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eco-user

Best practices **Guide**

*for information
technology and
telecommunication
users*

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SFIB and GITEP TICS are two French professional trade associations. SFIB represents the Information Technologies Industry and GITEP TICS represents the telecommunication manufacturers. From 2003 to 2010, SFIB and GITEP TICS formed the federation Alliance TICS. This guide was elaborated in 2009 by Alliance TICS, at the initiative of its member companies strongly involved in an eco-friendly approach of Information and Communication Technologies (ICTs) and taking an active part in the efforts and commitments of the European and international industrial community in ICT sector.



eco-user

Best practices **Guide** for information technology and telecommunication users

This guide gives a comprehensive vision of all the ways to behave as eco-friendly users. From the purchase to the end-of-life, here are easy tips to manage information technology and telecommunication equipment. This guide helps users to manage their information technology and telecommunication equipment in a more eco-friendly way because these tools are part and parcel of their private and professional lives. From computers to cell phones, this guide gives simple advice to reduce environmental impacts. In your office or at home, you can help protect the environment and our planet, because every single action counts... There is no more time to waste! Let's act together for the environment and behave in an eco-friendly way.

Enjoy the read!

Users: what can you do?

To reduce the environmental impact of information technology and telecommunication products such as cell phones, computers and printers, users have a very important role to play during the entire product life cycle and not only while using it.

To be more precise, the users' behavior has an impact on the environment during **three stages** of the product life cycle: when they buy the product, when they use it and when the product reaches end-of-life.



To reduce information technology and telecommunication equipment's environmental impact, users are responsible at every stage. Here are the three main levers for eco-users: choose a product in a responsible way, use it properly and have it recycled or reused after use. In this guide, you will find the information you need to behave in an environmental friendly way during these three stages.

When the users behave in an eco-friendly way, they help preserve the environment and fight against climate change while they also save money. Indeed, having a more responsible management of digital appliances is, for you, a means to reduce your electricity invoice, and for humanity, it is a means to save the planet.

Eco-friendly behavior for information technology and telecommunication users

Responsible purchasing

First of all, check if all your information technology and telecommunication appliances have the **EC label**. This label means the product complies with the essential requirements in the European Community directives on products.



When you buy

A desktop computer or a laptop:

- Choose preferably **eco-labels** because they are a means to get more eco-friendly appliances, (see "How to identify eco-labels for IT equipments"). These labels attest of producers' efforts to eco-design equipment, (see "Eco-design").
- Choose the **screen size** according to your needs: the bigger the screen is, the more power-consuming it is.
- **LCD screens** are, in average, 50 to 70% less energy-consuming than CRT screens when they are «on»⁽¹⁾.



Printer supplies:

A printer

- Choose preferably **eco-labels** because they are a means to get more eco-friendly appliances, (see "How to identify eco-labels for IT equipments").
- Choose **multifunction printers (all-in-one)** that can be used as photocopier, scanner and fax machine. This multifunction device uses 50% less energy than separate printer, scanner, photocopier and fax machine normally use⁽²⁾.
- Choose preferably devices with the **duplex printing** function.

- Make sure that the brand you choose recovers empty cartridges for **recycling**.

If you work on average 8 hours a day, choosing an LCD screen rather than a CRT screen with the same dimensions could help you save more than 100 kWh/year. According to electricity prices, choosing an LCD could help you save up to **135 euros** on your equipment life span⁽²⁾.



⁽¹⁾⁽²⁾ Source Energystar

- Choose **long lasting** ink cartridges to avoid changing them too often and generating more waste when they reach end-of-life..

Behaving in an eco-friendly way is profitable for you...and for the planet too!

Eco-design

« Eco-design means taking the environment into account right from the design of products, be they goods, services or processes. Taking the environment into account right from the beginning is a way to have a comprehensive and multifaceted approach to environment and to take into consideration every stage of products life cycle »⁽⁴⁾.

