

SUceeding TOGETHER

2023
ANNUAL REPORT



INTERACTIVITY



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2023 **ANNUAL REPORT**

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EDITORIAL



The actions undertaken during 2023, which concerned all of our activities, are set to enable ecosystem to better its performances in order to meet national and European regulatory objectives, whilst continuing to serve its purpose as a mission-led company. We are fully aligned with national and European projects relating to the climate and the circular economy; more particularly, continuing to reduce electrical and electronic equipment waste by supporting repair and reuse initiatives, reducing greenhouse gases and other pollutant emissions thanks to treatment and environmental remediation techniques and preserving resources thanks to material recycling.

Initiated in 2022, increased efforts to extend the service life durations of equipment took a major turn in 2023 thanks to the optimisation of the actions put in place, making them both easier to apply and more effective. With the introduction of the Repair Bonus in December 2022, the Repair Incentive Scheme experienced its first full year of existence in 2023. And it's been a success, given that it meets the high expectations of the general public in terms of purchasing power and ecology.

Our links with the social and solidarity economy continue to grow, enabling solid bridges to be built linking ecology and solidarity. In 2023, the results of the Reuse-Upcycling Fund, which namely relies on equipment donations, are positive, with almost 300 social and solidarity economy structures having benefited from this scheme.

The year has also been marked by strategic partnerships with the demolition and building renovations industry and namely with the new PMCB sector (Products and Materials from Construction and Building). These partnerships are paving the way towards a brighter future that ecosystem will continue to develop over the next few years namely as regards professional electrical and electronic equipment waste collection.

Our year was however marked by a sad event, the death of our Chairman Alain Grimm-Hecker, who co-founded ecosystem in 2005, laying the foundations for the organisation in place today. Over recent years he worked towards ensuring that ecosystem became a mission-led company, in order to lastingly engrave our environmental and societal ambitions in our statutes, an objective which was achieved in 2021. We address our sincerest thanks to him for the strong values that he successfully transformed into actions.

NATHALIE YSERD
GENERAL MANAGER



TRIBUTE

Founder and Chairman of ecosystem since its creation, expert in the household electrical appliances sector in which he began his career and which he never left, Alain Grimm-Hecker died at the beginning of 2024 at the age of 75.

After occupying marketing and sales roles with Philips, he joined Whirlpool as General Manager before becoming Chairman and then European Vice Chairman for Business and Marketing. After moving to Moulinex in 1996, he became Assistant General Manager for Operations with SEB Group in 2001 before being entrusted with managing Global Retail for the group. In parallel, Alain Grimm-Hecker fully supported collective structures within Gifam – the professional household electrical appliances organisation – of which he was Chairman on three occasions between 1994 and 2008.

In 2005, with thirty three years of experience in the household electrical appliances sector under his belt, and thanks to the trust-based relations that he was able to create with the sector as a whole, he founded

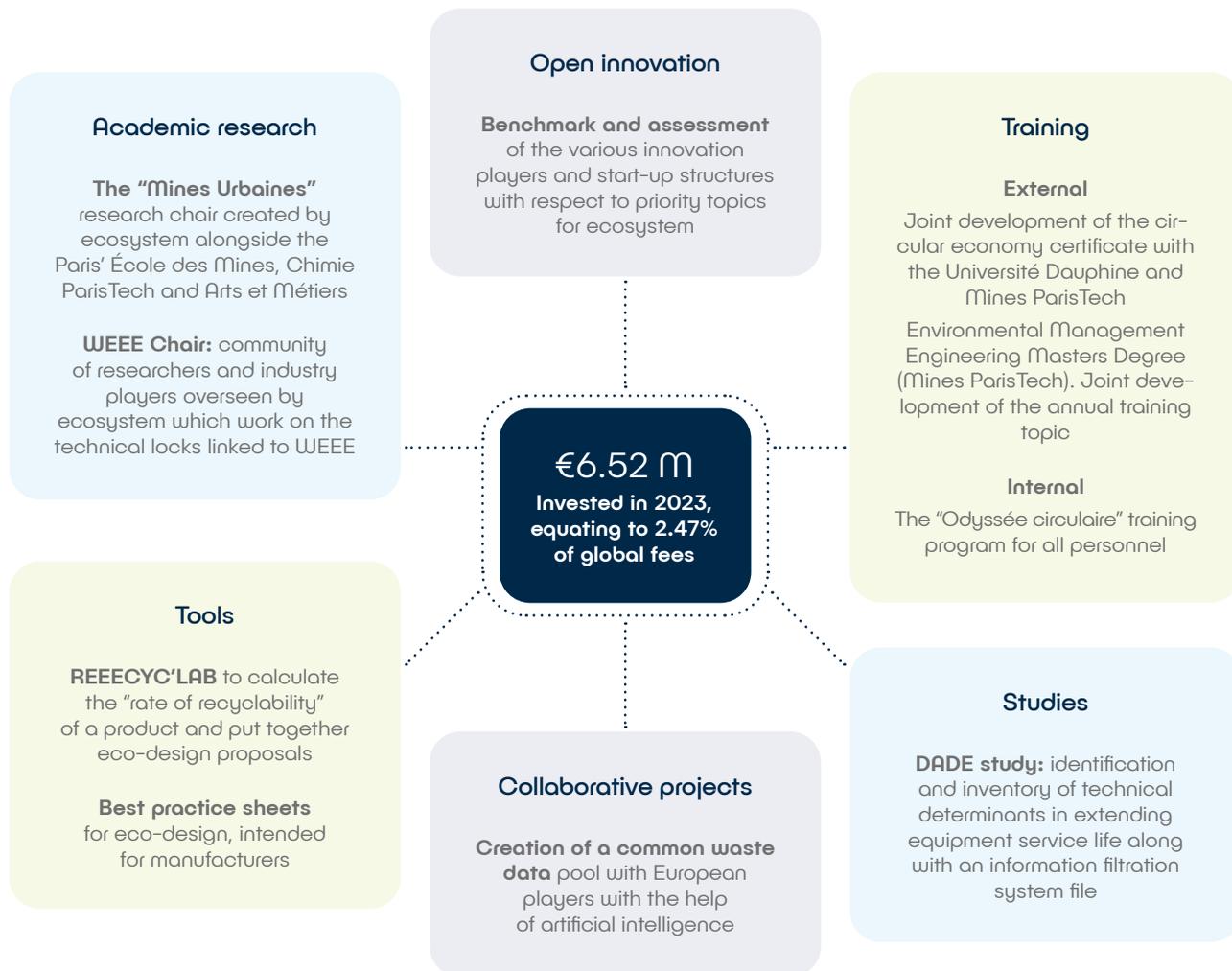
Eco-systèmes, laying the first stones for a producer responsibility organisation which quickly became the electrical and electronic equipment waste management leader in France and in Europe. And from the outset, he fought to fully integrate the social and solidarity economy within the sector.

In 2012 he contributed towards expanding the company's scope of intervention and responsibility by including professional equipment. Then, in 2017, he embarked on the merger of Eco-Systèmes and Recyclum, a producer responsibility organisation namely responsible for recycling lamps. The new company went on to become ecosystem.

A man of conviction, his objective was to build a producer responsibility organisation model of great environmental, economic and social value by developing a high quality sector. It was for this reason that over recent years he worked towards ensuring that ecosystem donned the quality of a mission-led company. And for the benefit of the common good, we will strive to continue his action.

RESEARCH AND INNOVATION TO FURTHER OUR PROGRESS

Research, innovation and the development of tools and solutions to ensure the progression of collective performances are the focus of dedicated governance and action plans within ecosystem. they respond to missions to preserve resources, protect the environment and public health, extend equipment durability thanks to repairs and reuse, whilst involving all of our teams and accompanying the experts of tomorrow.



XAVIER LANTOINETTE
ENVIRONMENTAL PERFORMANCE,
PROJECTS AND QUALITY DIRECTOR

● Focus

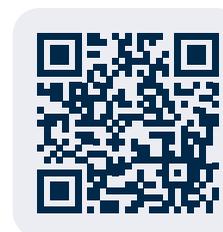
In 2023, we set up an Innovation Committee which brings together all of ecosystem's management departments in order to speed up momentum and cooperation as regards the circular economy and further the acculturation of teams. With this in mind, we created the "Odyssée circulaire" training program, which is mandatory for all members of personnel. In addition, the Innovation Committee meets up on a regular basis to reflect on circular economy innovations in sectors other than that of ecosystem. We have also put in place a framework for an open innovation program and a road map for a future call for projects. In effect, we are convinced that innovation is key in order to enable us to accompany players from the sector with respect to the challenges of the circular economy and carbon reduction objectives.



THE "MINES URBAINES" RESEARCH CHAIR IS CELEBRATING ITS TENTH BIRTHDAY

Whilst preparing a new cycle of research, in 2023 the "Mines Urbaines" Research Chair created by ecosystem and Mines ParisTech registered positive results for its 2nd season which began in 2019. Its objective is to produce research works corresponding to ecosystem's commitments, namely via theses by researchers from Mines ParisTech.

Since the creation of the Chair, six patents have been filed, four of which concern tantalum extraction while another concerns antimony, both of which are critical metals. These patents are currently being used by French industry players to create an innovative technological building block with the objective of successfully recycling the tantalum and antimony contained in electrical and electronic equipment. A new 5 year research cycle is being launched by the Chair in 2024 with the hope of making use of innovation to improve the performances of the WEEE sector.



FIND OUT MORE

THE "MINES URBAINES": SEASON 2 IN FIGURES



- 7 theses
- 55 publications
- 3 patents filed
- 8 Post-doctoral researchers
- 10 work placement students welcomed within ecosystem

01 recycling

TO PROTECT RESOURCES



Fighting to preserve fossil and mineral resources, whilst developing collection and contributing towards the development of new industrial processes to produce high quality recycled materials, in keeping with the requirements of a new manufacturing process.

WEEE collection is gaining ground

Within a lacklustre economic context, collection is increasing in the 4 sectors operated by ecosystem. this progression is the result of extensive and combined actions, resulting in the strong implication of all of the players in the chain. with respect to household weee, the most significant progress concerns the small electrical appliances flow, which registers growth of 9%.

As for professional weee collection, its progression can be attributed to the good performances of waste managers (shredders, collectors, etc.) who in 2023, collected 18 000 tonnes more weee than in 2022. At the level of lamps, it's retailers who have made the most progress.



SÉBASTIEN PARTIDA,
ASSISTANT DEVELOPMENT
MANAGER

● focus

In 2022, we observed a certain decline in quantitative collection performances in both the household and professional sectors. The progress noted in 2023 is the result of major efforts on the part of ecosystem as a whole, at every level. In effect, achieving this progression in tonnages within such a complex context requires winning initiatives and constant rigour. This progression has also benefitted reuse and repairs, further motivating us to increase collection and encourage longer service life durations for equipment, whilst continuing to convey our philosophy as a mission-led company.

