

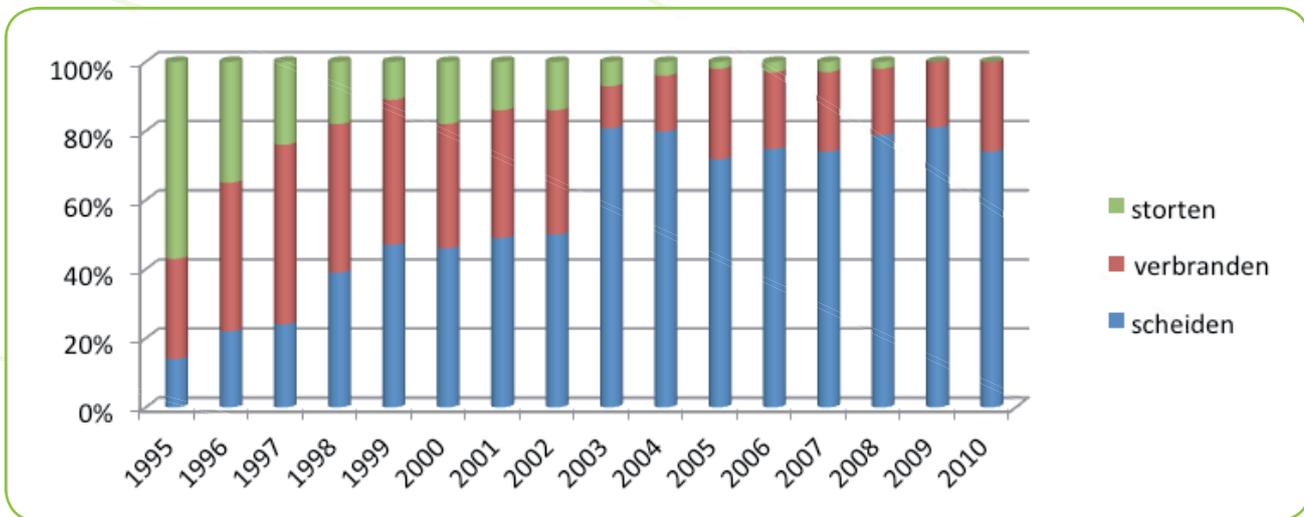


RESPONSIBLE PROCESSING E-WASTE

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REVOLUTION IN RECYCLING

Over the past 15 years the Netherlands has undergone a revolution in the world of waste processing. In 1995, 57% of the unsorted household waste was disposed of in landfills and 29% was incinerated. Now more than 80% is disposed of through separate collection. The recycling of that carefully separated waste is being continuously improved. As a result, a rapidly growing source of scarce raw materials is available for reuse, while the burden of waste on the environment is being greatly reduced.



Source: Netherlands Statistics, Processing of unsorted household waste (%) (green=landfill, red=incineration, blue=separation)

Electronics manufacturers united in Wecycle

A revolution has also taken place in the world of electronic waste. Manufacturers and importers of electrical and electronic equipment and low-energy lamps equipment now see it as their responsibility to collect and recycle these products at the end-of-life. More than 1500 manufacturers and importers of lamps and electrical equipment have joined hands to fulfil their responsibility for collection. They have centralised the processing via the product associations in a single non-profit organisation: Wecycle.

The manufacturers of computer and telecom equipment have established their own collection system, ICT~Milieu, which makes use of the logistics services of Wecycle.

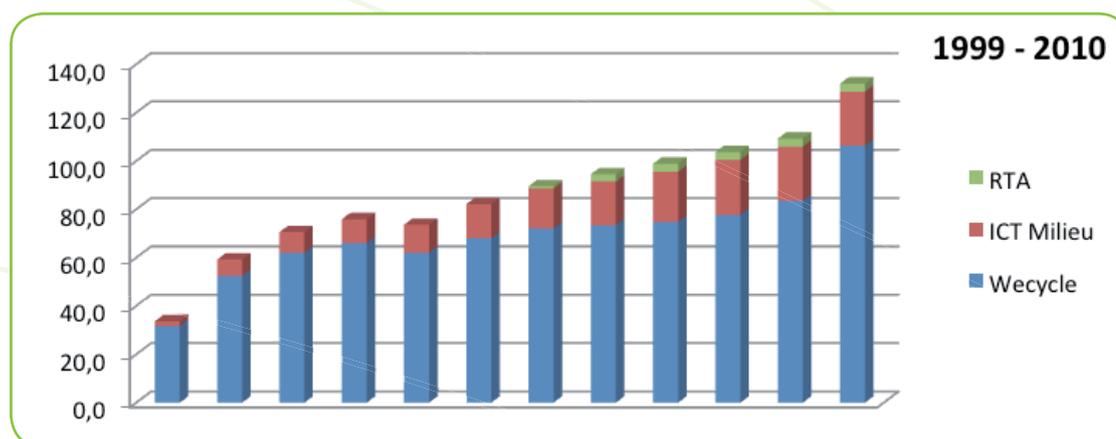
Collaboration with collectors

Wecycle has actively sought and received the cooperation of municipalities. They collect appliances at their civic amenity sites and receive fixed rate compensation from Wecycle, which takes responsibility for the further processing. Retailers who accept an old appliance at the time of purchase of a new one do the same. Additionally, there are agreements with installation companies, charity shops, schools and associations that collect discarded appliances and low-energy lamps and deliver them to Wecycle.