Indeed, from the extraction of raw materials to their end-of-life, goods go through several stages. Thanks to eco-design, all these stages (manufacture, retailing, use, end-of-life) are taken into consideration right from the design stage to reduce the environmental impacts of equipment all along their life cycle.

Information and Communication Technology companies have been working for years to design products that are more energy-efficient and more easily recycled.

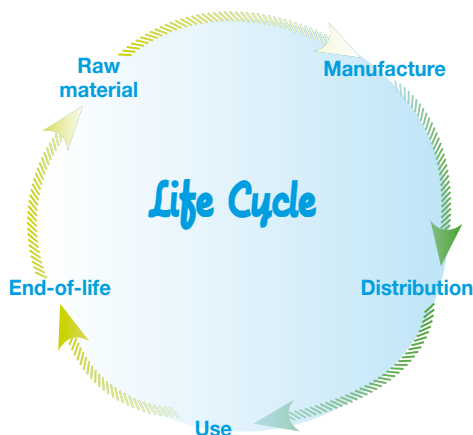
Here are a few examples of eco-design by several manufacturers:

Eco design of components

- Regularly review the list of chemical products needed for the microprocessors manufacturing and use alternatives for polluting products. This is why isopropanol, which is used during engraving on microprocessors, was replaced in 2007 by a less volatile product in order to reduce the impact on the planet. Because water is used during the manufacturing of microprocessors, water waste is an important issue for this sector of activity, especially in arid regions. For example, during the last ten years, a company invested more than 100 million dollars in water conservation programs. Now, every new manufacture site uses a wastewater management system. Wastewater is reused to cool water and air purifiers.

Eco design of materials

- Develop an industrial process to integrate recycled plastics of various origins in the manufacturing of inkjet cartridges, especially plastics from water bottles recycling and plastics from its own used ink cartridges. Thanks to this process, ink cartridges can be made out of recycled materials and thus preserve environmental resources.



⁽⁴⁾ Eco-design of products), Ademe, <http://194.117.223.129/servelet/KBaseShow?sort=-1&cid=96&m=3&catid=12922>

Eco design of packaging

- Design a recyclable casing for cell phones, out of plastic from mineral water bottles. The energy saved for its manufacture is reinvested into renewable energy sources and reforestation.

- Use highly recyclable materials such as aluminum or polycarbonate for computer cases. Using high-value materials enhances recycling and contributes to the reduction of the amount of waste when products reach end-of-life.

- Reduce the size of packaging for cell phones and use more systematically recycled materials to make them. In 2007, the reduction of packaging stood for 15.000 tons of material and 100.000 m³ of water saved –the size of a small lake.

- Reduce the total weight of packaging for two-cartridge packets by 26% by removing polyvinyl chloride (PVC). In addition, a new type of packaging made of high-density polyethylene (HDPE) is now used and makes it possible to save 52% of the amount of energy needed to make the packaging.

How to identify eco-labels for it equipments



Energy Star is an international program about energy efficiency. It was created in 1992 by the Environmental Protection Agency (EPA). Within the framework of an agreement with the government of the United States, the European Community is involved in the ENERGY STAR program for office equipment (computers, monitors, imaging devices). On IT equipment, the Energy Star logo guarantees they are energy efficient in active mode as well as on stand-by.

Version 4.0 is based on a program called 80 Plus (<http://80Plus.org>) aiming at enhancing IT material power supplies performance by setting energy efficiency to a minimum of 80%.

€ An ENERGY STAR certified equipment will help you save from 200 to 270€ on your electricity invoice for a pc and a printer on its life span⁽⁵⁾

@ Energy Star has a data base to help users to find the most energy efficient models. www.eu-energystar.org/fr/fr_database.htm

⁽⁵⁾ Based on 5 to 6 year life span (European average) and on 0.135€/kWh electricity price, source: Energy Star





EPEAT (Electronic Product Environmental Assessment Tool) was created in the United States by the Green Electronic Council (GEC). It helps public and private buyers to choose IT equipment (desktop computers, laptops and screens) according to 51 criteria based on the American environmental standard IEEE 1680-2006.

