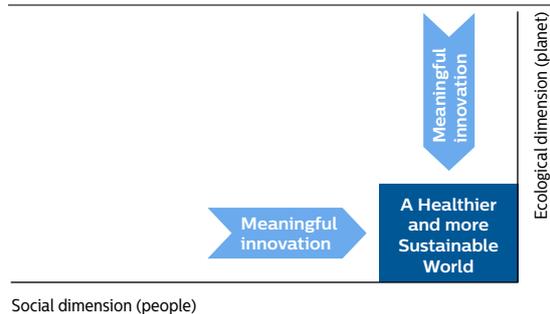


Closing the materials loop

At Philips, we are committed to improve people's lives and to make the world healthier and more sustainable through innovation. Our goal is to improve the lives of 3 billion people a year by 2025.

To guide our efforts and measure our progress, we take a two-dimensional approach – social and ecological – to improving people's lives.

Philips Group
Lives improved dimensions
2015



Products and solutions from our portfolio that directly support the curative (care) or preventive (well-being) side of people's health, determine the contribution to the social dimension. As healthy ecosystems are also needed for people to live a healthy life, the contribution to lowering the impact of the ecological dimension is determined by means of our Green Product portfolio, which is primarily focused on improving energy and resource efficiency.

This document describes the methodology and metrics used to calculate the key performance indicator, "Closing the materials loop", with the focus on:

- A – Collection and Recycling**
- B – Recycled content**

By "closing the materials loop" we contribute to the Ecological Footprint reduction of our products. The EcoVision5 performance is part of the assurance assignment of KPMG.

KPMG's assurance report can be found here: [chapter 14.4 of the Annual Report 2015](#).

Relevance

Waste from Electrical and Electronic Equipment (WEEE) is the world's fastest growing waste stream. Estimates project that European citizens generate up to 24 kg of WEEE per year. Inadequately treated e-waste poses both environmental and health risks as well as leads to a loss of natural resources.

The EU WEEE Directive has been in force since February 2003. The legislation introduced the concept of "producer responsibility" and requires producers to at least finance the collection and treatment of its products. Producers have set up collection schemes with the purpose to increase the collection and subsequent recycling and/or re-use of WEEE. The Directive was reviewed and republished in 2012, and now sets higher collection and recycling targets for WEEE. These will come into effect after implementation of the Directive from 2014 onwards.

While the EU took the lead in developing WEEE legislation, Japan, Taiwan, Canada, and a number of US states were quick to follow. In the last few years countries such as Argentina, Australia, Brazil, Canada, China, Costa Rica, Ghana, India, Kenya, Nigeria, Russia, Thailand, Turkey, and South Africa have started to develop WEEE legislation or have published WEEE legislation. However, implementation is still slow to follow. In some areas which have already implemented WEEE legislation, such as Japan and several US states, Philips does not have a producer obligation as it has no market share in the relevant WEEE categories. For example, a number of countries have only introduced collection and recycling obligations for some types of large household appliances such as televisions and fridges. Philips does not sell these products and therefore, it does not have an obligation to collect waste televisions. In some markets our brand license holders or our distributors may have a responsibility (e.g. for televisions in the US), but those obligations are not included in our target.

Philips has been at the forefront of setting up producer collection schemes, starting in the Netherlands in the late 1990s. We advised the EU on the development of the WEEE Directive and are doing the same with other governments around the world. Philips believes WEEE legislation should aim to maximize the amount of WEEE collected (i.e. diverted from illegal export or disposal) and to recycle it at a high quality standard.

A - Collection and Recycling

Methodology, metrics and data sources

In order to measure progress against our target to double the amount of WEEE collected and recycled, we took the year 2009 as a baseline, which we reported on in our 2010 Annual Report. The Annual Report 2015 includes collection & recycling data for the year 2014. The delay in reporting is due to the fact that collection schemes generally publish their annual collection and recycling data some six months after their year-end.

