into three sub-categories: preparing for re-use, recycling, and other recovery. In the context of defining backfilling only the terms recovery and recycling and the distinction between these terms are relevant.

Definition of recovery, WFD, Article 3(15): The principal result of a recovery operation is “waste serving a useful purpose by replacing other materials [. . . which would otherwise have been used. . .] to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy.”

The key requirements are the replacement of other materials and preparation to fulfil a particular function. All other sub-categories of recovery have to comply with one of these requirements.

The definition of **recycling** under Article 3(17) WFD is: “any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.”

The common idea behind recycling is that a waste material is processed in order to alter its physicochemical properties allowing it to be used again for the original or for other purposes and thus of closing the economic material circle.

Materials used for energy recovery, as fuels or for backfilling purposes are excluded from the definition of recycling. Recovery other than recycling is mainly associated with energy recovery and waste being used as fuel. The term backfilling falls under ‘other recovery’.

Other recovery is any operation meeting the definition for **recovery** under the WFD, but failing to comply with the specific requirements for recycling (or for preparation for re-use). Any backfilling operation has to comply with the recovery definition by replacing other materials or being prepared to fulfil a particular function. Associated with the term backfilling is the notion of a permanent placement of the material on/in particular sites, it is not intended to be returned to the economic material cycle.

According to the Commission Decision 2011/753/EU backfilling is defined as follows:

Backfilling means a recovery operation where suitable waste is used for reclamation purposes in excavated areas

or for engineering purposes in landscaping and where the waste is a substitute for non-waste materials.

There is no specification of the type of waste other than it has to be suitable, meaning appropriate for the purpose and without causing environmental harm.

Backfilling operation involves reclamation purposes in excavated areas or engineering purposes in landscaping, however it has to substitute other materials that are not waste.

The condition of substituting other (non-waste) materials suggests that the reclamation or landscaping measures will be undertaken anyway, whether a suitable waste for this purpose is available or not. This means that there is a justified need for the reclamation or landscaping activity, e.g. for stabilisation or coverage of the area. Landscaping engineering covers all the elements of traditional engineering such as planning, investigation, design, construction, operation, performance assessment, management etc. It involves other applied sciences (agricultural & horticultural sciences, hydrogeology, wildlife science etc) and reclamation as well.

A recurring question is whether landscaping measures on landfills using waste materials are classified as backfilling.

If the waste

- is used instead of other virgin materials,
- suitable for the application (complying with the necessary properties for the particular performance), and
- applied in a process of landscaping engineering

it falls under the definition of backfilling.

Related concepts

- [Incineration](#)
- [Landfill](#)
- [Recovered products](#)
- [Recycling of waste](#)
- [Reuse of waste](#)
- [Waste](#) (including disposal of waste)

Further information

Eurostat, Statistics explained: [Waste statistics](#)

Eurostat dedicated section on [Waste](#)