Growing collection

Since the manufacturers joined forces in 1999 a growing stream of appliances and lamps has been drawn to its sustainable processing system. In total, more than one billion kilograms of e-waste has been processed.

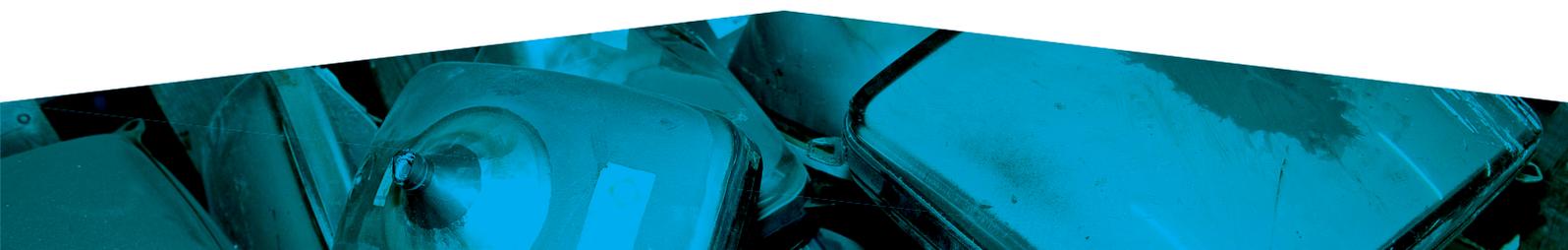
In 2011 Wecycle collected and processed 110 million kilograms of e-waste. In terms of quantities, this amounts to more than 7.6 million refrigerators, washing machines, TVs and other appliances plus another 10 million energy-saving bulbs, fluorescent bulbs and lighting fixtures. Together with ICT-Milieu the volume processed in 2011 came to 128 million kilograms.



Source: annual reports

Growing recycling

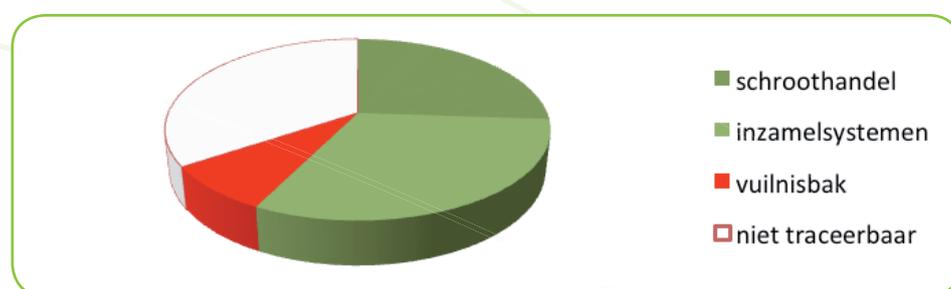
Wecycle works continuously to improve the recycling yield, both through research and improvement of recycling techniques. In 2011, 80% of the mountain of discarded appliances was converted to components and raw materials suitable for reuse. This included 37,000 tonnes of iron, 5,000 tonnes of other metals and 12,000 tonnes of glass. An additional 15% was incinerated to generate energy. The result was a reduction of the residual waste from the recycling process to just 5%.



Waste streams

Research has shown that the national collection systems, such as Wecycle and ICT~Milieu process 32% of all the e-waste in the Netherlands. Scrap dealers handle more than a quarter. More than 8% of the e-waste, mainly small appliances, goes directly into the residual waste stream. Through public awareness campaigns, Wecycle is working to reduce this source of wastage and environmental pollution.

The remaining 23% is untraceable. A portion of this untraceable e-waste is exported (legally or illegally) to developing countries where in some cases it is processed in a manner that involves substantial environmental damage and poor working conditions. Wecycle works with government bodies, the transport sector and the environmental movement to combat this illegal trade.



Bron: United Nations University: *The Future Flows*

Study into complementary waste streams for e-waste in the Netherlands, 2012

(darkgreen=scrap trade, green=collection system, red=refuse bin, white=untraceable)

Legislation and regulations

Responsible processing of e-waste via a national system has been stimulated since the beginning of the century through laws and regulations. In 2003 the European Union adopted a directive concerning the processing of electronic waste; in Brussels jargon it is called the Waste Electrical and Electronic Equipment Directive or simply WEEE. This directive, implemented in Dutch legislation and regulations, stipulates that the national collection system must collect at least 4 kg of e-waste per head of the population. This level is exceeded in the Netherlands, where the level is currently around 8 kg.

The European Commission, Council and Parliament reached an agreement on 20 December 2011 concerning the revision of the WEEE Directive. In 2016 most member states must collect 45% of e-waste from the electrical and electronic equipment that is newly introduced to the market (Put On Market or POM). In 2019 this level must have risen to 65% or, alternatively, the countries can choose to collect 85% of the generated e-waste (WEEE Generated).

Regardless of which of the two standards is used, achieving the objective in the Netherlands will demand a great effort from the collection systems and all the stakeholders. In 2011 the collective share of Wecycle and ICT~Milieu amounted to 32%. The manufacturers' objective for the medium term is in line with the latest European targets.



About the NVMP Association

The NVMP Association was established in 1999 and represents 1500 manufacturers and importers of electrical equipment and low-energy lighting in the Netherlands. These manufacturers and importers have established the first national system in the world for the responsible collection and sustainable processing of electrical appliances and low-energy lighting. The implementation thereof has been entrusted to the non-profit organisation Wecycle.

For more information

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