



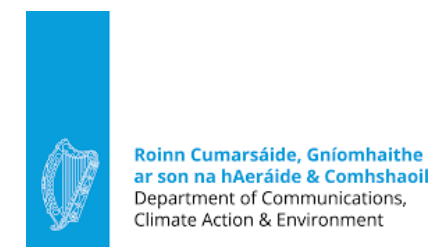
Recent Research on WEEE in Ireland

Dr. Colin Fitzpatrick, Dept of Electronic &
Computer Engineering



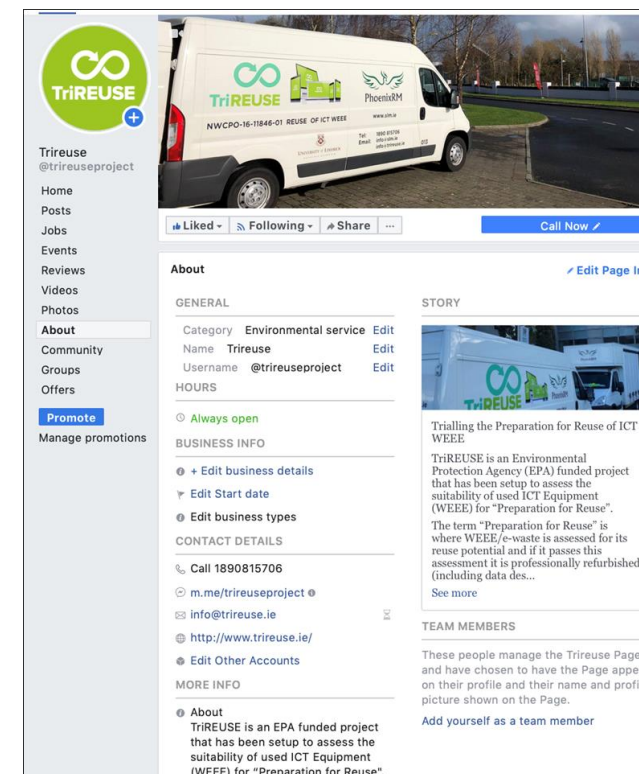
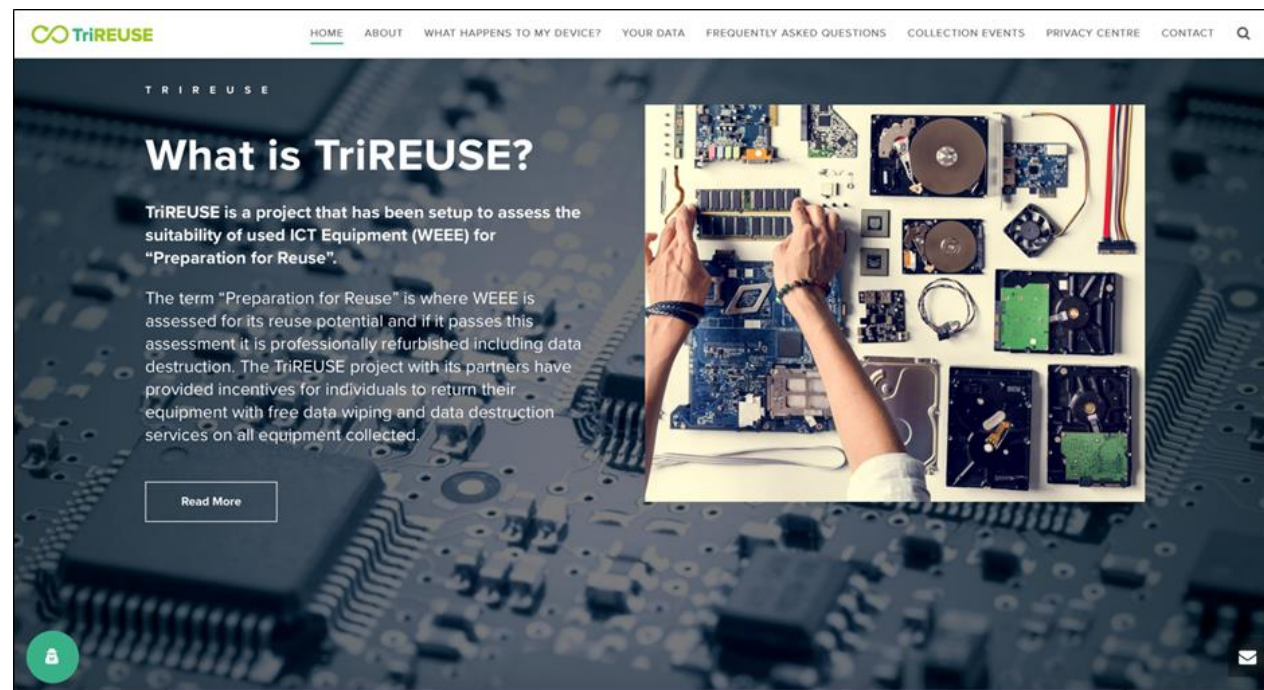
Presentation overview

- TriReuse – Completed & Published
- EEE2WEEE - Completed & Awaiting Published
- ExportEEE - Completed & Report Under Review
- LongWEEE – In progress



TriREUSE

- “Trialling the Preparation for Reuse of Consumer Laptops, Tablets & Smartphones”



