

Method for Estimation of E-Waste Generation

E-waste generated by producer for a specific EEE category code is to be estimated on the basis of quantity (number or weight) of EEE placed in the market in the previous years and taking into consideration the average life of the equipment. Such estimate should be carried out using the following method;

The generation of e-waste from end of life products:

E-waste generation (weight or number) in the financial year 'x – y' = Sales in the financial year '(x-z) - (y-z)'

where, 'x – y' = financial year in which generation is estimated, and

z= average life span of EEE

Average life of the EEE to be used in the above formula is given below:

Sr. No.	Categories of electrical and electronic equipment	EEE Code	Average Life
i.	Information technology and telecommunication equipment		
	Centralized data processing:	ITEW1	
	Mainframe		10 Years
	Minicomputer		5 Years
	Personal Computing: Personal Computers (Central Processing Unit with input and output devices)	ITEW2	6 Years
	Personal Computing: Laptop Computers(Central Processing Unit with input and output devices)	ITEW3	5 Years
	Personal Computing: Notebook Computers	ITEW4	5 Years
	Personal Computing: Notepad Computers	ITEW5	5 Years
	Printers including cartridges	ITEW6	10 Years
	Copying equipment	ITEW7	8 Years
	Electrical and electronic typewriters	ITEW8	5 Years
	User terminals and systems	ITEW9	6 Years
	Facsimile	ITEW10	10 Years
	Telex	ITEW11	5 Years
	Telephones	ITEW12	9 Years
	Pay telephones	ITEW13	9 Years
	Cordless telephones	ITEW14	9 Years
Cellular telephones	ITEW15		
Feature phones		7 Years	
Smart phones		5 Years	
Answering systems	ITEW16	5 Years	
ii.	Consumer electrical and electronics:		

Sr. No.	Categories of electrical and electronic equipment	EEE Code	Average Life
	Television sets (including sets based on (Liquid Crystal Display and Light Emitting Diode technology)	CEEW1	9 Years
	Refrigerator	CEEW2	10 Years
	Washing Machine	CCEW3	9 Years
	Air-conditioners excluding centralized air conditioning plants	CCEW4	10 Years
	Fluorescent and other Mercury containing lamps	CEEW5	2 Years

Example for Calculation of E-waste Generation

E-waste generation (weight or number) in the financial year 'x – y'

= Sales in the financial year '(x-z) - (y-z)'

'x – y' = financial year in which generation estimated,

z= average life span of EEE)

For example

For financial year 2016 -17,

x - y = 2016 -17 (April 2016 to March 2017)

If EEE, for which generation is to be estimated, is **ITEW 15**

means cellular phones that is either smart phone or feature phones then

z= 5 years or z = 7 years as from the table in chapter 2.1

1. The estimated generation of end of life **ITEW 15 – smart phone** in the FY 2016-17

= Sales in the (FY year 2016-5 – 2017-5)

= Sales in the financial year 2011-12

or

2. The estimated generation of end of life **ITEW 15 – feature phone** in the FY 2016-17

= Sales in the (FY year 2016-7 – 2017-7) either in terms of weight or number

= Sales in the financial year 2009-10 in terms of weight or number

- ❖ Therefore, generation of end of life of **smart phone in the FY 2016-17 =** Sales in the financial year 2011 – 12 either in terms of weight or number

- ❖ Similarly, generation of end of life of **feature phone** = Sales in the financial year 2009-2010 either in terms of weight or number