



SURINAME



SURINAME's E-Waste Statistics



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1. What is e-waste ?

- Electronic waste, or e-waste, refers to all electrical and electronic equipment (EEE) and its parts that have been discarded by its owner as waste without the intent of re-use **3 (Step Initiative, 2014).**



2.Imports on e-waste

- **Imports** and exports on e-waste are usually captured in trade statistics, which use the global Harmonized Trade System (HS) codes as a classification unit. These HS codes do not distinguish between new and used electron.
- We used import statistics from the Harmonized Trade System for the calculation of e-waste for Suriname.



3.The Basel Convention

- Currently, there is one international law (the Basel Convention) that asks countries to report on quantities of imported and exported e-waste. The Basel Convention classifies hazardous waste in terms of the substances in the waste materials.
- *The treaty aims to protect human health and the environment by minimizing the production of hazardous waste and other substances. The treaty also aims to remove or process the waste as close to the source of origin as possible, to minimize the amount of hazardous substances and their danger and to restrict their movement across international borders (Preamble). 1 to 4 the lists of substances that fall under the scope of this treaty. Some of these are: biomedical and medical waste, used oils, used lead-acid batteries, PCBs, paint additives, **electronic waste (so-called e-waste)**, mercury and asbestos.*



The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was ratified **in Suriname on 19th December 2011**

4.UNU-Tool and Trade Statistics

- To generate the e-waste statistics both UNU tools were used,
- **first the** : *“EEE put on market tool”* where raw HS (imports from Trade Statistics) was imported and after the data was checked and screened the “Put on Market (POM)” data was copied and pasted in the
- **second tool** : *“E-waste generation tool”* where the e-waste is calculated and generated. See table 1 and graph1 and 2



4. UNU-Tool and Trade Statistics

- The EU-6 Classification of electrical and electronic equipment under the six categories as set out in Annex III of the Directive 2012/19/EU on WEEE was used for Suriname's estimation.

UNU_KEYS to EU-6

UNU_Key	EU-6	UNU_Key	EU-6	UNU_Key	EU-6	UNU_Key	EU-6
0001	4	0201	5	0401	5	0601	5
0002	4	0202	5	0402	5	0602	4
0101	4	0203	5	0403	5	0701	5
0102	4	0204	5	0404	5	0702	6
0103	4	0205	5	0405	5	0703	4
0104	4	0301	6	0406	5	0801	5
0105	4	0302	6	0407	2	0802	4
0106	4	0303	2	0408	2	0901	5
0108	1	0304	6	0501	5	0902	4
0109	1	0305	6	0502	3	1001	4
0111	1	0306	6	0503	3	1002	1
0112	1	0307	4	0504	3		
0113	1	0308	2	0505	3		
0114	5	0309	2	0506	5		
				0507	5		



4.UNU-Tool and Trade Statistics

TABLE 1: Detailed description of the UNU product classification and its correlation to other e-waste classifications⁶