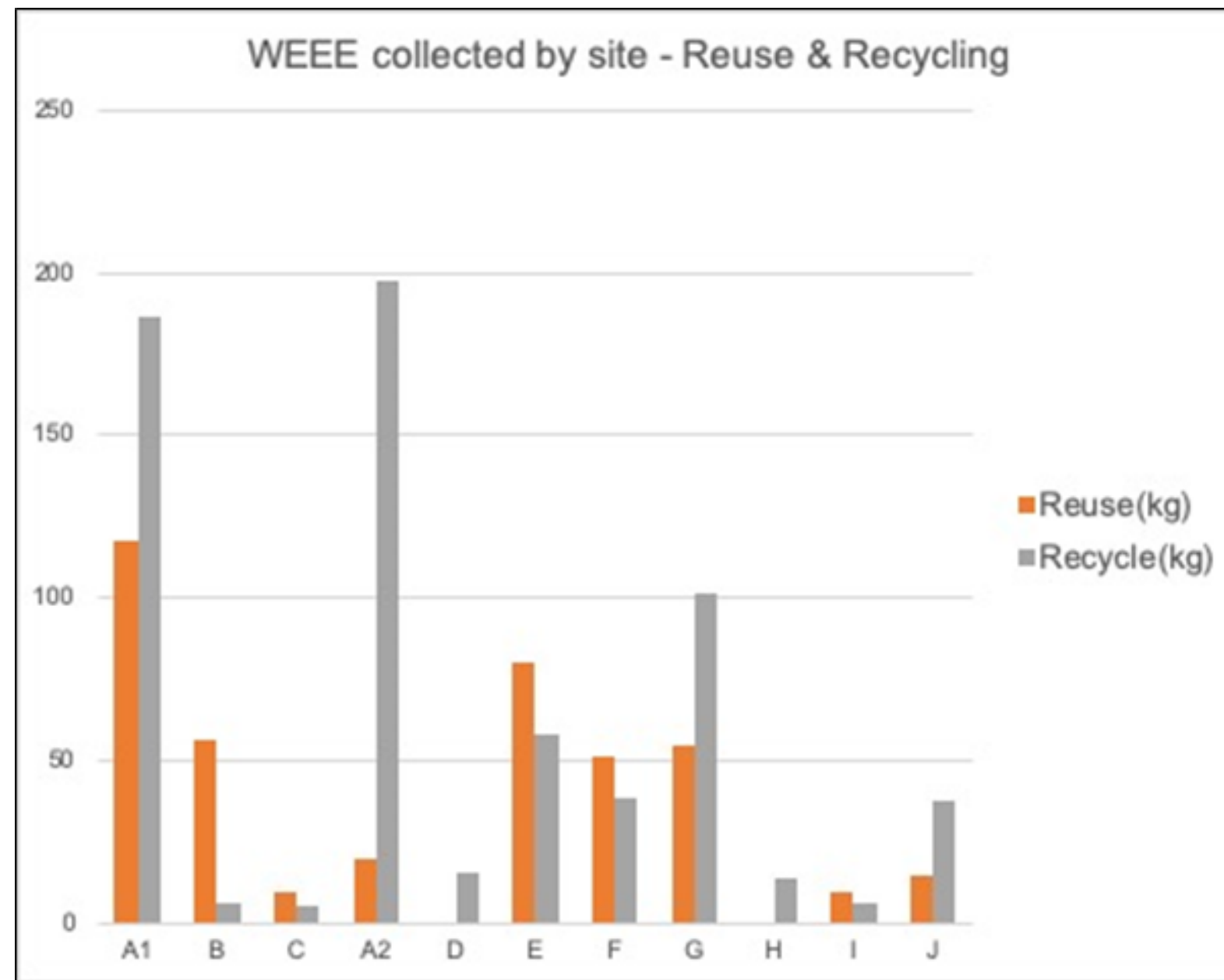
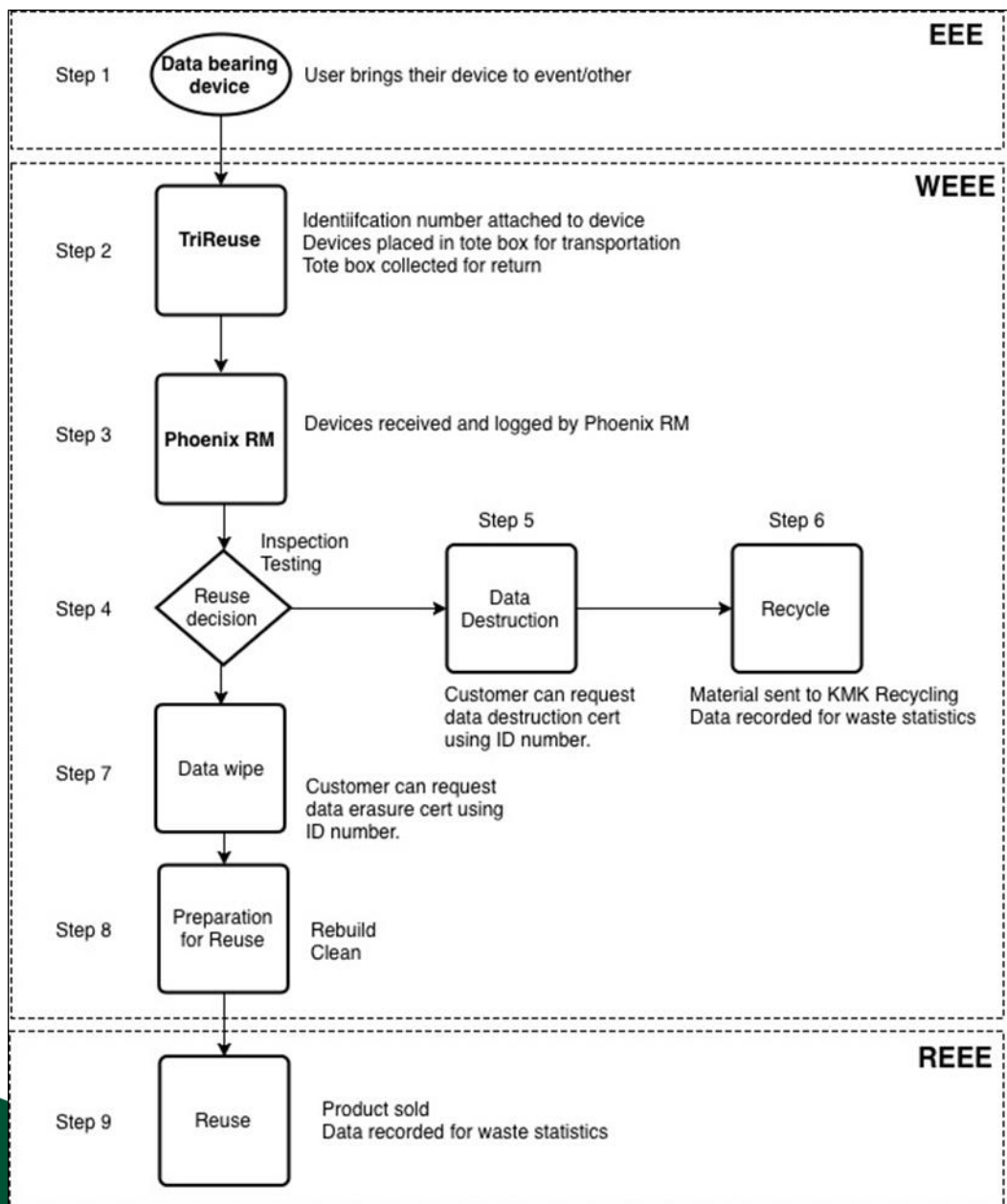
TriREUSE

- “Trialling the Preparation for Reuse of Consumer Laptops, Tablets & Smartphones”