To assess the material, EPEAT has 23 compulsory criteria and 28 optional ones. These criteria are classified into 8 different categories:

- Reduction/elimination of environmentally sensitive materials
- Choice of components that respect the environment
- Integration of product end-of-life right from the design stage
- Material durability
- Reduction of energy consumption
- Recycling
- Involvement of the company into a sustainable development approach
- Packaging

EPEAT offers 3 labels to manufacturers:

	23 compulsory criteria compliance
	23 compulsory criteria compliance 50% of optional criteria compliance
	23 compulsory criteria compliance 75% of optional criteria compliance

@ For more information on EPEAT criteria:
www.epeat.net/Criteria.aspx?show=all#criteriatable



TCO (Tjänstemännens Centralorganisation, the Swedish Confederation for Professional Employees) was first created to single out quality and eco-friendly screens. Now, it also applies to computers and printers. This label is based on criteria such as material ergonomics, energy consumption, ISO 14001 certification, noise and material recyclability.



Blue Angel was created in 1978 by the German ministry of Ecology and it is the world's oldest environmental certification. This label applies, among others, to IT material. It is interesting because it is based on a wide range of criteria including integration of the recycling issue right from product design, pollution reduction during the manufacturing process, reduction of energy consumption and chemical emissions, an ergonomic design and, last but not least, the integration of equipment end-of-life.

How to read a label?

You will see below a short description of the different logos you can find on a laptop charger label so that you know what each one means. For a French

user, the most important logos are: the CE marking and the crossed-out wheeled bin marking and the crossed out bin symbol. The other logos refer to national safety specifications and requirements from foreign countries, such as China, Norway and the United-States for instance.

• This marking means the product complies with essential requirements from the European Community directives for this type of product.

• This symbol means it is prohibited to throw the product away with other household waste; it must be collected and treated separately.



• Australian safety marking

• Chinese compulsory certification

• Safety marking in the United States

• Norwegian safety marking

• Safety marking in Singapore

Important logos for French users:



How can you reduce your computer's electricity consumption?

To reduce your computer's electricity consumption, you have to define the parameters of **power supply management**. To improve your computer's energy efficiency, the Climate Savers Computing® suggests you set up your power supply management as follows:

® Climate Savers Computing was created in 2007 by the main actors of information technology industry, along with Energy Star and support from WWF - the World Wild Foundation for the protection of environment. This program aims at reducing CO2 emissions in the information technology sector. <http://www.climatesaverscomputing.org/french/>

@ For stand-by settings, you can refer to the following web site:
http://www.eu-energystar.org/fr_fr_024c.shtml



Screen saving:
after 15 minutes
or less

Put hard disk(s) on stand-by:
after 15 minutes or less

Put system on stand-by:
after 30 minutes
or less



Eco-friendly behavior with printers



Power supply management can help you save more than 40€ per year in energy cost⁽⁷⁾

Calculate your computer's energy consumption

Thanks to Energy Star® Savings Calculator, you can compare total electricity consumption in kWh/year for each mode (on, stand-by, off).

Web site : www.eu-energystar.org/fr/fr_calculator.shtml

In France, total consumption of appliances on stand-by (computers, TVs, HI-FI ...) represents a nuclear plant year production⁽¹¹⁾!

If you leave appliances on stand-by, your electricity invoice is 10% more expensive⁽¹²⁾

If you're out of office:

≥ 15 minutes: Put your screen and hard disks on stand-by

≥ 1 hour (meeting, lunch): Switch off your screen

≥ 12 hours (night): Switch off your computer and screen

≥ 48 hours (week-end, holidays): Unplug your computer

Of course, stand-by mode is more energy-efficient, but it still needs energy. Indeed, when on stand-by, a computer still uses 20 to 40% of what it needs when it is "on"¹. Don't forget to switch off your computers and screens every night and every week-end. To reduce consumption to zero, it is even better to unplug your computer (or use an outlet switch to completely disconnect the computer from power supply). Even when your computer is off, its power supply still consumes electricity when it is plugged in –around 70 WH a day⁽⁹⁾.