UNU KEY	DESCRIPTION	EEE CATEGORY UNDER EU-6	EEE CATEGORY UNDER EU-10
0001	Central Heating (household installed)	Large equipment	Large household appliances
0002	Photovoltaic Panels (incl. inverters)	Large equipment	Consumer equipment
0101	Professional Heating & Ventilation (excl. cooling equipment)	Large equipment	Large household appliances
0102	Dishwashers	Large equipment	Large household appliances
0103	Kitchen equipment (e.g. large furnaces, ovens, cooking equipment)	Large equipment	Large household appliances
0104	Washing Machines (incl. combined dryers)	Large equipment	Large household appliances
0105	Dryers (wash dryers, centrifuges)	Large equipment	Large household appliances
0106	Household Heating & Ventilation (e.g. hoods, ventilators, space heaters)	Large equipment	Large household appliances
0108	Fridges (incl. combi-fridges)	Temperature exchange equipment	Large household appliances
0109	Freezers	Temperature exchange equipment	Large household appliances
0111	Air Conditioners (household installed and portable)	Temperature exchange equipment	Large household appliances
0112	Other cooling equipment (e.g. dehumidifiers, heat pump dryers)	Temperature exchange equipment	Large household appliances
0113	Professional cooling equipment (e.g. large air conditioners, cooling displays)	Temperature exchange equipment	Large household appliances
0114	Microwaves (incl. combined, excl. grills)	Small equipment	Large household appliances
0201	Other small household equipment (e.g. small ventilators, irons, clocks, adapters)	Small equipment	Small household appliances
0202	Equipment for food preparation (e.g. toaster, grills, food processing, frying pans)	Small equipment	Small household appliances
0203	Small household equipment for hot water preparation (e.g. coffee, tea, water cookers)	Small equipment	Small household appliances
0204	Vacuum Cleaners (excl. professional)	Small equipment	Small household appliances
0205	Personal Care equipment (e.g. toothbrushes, hairdryers, razors)	Small equipment	Small household appliances
0301	Small IT equipment (e.g. routers, mice, keyboards, external drives & accessories)	Small IT	IT and telecommunications equipment
0302	Desktop PCs (excl. monitors, accessories)	Small IT	IT and telecommunications equipment
0303	Laptops (incl. tablets)	Screens and monitors	IT and telecommunications equipment
0304	Printers (e.g. scanners, multi-functional, faxes)	Small IT	IT and telecommunications equipment
0305	Telecommunication equipment (e.g. cordless phones, answering machines)	Small IT	IT and telecommunications equipment
0306	Mobile Phones (incl. smartphones, pagers)	Small IT	IT and telecommunications equipment
0307	Professional IT equipment (e.g. servers, routers, data storage, copiers)	Large equipment	IT and telecommunications equipment
0308	Cathode Ray Tube Monitors	Screens and monitors	IT and telecommunications equipment
0309	Flat Display Panel Monitors (LCD, LED)	Screens and monitors	IT and telecommunications equipment
0401	Small Consumer Electronics (e.g. headphones, remote controls)	Small equipment	Consumer equipment
0402	Portable Audio & Video (e.g. MP3, e-readers, car navigation)	Small equipment	Consumer equipment