TriREUSE

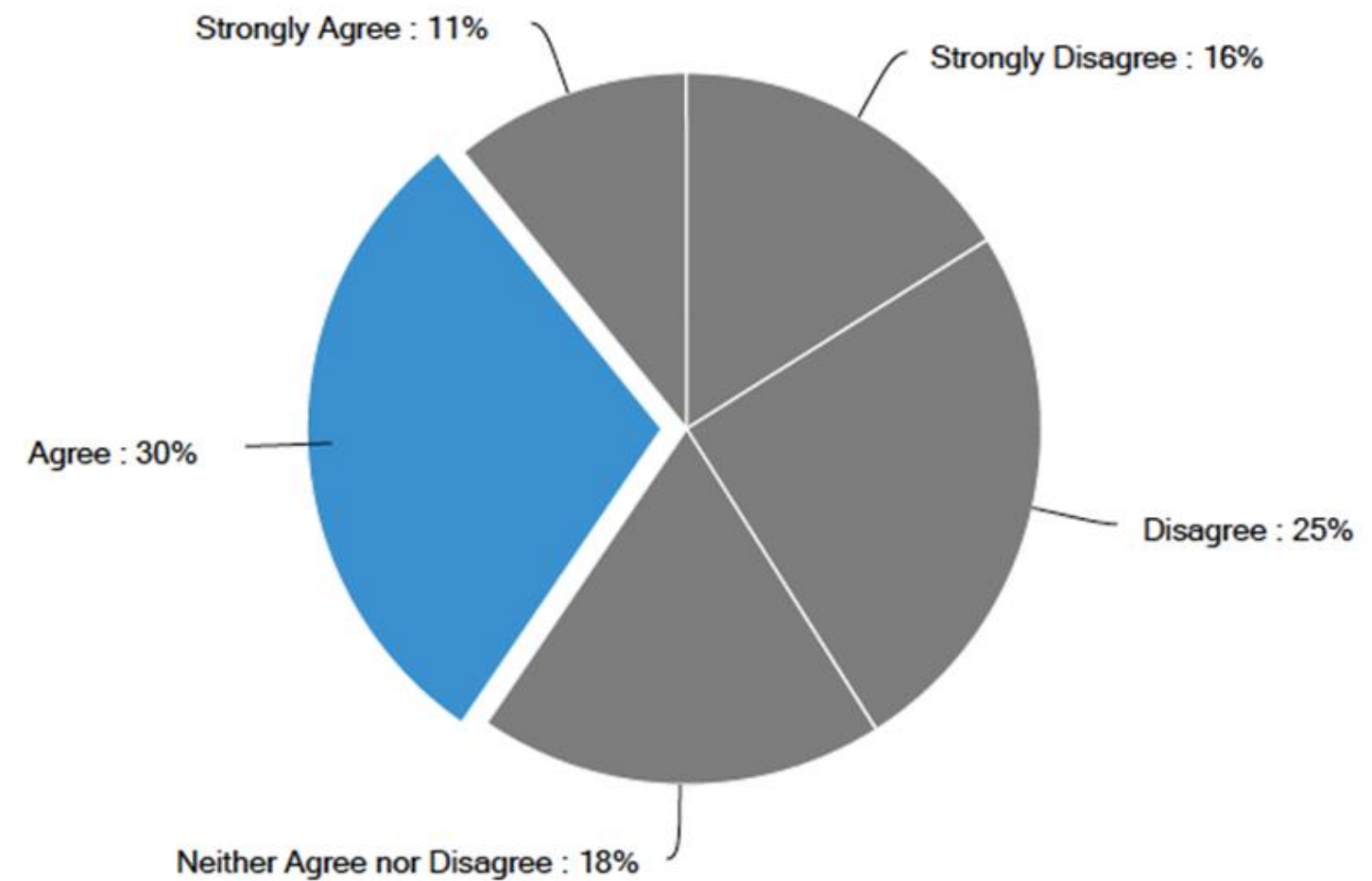
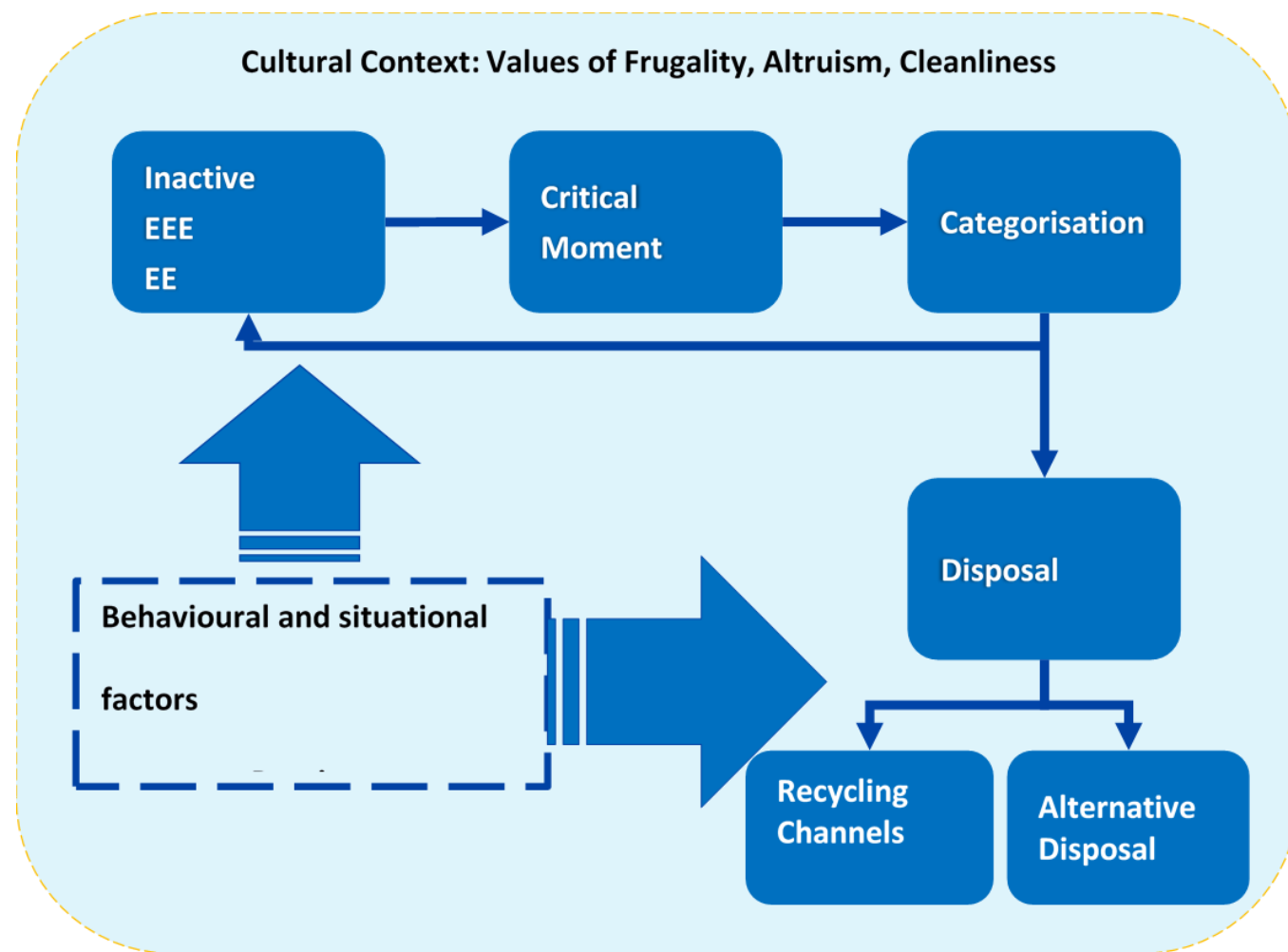
- “Trialling the Preparation for Reuse of Consumer Laptops, Tablets & Smartphones”