⁽⁷⁾ According to Climate Savers Computing

⁽⁸⁾ Short guide on eco-friendly behavior in office, by Ademe, the French Agency for the Environment and Energy Management

⁽⁹⁾ User's guide by Ademe – Electrical appliances

⁽¹⁰⁾ Dossier Eco-consommation - Trouver le bon produit - Multimédia, Ademe

⁽¹¹⁾ Dossier Eco-consommation - Trouver le bon produit - Multimédia, Ademe (consumption guide – best practices at home)

⁽¹²⁾ Dossier Eco-consommation - Trouver le bon produit - Multimédia, Ademe



... Other tips

Switch off you screen "saver"!

Historically, screen savers were meant to save cathode-ray tube screens (CRT). Nowadays, with LCD flat screen technology, screen savers are useless and energy-consuming. This is why it is better to use stand-by mode and to switch off your screen if you are away from your computer for more than an hour.

Adapt screen brightness to your environment, still keeping an acceptable visual comfort. Maximum brightness is twice as energy-consuming as minimum brightness.

Electronic and electrical appliances on stand-by (Computer, TV, video recorder, HI-FI...)



150 to 500 kWh per household and per year



The amount of energy consumed by a fridge on the same period⁽¹⁰⁾

When it comes to printers, the main environmental impact is paper use: indeed, making a paper sheet is as energy-consuming as copying 50 sheets¹. So, if you want to reduce energy

consumption linked to printing, you have to monitor your paper consumption (see table: Responsible printing).

⁽¹³⁾ «Petit guide d'un agent pas comme les autres face à ses éco-responsabilités au bureau », Ademe, p.3 ("Short guide for a different eco-behavior in office")

Advice

- Try not to print systematically documents and emails.
- Check layout before printing to avoid size problems, especially with Internet pages to avoid printing advertisements.
- Choose duplex printing and/or print several pages on the same sheet of paper (you can define default parameters so that duplex printing is automatic).
- To print documents that do not need optimum quality, choose quick and draft printing mode (even less ink-consuming) and if possible in black and white (color printing uses 4 times more ink than monochrome printing).
- If possible, only print the page you need instead of the whole document.

Result

Reduce ink and paper consumption

Gain space

- Scan and send your documents via email instead of sending paper versions.
- You can pass around your documents to avoid useless extra printing.

Share via email is easier and quicker

- At the end of your emails, you can add a note «Be eco-friendly, only print this message if needed».

Education tool: Raise awareness around you on paper saving issues



- Almost 2/3 of European employees say they could reduce their printing volume by 30% while staying productive¹⁴⁾.

Did you know that ...

- European employees admit that 1 page out 5 is unnecessary printing¹⁵⁾.



- Paper is the first supply used in at the office and it represents 4% of office waste¹⁶⁾.

¹⁴⁾ European survey Ipsos "The State of Printing in 2007", December 2007

¹⁵⁾ European survey Ipsos "The State of Printing in 2007", December 2007

¹⁶⁾ Short guide on eco-friendly behavior in office, by Ademe, the French Agency for the Environment and Energy Management



Paper storage at the office

New paper storage:

Store paper reams in a cupboard instead of leaving them next to printers and copy machines so that users do not get the idea that paper is available in unlimited quantity, ready to be squandered.

Draft paper storage:

Next to each printer and photocopier, put a paper tray with clear indications to push users into letting one-side printed sheets so that they can be used as draft paper.

Be responsible, be digital: choose electronic invoicing

Choose the electronic way to pay your invoices (cell phone, Internet, electricity, etc) and you will reduce your paper consumption. If you want to subscribe for free to the electronic invoicing system, just check out on your contractor's website.

Thanks to electronic invoicing, some service contractors reduced their paper consumption by several thousand tons.

