Australian Government
Department of the Environment

National Television and Computer Recycling Scheme – product weights and recycling targets

This fact sheet outlines how product weights and recycling targets are calculated for the National Television and Computer Recycling Scheme.

TARGETS

The Product Stewardship (Televisions and Computers) Regulations 2011 sets out two different targets that assist in the development of the scheme settings.

The **scheme target** is the overall amount of e-waste to be recycled under the scheme in a year. Annual scheme targets are set as a percentage of the total 'waste arising', which is an estimate of the total television, computer and computer product waste to enter the waste stream in the year. In 2015–16 the scheme target will be 50 per cent, rising incrementally to 80 per cent in 2026-27.

A co-regulatory arrangement's **recycling target** is the weight of products it must recycle in a given financial year, and each arrangement's target is a share of the overall scheme target. The co-regulatory arrangement's recycling target is dependent on the collective weight of the television or computer products imported or manufactured by its liable party members as a proportion of imports of the other arrangements in the scheme.

A worked example is provided below.

How are targets calculated?

Targets are calculated based on a methodology set out in the Regulations.

Step 1:
Scheme Target *(Department to calculate)*

The first step is for the Department of the Environment to calculate overall scheme targets for television and computer waste using the formula contained in the Regulations. This involves calculating the 'waste arising' in the financial year and multiplying this by the scheme percentage target for that year.

Waste arising is calculated taking into account an average of import and manufacturing data for the preceding three years with an adjustment for exports and growth. The scheme percentage targets for each year are specified in Schedule 2 of the Regulations.

Step 2:
Total 'converted weight' of net imports/ manufacture for all liable parties
(Department to calculate)

The Department calculates the total 'converted weight' of net imports/manufacture by all liable parties in the preceding financial year. To determine the converted weight, each product imported under a scheme product code has an average weight conversion factor is applied to it.

COR07.2015

Step 3:
Recycling target for co-regulatory arrangement

(Department and Co-regulatory arrangement to calculate)

Based on its membership for the financial year, and the information provided by the Department above, the co-regulatory arrangement determines what proportion of the scheme target it is responsible for. It does this by dividing the total converted weight of net imports/ manufacture by its members by the total for all liable parties.

Worked example:

Please Note: the figures used in the following example are for illustrative purposes only.

This is how a co-regulatory arrangement's recycling target is calculated.

Step 1:

The scheme target for 2015-16 is 50 per cent.

The Department calculates that waste arising for televisions and computer products in 2015-16 is (for example) 60,000 tonnes. Therefore, the 2015–16 scheme target for televisions and computer products will be 30,000 tonnes calculated as follows:

- 60,000 tonnes (waste arising for 2015–16)
  x 50 per cent (scheme target for 2015–16)
  = 30,000 tonnes

Step 2:

For 2015–16 the Department calculates that the total 'converted weight' of net imports/manufacture of televisions and computer products by all liable parties in Australia in the preceding financial year is (for example) 70,000 tonnes.

Step 3:

In 2015–16 a co-regulatory arrangement has seven members with combined net imports of televisions and computer products in the preceding year of 28,000 tonnes. As this is 40 per cent of the total for all liable parties, this co-regulatory arrangement is responsible for 40 per cent of the scheme target or 12,000 tonnes of televisions, calculated as follows:

- 28,000 tonnes (total combined net imports of liable parties in the coregulatory arrangement)
  / 70,000 tonnes
  (total net imports/manufacture by all liable parties) x 100
  = 40 per cent
- 30,000 tonnes (the scheme target for 2015–16)
  x 40 per cent (co-regulatory arrangement's share)
  = 12,000 tonnes

PRODUCT CODES AND CONVERSION FACTORS

The liability of importers and manufacturers in a financial year is determined by the number of television and computer products they imported or manufactured in the previous financial year. Television and computer products are defined, for the purposes of the scheme, as products which have a product code listed in a Schedule to the Regulations.

The scheme's product codes align with the tariff and statistical codes in the *Combined Australian Customs Tariff Nomenclature and Statistical Classification*, commonly known as the Working Tariff, which is used by the Department of Immigration and Border Protection and the Australian Bureau of Statistics (ABS) to identify imported products.

Each product code has an associated conversion factor, which is an estimated weighted average weight of products imported under that product code. The purpose of this conversion factor is to enable the data collected by the Department of Immigration and Border Protection, which records the number of units imported in each shipment, to be converted into an estimated weight of these products. This is necessary because waste management and recycling processes necessarily work in weights rather than units of products. The conversion factors were established following consultation with the television and computer industries, based on information provided on the weight of products imported under each product code.

Are product codes and conversion factors accurate?

As the scheme's product codes align with Working Tariff, the Department works closely with the Department of Immigration and Border Protection and ABS to maintain these codes.

The Department periodically gathers data on import quantities and actual unit weights from the television and computer companies, to inform the ongoing accuracy of conversion factors. These updates to conversion factors ensure that changes in technology and product weights over time are reflected. Periodically reviewing conversion factors ensures equitable outcomes for liable parties in allocating their scheme liability.

Product codes and conversion factors were most recently updated as part of the regulatory amendments that came into effect on 1 July 2015. These can be found in Schedules 1C and 1D of the Regulations.

WASTE ARISING SCALING FACTORS

'Waste arising' represents the amount of additional waste television and computer products that are expected to enter the waste stream in Australia in any financial year. The Regulations provide a formula to calculate waste arising, based on the average weight of imports over the past three years and a scaling factor of either 0.9 for televisions, 0.8 for computers or 0.88 for printers, computer parts and peripherals.

The formula for waste arising is:

$$\text{Waste arising} = \frac{\text{Total weight of imports over past three years}}{3} \times 0.9/0.8/0.88$$

The logic of the waste arising formula is that when a product is imported it usually replaces another product, which then becomes waste. Taking the average converted weights of imports over the past three years reduces the impact of annual fluctuations in imports.

Modelling undertaken during development of the scheme and during the operational review confirmed that this method was a good indicator for the amount of waste entering the waste stream each year.

What is a scaling factor?

The scaling factor takes into account that some imported products are subsequently exported, and that not all imported products replace existing products. When the scheme was implemented a scaling factor of 0.9 was applied to all television and computer products imported or manufactured.

As part of the 2014 operational review of the scheme, further analysis supported a revision to the scaling factors for computers to 0.8 and printers, computer parts and peripherals to 0.88. There was no change to the scaling factors for televisions which remain at 0.9.

MORE INFORMATION

For more information on the National Television and Computer Recycling Scheme visit the Department of the Environment website at: www.environment.gov.au/ewaste or contact ewaste@environment.gov.au or call the Product Stewardship Line on 1800 332 783.

Factsheet last updated on 01/07/15