22% Reuse rate by weight
29% Reuse rate by number of items

EEE2WEEE

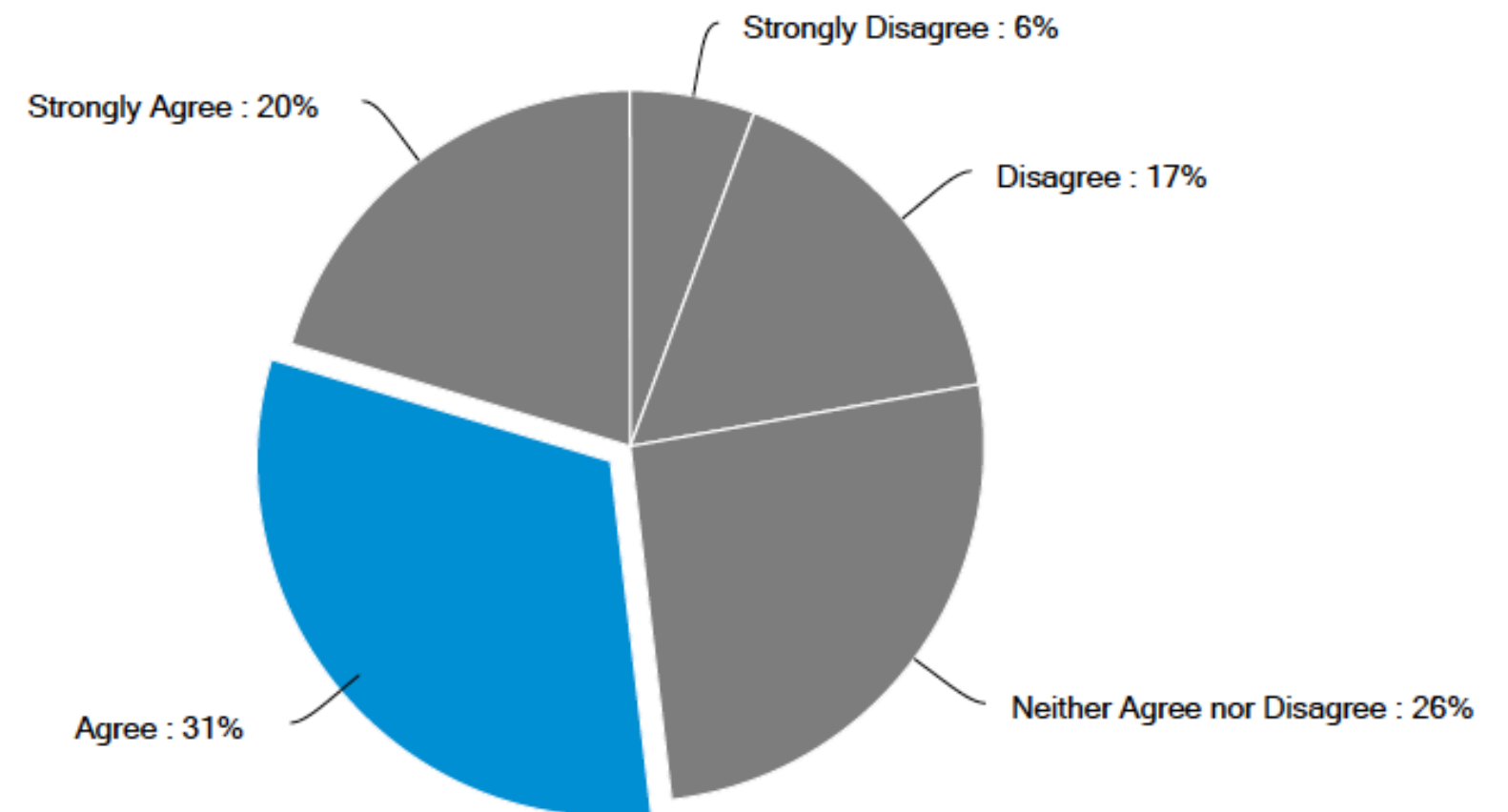
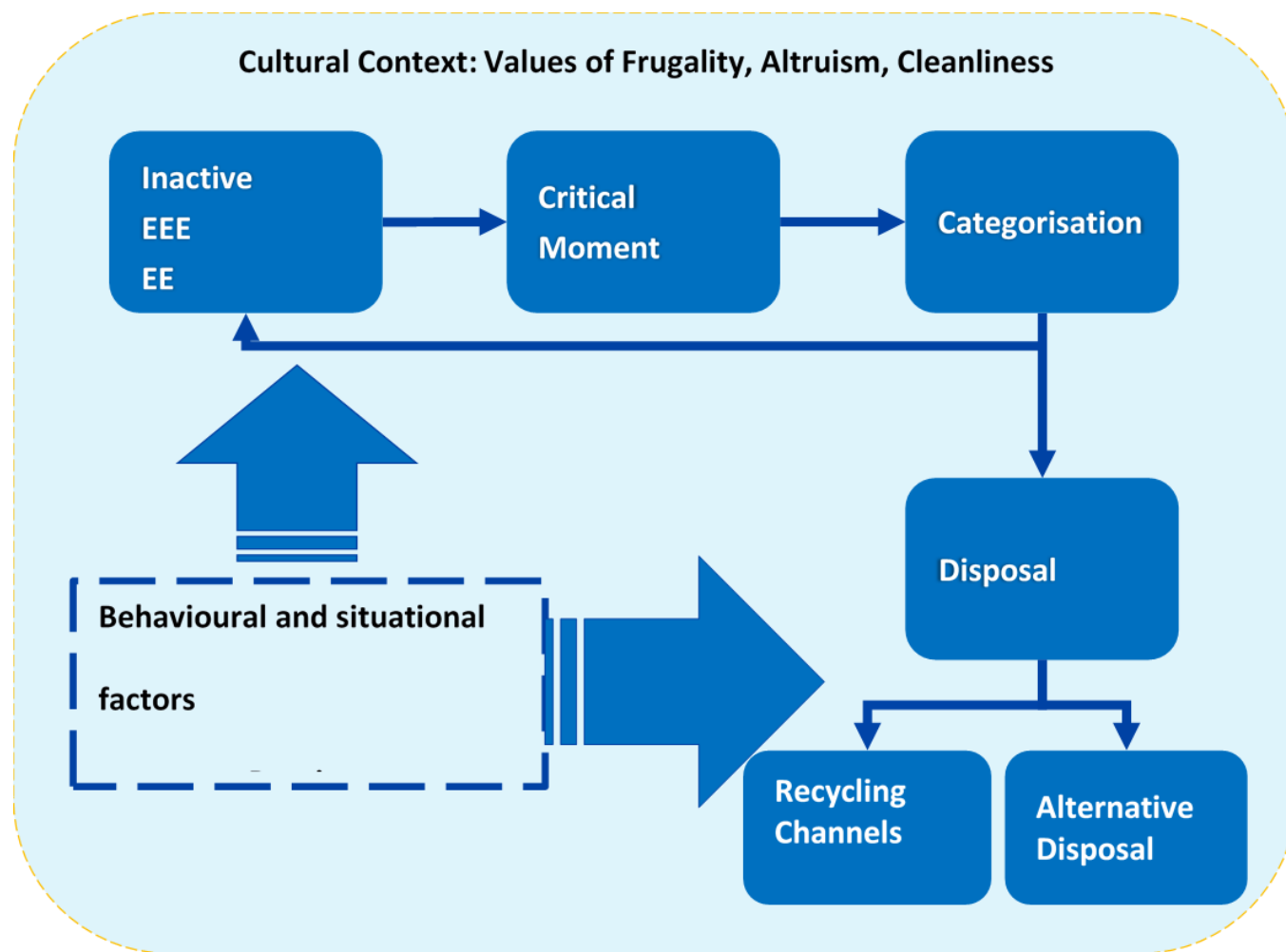
- “Exploring Complimentary WEEE Flows in Ireland”



“Recycling functional electronic items is wasteful.”