Reminder:

Don't forget to switch off printers:
In office: at the end of work days and before week-ends
At home: Only switch them on if needed.

How to choose the right paper?

Eco labels on recycled paper:



European eco-label:
www.eco-label.com



this European label guarantees the paper is made out of recycled fibers or sustainably managed forests as well as a low-waste and low-energy manufacturing process.



Blue Angel:
www.blauer-engel.de



this German eco-label guarantees a 100% recycled paper.



APUR:
www.apur-papiersrecycles.com



this French eco-label was created in 1992 by APUR (Association des Producteurs et des Utilisateurs de papiers-cartons Recyclés, Recycled paper and cardboard Users and Manufacturers Association). It specifies the proportion of salvaged cellulosic fibers used. The APUR label goes along with an accreditation number for each range of paper or cardboard, which guarantees the information given to consumers is authentic.



Swan
www.svanen.nu



this Scandinavian eco-label guarantees that, for the manufacturing of paper and fibers, chemicals are used in a responsible way, waste is managed in an eco-friendly way and all the manufacturing process respects the environment as well as the quality.

1. Paper eco-labels are important

Just like Information and Communication Technology industrials, paper makers strive to make eco-friendly paper. Below-listed labels are a distinction for best environment-friendly practices in paper making.



If you choose virgin fiber paper:

Check the fiber origin, choose certified paper. FSC and PEFC certifications guarantee that the wood which is used to make the pulp paper comes from sustainably managed forests.



FSC
 (Forestry Stewardship Council)
www.fsc.org



PEFC
 (Program of the Endorsement of Forest Certification)
www.pefc.org



2. Check paper's basis weight and whiteness

- When it is possible, use lighter paper. Making a 75 g/m² paper instead of a 80 g/m² paper (which is the most commonly used basis weight for office paper), wood needs are reduced by 18%, water needs by 14%, energy needs by 23% and waste is reduced by 6%¹⁷⁾.

- Use paper with proper whiteness. All documents do not need the same whiteness. Make very white paper is much more energy-consuming and uses a lot more chemicals (whitening and coloring agents).

¹⁷⁾ «Papier et pratiques durables» (sustainable practices for paper), a study made by a printer manufacturer and main paper manufacturers, p3

Waste sorting

Paper collection

At the office...

Push your company into collecting office paper. For example, you can suggest putting individual paper trays in each office so that office paper can then be sent to appropriate recycling channels. If there is already a collection system implemented in your work place, respect sorting instructions.

At home...

Put a specific bin for paper at home. Then, trash paper in the appropriate container. Each city has its own waste sorting method. Ask about how paper sorting works in your district (for example, you can find information on your city's website).

Companies producing printed paper have to pay an eco-fee for each ton of paper to **EcoFolio** (www.ecofolio.fr), a collective scheme in charge of the recycling of paper. This fee is designed to finance recycling and revaluing.



Printing supplies collection

It is very easy to recycle ink jet or laser cartridges.



Within their environmental policy, most manufacturers offer a free collection of used cartridges to have them recycled.

How can you do?

Various cartridge recovering systems can be used, for example:

- Detail recovering process on website: you have to fill in a request form on the manufacturer's website. Then, you will be sent prepaid packages to send back used cartridges.
- If an envelope is already in the cartridge package, don't discard it: it is a return envelope for recycling (with stamp and address already on it). Put the empty cartridge in the envelope and send it by mail.

Push your company into collecting cartridges
For example, you can suggest putting specific containers in offices and naming a person in charge of sending them back to the manufacturer.

Don't forget to **unplug your charger** after each use because the charger itself still consumes energy when it is plugged in. Some phones have a visual alert once they are charged to encourage users to unplug charger.

Eco-friendly behavior with cell phones



Some studies show that **2/3 of energy consumed by cell phones comes from chargers left plugged in out of charging time.**⁽¹⁸⁾

Info BOX

When you leave home for several days, switch off you telephone/Internet access equipment (box): operators offer electronic answering systems to replace your answering machine and, **for more than a week off, you save 1,5 kWh, which is the same as the energy used monthly by a low consumption light bulb**⁽¹⁹⁾.