To calculate the total amount of WEEE collected by Philips in 2014, we used data from national WEEE collection schemes and from our own recycling and refurbishment services (mainly Healthcare). Collection schemes report the various WEEE categories either in kilograms or pieces, depending on their collection infrastructure. Philips does not perform additional validation on these data. The data sources can be split into four categories:

1. Data from collection schemes representing WEEE intake that can be directly attributed to Philips (in pieces or kilograms). No further calculation needed.
2. Data from collection schemes representing total WEEE intake for all participants – we convert the data provided to calculate what share of the total WEEE intake can be attributed to Philips (applying Philips' market share in the collection scheme to calculate pieces or kilograms attributable to Philips). Philips uses market share data provided by the collection schemes based on Philips units brought to market as a percentage of the total units brought to market by all participants in the collection scheme.
3. No data available from collection schemes. In these rare cases (mainly professional luminaires schemes, but for lamps collection in Greece as well), we have excluded the scheme from the scope. We will work with these schemes aiming for better data in the future to enable us to include them in the scope.
4. Data obtained from Philips Refurbishment Systems (Healthcare equipment) or dedicated recyclers. Weight data is available from our refurbishment operations where for each product or spare part category we take the product weight of a reference product configuration based on available information from installation manuals, recycling passports, expert opinions, or other data sources inside Philips. This weight is multiplied by the number of refurbished products sold. Recyclers provide us with the weight of recycled products. Where we receive the cost of recycling only, such as a small number of cases in Healthcare, we have

converted this to kilograms (average cost/kilogram collected for the particular WEEE). Philips does not perform any validation of this data.

Scope

In 2015, we collected data from those countries around the world where Philips had a producer responsibility (based on local WEEE legislation) or where we operated sizeable voluntary schemes (such as for our Healthcare refurbishment operations or Consumer Lifestyle). As in the previous years, these countries are predominantly European countries.

In a small number of countries we conducted voluntary activities or we were part of a producer responsibility program in 2013, but the collection & recycling data were not reliable. We excluded those schemes. The exclusion is deemed immaterial as the size of the collection and recycling operations was small. The full list of countries from **Consumer Lifestyle**, **Lamps** and **Professional Luminaires** which are included in the scope of collection & recycling is shown in the table below:

List of countries

2015

Consumer Lifestyle		Lamps		Professional luminaires	
Austria	Norway	Austria	Netherlands	Belgium	
Belgium	Poland	Belgium	Norway	Czech Republic	
Czech Republic	Portugal	Czech Republic	Poland	France	
Denmark	Romania	Denmark	Portugal	Hungary	
Finland	Slovakia	Estonia	Romania	Ireland	
France	Spain	Finland	Slovakia	Italy	
Germany	Sweden	France	Slovenia	Netherlands	
Hungary	Switzerland	Germany	Spain	Norway	
Italy	United Kingdom	Hungary	Sweden	Poland	
Latvia	Brazil	Ireland	Switzerland	Romania	
Netherlands	Canada	Italy	United Kingdom	Slovakia	
		Latvia		Spain	
		Lithuania		Switzerland	
				United Kingdom	

Healthcare mainly collects WEEE in Europe in compliance with the WEEE Directive, in British Columbia and Brazil in compliance with the Canada's and Brazil's product stewardship legislation, respectively. In other countries, such as the USA, collection is voluntary and generally related to our upgrade, repair, and refurbishment activities. Healthcare WEEE collected voluntarily can originate from any customer in the world.

The amount of collection and recycling for 2014 (reported in 2015) was calculated at 28,500 tonnes, a 10% decrease compared to 31,500 tonnes reported in 2014, driven by lower weight of products and components in all sectors. Our target was to double global collection and recycling by 2015 compared to 2009, when the baseline was set around 22,500 tonnes, based on the data retrieved from the WEEE collection schemes and from our own recycling and refurbishment services (mainly Healthcare).

The EU WEEE Directive has the widest scope of any WEEE legislation in the world in terms of WEEE categories covered by producer responsibility. Annex I to the Directive lists 10 product categories. Philips has producer obligations for products in most EU countries for categories such as IT and telecommunications, consumer electronics, energy saving lamps, professional luminaires, and medical devices. In general, we can state that all Philips electronic products fall within the scope of the WEEE Directive except for batteries, incandescent lamps, and consumer luminaires.

