

# Guide 1

## Give a new life to your digital equipment (smartphones, computer et tablet)



<b>Understanding</b>	<b>2</b>
Understand the impact of the manufacturing of your equipment	2
Measure its impact	3
<b>Taking action</b>	<b>4</b>
Give a new life to your digital equipment : step by step	4
#1 Give a boost to your equipment	4
#2 Repair your equipment	4
#3 Encourage reuse	5
#4 Recycle	6
Checklist	6
<b>To go further</b>	<b>7</b>
<b>Sources</b>	<b>8</b>
<b>Acknowledgements</b>	<b>8</b>
<b>Licence to use this guide</b>	<b>9</b>

## 1. Understanding

### Understanding the impact of the production of my equipment

*What do you think is the total weight of raw materials needed to manufacture a 2 kg computer ?*

A 2 kg computer requires a total of 800 kg of raw materials that must be extracted to manufacture it, [Source ADEME](#)

In a [recent study](#) commissioned by ADEME and ARCEP, we learn that the majority of digital-related impacts are due to the equipment itself. These impacts occur mainly during the **manufacturing phase and at the end of the life of the equipment**. But what impacts are we talking about exactly?

On biodiversity : to manufacture a 200g smartphone, it is necessary to extract approximately 200 kg of materials and to mobilize a large quantity of water. Nibbling the earth's crust to extract lithium, gold, cobalt, copper and other metals involves mining. In these mines, which can reach the surface of 300 football fields and the depth equivalent to the height of 2 Eiffel Towers, all animal and plant life is destroyed. In addition, the water used during the extraction is too often discharged into nature without prior treatment, with the consequence of a significant impact on all the surrounding biodiversity. The end of life of our dear digital companions is not left out since this equipment, very little recycled, is very often [piled up in open landfills](#) polluting the soil and waterways.

#### Extraction : huge volumes for tiny quantities



Koffiefontein Mine (south Africa)  
7.6 million carats of diamonds = 1520kg = 0,4318 m<sup>3</sup>



Palabora Mine (South Africa) - 4.1 million tonnes of copper = 458 612,97 m<sup>3</sup> = 122 piscines olympiques

On the climat : the manufacture of a smartphone or a television requires a large amount of energy (for the extraction of minerals, the transformation of materials or transport for example). In the countries where our digital equipment is manufactured, the [energy used is mainly of fossil origin](#) (oil, coal, gas). The production of this energy emits greenhouse gases and this contributes to climate change.

On people: a significant proportion of the metal deposits needed to manufacture our equipment are located in poor countries. Populations are then often exploited in [appalling conditions, sometimes from a very young age](#). In addition, all or part of the financial gains may be diverted to finance armed conflicts.

To assemble the [billion smartphones sold each year](#), factories exploit their staff, sometimes in [inhumane conditions](#).

Finally, the open dumps already mentioned are also the workplace of [children breathing toxic gases](#) when they burn cables to recover the precious copper.

Fortunately, there is a simple and very effective solution to reduce all these impacts: **extend the life of our equipment!**

This guide will give you all the tricks to achieve it..

## Measure your impact

Measuring the impact of your digital equipment by yourself is not easy, as the repercussions of their production on the environment (water, air, soil), natural resources and biodiversity are multiple. However, it is easy to have a few points of reference. Today, we keep our smartphone on average for [24 months](#), if we decide to extend its lifespan by as much - 24 months - by [taking action](#), then we will reduce our environmental footprint by 50%! ([Source ADEME](#)).

In the end, a few simple gestures make a huge difference.

To help you better understand the benefit of the efforts you make during this Cyber CleanUp Equipment, we suggest that you count the number of equipment collected by categories of those functional and those non-functional. Then, compare it to the quantity of resources saved by avoiding the manufacture of new equipment.

Now that you know more about impact measurement related to digital equipment, **you are ready to take action !**

## 2. Taking action

### Give a new life to your digital equipment : step by step

#### #1 Give a boost to your equipment

**Is your equipment cluttered, slow?** Start by organizing or participating in a Cyber CleanUp Cleaning Data and use our guides.

- Remember to uninstall unused software / applications on :
  - [Guidebook N°3 - Clean your computer and your Drive](#)
  - [Guidebook N°4- Cleaning your smartphone and tablet](#)

- Sort through your data on :
  - [Guidebook N°5 – Clean your emails](#)
  - [Guidebook N°6 – Clean your emails](#)
- If necessary, reset your device (format or reset to factory settings) by getting help from someone you know or by watching tutorials.
- A solution can also be to switch to a free operating system that is less resource intensive (for example Linux for computers and / or for smartphones).

## #2 Repair your equipment

**Your hardware no longer holds the battery or the screen is cracked?** Is it necessary to replace it in its entirety? Many solutions are available to you to fix it.

This operation can be technical or require specific tools, so we advise you to call on a professional. However, there are alternative solutions. A **diagnostic or repair workshop** can be considered as part of Cyber CleanUps.

- **Repair your equipment by yourself** with online tutorials on sites like <https://www.ifixit.com/>.
- **Get help at a repair café.** This is a workshop dedicated to the repair of objects and organised at a local level by volunteers, there is surely one near you.
- Or **look for a professional** to help you.

## #3 Encourage reuse

**Your equipment is still functional** but may no longer meet your needs. It may still be useful to someone with different expectations or for other less resource-intensive uses.

Once you have recovered and deleted your data, **you can donate your device** to a relative or acquaintance, or **sell it** on an online marketplace or to a professional who buys your second-hand equipment near you.