⁽¹⁸⁾ Cell phone manufacturer CR Report 2006 in High Tech: Low Carbon published by EICTA April, 2008 p 13
⁽¹⁹⁾ Light power: 15 W, use time: 4h a day.

Advice

- Protect your cell phone from shocks, scratches, dust and water projections with a cover.
- Try not to drop your cell phone on the floor.
- Avoid heat exposure (for example, leaving it in a car in the sun).
- Remove your cell phone from its cover when charging it (some covers can increase heat).
- Respect charging instructions.
- Switch off your phone once a day to optimize memory management.
- Make sure you use accessories from manufacturer to ensure compatibility and reduce safety risks.

Result

Prolong your cell phone's life span

Prolong battery life span

Avoid breakdowns, electrical overloads and optimize use

Information technology and communication appliances end-of-life

Household appliances end of life



Since August 13th, 2005, electrical and electronic products have to be labeled by the "crossed out bin" symbol. In compliance with the European Community directive 2002/96/EC on Waste Electrical and Electronic (WEEE), this symbol means the product must not be discarded along with other household waste **it must be collected and processed separately**. Information technology and communication waste are part of WEEE so they must not be mixed with other

household refuse. In France, the new collection and recycling network for household Waste Electrical and Electronic Equipment has been operational since November 15th, 2006. This collection and recycling network is based on the **Extended Producer Responsibility (EPR)**. This principle makes it compulsory for manufacturers to take responsibility for WEEE collecting and processing (recovery, recycling, energetic revaluing). For household WEEE1, manufacturers

must join an organization agreed by public authorities. Today, four organizations are agreed in France: Ecologic (www.ecologic-france.com), Eco-systèmes (www.eco-systemes.com), ERP (www.erp-recycling.org), Récyllum (www.recyllum.com), the latter is specializing in lamp collection (fluorescent tubes, compact fluorescent lamps (CFL), LED lamps, etc.). Manufacturers can also set up individual collection and recycling solution.

⁽²⁰⁾ According to the French decree, waste coming from households or from equipment that were used for professional purpose or for the needs of an association but are similar to household equipment nature and retail circuit are considered household WEEE (art.2 in Decree n°2005-829 July 20th, 2005)



Visible fee

Since November 15th, 2006, users pay a fee when they buy new equipment. This fee is often called visible fee and is designed to cover collection and process costs for household WEEE that were bought before the decree implementation. The fee can vary from 1 cent for a cell phone to two or three euros for a computer. In the French decree, this fee will not be visible anymore from 2011 for information technology and communication equipment because product end-of-life costs will be fully integrated in the product price.



What can you do to manage household appliances end of life?

Here is some advice regarding IT equipments and cell phones:



According to a global consumer survey that was published by a cell phone manufacturer, **97% people do not recycle their old cell phones**. Most users keep their old phones when they don't use them anymore.

If the device doesn't work anymore:

- When you buy new equipment, you can bring back old ones to the retailer (retailers must recover used equipment).
- You can send back your old cell phone directly to manufacturer, for more information, check on their websites.
- You can ask in city office how waste is collected (nearest and most adapted waste collection center).

According to a cell phone manufacturer, if all three billion cell phone owners in the world returned only one phone, we could save **240 000 tons of raw material** and get a greenhouse gas reduction corresponding to **4 million cars out of traffic**.

Conclusion

If the device is still in good shape, it can still be used by other people...



- You can sell the product on owner to owner sites.
- You can give it to somebody you know (family, friends, etc.)..
- You can call solidarity and social organizations.



Professional equipment end of life

«Manufacturers are in charge of organizing and financing recovery and processing of professional waste electrical and electronic equipment that was put on the market after August 13th, 2005, except if the equipment's sales contract specifies different measures» ⁽²¹⁾.



