

Supplementary Materials: The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/su141811557/s1>, S1: Instrument for data collection

Green line WEEE reverse logistics questionnaire

Dear participant

This questionnaire aims to collect data for research developed within the scope of the research group XXX- Advanced Studies and Research Group in Logistics and Supply Chain Management, under the guidance of Professor XXXX, linked to the Department of Administration at XXX. This research will collaborate as part of the project "Reverse Logistics Management of Electronic Waste in Brazil based on Law nº 12,305/2010 and on the Multicriteria Decision Support Approach (MCDA)", approved in Universal Call MCTI/CNPq coordinated by Professor Dr. XXX and which aims, among other aspects, through the collection of habits, perceptions and expectations of consumers, to identify opportunities for improvement of the reverse logistics of e-waste (green, blue, brown and white lines) from electrical appliances, in Brazil, by manufacturers and resellers.

Electrical and Electronic Waste is classified by the Brazilian Association of Electrical and Electronics Industry (in Portuguese, ABINEE) in lines depending on the type of the products, which are: GREEN LINE: desktop and laptop computers, computer accessories, tablets and cell phones, among others; BLUE LINE: mixers, blenders, electric irons, drills, hairdryers, fruit juicers, vacuum cleaners, coffee makers; BROWN LINE: tube, plasma, LCD and LED monitors and televisions, DVD and VHS players, audio equipment, camcorders; WHITE LINE: refrigerators and freezers, stoves, washing machines and dishwashers, dryers, air conditioners;

If you buy or have already bought any of these electronics you are able to answer the survey. Your participation is essential!

We highlight here the concept of reverse logistics for knowledge:

Reverse Logistics is the process of efficiently planning, implementing and controlling the flow of raw materials, work in process, finished goods and related information from the point of consumption to the point of origin for the purpose of recapturing value or to eliminate them properly (ROGERS, TIBBEN-LEMBKE, 1998)

We assure that this research project follows the Brazilian guidelines for the safety of participants of the study, we assure you complete anonymity and that your data will be processed in an aggregated way, only for research purposes.

If you do not feel comfortable to answer any question, you can quit anytime.

Feel free to contact us for any clarifications.

Researcher name – e-mail

Do you agree and confirm your participation in the survey?

° Yes

° No

Habits and perceptions

1) What do you believe is the ideal lifespan of an appliance?

a) from 0 to 2 years

b) from 2 to 5 years

- c) from 7 to 10 years
d) more than 10 years
- 2) In which situations are these appliances usually replaced?
- a) When the appliance malfunctions
b) When it has been used for a long time and has no defects
c) When it has been used for a long time and has defects
d) When a new version is released on the market
e) Others (open question)
- 3) When you carry out this exchange, do you believe you are giving the correct destination for the old appliances?
- a) Yes
b) No
- 4) What destination do you usually give to overlapping appliances?
- a) Sell
b) throw in the trash
c) Donate
d) Save
e) Return to the store where you bought it
f) return to manufacturer
g) Take to the collection center
h) Other (open question)
- 5) When I buy an appliance, do I expect it to last a long time?
- I totally disagree ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 I totally agree
- 6) The lifespan of my appliances often reflects what I expected when I bought them.
- I totally disagree ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 I totally agree
- 7) When I change an appliance, I look for information on how to dispose of the old one.
- I totally disagree ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 I totally agree
- 8) Household appliance in the common waste
- I totally disagree ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 I totally agree
- 9) I care about the environment when disposing of an appliance
- I totally disagree ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 I totally agree
- 10) I know the existing components in electronics
- I totally disagree ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 I totally agree

11) I know the degree of danger of the existing components in home appliances

I totally disagree ☐ ☐ ☐ ☐ ☐ I totally agree
 1 2 3 4 5

12) I know proper home appliance disposal sites

I totally disagree ☐ ☐ ☐ ☐ ☐ I totally agree
 1 2 3 4 5

Knowledge about NSWP

The National Solid Waste Policy (NSWP) brings together principles, objectives, instruments, guidelines, goals and actions adopted by the Federal Government, alone or in cooperation with the states, the Federal District, municipalities or particularities, with a view to integrated management and environmentally sound disposal of solid waste. (BRAZIL, 2010)

1) I know the National Solid Waste Policy

- a) Yes
- b) No

Profile Identification

Your data will not be disclosed individually, thus protecting the confidentiality of responses. The next items are exclusively to characterize the respondents of the questionnaire in aggregate form.

1) Gender

- a) Male
- b) Feminine
- c) I prefer not to declare

2) Age

- a) under 18 years old
- b) 18 and 25 years old
- c) 26 and 30 years
- d) 31 and 40 years
- e) More than 40 years

3) What is your education level?

- a) Incomplete elementary school
- b) Complete primary education
- c) Incomplete high school
- d) Complete high school
- e) Incomplete higher education
- f) Complete higher education
- g) Incomplete postgraduate
- h) Complete postgraduate

4) Family Income (no personal data will be disclosed)

- a) Up to BRL 1,908.00
- b) From 1,908.01 to 4,770.00
- c) From 4,770.01 to 9,540.00
- d) From 9,540.00 to 19,080.00 More than 19,080.01

5) How many people is your family unit made up of, including you?

- a) 1
- b) 2
- c) 3
- d) 4
- e) 5 or more

Thank you for your participation!