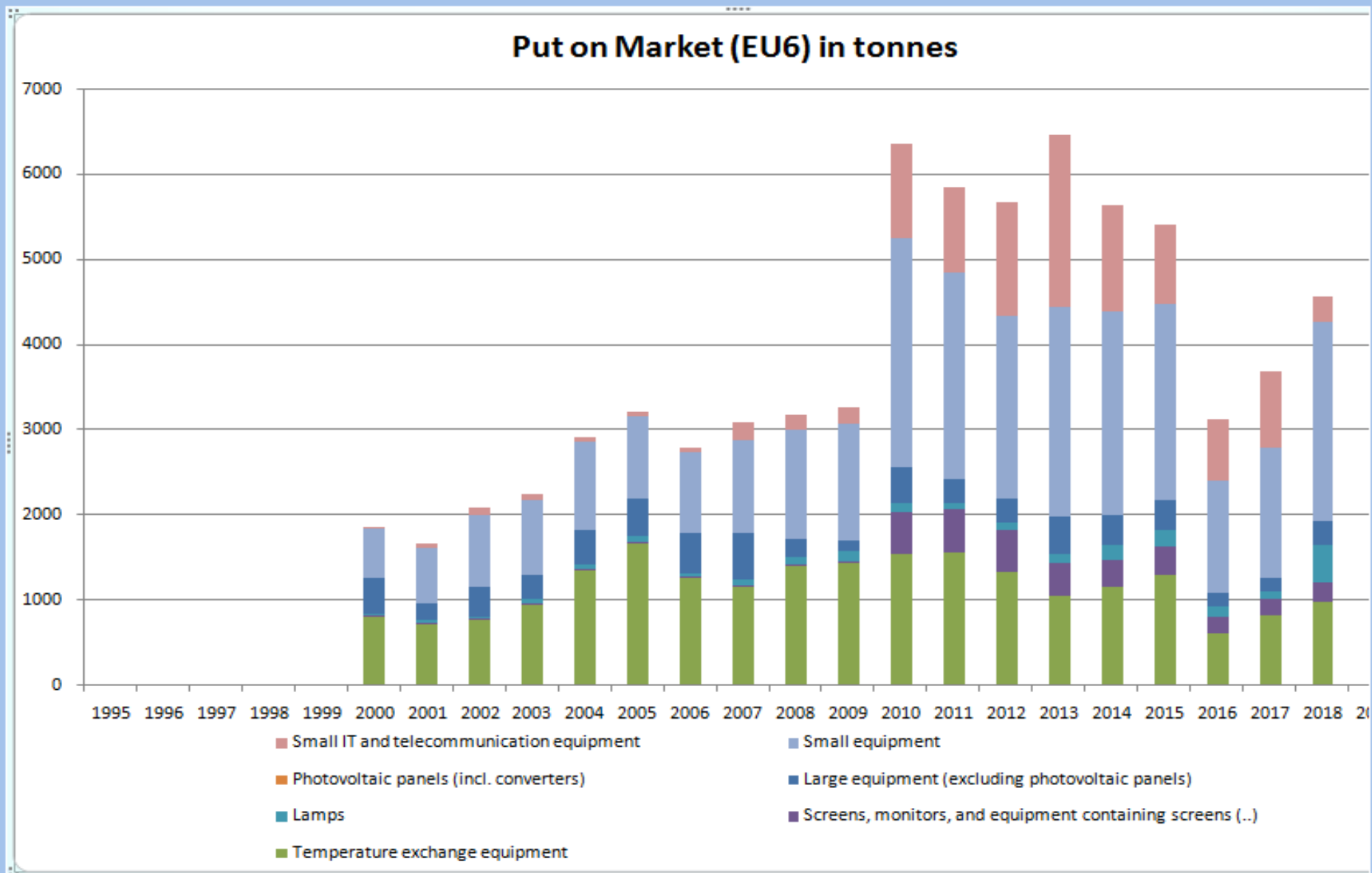
4.UNU-Tool and Trade Statistics

Annex 1:

