Annual Report Mhat has Ecologic done 



# 1,126 members

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4th
year of 150 9001 and 150 14001 certification

239,249 tons placed on the market by our members

# Improving the Collection of Waste Electrical and Electronic Equipment



In 2011, the WEEE sector celebrated its fifth birthday. What conclusions do you draw from this first chapter?

It's all been very positive. Since the inauguration of the sector, we have focussed above all on improving collection rates. Today, more than 30% of equipment placed on the market by producers gets processed. It's a very good outcome and it underlines in particular the efficiency of our collection network as well as the commendable response of citizens as they've become aware of waste sorting practices. In the space of five years, Ecologic has managed to

mobilise all participants in the sector:

- consumers now know how to sort their waste
- local authorities are promoting waste sorting
- distributors are making waste collection easier
- producers are committed

#### Is it possible to collect even more WEEE?

It's both possible and necessary. In 2011, for example, we carried out tests in Ile-de-France with a view to installing collection points in the high-rise housing estates. Over the course of several months and thanks to the commitment of landlords, careta-

Over the course of several months and thanks to the commitment of landlords, caretakers and the good will of residents, we have seen very good results. »

with economic growth. Ecologic has a role to play in

this: our recycling rates are already high but must be im-

kers and the good will of residents, we have seen very good results. Here we have a new mechanism for improving collection and thus the overall WEEE recovery and recycling rates.

roving collection and thus the overall WEEE recovery proved and we need to take more interest in rare metals even if they only represent a small fraction of WEEE.

The sector retains the will to establish social in
And how do you intend to achieve this?

# The sector retains the will to establish social integration and re-utilisation amongst the primary treatment solutions. How does Ecologic sit with these requirements?

# In 2011, 19% of our waste was passed to organisations working within the social economy. A product destined for re-utilisation or dismantling will not be processed in the same way and this entails special precautions being taken in advance. We encourage users to only discard their items as a last resort and we take steps to raise the profile of the distribution channels for second-hand appliances.

And here the role of the waste holder is crucial because it is the waste holder that decides whether to give an appliance a second life or whether to just throw it away.

### Are there other areas of the sector where there is scope for improvement?

For me, the main area where there is room for improvement is in our approach to pushing forward the recycling of rare metals, which are found widely in WEEE. These materials play a strategic role in the goods we consume and in our economy in general - we can't afford to waste them. It is essential that we start decreasing the amount... of resources borrowed from the Earth, what I call the 'material decline', which isn't necessarily inconsistent

We are already getting very good results in terms of recovery of iron, aluminium and copper... Ecologic recycles more than 80% and recovers more than 85% from equipment processed. On the other hand, there is scope for improvement with regard to the precious metals such as palladium, neodymium, gallium, indium, etc. although because they are used so diffusely they are difficult to extract.

Ecologic is responsive to any initiatives in recycling these materials. Ecologic is also ready to work with producers of electrical equipment to promote eco-design.

Today, more than 30% of equipment placed on the market by producers, is processed. »

# Pollution Control

### WEEE

An item of electrical or electronic equipment (EEE) contains numerous components and materials. Once it arrives at end of life, certain materials such as lead, cadmium and mercury, if not treated and subject to pollution control in accordance with strict guidelines, represent a recognized hazard to the planet, to mankind and his environment.

With the other participants in the WEEE sector, Ecologic shares a central ambition: to ensure optimum, effective pollution control of all these materials, where they are sometimes present in waste electrical and electronic equipment (WEEE).

### **Promoting**

### re-use and re-utilisation

That an electrical appliance becomes obsolete for its user, does not necessarily mean that it is no longer useable.

From its very inception, Ecologic has entrusted organizations from the social economy with refurbishing, repairing and returning to the market any equipment that could be.

According to European Directive 2002/96CE, re-utilisation and re-use should be the first-line 'treatment' solutions, deployed before all other solutions.

The eco-organisation has also taken part in the 'Digital Solidarity' Project, which allows people in difficulty to access services and digital equipment.

### Recovery

### of raw materials

Above and beyond collection targets which call for citizen involvement, there is a crucial issue that cuts across the sector in terms of **recycling** and **recovery targets**.

Our planet's resources are limited and **Ecologic** is determined to play a role in conserving re-

serves by supporting initiatives that address this issue.