According to the French decree implementing WEEE directive, each device which is used only on professional purpose or sold via an exclusively professional distribution channel is considered professional equipment.

⁽²¹⁾ Art.18 in Decree n° 2005-829, July, 20th 2005, regarding electrical and electronic equipment composition and disposal of waste generated by such equipment.



What can you do to manage professional equipment end of life?

If you want to dispose of professional equipment you bought after August 13th, 2005, you can call the company or send your disposal request via the manufacturer's website or ask information to retailer.

Owners are held responsible for end-of-life professional equipment that was bought before August 13th, 2005 ("historical waste"). Nevertheless, some manufacturers offer historical waste recovery for free or under certain conditions (commercial negotiations).

From purchase to waste, we all share responsibility for our digital appliances. This guide reminds us of our responsibility and helps you do the right thing every day.

As for, Information and Communication Technology (ICT) companies, they sustain their efforts for the environment protection. As mentioned in this guide, ICT companies focus their R&D on eco-design to improve their products' environmental performance all along their life cycle.











This is how more and more environment-friendly products are designed as, for example, cell phone chargers that are designed to reduce energy consumption, or computers respecting eco-labels' environmental requirements, or reduced packaging to limit waste quantity. All these examples prove a real commitment from ICT companies for environmental responsibility.

As users, our role is of utmost importance to keep up with manufacturers' effort to reduce the impact of our information technology and telecommunication devices on the environment. We have to be aware of it and act together with a common aim: preserve our planet.

Make a good eco use of this reading!

Appendix

Eco labels

Eco labels	Desktop computers and laptops	Monitor	Printer	Paper
 Ecolabel européen				●
 APUR				●
 SWAN				●
 PEFC				●
 FSC				●
 TCO	●	●	●	
 Blue Angel	●	●	●	●
 EPEAT	●	●		
 Energy Star	●	●	●	
 Eco labels				

NB: The European eco-label also covers information technology equipment, but it is now being reviewed.

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 - « Dossier éco-consommation, Trouver le bon produit, Multimédia » (Eco-consumption: Find the right product, Multimedia) available at home: <http://www2.ademe.fr/servlet/KBaseShow?sort=-1&cid=21435&m=3&catid=21456>
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 - «Saving energy at home » available on <http://www.climatesaverscomputing.org/french/learn/saving-energy-at-home>
- **EcolInfo**, work group in CNRS (the French National Center for Scientific Investigation)
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- **Energystar**, dvice for office equipment purchasing, energy calculator www.eu-energystar.org
- **MEEDDAT**, the French Ministry for Environment, Energy, Sustainable Development and Urban Planning
 - « Les écogestes au quotidien, je mêle travail et environnement » «Eco-friendly behavior every day, how to work and preserve the environment») available on www.ecologie.gouv.fr/Au-bureau.html
 - « La gestion du papier au bureau », («Paper management in office») available on www.ecologie.gouv.fr/IMG/pdf/Papier_bureau.pdf
- **REVIPAP**, a French group of paper manufacturers using recyclable papers www.revipap.com

ADEME : the French Agency for the Environment and Energy Management.

Alliance TICS : Federation of 2 French professional trade associations for the Industry of Information Technologies, Communication and Services (SFIB and GITEP)

APUR : Association of Recycled paper and cardboard Users and Manufacturers

CRT : Cathode Ray Tube

WEEE : Waste Electrical and Electronic Equipment

EPA : Environmental Protection Agency

EPEAT : Electronic Product Environmental Assessment Tool

Sigles

FSC : Forestry Stewardship Council

LCD : Liquid Cristal Display

MEEDDAT : the French Ministry for Environment, Energy, Sustainable Development and Urban Planning

PEFC : Program of the Endorsement of Forest Certification

EPR : Extended Producer Responsibility

REVIPAP : a French group of paper manufacturers using recyclable papers

TCO : Tjänstemännens Centralorganisation (the Swedish Confederation for Professional Employees)

ICT : Information and Communication Technology

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