Link between the UNU-KEYS and HS code

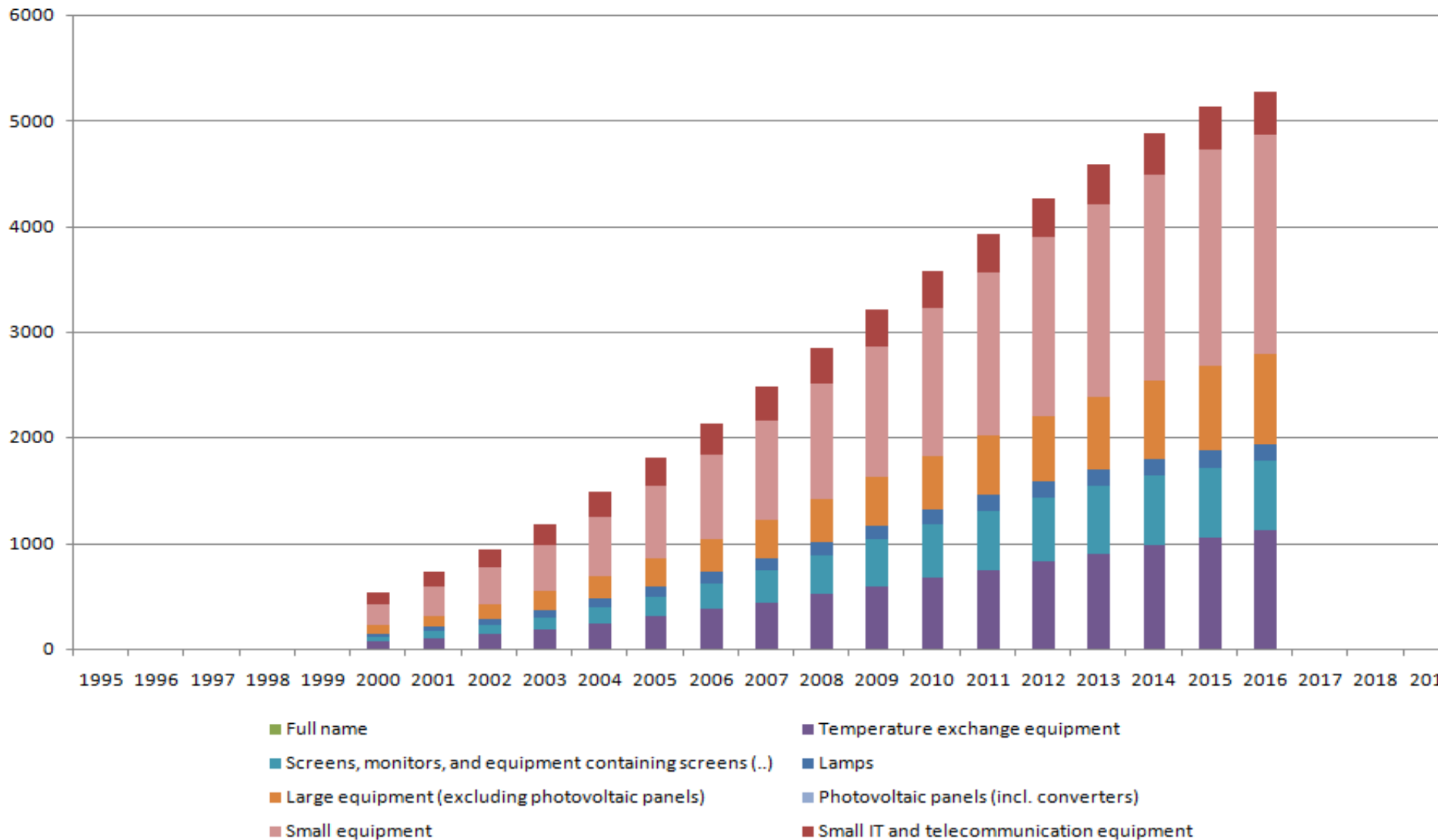
<i>UNU-KEY</i>	<i>UNU KEY DESCRIPTION</i>	<i>HS</i>	<i>HS DESCRIPTION</i>
0001	Central Heating (household installed)	840310	Boilers; central heating boilers (excluding those of heading no. 8402)
0001	Central Heating (household installed)	854140	Electrical apparatus; photosensitive, including photovoltaic cells, whether or not assembled in modules or made up into panels, light emitting diodes
0101	Professional Heating & Ventilation (excl. cooling equipment)	845110	Dry-cleaning machines
0101	Professional Heating & Ventilation (excl. cooling equipment)	845130	Ironing machines and presses (including fusing presses)
0102	Dish washers	842211	Dish washing machines; of the household type
0102	Dish washers	842219	Dish washing machines; of other than household type
0103	Kitchen equipment (e.g. large furnaces, ovens, cooking equipment)	851660	Ovens, cookers, cooking plates, boiling rings, grillers and roasters; of a kind used for domestic purposes (excluding microwaves)
0104	Washing Machines (incl. combined dryers)	845011	Washing machines; household or laundry-type, fully-automatic, (of a dry linen capacity not exceeding 10kg)
0104	Washing Machines (incl. combined dryers)	845012	Washing machines; household or laundry-type, with built-in centrifugal drier, (not fully-automatic), of a dry linen capacity not exceeding 10kg
0104	Washing Machines (incl. combined dryers)	845019	Washing machines; household or laundry-type, not fully-automatic, without built-in centrifugal drier, of a dry linen capacity not exceeding 10kg
0104	Washing Machines (incl. combined dryers)	845020	Washing machines; household or laundry-type, of a dry linen capacity exceeding 10kg
0105	Dryers (wash dryers, centrifuges)	842112	Centrifuges; clothes-dryers
0105	Dryers (wash dryers, centrifuges)	845121	Drying machines; of a dry linen capacity not exceeding 10kg
0105	Dryers (wash dryers, centrifuges)	845129	Drying machines; of a dry linen capacity exceeding 10kg
0106	Household Heating & Ventilation (e.g. hoods, ventilators, space heaters)	841460	Hoods; ventilating or recycling hoods incorporating a fan, whether or not fitted with filters, having a maximum horizontal side not exceeding 120cm
0106	Household Heating & Ventilation (e.g. hoods, ventilators, space heaters)	851621	Heating apparatus; electric storage heating radiators
0106	Household Heating & Ventilation (e.g. hoods, ventilators, space heaters)	851629	Heating apparatus; electric soil heating apparatus and space heating apparatus (excluding storage heating radiators)
0108	Fridges (incl. combi-fridges)	841810	Refrigerators and freezers; combined refrigerator-freezers, fitted with separate external doors, electric or other
0108	Fridges (incl. combi-fridges)	841821	Refrigerators; for household use, compression-type, electric or other
0108	Fridges (incl. combi-fridges)	841829	Refrigerators; household, electric or not, other than compression or absorption-type
0109	Freezers	841830	Freezers; of the chest type, not exceeding 800l capacity
0109	Freezers	841840	Freezers; of the upright type, not exceeding 900l capacity