2023 figures ●



TONNES COLLECTED IN 2023 PER SECTOR

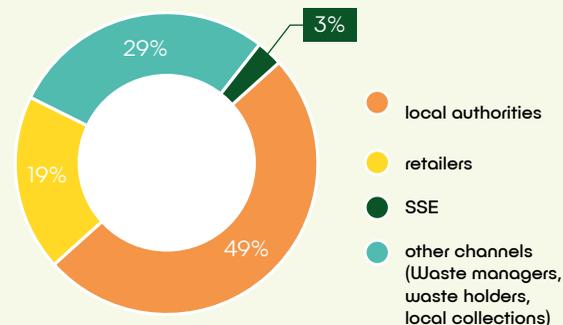
	2022	2023	progression %	Units collected in 2023
Household WEEE DEEE	625 563	641 030	+2.5%	137 702 670
Professional WEEE	66 854	88 992	+33.1%	-
Lamps	4 608	5 321	+15.5%	54 046 188
Small fire extinguishers	388	459	+18.3%	197 822

RATE OF COLLECTION

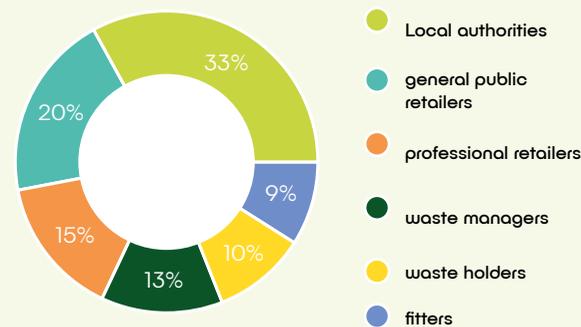
	Rate of collection 2023	Regulatory objective
Household WEEE DEEE	47.4%	65%
Professional WEEE	42.0%	65%
Lamps	88.9%	85%
Small fire extinguishers	26.4%	19%

TONNES COLLECTED PER CHANNEL

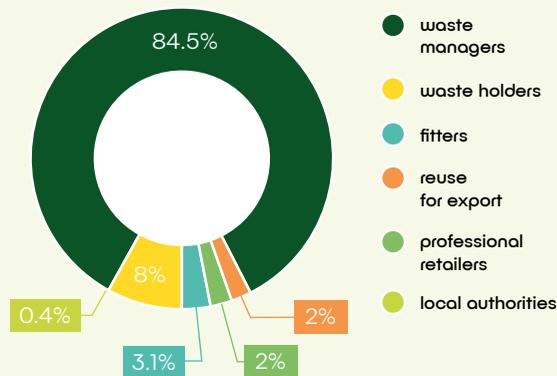
DEEE MÉNAGERS



LAMPES



PROFESSIONAL WEEE



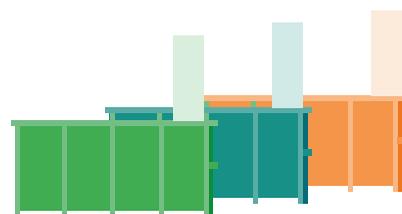
The conquest for small appliances

There are currently between 100 000 and 120 000 tonnes of SHA (small household appliances) in domestic waste (study 2021). ecosystem is putting in place innovative solutions to help citizens to avoid sorting errors and to adopt best practices to ensure that this waste integrates the WEEE treatment outlet. The "jedonnemonelectromenager.fr" solution, or collection services targeting building caretakers, are contributing towards improving results in this domain.

New initiatives, such as the introduction of facilitated collection so that people can post their electrical appliances towards dedicated treatment facilities, via parcels with pre-paid postage, are helping to increase overall momentum and raise awareness (local authorities, retailers, residents) as well as facilitating donations to social and solidarity economy players.

Better identified reuse zones at waste centers

Reuse zones are being set up in certain waste centres to enable inhabitants to drop off their equipment with a view to donating it. These appliances are then collected by referenced SSE representatives which benefit from financial support via the Reuse Fund.

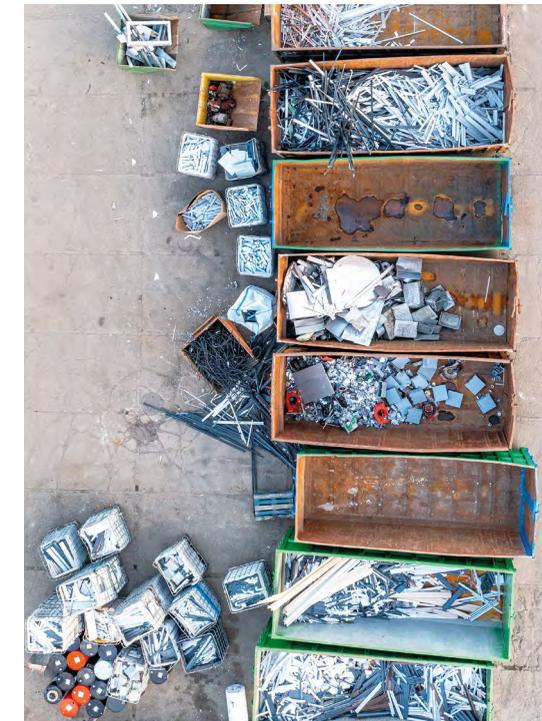


THE BOOST PLAN: FIGHTING AGAINST THEFT!

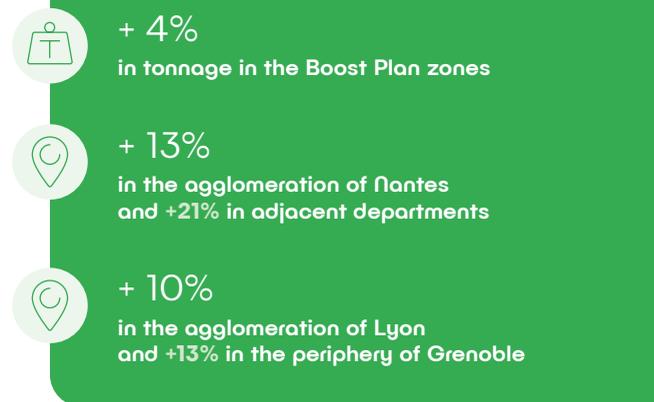
Launched in 2022 to boost collection and secure feedstocks in four departments and at 84 test waste centre in 2023 the Boost Plan was deployed at almost 300 waste centres in France where theft is rife.

The Boost plan is based on new service providers who, using light vehicles and with a two-man team, collect between 15 and 20 appliances per collection run, within a restricted perimeter and over a short period of time (from 4 pm to 9pm). As a consequence, the appliances dropped off by the general public at waste centers sites are collected on the same day, before waste centers close, to prevent their theft.

This plan has permitted a +4% increase in the tonnages collected, confirming its usefulness in the fight against theft and vandalism. In addition, this specific organisation has had a positive effect on our traditional so called "standard" logistics, resulting in a growth in collection.



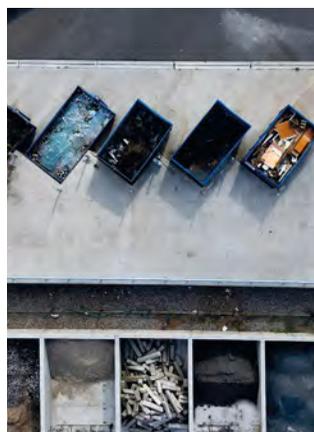
2023 figures



Feedback is being compiled in order to perpetuate this service and integrate it into our standard logistics within the context of ecosystem's future invitations to tender.

In addition, a reinforced video surveillance program, with a call for expressions of interest, was launched in 2023, in order that producer responsibility organisations finance approximately 70% of the costs of video surveillance systems on waste centers (within an upper limit of €3500).

Lastly, to encourage local authorities to file complaints in the event of theft and to accompany them in this procedure, a legal awareness raising initiative was launched in 2023, backed by specialist environmental law legal advisors and by the WEEE industry's coordinator body, the OCAD3E. An increase in complaints and legal hearings was observed in 2023, with dissuasive sentences (prison and suspended sentences, deportation, confiscation of vehicles used during thefts) which increasingly take account of the environmental and society-related damages linked to widespread thefts of electrical equipment, as well as their negative effects on property and persons.



jedonnemonelectromenager.fr is booming!

2023 was a record year for jedonnemonelectromenager.fr, with a total of 24 434 collection services carried out for 34 695 appliances collected! The success of this free home collection service has been made possible thanks to partnerships put in place with 11 local authorities.

This service was first introduced in June 2023 in Paris, then in France's PACA region, in Nice and in Cannes, from September 2023. Local authorities also promoted this innovative collection service via a multitude of communication channels, increasing its visibility and capturing the interest of the general public. Posters in stations, tramways, on the underground, in the press, on the radio...ecosystem and partner local authorities joined forces to target the areas concerned and promote the service among local residents. For 2024 the objective is to take this initiative even further, and the growth registered during the first quarter has served to confirm this ambition.



AURIANE SZUCS,
COLLECTION SOLUTIONS
DEVELOPMENT MANAGER

● focus

The household appliances donated to us by consumers are carefully collected in order to provide high quality flows to our partner SSE structures and enable equipment to be reused. Our platforms in Carros (06) and Bercy (75) make an initial assessment before directing appliances towards Emmaüs or Envie. Appliances are sent according to the storage capacity and location of the structure. For smaller structures with a low storage capacity but which are close to our assessment platforms, deliveries take place several times per week. For structures which are further away, appliances are sent on a less regular basis but these structures benefit from higher storage capacities.

2023 results ●

11
partner local
authorities

24 434
collection
runs made

34 695
appliances
collected

France's Overseas Departments, DROM-COM, territories which are rapidly evolving

The DROM-COM constitute a major stake in terms of accelerating collection and recycling performances. In 2023, ecosystem drafted specific waste prevention and management plans for all of the local authorities overseas given that the public authorities are requesting extensive efforts with respect to waste management in these territories: Higher collection tonnages, management of uncontrolled landfills, incentives to put in place offers concerning second hand appliances via repair outlet labelling and reuse player referencing and lastly, the involvement of mass retail in organising in store collection services.

The road map compiled by our local teams was endorsed by the public authorities at the end of 2023. The uniqueness of the six territories comprising the DROM-COM means that ecosystem teams need to define action plans which take account of the particularities of every territory, whilst federating local networks and reinforcing professional management. The challenge is all the more complex in that the DROM-COM suffer from demographic and tourist-related pressure as well as sizeable land constraints. A limited road network as well as exposure to natural risks makes dropping off equipment and its subsequent collection by operators extremely complex.

GETTING ORGANISED AND RAISING AWARENESS TO ENSURE SUCCESS

To successfully negotiate these challenges, our dedicated team in mainland France has been boosted and its interactions with contacts in overseas territories have been intensified in order to share experiences and improve relations with retailers and local authorities. The challenge is namely to convince retailers to accept equipment being dropped off on their premises, even if they don't sell it on. A "collection point" logo is obligatorily displayed for this purpose at the store entrance.