It's a matter of working hand-in-hand with treatment operators towards ever greater recovery rates and also of pressing industry to manufacture more responsibly.



- Around 17,200,000 inhabitants
   988 '1 for none' collegered by 996 waste disposal sites
   at partner distributors
  - 988 '1 for none' collection units

#### I for none

## A new generation of collection units in DIY stores

For three years now and in conjunction with its partner distributors, Ecologic has been developing a collection unit solution that will reach out directly to users at EEE purchase points. This mechanism has seen more widespread use in 2011 with newly-designed units, which are larger, more practical and more ergonomic.



100 new units were delivered to Brico Dépôt in 2011. They are made of strong chipboard and bear the colours of the brand, red and black. Coming soon: the 2nd generation of collection units at Weldom and new partnerships with Truffaut, Décathlon and Lidl.

Having deployed these units in Castorama, Weldom, Leroy Merlin and Brico Dépôt stores across France, Ecologic proposed that these long-term partners adapt the original unit into something that responded more precisely to their needs.

### Involving partners

As Ecologic's Distribution and Development Manager, Basilios Riniotis, puts it: "Ecologic aims to facilitate collection at distributor outlets whilst supporting distributors to develop a collection unit that is adapted to their environment.

We want our partners to be able to collect greater amounts and to understand the mechanism, adding their own visual identity and above all developing a WEEE collection device that is efficient, practical and represents the minimum burden for staff."

### Tailored support

Ecologic works hand in glove with the distributors concerned. "We're on hand to support them at every step, day after day." emphasizes Basilios Riniotis "That collection unit must remain their property."

In 2011, a new generation of multi-stream collection units was unveiled at Brico Dépôt, a prototype was created for Weldom and Leroy Merlin laid the foundations for its future collection unit.

### A collection unit 'fabriqué en France'

Another major plus for the Ecologic collection bin is that it's made in France. Since the creation of this 'in situ' take-back device, 988 units have been devised and manufactured in the workshops of an enterprise based in the l'Oise.

We have worked in close collaboration with Ecologic to create a new collection unit that is more hard-wearing and better adapted our needs (larger and formed around our image). Ecologic provided us with precious technical help as well as financial assistance for the manufacturing. Due to their responsiveness, our partnership is today as strong as ever.

#### Andréa Mantovani

Head of Sustainable Development at Brico Dépôt



988 collection units deployed in DIY retail outlets

20315 tons of small appliances recycled by Ecologic in 2011

Since the 2010 installation of the first Ecologic collection unit in Weldom, the in-store '1 for none' mechanism has very much proved its worth. But there's a new model on the scene and it's easier to use but also better adapted to the scale of our various stores. Thanks to Ecologic, we have created the mobile collection unit on wheels - very manoeuvrable and most importantly, able to handle multiple waste streams, truly simplifying the sorting process for our clients.

#### Frédéric Gueho

After-Sales Service Manager at Weldom



### Innovation

## « Triez facile! » : A free application that shows you where and how to sort



Sorting? Fine, but where and how? Where do I take this old washing machine; these used LED lamps; this waste wood; these hazardous products? The answers can now all be found in one new web and

iPhone app, developed by "Triez Facile". All too aware that today's recycling issues are resolved by pooling services and making them more accessible, Ecologic not only supported the project, we helped implement it.

Intelligent, intuitive and practical, the application covers all the existing waste streams, associated collection points, a global positioning system, practical advice, etc. It informs users of the collection points managed by enterprises from the social economy as a means of supporting and promoting re-use and re-utilisation of waste. Ecologic was the first take-back system in the WEEE sector to participate in this national project.

### Voluntary drop-off points at Science Po Paris

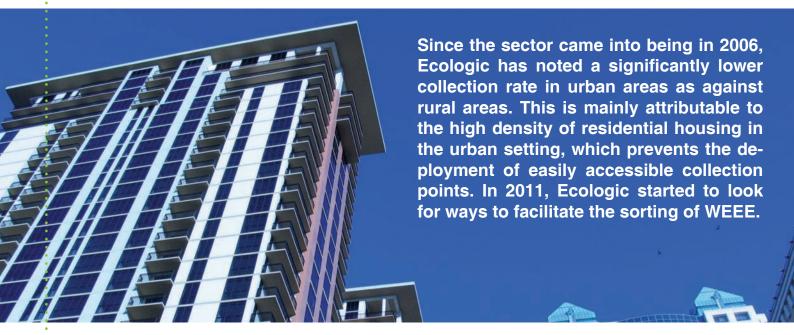
In 2011, the association Science Po Environnement and Ecologic worked together for the first time on an operation to raise awareness around the treatment of waste.