EEE2WEEE

- “Exploring Complimentary WEEE Flows in Ireland”



“It is convenient to recycle e-waste”

EEE2WEEE

- “Exploring Complimentary WEEE Flows in Ireland”

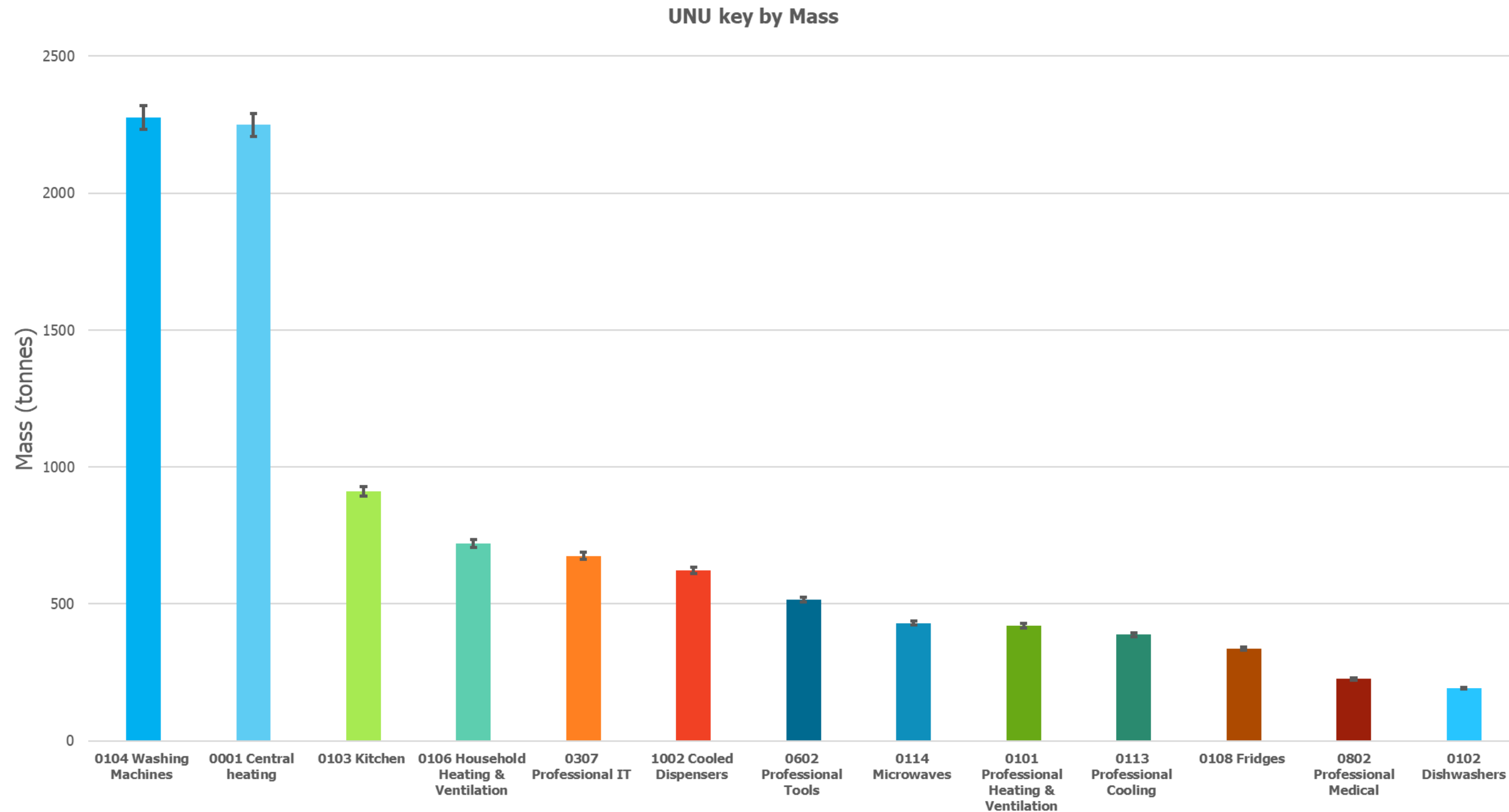


- **3.91% of scrap metal sampled was WEEE (+/- 1.88%)**
- **For 2018 this scales to 10,950 tonnes**
- **~2.3kg/capita**

EEE2WEEE

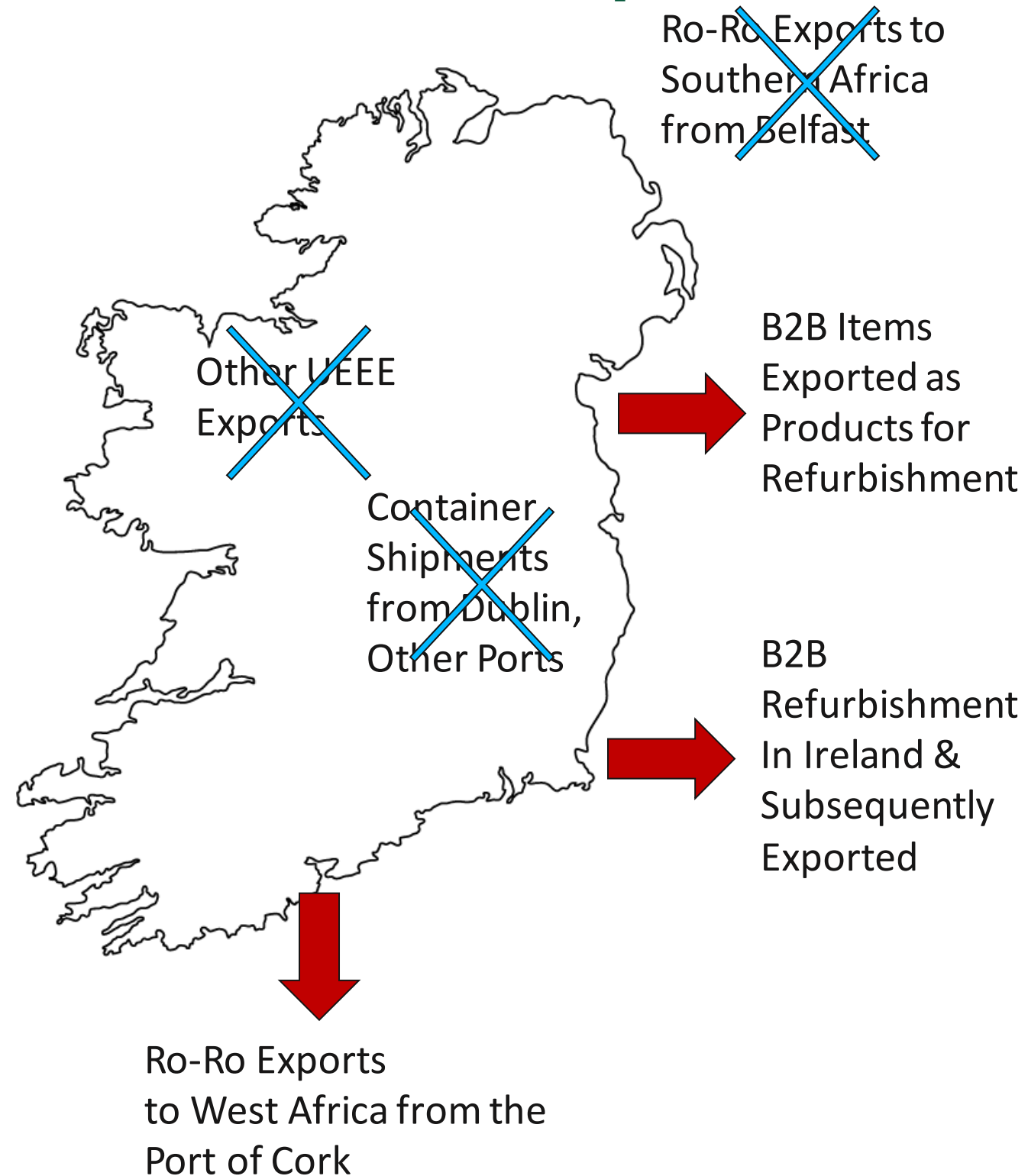


- “Exploring Complimentary WEEE Flows in Ireland”