Raising awareness among local residents also has a major role to play in achieving objectives. They have to be persuaded to drop off their equipment at dedicated collection points as opposed to just getting rid of it at "uncontrolled landfills". Consequently, ecosystem is proposing awareness-raising campaigns targeting populations in order to instil best practices. The company is also technically and financially accompanying the eradication of uncontrolled landfills and developing collection among professionals (air-conditioning and other equipment) via contracts with waste management operatives present in these territories. ecosystem is also encouraging repair professionals to obtain the QualiRépar label in order to be able to propose the Repair Bonus to consumers and contribute towards extending appliance service life. Lastly, in addition to repairs, ecosystem references local SSE players in order to encourage electrical equipment reuse.



FILOMENA MILANO,
NATIONAL MANAGER IN CHARGE
OF WASTE MANAGER DEVELOPMENT

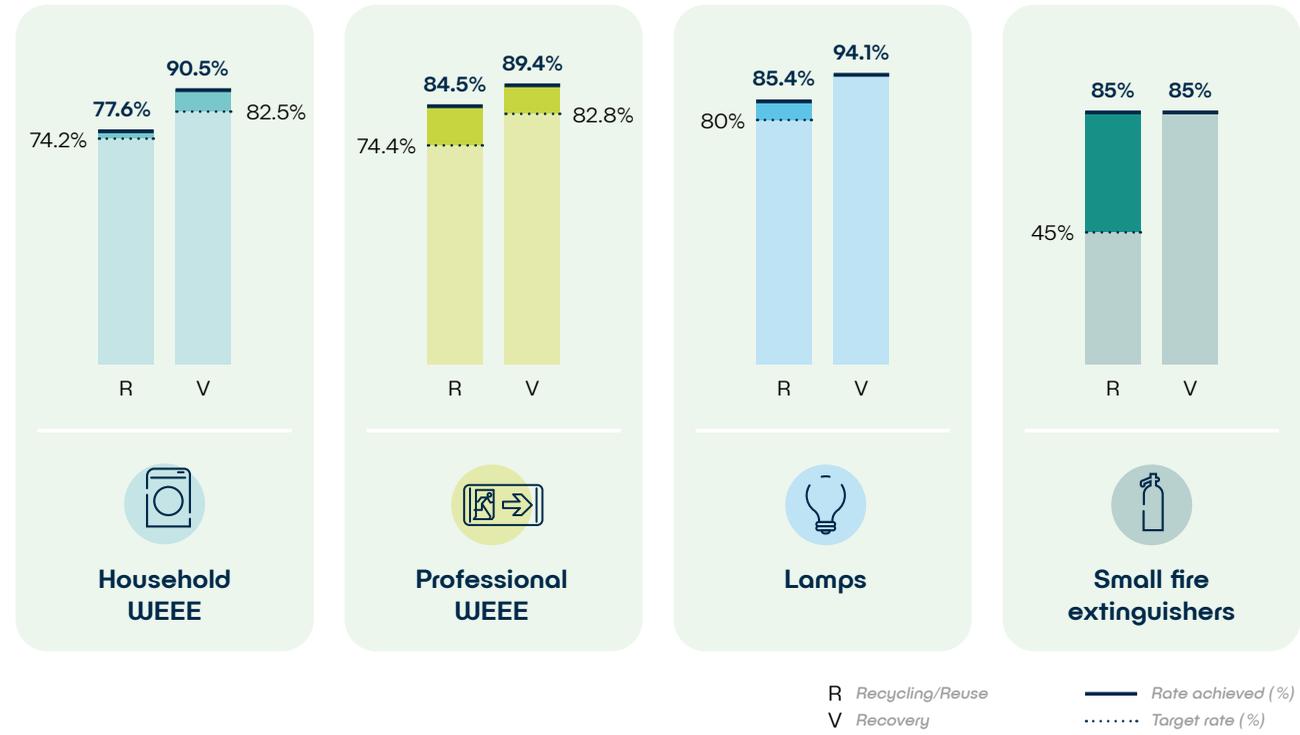
● focus

It's near impossible to succeed alone. We therefore have to conduct joint and cooperative efforts with other producer responsibility organisations present in the DROM-COM. To date, we have built a solid operational framework to successfully put in place prevention plans. I'm convinced that during the next two years this positive seedbed will bear fruit. In 2024 our teams, our logistical network and our treatment facilities are committed to specific and collective actions with a view to speeding up this favourable momentum!

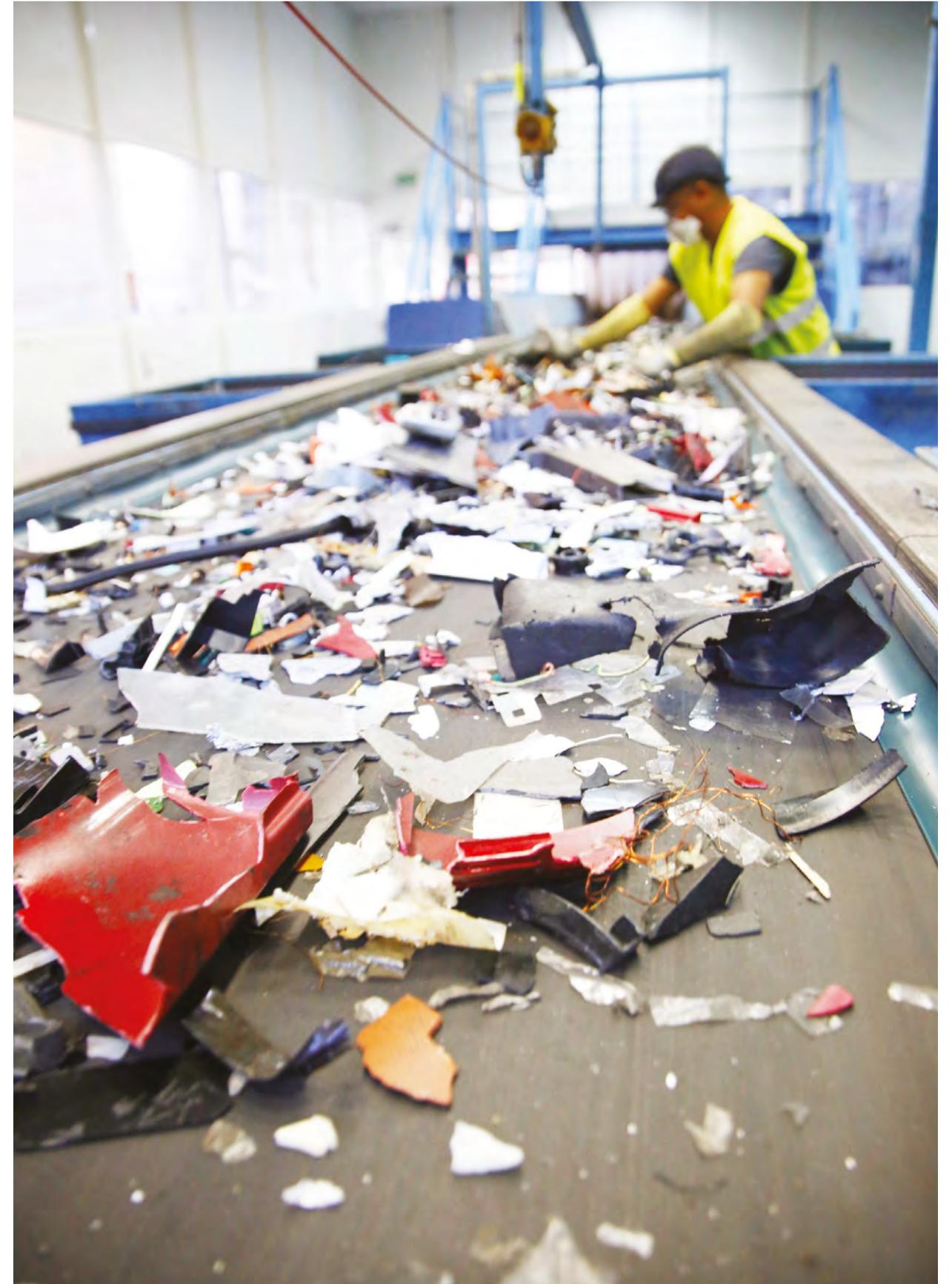
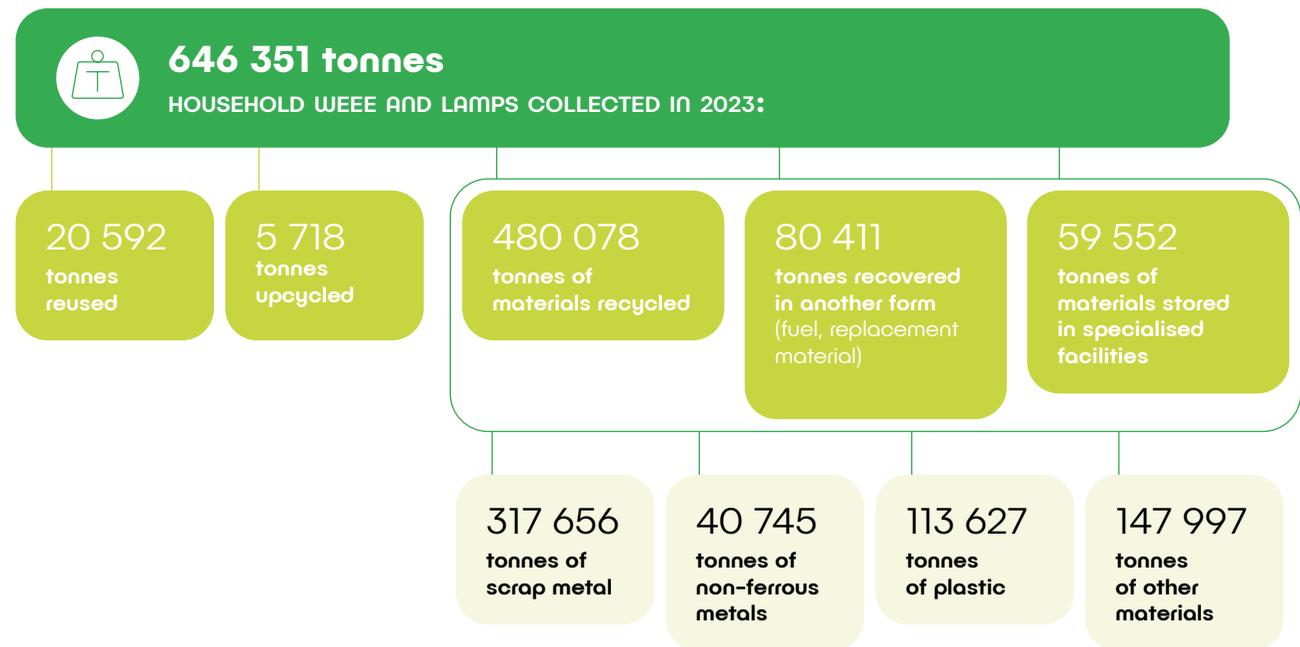


2023 overview of recycling and recovery

RATE OF RECYCLING / REUSE AND RECOVERY IN 2023



2023 MATERIAL ASSESSMENT



02 rising

TO CHALLENGES
TO BETTER PROTECT PUBLIC HEALTH
AND THE ENVIRONMENT



Protecting public health and the environment by eliminating pollutant or hazardous substances and reducing the environmental footprint of our operational activities.