A temporary collection point was installed at the start of rue Saint-Guillaume in Paris for the duration of the sustainable development week.

The students didn't stop at merely bringing their obsolete printers or their old phones, they also reflected on the global, geo-political implications of re-cycling and diminishing natural resources.

### Voluntary drop-off points

# When high-rise housing takes up WEEE waste sorting, it really works!



Whereas the need for drop-off points is much greater in the urban setting, there is actually less space for waste disposal sites and fewer storage areas for used WEEE.

So Ecologic came up with a solution that makes waste sorting easier in high-rise housing. We devised an operational tool, a working methodology, training modules and communication tools to enable high-rise block landlords and caretakers to implement this new waste sorting solution.

### Case by case

For each high-rise complex, Ecologic contacts the relevant parties, presents the project to them, then collaborates to find a suitable location and ascertain the necessary improvements to access.

"It's something that we look at on a case-by-case basis" says Christine Renaud, Ecologic's Regional Operations Manager in Île-de-France "because each block of flats has its own specificities — we need an on-site intermediary that is efficient, mobile and available (more often than not, this is the caretaker). To do this, we need to get to know them and train them up."

### Collection rates as high as rural areas

For landlords, the project is of immediate interest as they will be offering their occupants a WEEE management service that complies with regulation, reduces the costs associated with managing bulky items of waste and that will liberate already cluttered storage areas. Not only has this initiative been broadly welcomed, it has already proved fruitful with certain complexes recording 6 to 7kg of WEEE per inhabitant at year end.

In several months, we have been able to prove that it is possible to improve waste sorting in high-rise housing. It's simply a question of mobilizing key players and the inhabitants. Inaugurated in Ile-de-France, in 2012 this initiative will be deployed across other regions covered by Ecologic.

Christine Renaud Regional Operations Manager at Ecologic

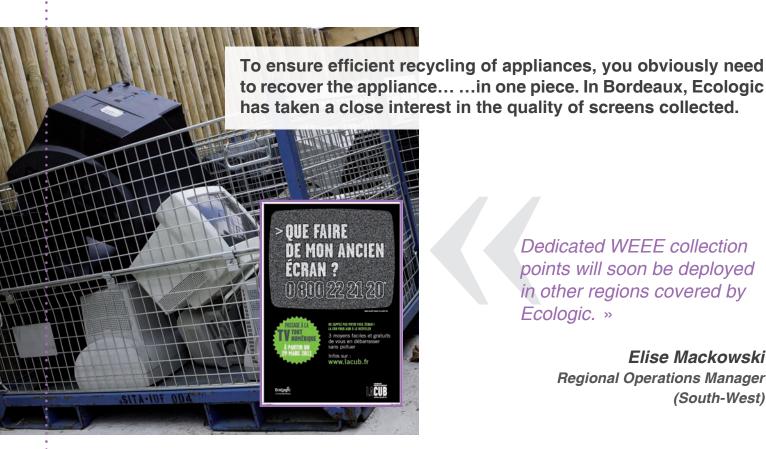


• 72,100 tons of WEEE collected

• 1 new category of equipment collected

• the 1st tour of the 'DEEEglingués'

### Restructuring collection to optimise recovery



Dedicated WEEE collection points will soon be deployed in other regions covered by Ecologic. »

> Elise Mackowski Regional Operations Manager (South-West)

In amongst the debris and often looted to obtain the copper coil to the rear of the cathode ray tube, screens all too often arrive at the treatment and pollution control operators in an advanced state of deterioration. In conjunction with the social enterprise operator, Envie2E and the Urban Community of Bordeaux, Ecologic has assembled a steering committee with the aim of better protecting this equipment. The partners agreed in the first instance that operators would come and remove screens from waste disposal sites twice a week (Wednesdays and Saturdays) instead of once every two or three weeks.

### **Dedicated collection points**

A second phase saw the establishment of dedicated collection points for screens so that storage only ever takes place at secure sites (directly to Envie 2E, at the consolidation centre and at two professional waste disposal sites). To disseminate information on the treatment of used screens, the Urban Community of Bordeaux took advantage of the transition to a fully digital environment and "once again, this method of communication worked really well."