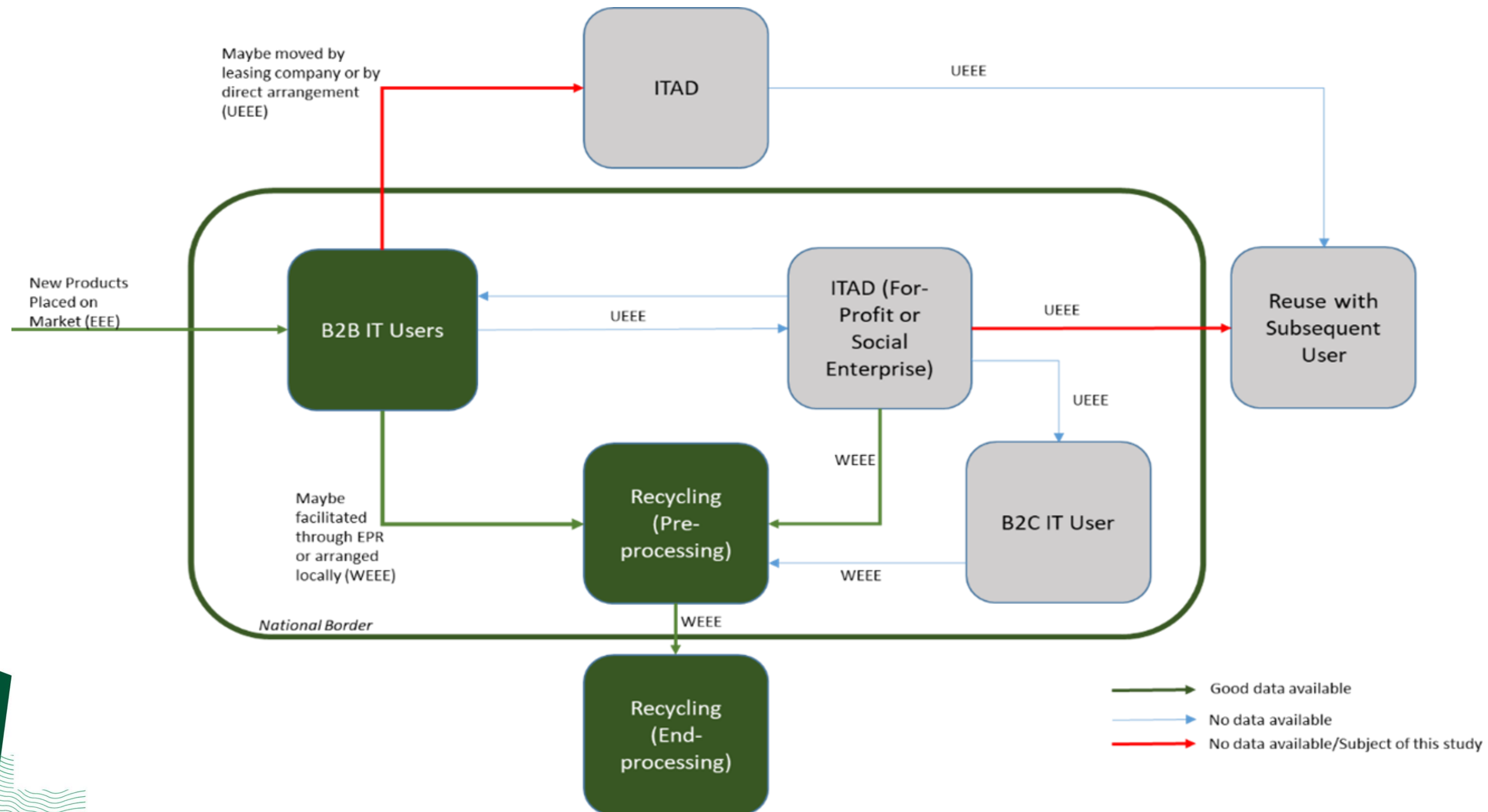
ExportEEE

- “An Assessment of used EEE exports from Ireland”



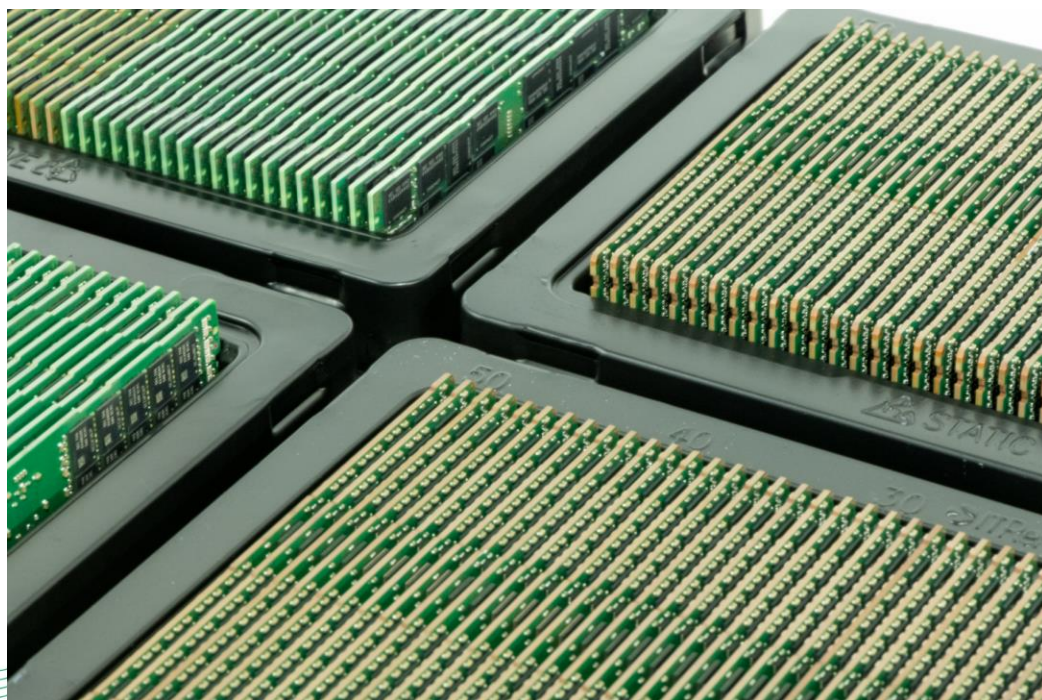
ExportEEE

- “An Assessment of used EEE exports from Ireland”