Extracting hazardous or regulated substances

One of the key reasons for the existence of our sector is to protect public health. ecosystem's objective is to extract and then neutralize the hazardous substances contained in the appliances collected, an activity which has required the creation and development of specialised treatment sites in France. In 2023, ecosystem collected 735 343 tonnes of Lamps, Household and Professional WEEE in France. 62 521 tonnes of hazardous or regulated substances were extracted.

QUANTITIES OF HAZARDOUS SUBSTANCES EXTRACTED IN 2023



DECONTAMINATING LCD SCREENS

Plasma panels contain elements such as calcium, sodium, barium and strontium which can cause skin irritations and potentially damage the eyes. These elements can also be corrosive. In addition, like older generation LCD screens, plasma screens are backlit using lamps containing mercury. Mercury can be extremely harmful to the body, namely at the level of the nervous system and kidneys. It also interferes with reproduction and development.

environmental assessment
● 2023

In 2023, the collection, decontamination and recycling of Household WEEE and Lamps enabled us to fight against:



GLOBAL WARMING



498 075 tonnes of CO₂ emissions avoided, equating to the equivalent of 4 487 165 829 km travelled by car (4 482 683 car journeys between Lille and Marseille)



1 155 172 tonnes of CO₂ equivalent eliminated, equating to the quantity of CO₂ absorbed by 96 264 364 trees over one year

THE DEPLETION OF NATURAL RESOURCES



4 125 146 tonnes Of raw natural resources saved, equating to the equivalent quantity of mineral resources necessary to produce 10 279 910 PCs



1 662 982 501 KWh saved, the equivalent energy consumption of the heating required by 360 613 people in France over one year

OTHER FORMS OF POLLUTION



201 732 kg Of gas, responsible ozone layer destruction, eliminated (CFC - 11 equivalent)



Emissions of molecules responsible for ozone pollution peaks avoided, equivalent to those discharged by 3 856 986 cars over one year



Emissions of molecules avoided, which would have generated the equivalent of one year's worth of acid rain over a surface area spanning 529 878 289 m²

The Kheops project: recycling hot water tanks without harming the environment

The Kheops project, which began in 2022, aims to recycle, in a confined environment, hot water tanks and large professional cooling appliances in order to capture the CFC/HCFC/Pentane gases contained in their insulating foams. In 2022, ecosystem consequently launched a call for projects to build treatment facilities capable of crushing hot water tanks whilst capturing and conditioning gases with a high global warming potential in order to prevent them from escaping into the atmosphere.



5 SPECIALISED TREATMENT FACILITIES BY 2025

2023 was the year in which this extensive project became a reality. For the hot water tank feedstock managed by ecosystem, it will permit the annual emission of 150 000 tonnes of CO₂ equivalent to be avoided. Between now and 2025, five facilities will be built throughout France for an industrial investment of €60 million. The first three facilities will be opening their doors in 2024.

2023 figures ●



150 000 tonnes Of CO₂ equivalent avoided per year



5 specialised treatment facilities by 2025



€ 60 million In investments made by industry players



PHILIPPE CHEMINEAU, OPERATIONS DIRECTOR

● focus

Following our call for projects for the design and construction of treatment facilities within the context of the Kheops project, several industrial partners were selected. One of the priority criteria in our selection was to avoid all land artificialisation. In effect, zero environmental impacts may be generated by these specialised facilities – the contrary would render them totally counterproductive.



ACCOMPANYING CHANGE

These new facilities require an unprecedented process to be put in place throughout the treatment chain. Depending on the hot water tank collection zone, collection operators must deliver tanks to a dedicated regional facility, in such a way as to also limit transport emissions. For metal traders, this constitutes a change in economic model which requires accompaniment to appropriate this new logistical and organisational process. Consequently, in 2023, ecosystem focused on developing educational tools, which included making a documentary. Webinars and information meetings are also scheduled throughout 2024.

03 increasing

WASTE PREVENTION



Contributing towards extending appliance service life thanks to prevention, and more particularly repair and reuse, and encouraging producers to move towards an eco-design to encourage product durability.

1st birthday of the Repair Bonus: update

The repair incentive mechanism, put in place in December 2022, enables households to get equipment repaired whilst benefiting from a bonus if they call on the services of QualiRépar labelled repairers. So what's the situation one year on from the launch of this scheme?

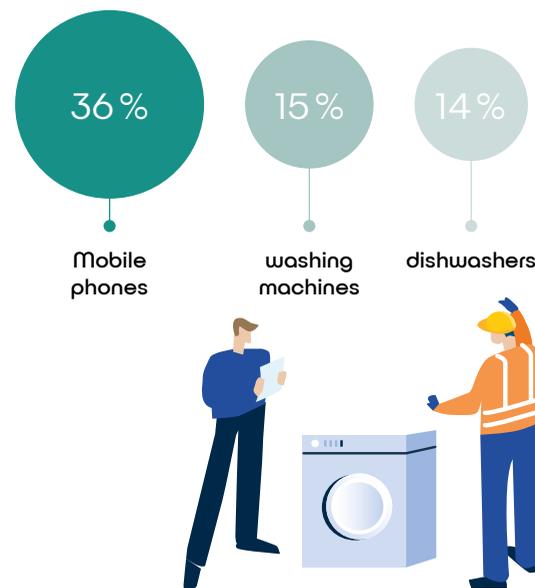


2023 assessment of the Repair Bonus

- 124 198 repairs benefitted from a Repair Bonus for a total sum of €2 942 000 financed by ecosystem
- 4.64/5 it's the average consumer satisfaction mark awarded by consumers with respect to this repair service

- For 45% of consumers, the Repair Bonus had a strong decisive impact on their decision to get an appliance repaired outside of the guarantee period
- 6% of these consumers wouldn't have got the appliance repaired without the Repair Bonus

THE THREE PIECES OF EQUIPMENT WHICH ARE MOST OFTEN REPAIRED:



THE QUALIREPAR NETWORK

- 812 labelled companies, 655 of which were labelled in 2023, representing a total of 7 172 technicians, 2 650 of whom are mobile
- 5 055 repair points throughout France and the French overseas territories Drom-Com
- 24 € average bonus paid per repair

Prevention and eco-design plan: working alongside producers

The introduction of France's AGEC law (Anti-Waste for a Circular Economy) requires producers to put together a waste prevention and eco-design plan structured to take account of three main objectives:

- Reduction of non-renewable materials
- Increase in recycled materials
- Increase in recyclable materials

2023 was a crucial year for ecosystem teams who accompanied and assisted producers in preparing their individual five-year plans. Several tools were developed to help them to better understand the stakes and assist them with effectively formalising actions.

2023 figures

- 1 661 participants in webinars live or replay
- 977 Tutorials were viewed
- 522 Questions were answered by our hotline



AXEL ROY,
ENVIRONMENTAL
EXPERT, ECO-DESIGN
AND CIRCULAR
ECONOMY REFERENT

focus

In 2023, we initiated local-level accompaniment for producers in order to help them put together their prevention and eco-design plans. We organised webinars and made a plan framework available to them along with a tutorial to make it easier to use. We also opened an email and telephone hotline to allow every producer to benefit from specific accompaniment. ecosystem's role is now to accompany, advise and orient producers in order to help them to successfully implement their action plans.



Summarising data to learn and make progress

By the end of summer 2023, ecosystem had received 49% of the producer prevention and action plans, 80% of which corresponded to the framework jointly developed by ecosystem, Citeo, Refashion and Ecomaison.

Teams then analysed data to produce a summary per sector (Household WEEE, Professional WEEE, Lamps and Small fire extinguishers). These summaries were made public in December during a dedicated webinar. New summaries will be drawn up every three years with the objective of eventually enabling the three strategic focuses of the action plans to evolve, in order to best respond to the specific needs of each sector and to every producer typology.

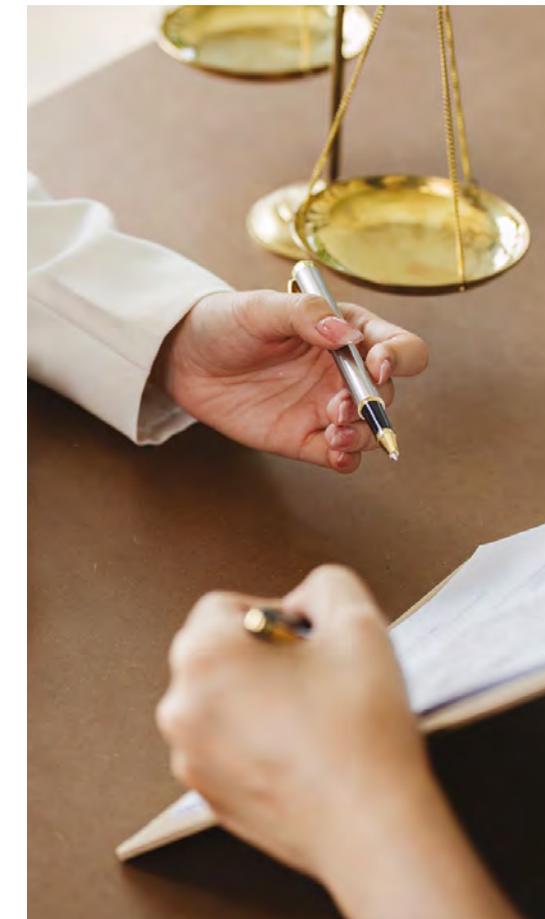


Bringing market places into compliance; a challenge that has been successfully met

One of the measures introduced by the AGEC law makes market places responsible for declaring the volumes put on the market by the third party retailers they host, if these retailers have not established their compliance and obtained a Unique Identification Number (UIN) attesting their adhesion to a producer responsibility organisation.

Failing this, the market place must pay eco-fees on behalf of the third party retailer. In 2023, ecosystem teams accompanied this transition resulting in the adhesion of than 800 new members, more often than not declaring low volumes of EEE.

This intensive management of activity required ecosystem to reinforce its teams - both to continue to raise awareness among market places as regards their legal obligations and to help them to ensure that their declarations are correct. This increase in the number of declarations has not however sufficed to compensate falling volumes placed on the market.



BREAKDOWN OF PRODUCER-MEMBERS

	Adhesion contracts	Net eco-fees collected
Household WEEE	3 286	232 588 000 €
Professional WEEE	1 994	18 188 000 €
Lamps	800	11 843 000 €
Small fire extinguishers	32	761 000 €
TOTAL	6 112	263 380 000 €

2023 figures

- +811 Member contracts vs 2022
- 3,3% of net fees collected vs 2022

04 reusing

VIA THE SOCIAL AND SOLIDARITY ECONOMY



Contributing towards creating employment and new business expertise and accompanying the professional insertion missions of the social and solidarity economy.

