

## Wageningen UR Waste policy & implementation

Wageningen University & Research centre (Wageningen UR) is a knowledge institute which carries out education and fundamental and applied research. Inherent in its activities is the production of waste.

Wageningen UR aims to provide transparency to concerned parties/stakeholders in relation to its sustainable operational management. For this reason, this memo lays out the Wageningen UR waste policy and its implementation.

### Policy

Wageningen UR's approach to waste management follows Lansink's Waste Hierarchy. In practice, this means that waste management is organised so as to give priority to the most environmentally friendly processing methods, shown at the top of the 'ladder'. The steps in Lansink's Waste Hierarchy, displayed here as rungs on a ladder, are Prevention, Re-use and preparation for re-use, Recycling, Recovery, Combustion and Disposal (see figure 1). This division is given more detail in the Netherlands' National Waste Management Plan (*Landelijk afvalbeheerplan, LAP*).

The collection, removal and processing of waste at Wageningen UR is based on:

- compliance with operative legislation and regulations
- (National Waste Management Plan and the Dutch Environmental Management Act)
- separated waste collection by an accredited waste collector
- leading role in sustainable operational management



Figure 1. Lansink's Waste Hierarchy

In addition, Wageningen UR operates from the following starting points:

- Collected waste is not dumped unless there is no other option (such as asbestos). The goal for non-hazardous waste is to dump 0%.
- Wageningen UR's garden waste and green waste is processed internally as much as possible by using the composting and anaerobic digestion installations in Wageningen and Lelystad.
- The local (municipal) climate goals are followed where this is reasonably possible.
- Proven technology is utilised.
- Electronic waste, white goods and brown goods are recycled/processes in conformity with the WEEE Directive.
- Old paper and cardboard are collected, removed and processed as 'confidential'.
- Tendering is carried out in conformity with NL Agency's sustainable procurement criteria.

Wageningen UR's sustainable operational management always respects the points of the Corporate Social Responsibility statement, including the sustainable procurement policy (see [www.wageningenur.nl](http://www.wageningenur.nl)).

### Implementation

The most important waste flows within Wageningen UR are:

- general waste
- old paper and cardboard
- electronic waste
- plastics
- flat glass
- hazardous waste (office waste, laboratory waste, hospital waste), white goods, brown goods
- biodegradable waste
- glass
- wood
- metals

These waste flows are classified under three different categories:

### *I. Non-hazardous waste/industrial waste*

This category includes all industrial waste except for hazardous waste, paper, cardboard, carriers of confidential information and foil. It can be roughly subdivided into general waste, glass, biodegradable waste/swill (cooked food waste), green waste, plastics, construction & demolition waste/rubble/other construction-related waste flows and other waste flows like wood, metals, flat glass and bulky waste. Waste in this category is collected by the waste collection service.

### *II. Hazardous waste*

Hazardous waste includes all waste that is hazardous to humans, animals and the environment, as defined in Article 1.1, paragraph 1 of the Dutch Environmental Management Act. The most important hazardous waste flows within Wageningen UR are laboratory waste, Specific Hospital Waste and Hazardous Office Waste. Wageningen UR also classifies electronic waste and white and brown goods as hazardous waste. Waste in this category is collected by the waste collection service. An environmental officer is brought in a few times per year to assist with the removal of the waste flow 'miscellaneous laboratory chemicals'. To this end, chemical waste is collected according to ADR classification, sorted and packed; and a packaging list is drawn up and related activities are carried out. In addition, an environmental advisor is occasionally brought in to determine the composition of an unknown waste flow.

### *III. Old paper & cardboard, carriers of confidential information and foil*

The processing of paper and foil focuses on making as much recycled materials as possible suitable for reuse as raw materials. In this digital age, information carriers are not limited to paper. Most information is stored digitally. Nevertheless, it is sometimes necessary to destroy this information because it is no longer relevant or up-to-date. The destruction of this information is a specialised task. Waste in this category is collected by the waste collection service/service provider.

Collection of the waste flows listed above is procured for Wageningen UR as a whole. The criteria for procurement are costs, service provision (including logistics and recycling methods), invoicing, information provision (including about management) and sustainability. Follow-through on agreements and critical performance indicators are evaluated and determined under the responsibility of the contract manager.

In addition to the three categories listed above, Wageningen UR distinguishes among the following separate waste flows:

#### Radioactive waste

- Short-life radioactive waste is kept on-site under secure conditions until it has sufficiently decayed to be able to be removed as hazardous waste. Only extremely small amounts of long-life radioactive waste are produced. This is transported to the Netherlands' Central Organisation for Radioactive Waste (COVRA).

#### Carcasses and related flows

- This waste is collected and processed by the rendering company Rendac in conformity with European rendering legislation.

#### Construction and demolition waste from construction and renovation activities

- Removal of this waste is the responsibility of the contractor or head contractor.

At Wageningen UR, waste is separated at the source. The amount of waste that is separated differs per location and depends on a) the amount and composition of the waste released and b) the physical capabilities/limitations of the location.

The composition of the waste released is determined by the function of the location (office, education, laboratory, restaurant, greenhouse) as well as by the type of research carried out at that location.



Figure 2. Separation of waste in the Forum educational building

The method of internal waste collection differs per location, and a combination of collection at the workplace and central collection is implemented. The performance is also location-specific and is provided by cleaning staff and the location's own facilities staff. At the educational locations Forum and Orion, an external service provider, EcoSmart, is responsible for the collection of internal non-hazardous waste.

EcoSmart states that it is the company that is most qualified to keep organisations and buildings waste-free. The waste flows are separated at the source (see figure 2) and the waste life cycle is managed sustainably and efficiently from the source to processing. In the years that EcoSmart has been collecting waste at Wageningen UR, the amount of residual waste has been reduced by one quarter.

Wageningen UR keeps track of developments in this regard. In the coming years, Wageningen UR will focus on continuing to develop the Wageningen UR waste policy and its implementation.