There are many different types of refurbishing organisations. Amongst others, there are work integration companies, which train people to repair and reinitialise your old equipment and then redistribute it on a second-hand market. By donating your equipment to them, you allow these people to be trained and their work to be valued. As far as possible, give preference to a local company or association, as this helps to keep the ecosystem close to home working and limits the need for long-distance shipments.

Just as it is important to find out where your equipment comes from and how it is produced, it is important to find out what happens to it. To avoid any disappointment, do not hesitate to ask your partner for proof of purchase or donation.

**Nota** : If you are participating in a Cyber CleanUp collection, **remember to separate functional from non-functional devices**. This will make it easier for the various partners in your organisation to collect them.

As an organiser, to help participants determine what is functional equipment, you can post the Ecologic definition below in the equipment collection room or attach it to the messages sent to participants.

To help you determine whether your appliance is still considered functional or not by the partners, here is a **definition** from Ecologic :

**A working device** describes equipment in working order with acceptable performance with a supported OS level (with at least Windows 10 64 bit for computers). For smartphones and tablets, the screen may be very slightly cracked but no more. The condition of the devices (scratches) is not very annoying as long as the functionality is not impacted. Breaks that weaken the equipment too much lead to a classification as non-functional.

**Another important point**: some customizations prevent the reconditioning of the devices and must be removed by the donors before the collection of the devices (Bios code for laptops; enrolment under an MDM tool, Google or Apple-Id account for smartphones and tablets).

To get in touch with our collection partners, you can refer to our [Partners page](#) and follow the proposed processes according to the type of equipment collected.

## #4 Recycle

If your appliance is **non-functional or non-repairable**, it must be treated as **Waste Electrical and Electronic Equipment (WEEE)**. It will then be dismantled. The materials will be sorted and recycled as far as possible.

Favour drop-off points near your home to limit long-distance shipments and boost the local ecosystem.

## Checklist

- Clean up the data
- Repair the device
- If functional, encourage re-use
- If non-functional, recycle in the appropriate WEEE stream

## Well done! You have given your equipment a second life!

You can now take stock of your actions to [measure your impact](#).

### 3. To go further

With this guide you may have given your equipment a second life and want to make sure it will last a long time. Or maybe you've had to part with it and you want some good advice? Then here they are :

- **Protect your devices** with a protective shell and glass, a storage case, but also think about antivirus software, and extend their warranties.
- **Buy a reconditioned device** if you need to change it, from a reconditioning organisation whose commitment to the quality of the reconditioning carried out can be verified, whose stated values are in line with your own (environmental, social, etc.) and whose guarantee complies with the legislation in force in its country (24 months in France, 12 months in Belgium and Switzerland).
- **Find out about the conditions of production, reparability and durability of your appliance** if you choose a new one through consumer associations. You can use the reparability index to choose your product or the durability index of [Les Numériques \(for smartphones\)](#) and the [ADEME label guide](#).
- **Limit the number of devices per person** by sharing business/personal use (e.g. with a Dual Sim system, e-Sim for smartphones) but also by preferring rental to purchase for occasional needs.
- **Suggest to your employer that you use BYOD or COPE** (Bring Your Own Device / Choose Your Own Device)
- **In companies, question the purchasing strategy** with the help of the practical [guide for responsible digital purchasing](#).
- **Refuse giveaways and resist promotional offers** when they push you to renew your still functional equipment.

## Sources

- Cover image : <https://fr.freepik.com>
- <https://librairie.ademe.fr/cadic/2351/guide-pratique-face-cachee-numerique.pdf?modal=false>
- [https://www.arcep.fr/uploads/tx\\_gspublication/etude-numerique-environnement-ademe-arcep-note-synthese\\_janv2022.pdf](https://www.arcep.fr/uploads/tx_gspublication/etude-numerique-environnement-ademe-arcep-note-synthese_janv2022.pdf)
- <https://multimedia.ademe.fr/infographies/infographie-terres-rares-ademe/>
- <https://librairie.ademe.fr/cadic/6555/guide-en-route-vers-sobriete-numerique.pdf>

## Acknowledgements

Kevin GUERIN - Romain PILLON - Cécile HADJADJ - Héloïse DANO  
Alexandre KALATZIS - Julien NORA - Rémy MARRONE

## Licence to use this guide

[CC-by-nc-sa \(Attribution / Pas d'Utilisation Commerciale / Partage dans les mêmes conditions\)](#)



The CC-by-nc-sa 4.0 licence allows any exploitation of the work (sharing, copying, reproducing, distributing, communicating, reusing, adapting) by any means, in any format. All uses of the work or derivative works, except for commercial purposes, are possible.

The obligations related to the license are to :

- to credit the creators of the original works, to indicate the sources and to indicate if modifications have been made to the works (obligation of attribution);
- not to profit (direct gain or commercial gain) from the work or derivative works;
- disseminate the new creations under the same conditions (according to the same licence) as the original work (thus authorising modifications again and prohibiting commercial uses).

This licence therefore prohibits the new derivations of the derivative work from being exploited for commercial purposes.

Do you have a question or an idea to improve this guide? Do not hesitate to contact us : [\*\*contact@cyberworldcleanupday.fr\*\*](mailto:contact@cyberworldcleanupday.fr)

And follow us on social networks :



WCUD – France : 75 Rue Léon Gambetta 59000 Lille – [www.worldcleanupday.fr](http://www.worldcleanupday.fr)  
INR : 23 avenue Albert Einstein | BP 33060 - 17031 La Rochelle – [www.institutnr.org](http://www.institutnr.org)