Re-use, an essential mission



Within an economy subject to inflation and a context marked by growing environmental awareness, consumers are renewing their electrical and electronic equipment less often, consequently reducing the volume of appliances available for structures committed to promoting reuse alongside ecosystem. To provide the necessary feedstock in terms of volume and quality, ecosystem has put in place actions targeting the general public, via the jedonnemonélectroménager.fr website, but also retailers with the aim of consolidating the partnerships in place and regrouping and treatment facilities in order to refine equipment sorting and increase the feedstock intended for reuse.

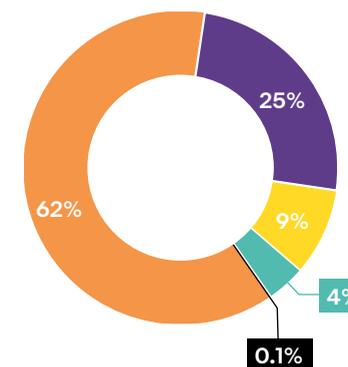
2023 was a pivotal year in that it was extremely dynamic, enabling ecosystem to rise to numerous challenges with respect to reuse. Reuse is one of the company's transverse activities and links the collection and recycling teams. It offers us a global vision as regards decisions and their impacts. To accompany the new social and solidarity economy players who are committing to reuse alongside us and in addition to the historic partnerships in place with the Envie and Emmaüs networks, in 2023 we expanded our team. These new players, often

specialised in IT equipment or large household appliances for example, effectively require personalised responses and accompaniment with respect to managing their reuse declarations. ecosystem regularly visits associations to exchange on the difficulties they encounter and share best practices.

The results for 2023 are positive: the objective of ensuring the reuse of 2 % of household appliances in relation to the volume of equipment placed on the market in 2022 has been reached!

BREAKDOWN OF HOUSEHOLD EEE TONNAGES RE-USED PER FLOW

- SHA
- NC-LHA
- C-LHA
- SCREENS
- TELEPHONES



OBJECTIVES FOR HOUSEHOLD AND PROFESSIONAL EEE

2 % of the tonnage reused in relation to the tonnage placed on the market in year N-1. Contribution to the Reuse-Upcycling Fund designed for social and solidarity economy players to the order of 5 % of the annual eco-fees received.

2023 figures

- 296 Partnerships with SSE associations
- 50 New SSE structures referenced
- 973 045 Appliances reused by the SSE, equating to 10 622 tonnes
- 13,1 m€ of support paid out via the Reuse Funds
- 3 076 Persons from the SSE employed by the sector



Reuse, professional equipment too

The professional electrical and electronic equipment sector has the particularity of being extremely diverse: It includes all types of technical equipment (industrial, medical, construction, catering, energy production...) of all sizes (from small electronic thermometers to medical scanners for example).

On the other hand, feedstocks are four times less significant than in the household equipment sector, owing to equipment's longer service life duration and the maintenance, repair and reuse practices which are already in place both in France and abroad given the high investment costs linked to these appliances.

The professional electrical and electronic equipment sector is therefore specific, but in light of the AGEC Law it is subject to the same obligations as that of household equipment. Whilst the collection and reuse network is mature for household equipment, it is still being developed for professional equipment. For the past few years ecosystem has been working alongside its producer members and several NGOs which donate medical equipment in order to monitor the extent of reuse abroad. Our ambition is to significantly increase reuse, in spite of the complicated context; unlike the household WEEE sector, in the professional WEEE sector it is waste managers who are responsible for collection and who hold 80% of flows.



● focus

CHLOÉ CHARRIER,
RESPONSIBLE FOR REUSE

Ecosystem has partnered the Envie and Emmaüs networks since 2006. We are working alongside them in order to help them improve their reuse performances and best respond to their needs. In 2023, we namely put in place a test process to assess reusable appliances at our treatment facilities and to then send them onto Envie in Angers. We are also continuing our actions to accompany the Weelabex certification process, as was the case for Envie in Lorraine in 2023, with a certification objective in place for the end of 2024. This initiative permits the quality of work and the expertise of associations to be promoted with respect to reuse.

2023 figures ●



2507 tonnes

reused / upcycled,
1 673 tonnes of which
by the SSE



10 SSE actors

referenced



€ 127 000

in financial support paid out

Federating players and structuring professional equipment reuse



In 2023, ecosystem continued its work with its producer members to promote the implementation of reuse in France and abroad, via a specific contract to encourage the declaration of reused appliances.

Teams are also working to reference SSE players in order to enable them to have access to feedstocks of used appliances and provide them with financial support per effective tonne reused, whether sold or donated. Three categories of support are put in place according to the degree of professionalization of players. The further they go in the reuse process, more particularly by proposing a guarantee for a piece of equipment which has been repaired and sold on, the more support they obtain. In 2023, one dozen SSE players were referenced by ecosystem and were supported to the order of 300 tonnes of EEE reused. However, SSE players intervene on a part of the value chain for professional equipment reuse and most often via sub-contracting from retailers. ecosystem's objective is therefore to increase their expertise in order to enable them to act independently, namely via calls for projects financed by the Reuse-Upcycling Fund and to give them access to the financial support provided by the said Funds. A first call for projects was launched in 2023 and concerned the reuse of light fixtures and cold production units.

To respond to the stakes of reuse in a wider and more global manner, ecosystem has also created partnerships with equipment reconditioners. A single reference base which is common to all players – producer members, SSE players and reconditioners – has been put in place to enable them to be referenced and includes a prior visit to structures and the collection of documents proving equipment reuse and traceability.



A STUDY TO ENSURE OBJECTIVES EVOLVE

At the end of 2023 and in keeping with their accreditation specifications, ecosystem and Ecologic launched a sector-based study, with the aim of drawing up an inventory of professional equipment reuse in France, in order to obtain an objective view of the reuse potential in this sector and its associated measures. The study will also tackle the problem of how to value and count reuse when the owner remains the same (eg : long-term rental of reconditioned equipment, making equipment available and sale of consumables or services...), a common and virtuous practice in the professional sector but which is not yet included in reuse objectives. More than 70 players have participated in this study which will be finalised at the end of 2024.



LAURE MORICE,
FEEDSTOCK AND REUSE
STUDIES MANAGER

● focus

In 2023, the objective was to integrate Professional EEE into the reuse mechanism which already exists for Household EEE. In 2024, the goal will be to further integrate the specificities of the professional sector by finding solutions to increase the access of referenced reuse players to the professional equipment feedstock and develop the expertise of SSE players in this sector.

We also need to show our producer members the advantages of being voluntarily referenced as a reuse player, given that they are not obligated to do so. Certain producers are already calling on our expertise to help them develop their reuse mechanisms, a clear indication of their interest in this topic.

05 re inventing

BEHAVIOUR TO TRANSFORM SOCIETY



Accelerating changes in behaviour among citizens in their private lives or in their professional spheres in favour of more ecologically responsible consumption, production and management behaviours.

Tour de France : On your marks, repair, donate, recycle!



THE GREAT SOLIDARITY ROUNDUP: 30000 TELEPHONES COLLECTED IN 2023

Prior to the Tour de France, ecosystem also proposes a mobile phone collection operation in partnership with the Tour Stopover Cities. A chance to make an environmentally friendly gesture but also one of solidarity, as in exchange for the mobile phones donated by inhabitants, ecosystem offers reconditioned telephones to social and solidarity organisations in the city concerned. Since the launch of this operation four years ago, ecosystem has collected more than 100 000 telephones, 30 000 of which were collected in 2023, in spite of a period of inflation which has slowed down donations.

To gain in terms of consumer commitment, ecosystem goes out to meet with the general public at popular and free events all over France. Since 2020, ecosystem is a "responsible partner" of the Tour de France.

In 2023, the ecosystem publicity fleet was modified, with a vehicle at the front portraying a planet and three additional floats to promote each of our missions: repair, donate, recycle. ecosystem offers useful advice to the general public namely thanks to its ambassadors and the famous "podium truck". This year, a new publicity fleet with a dedicated theme tune proved their effectiveness in raising awareness. Following surveys, prior to the passage of ecosystem's publicity fleet, the intention to repair equipment using the Repair Bonus stood at 69%, a figure which rose to 78% after the Tour de France. In the case of donation, this figure was initially 52% then rose to 60% whilst the intention to recycle remained stable at 95%.

In 2023, ecosystem also published a significant amount of content on social media. The videos produced during the event were viewed almost 4 million times. The global notoriety of ecosystem, measured during the Tour de France, has constantly increased since 2020, with a significant increase between 2022 and 2023 when it rose from 53% to 68%, which proves the coherency and effectiveness of the new operation.

2023 figures ●

78% of those questioned intend to repair equipment thanks to the Repair Bonus

60% of those questioned intend to donate equipment

95% of those questioned intend to recycle equipment

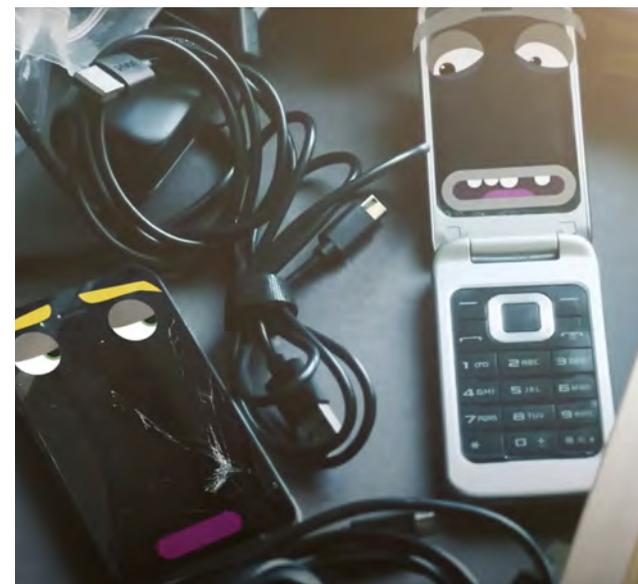


ecosystem Challenge and Appareils Story: raising awareness among children and young adults

Ten years after its creation, the ecosystem Challenge continues to generate as much interest as when it first began, with more than 100 000 schoolchildren participating every year. During the 2022-2023 school year, 4 571 classes were enrolled all over France, representing precisely 107 612 pupils.

The Challenge permits awareness to be raised among primary school children, who are extremely receptive and make great ambassadors towards their parents. According to surveys, once at secondary school and beyond, good will is lost, particularly among the 18-24 years age group, who can be highly militant but who do not yet reflect this militancy with concrete actions. ecosystem has therefore attempted to reach this public via its *Appareils Story* saga on TikTok.

Appareils Story are 24 one minute films which depict appliances and their personalities. The objective is to raise awareness about the possibility of extending service life thanks to maintenance, repair, donation and recycling. Launched in 2023, the first series of videos with a humorous tone gained ecosystem 40 000 new subscribers on TikTok within a community which counts 63% of people under 35. The saga is continuing in 2024 and this highly effective concept will serve as a basis for an awareness raising campaign on recycling, and more specifically sorting errors with respect to small electrical appliances and light bulbs.