"The message clearly hit home with the residents" reports Elise Mackowski, Regional Operations Manager (South-West). "Posters, radio and local TV advertisements meant that the information was widely conveyed and everyone complied with the new structure and rules." "Today", confirms Elise Mackowski, "every screen we collect is in excellent condition, giving us a distinctly improved recovery rate. We rose to the challenge and it paid off."

### More communication methods for communities



Directly involved in collection, local authorities have a constant need to communicate with their inhabitants to raise awareness of good sorting practices. To assist them, Ecologic has made numerous improvements to its communication toolkit for local authorities with new training modules for staff at waste disposal sites, a 'ready-to-use' Expo kit, new signage, leaflets and a teaching kit (with new materials, containers with fractions of material, etc.)

### Air conditioning comes on board

For several years, Ecologic has worked with manufacturers and distributor partners to develop recycling for air-conditioning units, where the potential for material recovery is particularly good.

In 2011, Ecologic asked manufacturers of air conditioning systems to contribute to the development of a new collection network using distributors and installers. This additional network allows manufacturers to actively participate in developments in WEEE collection for the products they are involved in.

For Ecologic, air conditioning amounted to 3,174 tons of material placed on the market in 2011.»



#### • The Ecologic Weeebzine

A quarterly magazine with topical information on the sector and its partners

#### • Le compte twitter d'Ecologic

A media that broadens the Ecologic WEEE community, with new followers including recognised experts, key figures in the sector, universities, etc.

#### New: DEEENews

With a readership of 4,500 this is a new mechanism that provides a link to news published on the website at www.ecologic-france.fr

#### • The Ecologic Recycling Tour de France



### National campaign

# Local authorities engage the general public with the DEEEglingués

The four WEEE take-back systems in the sector -Ecologic, Eco-Sytèmes, ERP et Recylum - joined up to make the public aware of the problems around WEEE collection and pollution control. They came up with the DEEEglingués. This key communication campaign is aimed at local authorities who wish to ingrain responsible practices in the minds of their population. "We have conceived of the DEEEglingués in the same way as you might conceive of a village fête, warm and welcoming" explains Valérie Henriet, Communications Officer at Ecologic. "Our ambition was to bring together all the stakeholders in the sector: consumers of course but also distributors, social enterprises and local authorities. It's the first time that an event on this scale has linked up so many key players. The DEEEglingués marks a real turning point in communi-

cation campaigns for the sector."

Thanks to the simplicity of its deployment and a spirit of festivity and originality, the DEEEglingués tour has been welcomed enthusiastically by local authorities.

It was rolled out to village squares, waste disposal sites and schools as well as distributors and social enterprises on 21st and 28th May 2011.

The DEEEglingués has given us the ability to speak to the general public on a serious matter in a playful and de-mystifying way. »

Valérie HENRIET Communications Officer at Ecologic



- 104 towns
- 18 regions
- 197 shops
- 254 waste disposal sites
- 22 social enterprises

have joined the movement, not to mention activities in towns, schools, markets...

and Masterias established 

### **Operators**

### Permanent ongoing support and constant monitoring



Each year, Ecologic carries out a whole series of tests, audits and assessments. which enable us to control the quality of operator's service offering, check on the accuracy of their declarations and monitor each step in the treatment process. In 2011, Ecologic carried out nearly 100 audits of its partners to ensure operations run smoothly. The outcomes are presented regularly to operators, which provides a good opportunity to both discuss with the teams the scope for improvement and to share positive results.

#### Technical audits

In 2011, Ecologic made 14 sampling audits with the aim of checking the composition of each waste stream (CFA, LDA, screens and SMW) according to the ten categories of equipment. In the same year, Ecologic carried out 59 characterization audits to monitor quality and measure performance in terms of pollution control as well as recovery, recycling and disposal rates for each waste stream.

In this way, Ecologic was able to compare results obtained with target objectives and to support operators in a programme of continuous improvement.

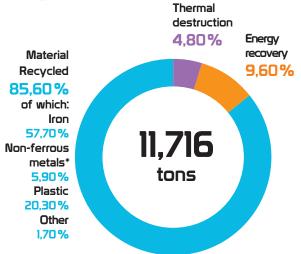
### **Treatment Outcomes**

### Recovery by waste stream

More than 85% of material recovered.»