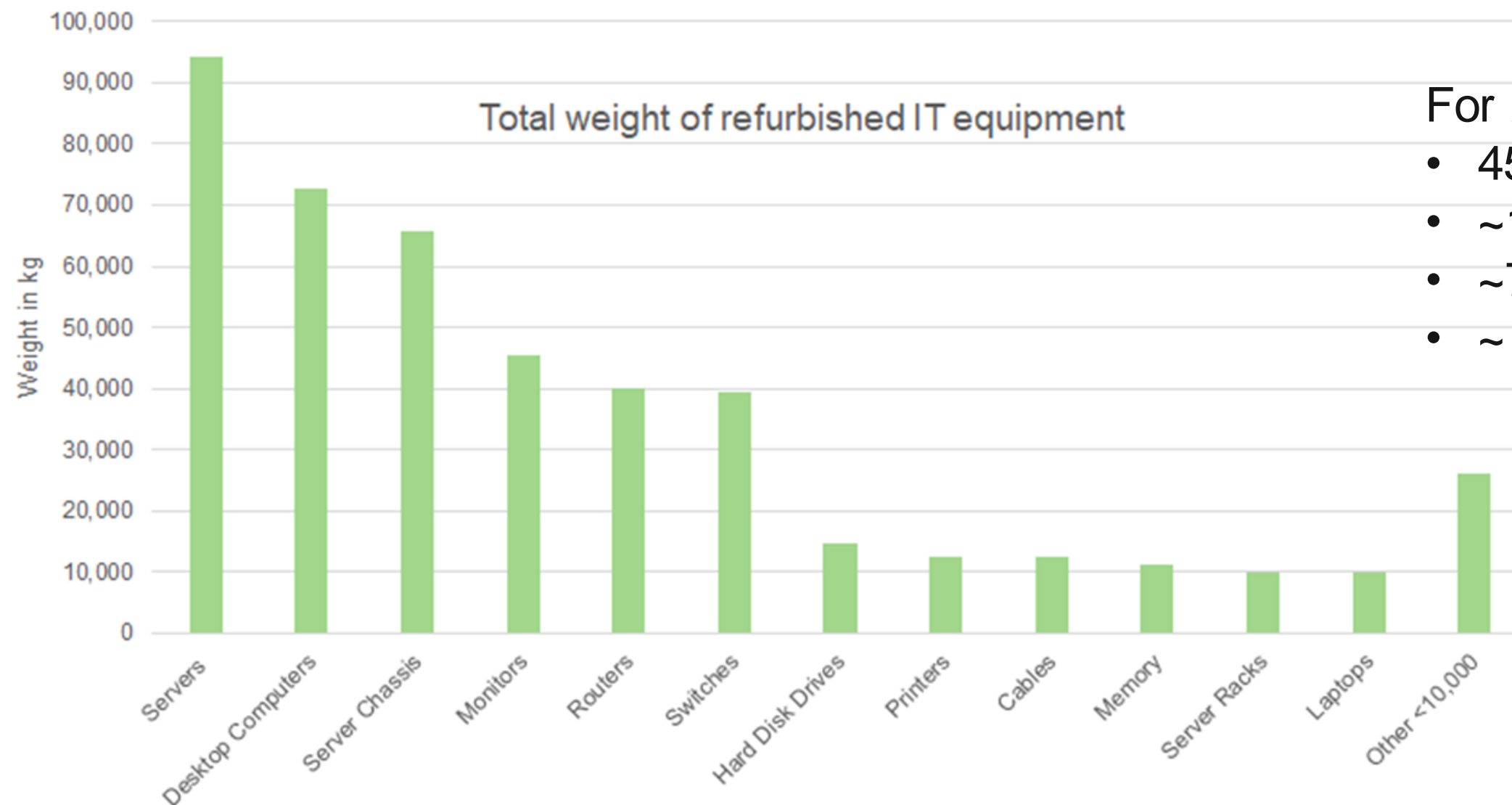
ExportEEE

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ExportEEE

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For 2019

- 454 tonnes
- ~1% of total WEEE collected (2017)
- ~7% of IT equipment collected (2017)
- ~ 0.1 kg/inhabitant