2023 figures ●



● focus

DONATIEN DRILHON,
DEPUTY COMMUNICATIONS
MANAGER

CONSTANT NEW EFFORTS

Every producer responsibility organisation has a general interest mission with regulatory objectives in terms of raising awareness and information campaigns. In addition to respecting this means objective, ecosystem constantly puts in place numerous media and non media actions in order to prompt changes in behaviour. Education, humour and the regularity of messages constitute the trademark of the campaigns proposed by ecosystem.



Collecting toys: child's play!

Since its launch in 2010, the operation "Laisse parler ton cœur" (Listen to your heart) has been extremely successful among participating local authorities.

This year, ecosystem was solicited by the Avenue de Noël of Saint-Lazare train station in order to host and oversee a solidarity chalet between November 24th and December 24th and give passers-by a chance to donate toys, recycle light bulbs and learn about the new Repair Bonus. A resounding success with 863 kilos of toys collected, whilst traditional collection points generally receive between 70 and 100 kilos of toys. A large majority of the toys in good condition were passed onto Emmaüs and the Restos du Cœur solidarity organisations.



2023 figures ●



06 COmbining

OUR STRENGTHS
TO MAKE PROGRESS TOGETHER



ecosystem is a committed organisation which makes use of common good goals with respect to the environment, public health, the circular economy, regulations, producer accompaniment... Multiple skills which require extremely diverse profiles which have to be attracted, won over and persuaded to remain within the organisation.

Boosting teams and accompanying their integration

To reach the objectives set out by its accreditations and to further its expertise with respect to new missions, ecosystem has accelerated its recruitment drive. In 2022 and 2023, more than fifty people were hired, equating to one third of personnel overall.

The new positions created aim to reinforce teams in the field in order to promote ecosystem's services and provide necessary support to treatment facilities, waste managers and various collection partners. The teams in charge of innovative collection runs such as "jedonnemonelectromenager.fr", those implementing the Repair Fund or the environmental expertise team have also benefited from this recruitment drive. Lastly, ecosystem welcomed data analysts to process the significant volume of data collected throughout the value chain and transform it into a more effective lever for progress.

This significant increase in personnel coincided with a total overhaul of the integration path for new employees, who are now organised into classes of between fifteen and twenty people. Three one day sessions took place in 2023, with very good feedback from participants. Within this context, a new e-learning training program, "L'Odyssée circulaire" has become mandatory for newcomers, but also for all members of personnel, in order to raise awareness among teams with respect to circular economy stakes. It's a common platform of basic knowledge, tailor-made for and by ecosystem, consisting of ten modules including videos by experts, quizzes and technical sheets. In addition, visits to treatment and SSE partner sites have become systematic for newcomers in order to complete their integration process.



ecosystem: a human mission

Within ecosystem's status as a mission-led company, the human dimension is of real importance. To respond to this, the Human Resources Department has accelerated the implementation of actions relating to quality of life in the workplace (QVCT) and has developed its policy to accommodate people living with disabilities.

A wide selection of actions is proposed to personnel in order to strike a better balance between their private and professional lives and help them get pleasure out of working. An awareness-raising campaign focusing on disconnection and best practices for hybrid working methods were displayed on premises during 2023.

Psycho-social risk prevention was also stepped up last year, with an obligatory half-day training program in "offside" behaviours within the context of the prevention of harassment for all members of personnel. Training spanned one full-day for managers.

The teams also got together for a worthy event, with the first Disability Awareness Week in the workplace, which took place between November 20th and 26th 2023, namely with a conference animated by a sign language interpreter and workshops to learn the basics of this language. And for the first time in 2023, ecosystem also participated in the "DuoDay" where two disabled work placement students were welcomed to the company. Personnel did their utmost to make their discovery of ecosystem's professional environment as fulfilling as possible for them. This initiative is set to be renewed in 2024.



Sharing a common project

The #2030 company project, defined in 2022 and initiated in 2023, formalises ecosystem's strategy and path in order to forecast the company's future contribution within a fast-evolving environmental and societal context. Beyond the personnel appropriation phase, the company has focused its efforts on initiating the transformation of its operating and management modes with a view to gaining in agility and efficiency.

The management community, largely consolidated in 2023, is particularly involved in promoting this transformation project among ecosystem teams. In January 2023, managers came together for a 3 day seminar to reflect on various themes which, in addition to enabling them to get to know each other better, resulted in working groups being created to make progress together throughout the year. The objective: to jointly commit to the transformation thanks to mutual assistance, regular feedback and shared experiences. Managers also had an opportunity to work closely with a coach enabling them to better grasp their own personal dynamics. Co-development and mutual assistance circles were formed among managers to deal with management problems and resolve them independently, among colleagues, enabling a united and trust-based mindset to be implemented.



● focus

MARIE-AGNÈS LENQUETTE,
HUMAN RESOURCES DIRECTOR

A YEAR OF TRANSFORMATION

2023 was a very intense year due to our commitment to the transformation of ecosystem via operational methods of our company, the mobilization of our teams and the implementation of numerous structuring projects. We dedicated a large part of our human and financial resources to hiring and integrating new members of personnel and reinforcing the group in order to enable it to successfully rise to future challenges. This transformation is on the right track and we will continue to focus our efforts on these stakes in 2024.

2023 social results ●



Employees 169



% of permanent contracts 94.1%

Women – men equality index 99/100

% of fixed-term contracts 1.82%

Executive Committee parity (%M-%W) 50 - 50

% of student apprenticeships 4.08%

Employee parity (%M-%W) 46.5 - 53.5

% of full-time employment 95.6%



2.57%
investment in training
(% of the total payroll, including salaries)

106
different professions

80 - 20
% of executives / non executives

41 years
Average age

6 years
Average seniority

2023 NOTEWORTHY EVENTS

A year rich in events

March



Online launch of an interactive platform dedicated to the French overseas territories Drom-Com

April



Publication of a Sorting Guide for Plastics resulting from WEEE

May



• Overhaul of the ecosystem.eco site
• Launch of the online Household EEE video campaign

June



Launch of je donne mon eletromenager in Paris

July



• The ecosystem Float embarks on its Tour de France
• "Repair Mission", a TV program on RMC Découverte: encouraging viewers to repair their electrical appliances

September



Launch of je donne mon eletromenager in Nice

October



Start of the "Light bulbs" poster campaign

November



Launch of the Reuse Fund for professional EEE

December



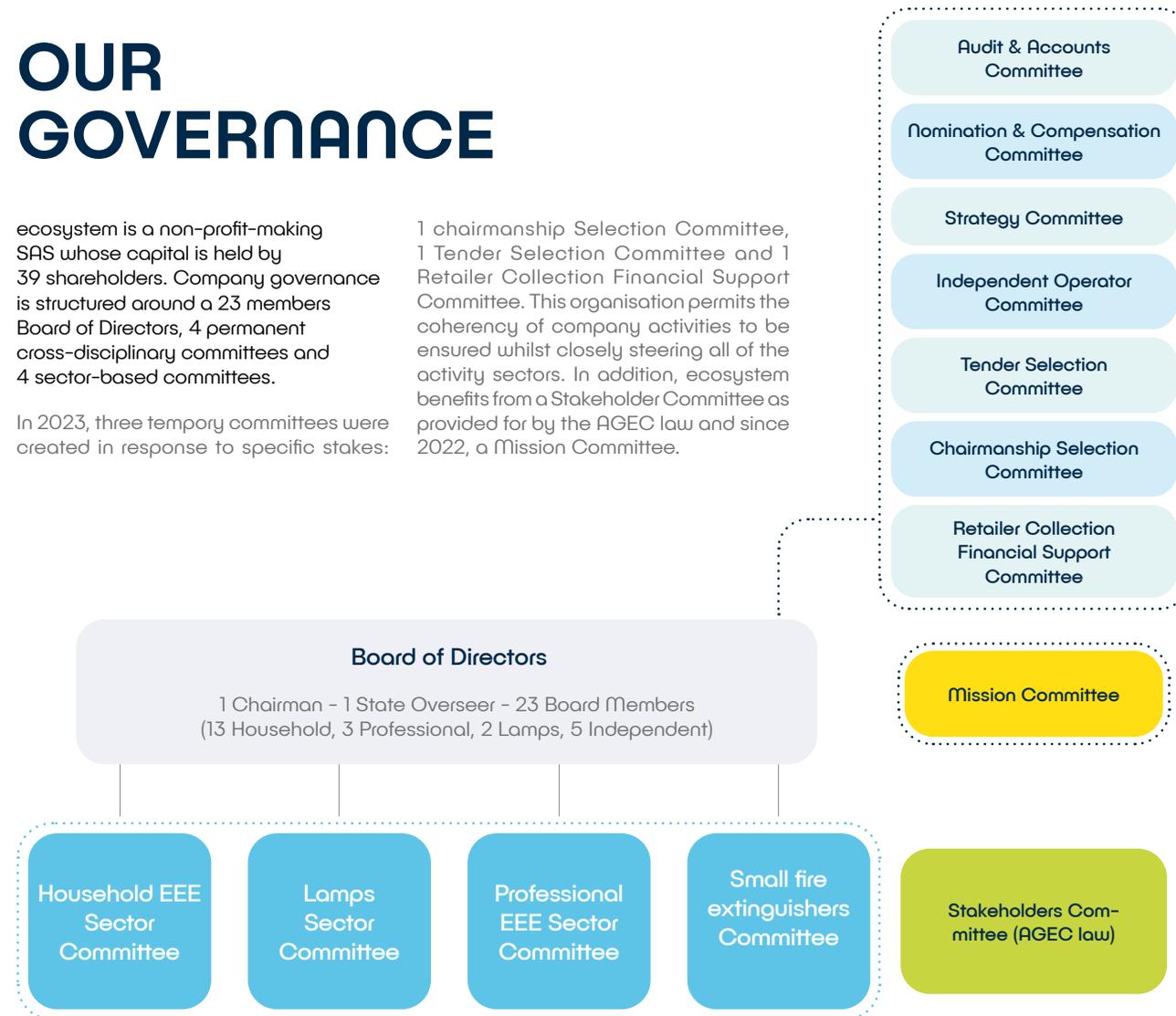
The Repair Bonus celebrates its first birthday

OUR GOVERNANCE

ecosystem is a non-profit-making SAS whose capital is held by 39 shareholders. Company governance is structured around a 23 members Board of Directors, 4 permanent cross-disciplinary committees and 4 sector-based committees.

ecosystem is a non-profit-making SAS whose capital is held by 39 shareholders. Company governance is structured around a 23 members Board of Directors, 4 permanent cross-disciplinary committees and 4 sector-based committees. In addition, ecosystem benefits from a Stakeholder Committee as provided for by the AGEC law and since 2022, a Mission Committee.

