

Our Knowledge Building Project

How to minimize the environmental impact of the waste that leaves the outdate computers.



Escola Proa

A decorative header consisting of six circles in a horizontal row. From left to right: a solid light purple circle, a hollow light purple circle, a solid light purple circle, a hollow light purple circle, a solid light purple circle, and a solid light purple circle.

Introduccion

Technology advances more and more, while our interest to renew our appliances, stimulated by advertising. That's good, but, when people have to get rid your old appliances sometimes they do it in a wrong way, because this kind of material can't be thrown out in the traditional garbage.

So there are different ways to get rid of them without harming the environment and helping people in need.



We wondered the following questions:

- **Is it possible to reuse some hardware?** (monitors, keyboards, mouse...)
- **What are these parts made of?** (casing, circuits, wires, loudspeakers, batteries, screens and cartridges)
- **Which one of them are recyclable?**
 - What are recycled materials used for?
- **Which one are pollutants?**
 - What could we do with pollutants?
- **Are outdated computers sent to developing countries? Which one? Which countries?**

Is it possible to reuse some hardware?

If you are good in arts, have imagination, patience and good hands, you can also give to your old computer another usefulness...



Override the current Nespresso, “what else?” with a coffee machine like this one; completely original.

If you invite your friends to have lunch, and you want to impress them, you can always use your computer as an extraordinary barbecue to cook the food.



It has no flowers, or good smell... but you don't have to water it, scare insects or buy another one when it dies... (made with wires and mouse)

Are you tired to see your hamster always in the same cage? Give it a modern life with this new and free monitor-cage.



Do you have problems every year with Christmas or birthday presents, and you don't never know what to give to your family?

Here you have an option; make the presents by yourself.

What are these parts made of?

(casing, circuits, wires, loudspeakers, batteries, screens and cartridges)

There are three environmental problems related to computer manufacturing:

- the use of many toxic substances in the production process
- a very high consumption of water and energy
- the large volume of waste (including toxic) they generate.

The most abundant material on a computer are plastics, steel, silicon, aluminium and copper (they are recyclable).

But in the manufacture of chips and boards are used too thousands of chemicals, some of them known carcinogens and highly polluting.

Which one of materials are recyclable?

Which one are pollutants?

Most of the computer parts are recyclable, like the frame; but there are parts that are not recyclable, which are deposited in a special deposits where will be eliminated.

- Frame: is made of metal and plastic. Both elements are recyclable.
- Circuits: are made of copper and plastic. Only plastic is recyclable.
- Wires: are made of copper, plastic and magnet. Plastic and cooper are also the only recyclable element.
- Loudspeakers: are made of copper, metal and magnet. Metal and plastic are recyclable.
- Monitor: is made of nickel, copper, metal and aluminium. Metal is recyclable.
- Batteries: are made of nickel and plastic. Plastic is recyclable.

Are outdated computers sent to developing countries?

There are some organizations which give to outdated computers another usefulness:

- BIP-BIP Foundation: www.fundacionbip-bip.org
- Open computing association: www.abierta.org
- New technologies for Africa: www.ntafrica.org
- Supportive Telecommunications:
www.renuevate.com/teso
- Esan foundation: <http://www.fundacionesan.org>

Some Advices

The title 'Some Advices' is positioned at the top left. To its right, there are five circles arranged horizontally. The first, third, and fifth circles are solid light purple. The second and fourth circles are hollow with a light purple outline.

- Users we should ask ourselves whether we really need to buy a new computer. Perhaps an extension of that we already have or buy a second computer hand we can perform our computing tasks.
- Configure the computer and devices to move to a low-power mode when it is a period of time unused.
- Replace your paper-filing systems for file systems in units of Computer Storage: floppy disks, CDs, hard disks...
- Make your backups on rewritable CDs instead of one-use CDs.

Some Advices

The title 'Some Advices' is positioned at the top left. To its right, there are five circles arranged horizontally. The first two circles are partially overlapped by the text. The circles alternate in style: a solid light purple circle, a hollow light purple circle, a solid light purple circle, a hollow light purple circle, and a solid light purple circle.

- Print documents that do not require a perfect presentation, you can reuse paper with only one side printed.
- The flat screens are spending half of electricity and they emit less radiation.