WEEE excluded from the scope:

Philips excludes the following WEEE streams from the scope of the Leadership KPI on collection:

1. Televisions, owing to the fact that our Television business was sold to TPV in 2011. We have agreed with TPV that it will accept the collection & recycling obligation in the markets on which it operates and will endeavor to double the amount of collection & recycling by 2015.
2. Lifestyle Entertainment, owing to the fact that our Lifestyle Entertainment business was disentangled in 2013, we restated the reported 2009 till 2012 data.
3. Professional luminaires in the following countries: Austria, Denmark, Finland, Germany, Portugal, Slovenia, and Sweden. There are multiple reasons for this; the accuracy of the data from collection and recycling figures appears to be below standard, Philips is not considered a producer or Philips does not have a board seat and therefore no access to reliable data. We will continue to work with the local collection schemes during the coming years to improve the quality of the data.
4. WEEE from our own manufacturing processes (e.g. rejects, by-products), as these are not post-consumer products. The intention of the Leadership

KPI is that Philips addresses the growing stream of post-consumer WEEE and ensures that it is properly collected and recycled.

5. WEEE from customer care centers which were not intended for disposal by consumers, excess stock returns from the field, retail, or warehouses where products were not first sold to consumers.
6. WEEE products which were collected by brokers/ other actors not acting on behalf of Philips or producer responsibility schemes of which Philips is not a member. A large number of brokers and collection schemes operate outside Philips' (financial) control and will collect end-of-life Philips products because these products have an end-of-life value or in order to meet their producer obligations.

Future developments:

It is our expectation that in the coming years producer schemes will be introduced in a number of non-European countries, such as Argentina, Australia, Brazil, Canada, China, Costa Rica, Ghana, India, Kenya, Nigeria, Russia, Thailand, Turkey, certain US states, and South Africa. Philips will join these schemes where we have a legal responsibility to do so. Philips may also develop additional voluntary collection and recycling activities in some countries to increase our collection rates.

B - Recycled content

Methodology, metrics, and data sources

In calculating the recycled materials in our products, we focus on specific relevant materials in the different sectors that we believe will drive innovation.

Philips Group
Relevant materials

Healthcare	Consumer Lifestyle	Lighting
Recycled content in Refurbished and repaired Systems, Recycled tubes and Spare parts harvesting	Recycled plastics	Recycled cast aluminum, recycled plastics, recycled phosphors and rare earth metals

In **Healthcare**, we use product weights and re-use percentages to determine the recycled content. In each product category, weight data of representative product configurations are used based on available information from installation manuals, recycling passports, expert opinions, or other data sources inside Philips. The recycling percentage is based on Philips' expert judgment. We multiply the volume of recycled materials by the number of products sold.

In **Consumer Lifestyle**, we determine the weight of the recycled plastics per product. Information on recycling percentages of the used plastics is provided by our suppliers. We multiply the volume of recycled materials per product by the number of units sold.

In **Lighting**, we use weight data and recycling percentages for cast aluminum provided by the casters. Where such data is not available, information from the smelters is used. Where no full-year information is available, we use extrapolation. Recycling of phosphors and rare earth metals is not material yet.

We calculated the amount of recycled materials used in our products in 2015 at some 13,500 tonnes (2014: 13,000 tonnes) by focusing on the material streams plastics (Consumer Lifestyle), aluminum (Lighting), refurbished products, and spare parts harvesting (Healthcare) depending on their relevance in each sector.

Philips does not perform additional validation of information provided by plastic suppliers, casters, and smelters (recycling percentages and weights).

Scope

Lighting's contribution to the total recycled content amount of Philips is significant. The scope for Lighting of the information collected in 2010 is smaller than 2011 and 2012 and therefore not comparable.

The products and services that are in scope are:

Healthcare

- All products that are part of our Refurbished Systems business (Bothell, Cleveland, Framingham, Reedsville, Best). Recycled tubes (Hamburg, Aurora). Spare parts harvesting (Best, SPS and Allparts).

Consumer Lifestyle

- All.

Lighting

- All.

Next steps

We used opinions from Philips' in-house experts and estimates for some elements of the Leadership KPI models. As such, our calculations include an inherent degree of uncertainty. The figures reported are Philips' best possible estimates. As our understanding improves, the methodology might be adjusted in the future. Reporting comparable figures over time is a priority in the development process.