In 2023, three temporary committees were created in response to specific stakes:



NUMBER OF SESSIONS IN 2023

Board of Directors	6	Independent Operator Committee	3
Strategy Committee	6	Household Sector Committee	3
Audit & Accounts Committee	3	Lamps Sector Committee	2
Nomination & Compensation Committee	3	Small Fire Extinguishers Committee	2
Chairmanship Selection Committee	2	Professional Sector Committee	2
Tender Selection Committee	1	Mission Committee	3
Retailer Collection Financial Support Committee	6	Stakeholders Committee	5

2023 IN KEY FIGURES

A lacklustre market

In 2023, ecosystem registered a significant decrease in volumes placed on the market, namely in relation to 2021 and 2022, when business was thriving. This decrease is explained by low GDP growth, and rising inflation and energy costs which had high repercussions on certain markets such as household appliances. At the same time, higher interest rates contributed towards a 15 to 20% decline in the real estate and construction market, simultaneously reducing purchases of new equipment by households.

A decline in quantities of tools and HVAC put on the market, owing to bans on installing gas boilers in new housing, also weighed heavily. As a consequence, a fall in income from fees has accentuated the need to revise ecosystem's eco-fees scale in 2025 in order to enable a financial balance to be maintained.

INVENTORY OF THE REVISION OF THE SCALE AND MODULATIONS



JEAN-PAUL AUBERGER,
PRODUCER RELATIONS DIRECTOR

● FOCUS

In 2023, we focused on putting in place a new scale for fees and their modulation, as part of a desire to proceed with a single transaction as from January 1st, 2024. The public authorities wanted the premiums proposed for equipment with the highest reparability index to be ten times greater than the amount initially proposed. Given that in certain cases the expected premiums can exceed the sum of fees, ecosystem drew the public authorities' attention to the possibility of "negative fees", as well as the risk of installing high penalties for appliances with a low reparability index, making them

less accessible to more modest households. ecosystem also asked the public authorities to reconsider the methods and reference bases used to establish the thresholds which trigger premiums linked to the reparability index by basing themselves on sales data permitting the thresholds to be more precisely modelled. In 2024, exchanges will continue with professional federations and the public authorities, with the objective of leading to the simultaneous revision of the modulation mechanism and of scales by January 1st, 2025.

2023 figures ●

-5 %
of volumes placed on the market in 2023 vs 2022, including:

-6 %
For Household EEE

et -19 %
for Lamps

BREAKDOWN OF PRODUCER MEMBERS

	Collected (tonnes)	Active collection points
Household WEEE	3 286	232 588 000 €
Professional WEEE	1 994	18 188 000 €
Lamps	800	11 843 000 €
Small fire extinguishers	32	761 000 €
TOTAL	6 112	263 380 000 €

2023 figures ●

+811
adhesion contracts vs 2022

-3,3 %
new fees received vs 2022



REPAIRS

5 055

Repair points

7 172

technicians

including 2 650

mobile technicians

2 942 000 €

paid out

24 €

average sum of the Bonus



REUSE-UPCYCLING

Household EEE

296

social and solidarity economy structures referenced

26 328

tonnes reused / upcycled, 10 622 tonnes of which by the SSE

11 218 342

appliances reused / upcycled

13 107 000 €

In financial support paid out to the SSE

Professional EEE

10

Social and solidarity structures accompanied

2 507

tonnes reused / upcycled, 1 673 tonnes of which by the SSE

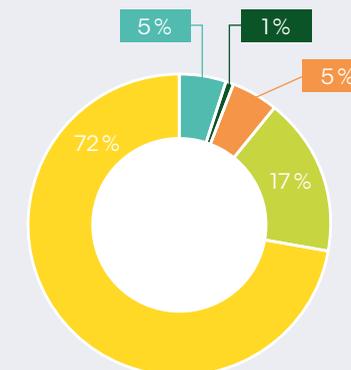
56 870

appliances reused / upcycled

127 000 €

In financial support paid out to the SSEESS

BREAKDOWN OF ECO-FEES (HOUSEHOLD EEE + LAMPS)



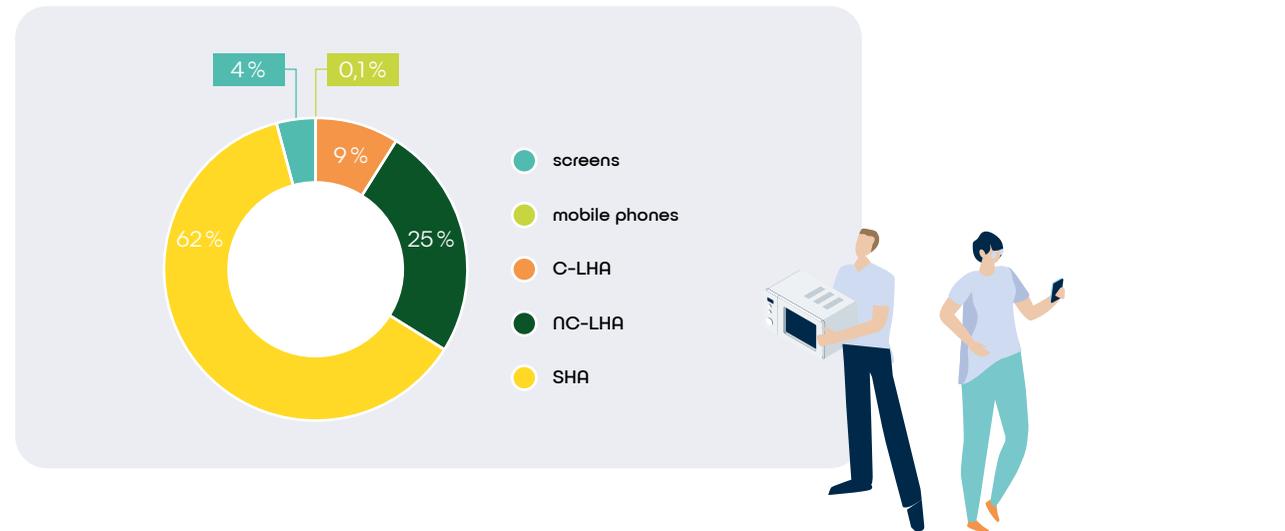
- running costs
- repairs
- information
- support
- operation costs



COLLECTION

	Collected (tonnes)	Active collection points
Household EEE	641 030	12 607
Lamps	5 321	15 926
Professional EEE	88 992	6 110
Small fire extinguishers	459	306
TOTAL	735 802	34 949

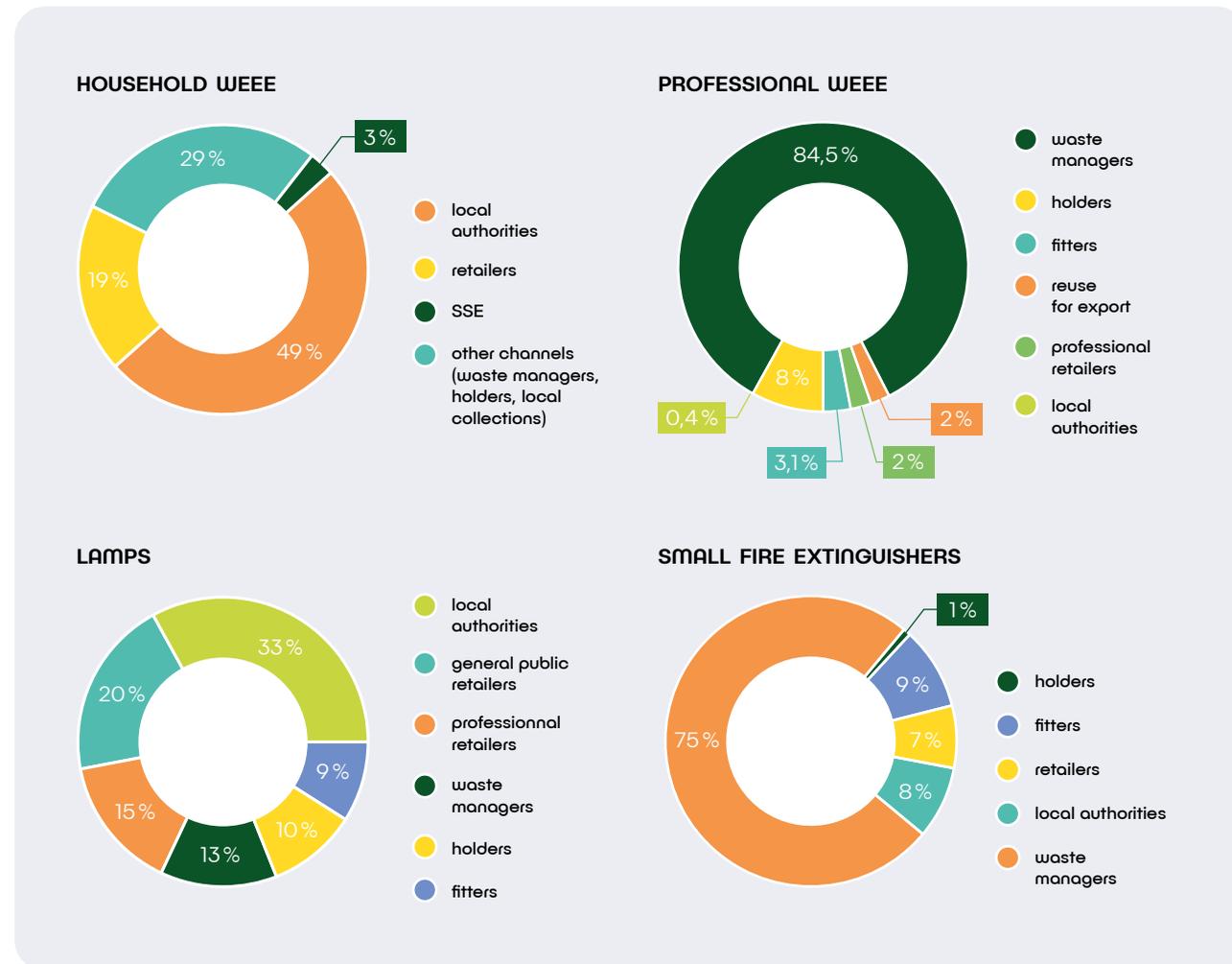
BREAKDOWN OF HOUSEHOLD EEE TONNES REUSED PER FLOW



TONNES COLLECTED IN 2023 PER SECTOR

	2023	2022	Evolution	Units collected 2023
Household WEEE	641 030	625 563	+2,5%	137 702 670
Professional WEEE	88 992	66 854	+33,1%	-
Lamps	5 321	4 608	+15,5%	54 046 188
Small fire extinguishers	459	388	+18,3%	197 822