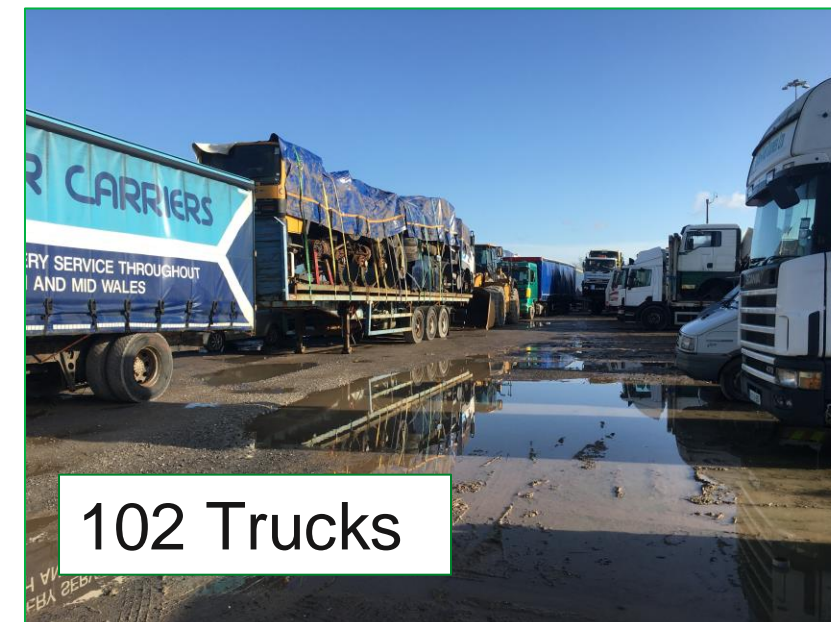
ExportEEE

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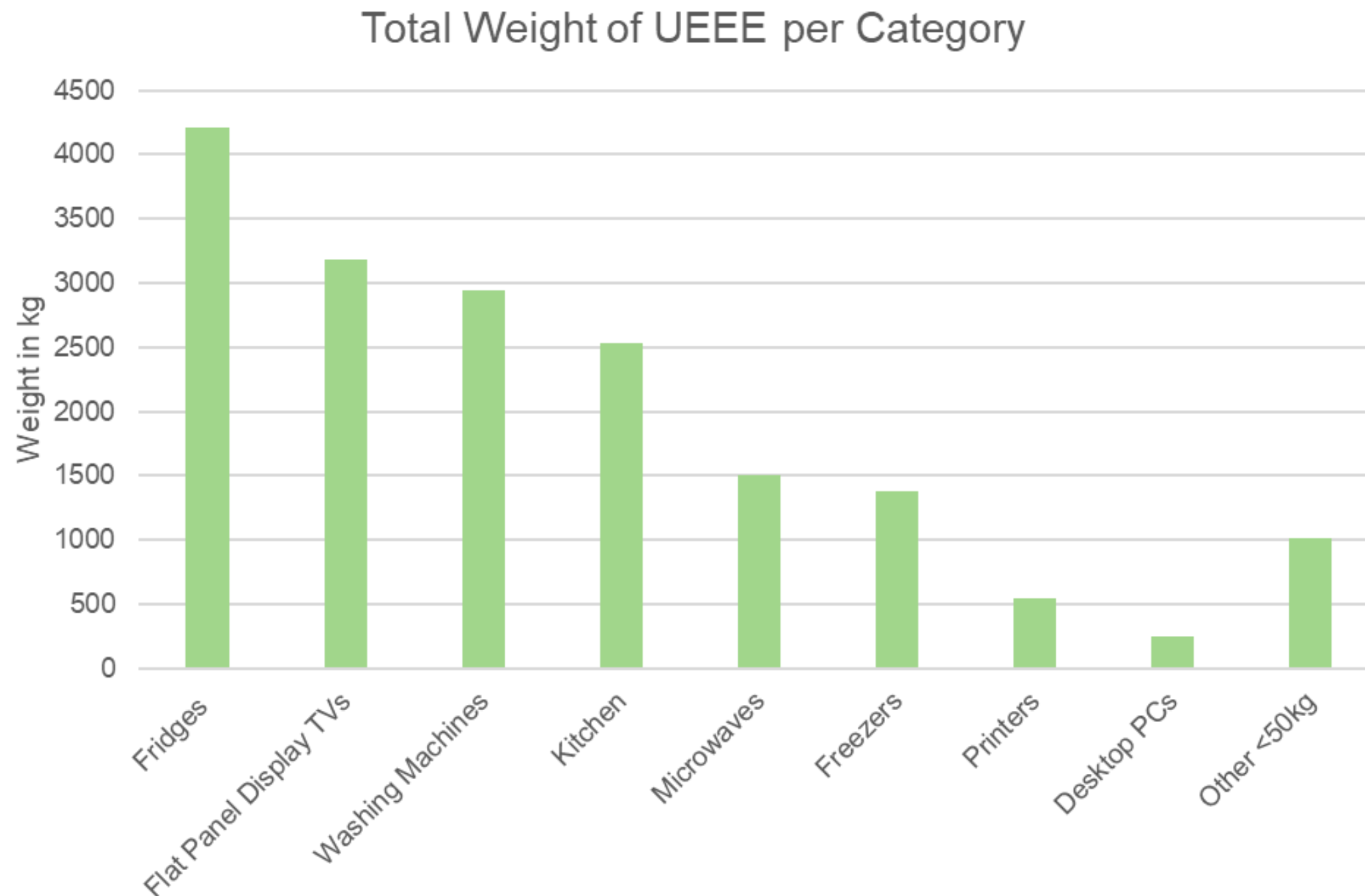
Packing List

Item Description (Make/Model no)	Quantity	Estimated value	Invoice present
SAMSUNG TV (LE40D550K1XXU)	1	€30	YES
HOT POINT FRIDGE (K2A30P)	1	€30	YES
NOVIFEST FRIDGE (CB4W/10177W)	1	€35	YES
BEKO FRIDGE (T1546AP)	1	€30	YES
BOSCH CHEST FREEZE (WAE2114W)	1	€30	YES
PHILIPS TV (32HF7874/10)	1	€30	YES
BEKO COOKER (RD33AW)	1	€40	YES
WHIRLPOOL FRIDGE (20RB-03T)	1	€30	YES
BELLING FRIDGE (S7047040020W)	1	€40	YES
FLAVEL ELECTRIC COOKER (F5ESDW)	1	€70	YES



ExportEEE

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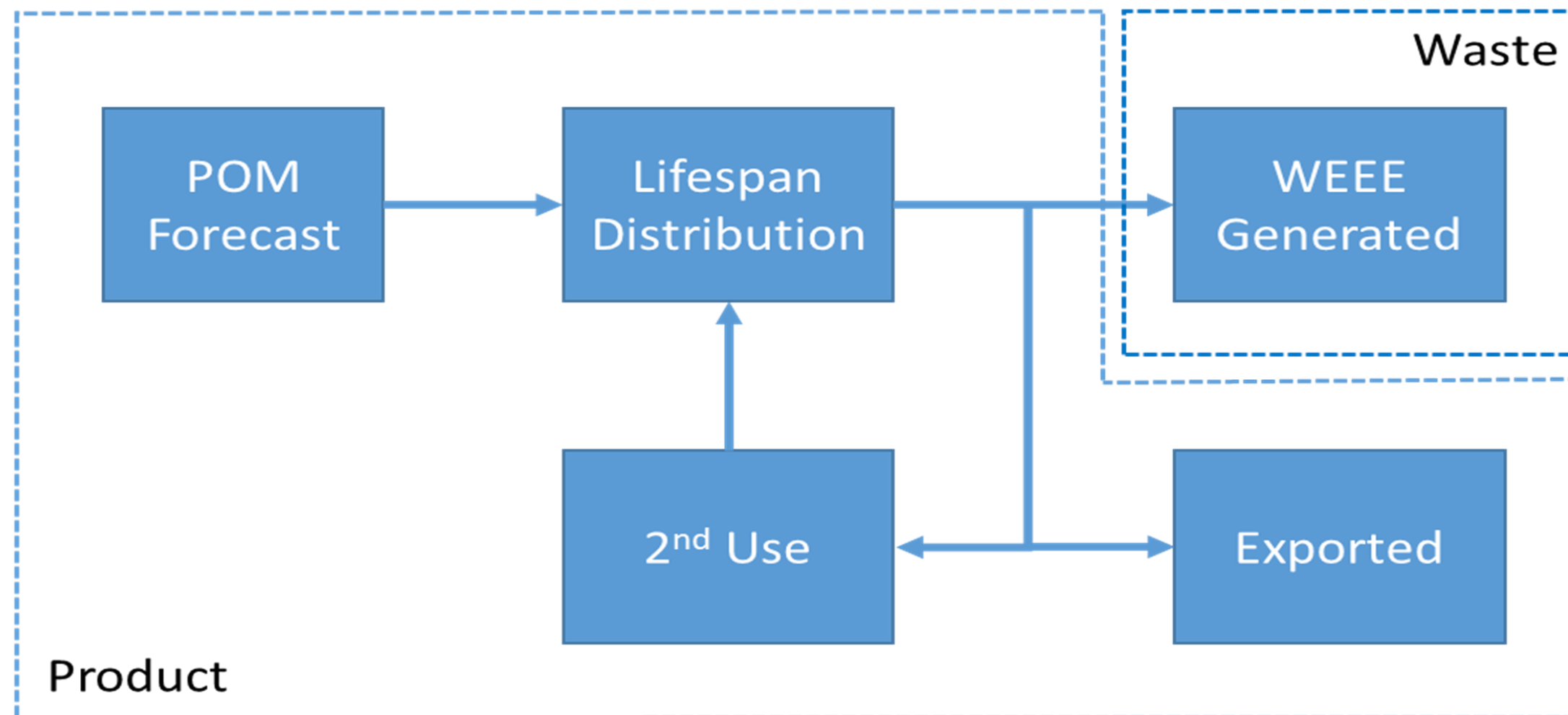


Estimated

- 17,319 kg
- ~0.0037 kg/inhabitant

LongWEEE

- “.....project the future volumes and financial flows related to **long-life emerging technologies** such as solar PV and electric vehicle batteries and, thus, enable decisions that will contribute to the **long-term sustainable management of WEEE in Ireland**”



LongWEEE



PAY WHEN PLACE ON MARKET

- Pros
 - Fair
 - Ensures existence of fund
- Cons
 - Uncertainty about requirements of fund
 - Amount of PV/EVB which will present
 - Future material values/costs of recycling
 - How would shortfall be dealt with
 - Fund needs to be managed

PAY WHEN COLLECTED

- Pros
 - Only pay when actually recycling
 - Collect based on market share
- Cons
 - Actors may not be as long-lived as their products
 - Market is heavily influenced by policy
 - Policy uncertainty over long-life products