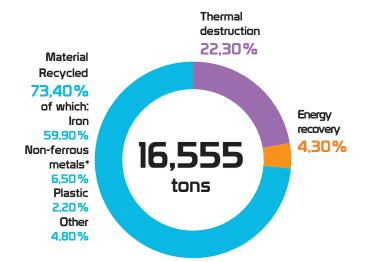


### Cooling & Freezing Appliances (CFA)



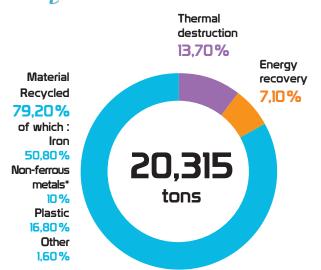
\*Non-ferrous metals (estimated): Copper: 1,90 % - Other (aluminium, stainless steel): 4,00%

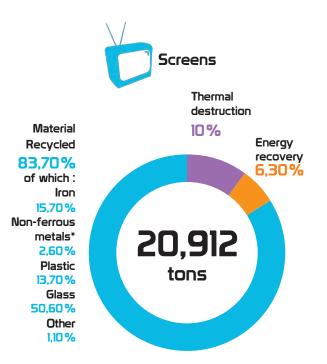
### Large Domestic Appliances (LDA)



\*Non-ferrous metals (estimated): Copper: 1 % - Other (aluminium, stainless steel): 5.4 %

### Small mixed WEEE (SMW)





### The second life of a refrigerator

Refrigerators belong to the category 'CFA'. Their design involves the use of numerous components and gases with the potential to have a significant 'greenhouse effect'.

### Dismantling ('Phase 1' pollution control)

- Removal of waste (food etc.) and mobile elements (bins, shelves)
- Removal of power cable
- Removal of glass fibre doors (interior finishing in blue)
- Extraction of gases and oils from the cooling circuit by suction
- Separation of gases and oils

### Shredding ('Phase 2' pollution control)

- Shredding takes place in a neutral vacuum (added nitrogen) to offset the risk of explosion, notably from appliances containing pentane
- Separation of gases used as expanding agents in the insulation foams (polyurethane)
- Separation of materials present in fine particles: scrap iron (sorted by magnetic separation), plastics (sorted by flotation), copper and aluminium (eddy current), foam

### Recovery (A second life for materials)

- Recovery of oils and gases destined for re-use CFCs are destroyed by incineration
- Recovery of materials from dismantling and pollution control processes (secondary raw materials): ferrous or non-ferrous metals, plastics and again, insulation foam

The pollutants present in a refrigerator are the gas coolant located in the cooling circuit and the expanded foam which serves as insulation. Since 1st January 2000, chlorofluorocarbons are prohibited in the manufacture of refrigeration devices. In 2002, European directive 2002/96/CE on selective management of WEEE makes their recovery and destruction mandatory. Treatment and pollution control is carried out by specialist operators. Ecologic monitors these operations and maintains strict monitoring.

### Guidance and Regulatory Monitoring

### A special relationship with producers



Ecologic ensures collection, processing, pollution control and recovery or re-use of WEEE on behalf more than 1100 producers. "We help producers with making their declarations" advises Angelina Honoré, Commercial and Administrative Assistant, "right through the year, responding to questions, monitoring regulatory obligations so that they are kept informed of developments in the sector, putting in support from day one."

### The extranet, constantly undergoing improvement

In 2011, the Extranet via which producers record their half-year performance figures has been enhanced so as to simplify the declaration process.



### 1126

EEE producers signed up to Ecologic

### 177.000.000

items of equipment placed on the market

We are particularly mindful of those who are starting out in the EEE business. They need an attentive service with very clear information and advice. That's what we're there for -support on day-to-day basis, a true partnership.»

> Angélina Honoré Commercial and Administrative Assistant

"As of today," adds Angelina, "the tool is very well used by our membership. The interface is even more intuitive and user-friendly, facilitating the whole process although we remain entirely at members' disposal to give guidance where needed. Ongoing communication with member producers remains very important. They have entrusted us with a major responsibility so it's only to be expected that our relationship should be based on trust and responsiveness. And as experts in the field, that's exactly what we offer them."