BREAKDOWN OF COLLECTION PER FLOW

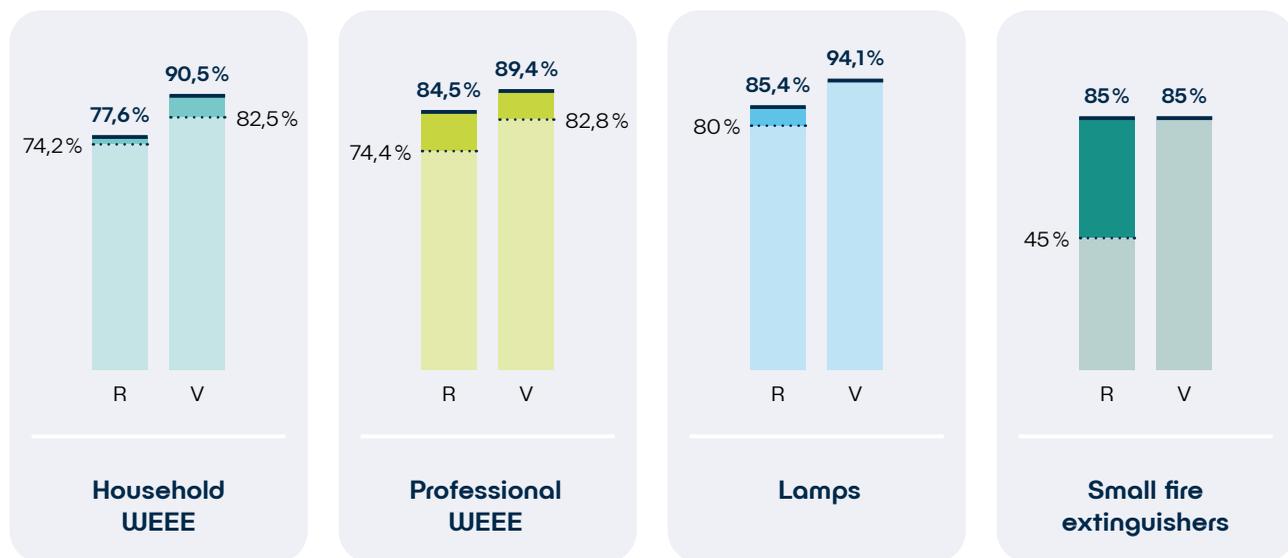


RATE OF COLLECTION

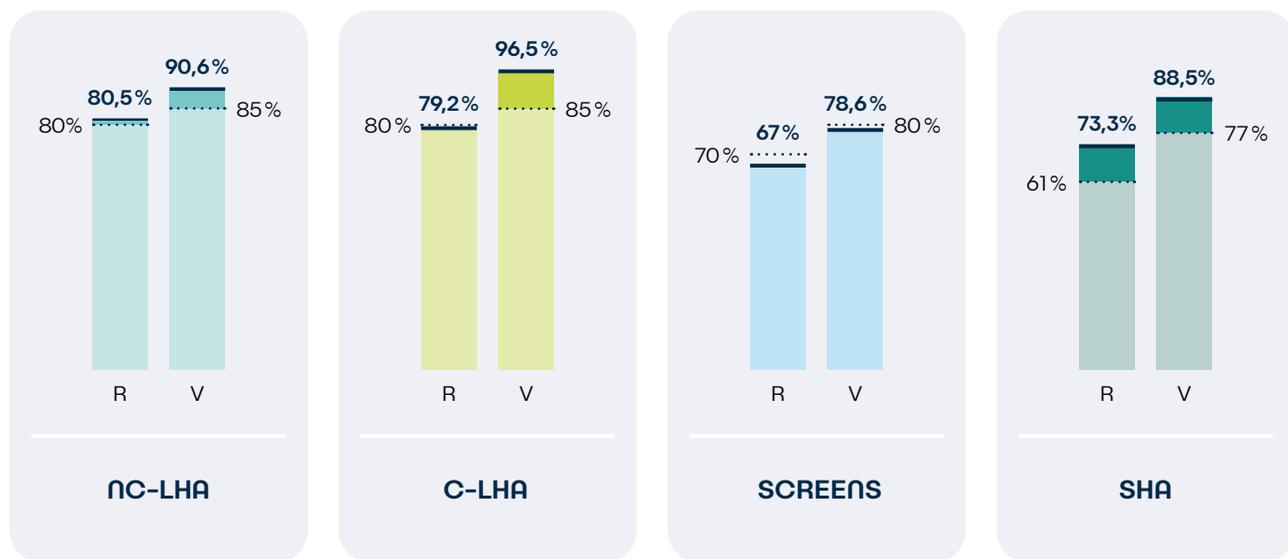
	Collection rate 2023 %	Regulatory objective
Household WEEE	47,4 %	65 %
Professional WEEE	42,0 %	65 %
Lamps	88,9 %	85 %
Small fire extinguishers	26,4 %	19 %



2023 RATE OF RECYCLING/ REUSE AND RECOVERY



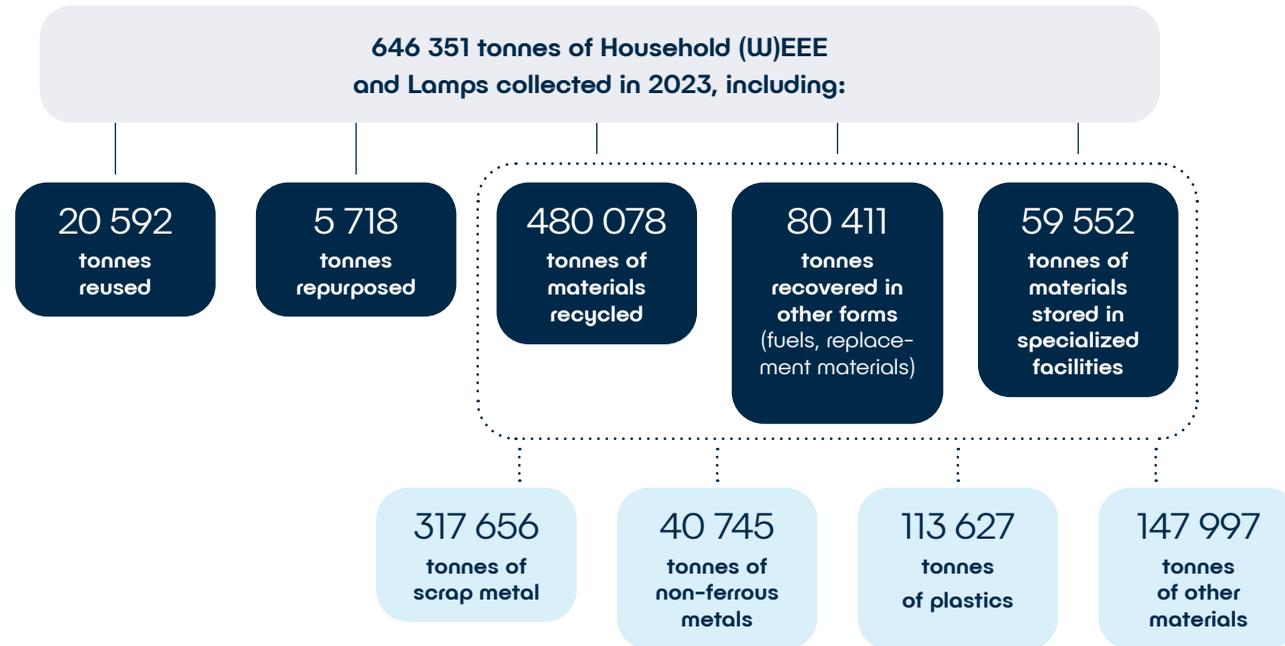
RATE OF RECYCLING/REUSE AND RECOVERY FOR HOUSEHOLD WEEE PER FLOW



With respect to screens (flat screens and CRT screens), neither the rate of recycling nor the rate of recovery have been reached. Following the requalification of lead glass into hazardous waste by the Public Authorities in 2018, it is impossible for target rates to be reached. Even though CRT screen collection volumes are constantly falling, an industrial project was put in place in 2023 to separate barium glass from lead glass. This investment has enabled 10 points to be gained in terms of recycling rates with respect to the screens flow.

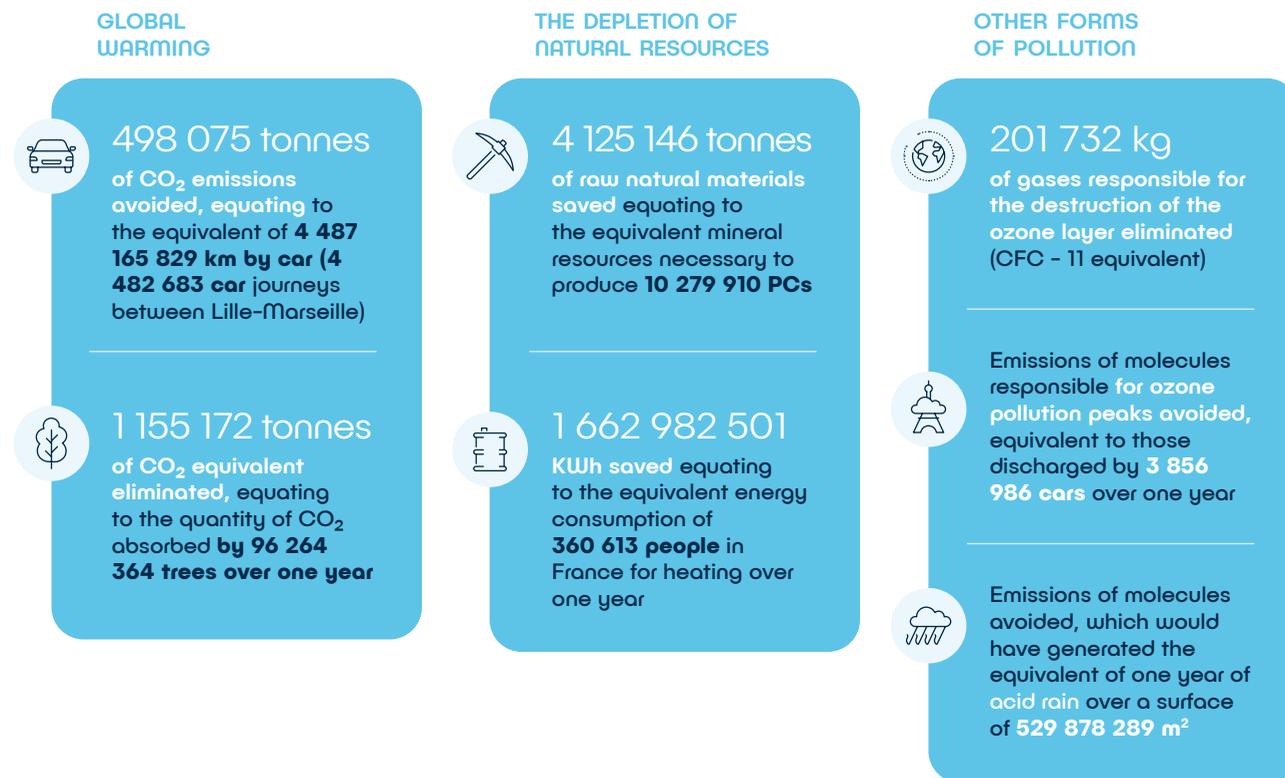
R Recycling/Reuse
V Recovery
— Rate achieved (%)
..... Target rate (%)

MATERIAL ASSESSMENT FOR HOUSEHOLD WEEE AND LAMPS COLLECTED IN 2023



ENVIRONMENTAL ASSESSMENT OF ECOSYSTEM'S ACTIVITIES

In 2023, the collection, pollution removal and recycling of Household WEEE and Lamps helped combat:



ecosystem