5. Put on Market (POM) -Graph



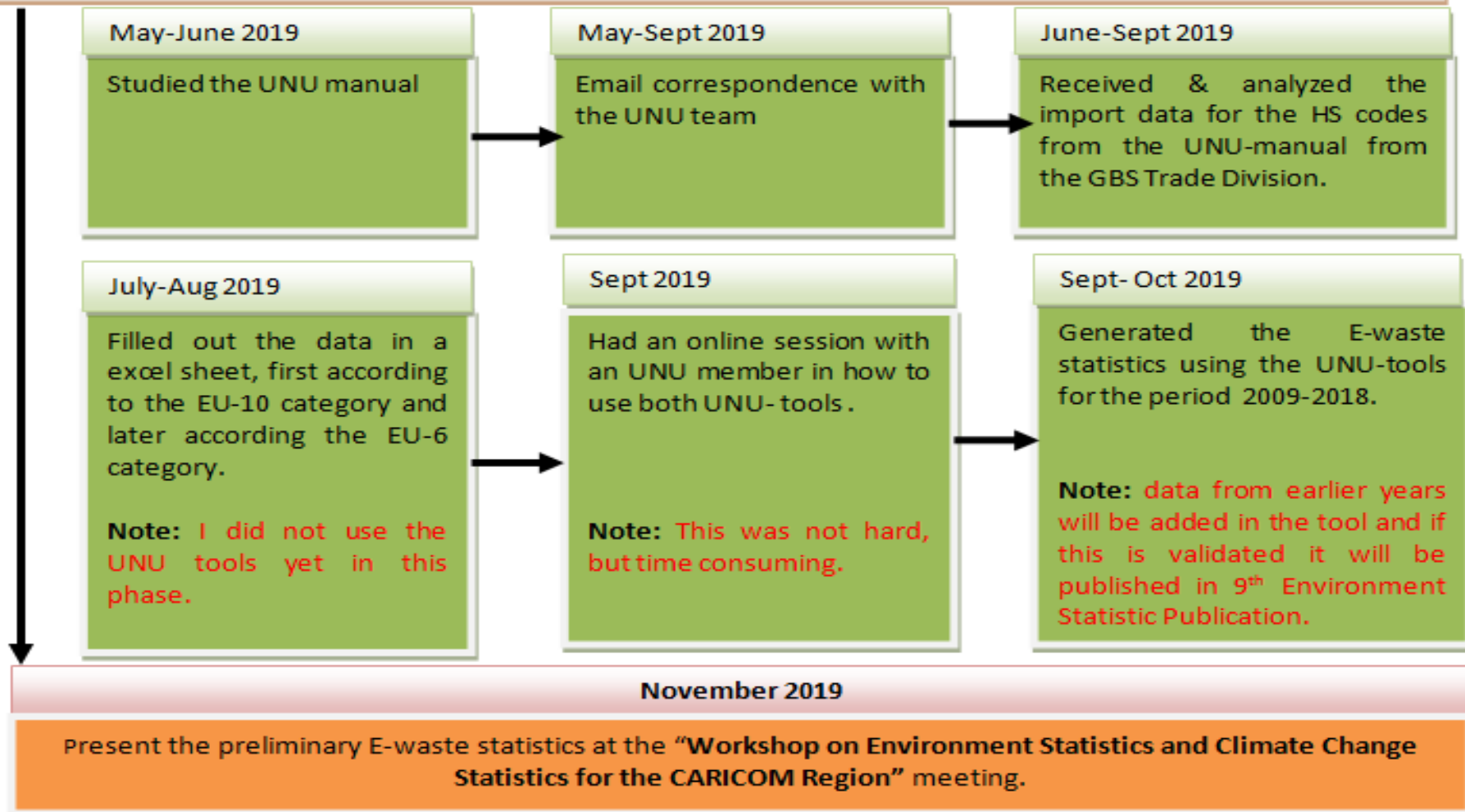
5. E-waste Graph in tonnes

E-waste generated (EU6) in tonnes



6.Steps generating e-waste statistics

1. Learned about the importance of E-waste statistics at the UNSD “Expert group meeting on Environment Statistics (EGES)” through the United Nations University (UNU).
2. Also through various chapters of the Framework on the Development on Environment Statistics (FDES), such as Waste and Climate Change



7. Advantages generating e-waste statistics

- The Import data was available at the Trade Statistics Division of GBS (in house)
- The UNU manual has the list of all the HS codes that are linked to the UNU-keys
- The UNU team contacted me quickly and a short training was provided using the tool
- It took less than a month to calculate the e-waste statistics using only import data.



8.Challenges generating e-waste statistics

- Work overload
- Suriname has an import economy so import data was used, but ideal a survey of used appliances would make better estimates. Surveys are expensive.
- The data was not validated yet by other stakeholders in Suriname, so it can not be published yet.



Conclusion

- If the data is validated and accepted it will be published in the 9th Environment Statistics publication in 2019
- Suriname will also report this data to the UNSD waste questionnaire.





**THANK YOU
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