### And also...

- Infologic Since 2010, a letter on regulatory monitoring has been sent to all members. It provides all necessary information on the WEEE sector, particularly where there is a direct impact on EEE producers.
- A new guide to making declarations in 2011, a new guide was sent to members to assist with making half-yearly declarations of product placed on the market and giving guidance about the Ecologic extranet.

### Innovation



### A charter of guidelines developed with operators

In 2011, Ecologic and the three other WEEE take-back systems participated in the creation of guidelines with operators that would provide a framework for relations between the organisations. Amongst other things, this document established an operational steering committee bringing together operators and take-back systems on an equal footing to discuss potential improvements to the sector.

This project evolved within the broader approach to harmonising waste management practices and is supported by CHMF (Commission for cross-sector harmonisation and mediation)

### The bonus-penalty system extended

Since the introduction of an adjusted tariff for eco-contributions in July 2010, take-back systems have applied a lower tariff to eco-designed products. This new measure takes into account efforts by producers in the area of eco-design and affords value to those who have taken progressive steps in this area. The application of this bonus-penalty system was extended to new categories of equipment in 2011, notably to mobile phones which had been excluded from the adjusted tariff. At Ecologic, 70% of products respect eco-design criteria.

### A producer's guide to eco-design

Since its founding, Ecologic has encouraged manufacturers to reduce the environmental impact of their appliances at end-of-life. To this end, Ecologic encourages design that allows for the elimination of pollutants and which allows for easier separation of recyclable materials.

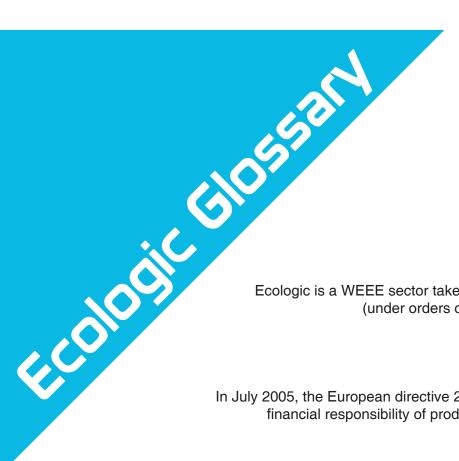
Under the auspices of work by OCAD3E, 2011 saw Ecologic take part in the drafting of a guide to eco-design for producers.

Taking its cue from activities at end-of-life, this guide provides concrete initiatives that can be taken to reduce the environmental impact of WEEE.



- New visits to treatment sites allowing producers the opportunity to better address the issues and problematics of the recycling and recovery landscape.
- Support for member producers regarding EPEAT\* labelling for product recovery.

\*EPEAT is a tool which allows companies to evaluate and compare IT equipment according to ecological characteristics.



### **Approval**

Ecologic is a WEEE sector take-back system approved by the authorities (under orders of 9 August 2006 and 23 December 2009)

### **Directive**

In July 2005, the European directive 2002/96/CE, which posited the principle of financial responsibility of producers, was transposed under French law.

### **Eco-contribution**

The amount of an eco-contribution corresponds to the operating costs of selective collection, removal, pollution control and recovery of WEEE.

It varies according to take-back system and product category.

### Eco-adjustment

Since July 2010, a new scale of tariffs was introduced for appliances that had been 'eco-designed'. These appliances have built in the criteria for eco-design and are eligible for a system of bonuses.

#### Waste stream

The WEEE sector makes a distinction between four waste streams: screens, refrigerators, large domestic appliances (excl. fridges) and small mixed WEEE (SMW) each of which are subject to different treatment methods.

#### Sector

The WEEE (Waste Electrical and Electronical Equipment) sector has been operational since the end of 2006. It revolves around 4 government-approved take-back systems that are responsible for the collection and treatment of WEEE: Ecologic, Eco-systèmes, ERP et Récylum (lamps).

### ISO 9001 et 14001

Ecologic is the first take-back system of the WEEE sector to obtain ISO 9001 and ISO 14001 certification.

#### **EPR**

Since 13 August 2005, producers have been obliged to take responsibility for the organization and financing of the collection and treatment of their appliances as they reach end-of-life. This is known as Extended Producer Responsibility.

### SAS

Ecologic was founded in December 2005 on the initiative of thirty EEE producers, with the status of SAS, a 'simplified joint stock company'. The shareholders are Aisin, Brother, Daewoo, Epson, Ficime Conseil, Fujifilm, Kodak, Lexmark, Peekton, Pioneer, Sagem and Sharp.

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